IR_Gv630

I

Test Suite Overview

Test Suite Structure

Suite Name : IR_Gv630
Standards Ref :
PICS Ref :
PIXIT Ref :
Test Method(s) :
Comments :

Test Group Reference	Selection Ref	Test Group Objective	Page Nr
IntersytemHO/			945
CellReselection/			986
Classmark_Interrogation/			995

Detailed Comments :

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
IntersytemHO/	tc_60_1	GERAN_Band_SpeechAnyRate	Inter system handover to UTRAN/From GSM/Speech/Success	945
IntersytemHO/	tc_60_2a	GERAN_C286	Inter system handover to UTRAN/From GSM/Data/Same data rate/Success	954
IntersytemHO/	tc_60_4	GERAN_Band_SpeechFR	Inter system handover to UTRAN/From GSM/Speech/Establishment/Success	961
IntersytemHO/	tc_60_5	GERAN_Band_SpeechFR	Inter system handover to UTRAN/From GSM/Speech/Blind HO/Success	967
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IntersytemHO/	tc_60_10	GERAN_Band_SpeechAnyRate	Inter system handover to UTRAN/From GSM/Speech/Success	977
CellReselection/	tc_20_25_2	GERAN_Band_SpeechAllBands	Intersystem Cell Reselcection / Idle Mode / FDD_Qmin	986
CellReselection/	tc_20_25_3	GERAN_Band_SpeechAllBands	Intersystem Cell Reselcection / Idle Mode / FDD_Qoffset	989
CellReselection/	tc_20_25_4	GERAN_Band_SpeechAllBands	Intersystem Cell Reselcection / Idle Mode / Qsearch_I	992
Classmark_Interrogation/	tc_26_6_11_3	GERAN_Band_SpeechAnyRate	Test of Classmark interrogation / UTRAN Classmark Change	995
Classmark_Interrogation/	tc_26_6_11_4	GERAN_Band_SpeechAnyRate	Test of Early UTRAN Classmark Sending	1000

Detailed Comments :

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UMTS_Specific/	ts_CellChange_RAUpdate_NoSRB 4		1016
UMTS_Specific/	ts_CRLC_DL_CipherCfgSRB1_3		1018
UMTS_Specific/	ts_CRLC_UL_Integrity_NoSRB4		1019
UMTS_Specific/	ts_GetHFN		1020
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UMTS_Specific/	ts_SendSIB5_MulRatHo		1036
UMTS_Specific/	ts_SendSIB16_MulRatHo		1041
UMTS_Specific/	ts_SetDL_RRC_MessageSN_NoS RB4		1053
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UMTS_Specific/	ts_SS_4DCH_Modify_IR_G		1055
UMTS_Specific/	ts_SS_RB2_RB3_ReCfg		1057
UMTS_Specific/	ts_SS_RB2_RB3_ReCfg_DefCfg1		1058
UMTS_Specific/	ts_SS_Reconf_DPCH_Speech		1059
UMTS_Specific/	ts_SS_Reconf_DPCH_Streaming Unknown14_4k_28_8k_57_6k		1060
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GSM_Specific/	ts_InitAssigmentCmd_HR		1066
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RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB11_MulRatOrBMC		1070
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB18_MulRatOrBMC		1073
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB1_MulRatOrBMC		1074
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RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB3_MulRatOrBMC		1076
RRCM_SysInfo/RRCM_MRAT_BM C/	ts_SendSIB4_MulRatOrBMC		1077
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M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType2quater		1103
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType3		1104
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType4		1105
M_RAT_HO_SysInfoBroadcastGS M/	ts_SendSysInfoType5		1105
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M_RAT_HO_SysInfoBroadcastGP RS/	ts_SendDefPacketSysInfo		1107
M_RAT_HO_SysInfoBroadcastGP RS/	ts_SendPacketSysInfoType		1109
M_RAT_HO_GPRS_Specific/	ts_GERANIdleUpdated		1110
M_RAT_HO_GPRS_Specific/	ts_GPRSAttach		1112
M_RAT_HO_GPRS_Specific/	ts_GPRS_Authentication		1114
M_RAT_HO_GPRS_Specific/	ts_ULTBFOnePhase_PBCCH		1118
M_RAT_HO_GPRS_Specific/	ts_UplinkTBFOnePhase_MMProc_ PBCCH		1119
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M_RAT_HO_GPRS_Specific/	ts_Create_LLE_Entity		1125
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M_RAT_HO_GSM_Specific/	ts_G_CC_EnterU1		1127
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M_RAT_HO_GSM_Specific/	ts_G_Rcv_SetUp		1133
M_RAT_HO_GSM_Specific/	ts_InitAssigmentCmd		1134
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L3M_SS_ConfigSteps/	ts_SS_SwitchBackCellOn		1192
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BasicM_Security_Steps/	ts_GetRRC_MessageSN		1275
BasicM_SS_Configuration_Steps/	ts_CMAC_Rel		1276
BasicM_SS_Configuration_Steps/	ts_CPHY_ActTime		1276
BasicM_SS_Configuration_Steps/	ts_CPHY_TrChRelDCH_NoSHO		1277
BasicM_SS_Configuration_Steps/	ts_CPHY_TrChRelNonDch		1277
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BasicM_SS_Configuration_Steps/	ts_CRLC_RelReconfSRB		1278
BasicM_SS_Configuration_Steps/	ts_CRLC_ResumeSecurity		1279
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BasicM_SS_Configuration_Steps/	ts_SS_ReconfigRAB_ToSRB		1311
BasicM_SS_Configuration_Steps/	ts_SS_ReconfNoDedicatedToCellFACH		1312
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BasicM_SysInfoHandling_Steps/	ts_CellDependentPara		1337
BasicM_SysInfoHandling_Steps/	ts_ChangeMIB_ValueTag		1338
BasicM_SysInfoHandling_Steps/	ts_ChangeSB1_ValueTag		1338
BasicM_SysInfoHandling_Steps/	ts_Scheduling		1339
BasicM_SysInfoHandling_Steps/	ts_SendMIB		1340
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BasicM_UT_Steps/	ts_MMI_UE_SwitchOn		1343
BasicM_UT_Steps/	ts_MMI_USIM_Insert		1344
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	ts_SS_CreateCellDCH_DPCH_Offset		1345
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Detailed Comments :

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Default Group Reference	Default Id	Description	Page Nr
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NAS_Defaults/	NAS_OtherwiseFail		1354
RRC_Defaults/	RRC_Def1		1356
RRC_Defaults/	RRC_DefConnEst		1359
UT_Defaults/	UT_OtherwiseFail		1361
SS_Defaults/	SS_Def		1362

Detailed Comments :

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Declarations Part

Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
LLMEID	INTEGER		The identifier of the Logical Link Management Entity in SGSN
B10	BITSTRING [10]		A BitString with a length of 10
B11	BITSTRING [11]		A BitString with a length of 11
B12	BITSTRING [12]		A BitString with a length of 12
B14	BITSTRING [14]		A BitString with a length of 14
B24	BITSTRING [24]		A BitString with a length of 24
B32	BITSTRING [32]		A BitString with a length of 32
B36	BITSTRING [36]		A BitString with a length of 36
B64	BITSTRING [64]		A BitString with a length of 64
B9	BITSTRING [9]		A BitString with a length of 9
BCCHFreq	BITSTRING [5]		position of a bcch carrier in the bcch channel list
CellId	INTEGER		
Channel	BITSTRING [2]		needed channel type
ChannelCoding	INTEGER		1 − CS−1; 2 − CS−2; 3 − CS−3; 4 −− CS−4; 5 − MCS−1; 6 − MCS−2; 7 − MCS−3; 8 − MCS−4; 9 − MCS−5; 10 − MCS−6; 11 − MCS−7; 12 − MCS−8; 13 − MCS−9; 14 − MCS−5−7; 15 − MCS−6−9
ChannelCombination	INTEGER		The value of channelCombination permitted currently: 1 TCH/F + FACCH/F + SACCH/TF 2 TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1) 3 TCH/H(0,0) + FACCH/H(0,1) + SACCH/TH(0,1) + TCH/H(1,1) 4 FCCH + SCH + BCCH + CCCH 5 FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3) 6 BCCH + CCCH

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
			7 SDCCH/8(0..7) + SACCH/C8(0.. 7) 8 TCH/F + FACCH/F + SACCH/M 9 TCH/F + SACCH/M 10 TCH/FD + SACCH/MD 11 PBCCH+PCCCH+PDTCH/F+PACCH/F+PTCCH/F 12 PCCCH+PDTCH/F+PACCH/F+PTCCH/F 13 PDTCH/F+PACCH/F+PTCCH/F 18 E−TCH/F + E−IACCH/F + E−FACCH/F + SACCH/TF 19 E−TCH/F + E−IACCH/F + E−FACCH/F + SACCH/M 20 E−TCH/F + E−IACCH/F + SACCH/M 21 E−TCH/FD + E−IACCH/F + SACCH/MD
EGPRSWindowSize	BITSTRING [5]		3GPP TS 44.060 clause 12.5.2
EstMode	OCTETSTRING [1]		establish mode
GPRS_CipherAlg	BITSTRING[3]		3GPP TS 24.008 section 10.5.5.3
G_LogicChType	INTEGER		logical channel types in GERAN: 0−BCCH; 1−RACH; 2−PCH; 3−AGCH; 4−SDCCH/4; 5−SACCH/C4; 6−SDCCH/8; 7−SACCH/C8; 8−TCH/F; 9−FACCH/F; 10−SACCH/TF; 11−TCH/H; 12−FACCH/H; 13−SACCH/TH; 14−PBCCH; 15−PRACH; 16−PPCH; 17−PAGCH; 18−PDTCH/F; 19−PACCH/F; 20−PTCCH/F; 21−E−TCH/F; 22−E−IACCH/F; 23−E−FACCH/F; 24−SACCH/M; 25−SACCH/MD

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
H3	HEXSTRING [3]		Generic type for 3 hex value
IEI_4	BITSTRING [4]		information element identifier, type 1
IEI_8	BITSTRING [8]		information element identifier, type 2−4
MessageType	BITSTRING[6]		message type for GPRS RLC/MAC control messages. 3GPP TS 44.060 clause 11.2.0
NCCPermitted	OCTETSTRING [1]		ncc permitted
O1	OCTETSTRING [1]		Generic type for 1 octet value
O15	OCTETSTRING [15]		Generic type for 15 octet value
O16	OCTETSTRING [16]		Generic type for 16 octet value
O2	OCTETSTRING [2]		Generic type for 2 octet value
O4	OCTETSTRING [4]		Generic type for 4 octet value
O8	OCTETSTRING [8]		Generic type for 8 octet value
PAGING_GROUP	INTEGER		see 3GPP TS 45.002 clause 6.5.2 and 6.5.6
PSI1_REPEAT_PERIOD	BITSTRING[4]		The repeat period of packet system information Type 1. See 3GPP TS 44.060 section 11.2.18
PSI_COUNT_HR	BITSTRING[4]		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
PSI_COUNT_LR	BITSTRING[6]		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18
PSI_Category	INTEGER(0..2)		3GPP TS 05.02 or 3GPP TS 45.002 clause 6.3.2.4
PagingMode	INTEGER		
PhysicalChId	INTEGER(0..31)		Physical channel identifier in GERAN emulator
PositionInList	INTEGER		0 is the first position;1 is the second, and so on.
RRBP	BITSTRING[2]		relativ reserved block period 3GPP TS 04.60 or 3GPP TS 44.060 clause 10.4.5
RxLevel	BITSTRING [6]		received signal strength
SAPI	INTEGER		Service access point of GERAN L2 or GERAN LLC

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
S_P_Bit	BITSTRING[1]		supplementary/polling bit for downlink RLC/MAC control mesage 0 − RRBP field is not valid;1 − RRBP field is valid.
SubChannelNumber	INTEGER		Subchannel number for TCH/H, FACCH/H, SACCH/TH, SDCCH/4. SDCCH/C4, SDCCH/8 and SDCCH/C8. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); For SDCCH/4 and SACCH/C4 value is (0..3).
SysInfoType	INTEGER		25−−SYSTEM INFORMATION TYPE 1 26−−SYSTEM INFORMATION TYPE 2 27−−SYSTEM INFORMATION TYPE 3 28−−SYSTEM INFORMATION TYPE 4 29−−SYSTEM INFORMATION TYPE 5 30−−SYSTEM INFORMATION TYPE 6 31−−SYSTEM INFORMATION TYPE 7 24−−SYSTEM INFORMATION TYPE 8 4−−SYSTEM INFORMATION TYPE 9 0−−SYSTEM INFORMATION TYPE 13 61−−SYSTEM INFORMATION TYPE 16 62−−SYSTEM INFORMATION TYPE 17 64−−SYSTEM INFORMATION TYPE 18 65−−SYSTEM INFORMATION TYPE 19

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
			66−−SYSTEM INFORMATION TYPE 20 2−−SYSTEM INFORMATION TYPE 2bis 3−−SYSTEM INFORMATION TYPE 2ter 7−−SYSTEM INFORMATION TYPE 2quater 5−−SYSTEM INFORMATION TYPE 5bis 6−−SYSTEM INFORMATION TYPE 5ter
TFI	BITSTRING[5]		temporary flow identity
TLLI	OCTETSTRING[4]		temporary logical link idetifier
TN	B3		time slot number
TSC	B3		Training sequence code,GSM 04.08 10.5.2.5
TX_Power	INTEGER		transmission power level of a physical channel. the unit is dBuVemf
LLMEId	INTEGER		Logical Layer Management Entity Id
ITC_Int	INTEGER (0,1,2,3)		Type of ITC 0 −> UDI 1 −> RDI 2 −> Other
AM_SeqNum	BITSTRING[12]		Sequence number for an AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.3
AuthRsp	BITSTRING [32]		Authentication Response Prarameter 3G TS 24.008 cl. 10.5.3.2
B1	BITSTRING [1]		Generic type for 1 bit value
B128	BITSTRING [128]		Generic type for 128 bit value
B16	BITSTRING [16]		Generic type for 16 bits value
B2	BITSTRING [2]		Generic type for 2 bits value
B20	BITSTRING [20]		Generic type for 20 bits value
B3	BITSTRING [3]		Generic type for 3 bits value
B4	BITSTRING [4]		Generic type for 4 bits value
B48	BITSTRING [48]		Generic type for 48 bit value
B5	BITSTRING [5]		Generic type for 5 bits value
B6	BITSTRING [6]		Generic type for 6 bits value
B7	BITSTRING [7]		Generic type for 7 bits value
B8	BITSTRING [8]		Generic type for 8 bits value
B80	BITSTRING [80]		Generic type for 80 bit value

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
Bitmap	OCTETSTRING[1..16]		The bitmap within a Bitmap super−field. Ref 3G TS 25.322 clause 9.2.2.11.5
BitmapLen	BITSTRING[4]		The length of a bitmap super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.5
CauseValue	OCTETSTRING[1]		SM Cause Value
CLIR_Invocation	BITSTRING('10100010'B)		CLIR invocation 3G TS 24.008 cl. 10.5.4.11b
CLIR_Suppression	BITSTRING('10100001'B)		CLIR suppression 3G TS 24.008 cl. 10.5.4.11a
CMServType	B4		CM Service Type 3G TS 24.008 cl. 10.5.3.3
CtrlPDU_Type	BITSTRING[3]		PDU type for AM STATUS PDUs. Ref 3G TS 25.322 clause 9.2.2.2
CTSPerm	IEI8		CTSPerm 3G TS 24.008 cl. 10.5.3.10 value "10100010"B
CW_NumberPart	BITSTRING[3]		The number part (X1X2X3) of a codeword in an RLIST SUFI. Ref 3G TS 25.322 clause 9.2.2.11.6
DC_Field	BITSTRING[1]		Control / Data type indicator for AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.1
FlowControl	INTEGER (0,1,2,3,4)		type of flow control. 0−−outband flow control 1−−inband flow control 2−− no flow control
FollowOnProceed	IEI8		Follow On Proceed 3G TS 24.008 cl. 10.5.3.7 value "10100001"B
Fresh	BITSTRING[32]		
GSM_CipheringKey	BITSTRING [64]		
IEI4	B4		information element identifier, type 1
IEI8	B8		information element identifier,type 2−4
IntegrityKey	BITSTRING[128]		
KeySeq	B3		ciphering key sequence 3G TS 24008 cl. 10.5.1.2
Length	OCTETSTRING [1]		IE length
LIST_Len	BITSTRING[4]		The length of a LIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.4
LogicChGERAN	IA5String		Logical channel (used for Interworking with GERAN)
MM_RAND	BITSTRING [128]		Authentication parameter RAND 3G TS 24.008 cl. 10.5.3.1

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
MRW_Len	BITSTRING[4]		The length of a MRW super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.8
MsgType	B8		Message Type 3G TS 24.008 cl. 10.4. This type is also used by the BMC protocol.
N_Length	BITSTRING[4]		The N_Length field within an MRW superfield. Ref 3G TS 25.322 clause 9.2.2.11.8
O0_8	OCTETSTRING[0..8]		Generic type for 0 to 8 byte value
O3	OCTETSTRING [3]		Generic type for 3 byte value
Padding	HEXSTRING[2..8192]		Padding for RLC UM or AM PDU. Ref 3G TS 25.322 clause 9.2.2.10 Note that this type should ideally be an OCTETSTRING[1..4096], but since TTCN does not have a predefined operator for INT_TO_OCT, a HEXSTRING is used instead.
ProtocolDiscriminator	B4		Protocol Discriminator 3G TS 24.008 cl. 10.2
ProtoIdContents	OCTETSTRING[1..251]		3G TS 24.008 cl. 10.5.6.3 @sic EW R5s050095 sic@
RejCau	OCTETSTRING[1]		Reject Cause 3G TS 24.008 cl. 10.5.3.6
RLIST_Len	BITSTRING[4]		The length of a RLIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.6
SapId	OCTETSTRING [1]		SAP Identifier ??? defined in several places GERAN 04.06 and 3G TS 24.008 as bitstring[2] ?
Services	IA5String ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Facsimile")		
SkipIndicator	B4		Skip Indicator 3G TS 24.008 cl. 10.3.1
SS_CN_DomainIdentity	INTEGER (0..1)		CN domain identity type in TTCN tabular format
SS_RB_Identity	INTEGER (−31..32)		RB identity type in TTCN tabular format
SUFI_ListLi	BITSTRING[4]		Number of consecutive PDUs not correctly received following PDU with sequence number SNi. Used in List super field. Ref 3G TS 25.322 clause 9.2.2.11.4

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
SUFI_SN_MRWi	BITSTRING[12]		SN_MRWi field to be used within move receiving window super fields. Ref 3G TS 25.322 clause 9.2.2.11.7
SUFI_Type	BITSTRING[4]		The type of a super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11
UTRAN_GERAN	IA5String ("UTRAN and GERAN", "UTRAN only")		
Detailed Comments :			

Structured Type Definition			
Type Name : IuModeCellSelection			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
cellBarQuality3	B2		
mask	B1		
sI13AltPBCCHLocation	SI13PBCCH_Location		
Detailed Comments :			

Structured Type Definition			
Type Name : IuModeNCParams			
Encoding Variation :			
Comments : This definition includes: { 0 | 1 < Iu Mode Cell Selection Params : <Iu Mode Cell Selection struct>> } * (val(NR_OF_REMAINING_CELLS)) But only 1 repetition has been defined here. This TTCN definition will be modified if more repititions are required			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
noOfRemainingCells	B4		
mask1	B1		
iuModeCellSelection1	IuModeCellSelection		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition

Type Name : IuModeNeighbourCellParamsList

Encoding Variation :

Comments : The definition in CSN.1 is {1 < Iu Mode Neighbour Cell Params struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more Iu Mode Neighbour Cell Params if more than 1 Iu Mode Neighbour Cell Params are required in the Constraint.

Reference : 3GPP TS 44.060 clause 11.2.20.1

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
iuModeNCParams1	IuModeNCParams		not present if prefix1 = 0
endingRepetition	B1		Value always ZERO, indicates the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : IuModeOnlyCellSelectionParams

Encoding Variation :

Comments : 3GPP TS 44.060 clause 11.2.20.1

Element Name	Type Definition	Field Encoding	Comments
bSIC	B6		
cELL_BAR_QUALIFY3	B2		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_PwrMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_PwrMask = 0
gPRS_SelectMask	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_ReselectMask = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
sI13_Mask	B1		
sI13AltPBCCH_LOCATION	SI13PBCCH_Location		not present if sI13_Mask = 0

Detailed Comments :

Structured Type Definition

Type Name : IuModeOnlyNCParams

Encoding Variation :

Comments : This definition includes:
{< FREQUENCY_DIFF : bit (1 + val(FREQ_DIFF_LENGTH)) >
< Iu mode Only Cell selection params : < Iu mode Only Cell Selection struct > >} *
(val(NR_OF_REMAINING_CELLS));

But only 1 repetition has been defined here. This TTCN definition will be modified if more repititions are required
Reference : 3GPP TS 44.060 clause 11.2.20.1

Element Name	Type Definition	Field Encoding	Comments
startFreq	B10		
iuModeOnlyCellSelectionParams	IuModeOnlyCellSelectionParams		
noOfRemaingCells	B4		
freqDiffLength	B3		
freqDiff1	BITSTRING		1 + val(FREQ_DIFF_LENGTH) bits
iuModeOnlyCellSelectionParams1	IuModeOnlyCellSelectionParams		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : IuModeOnlyNeighbourCellParamsList

Encoding Variation :

Comments : The definition in CSN.1 is {1 < Iu Mode Only Neighbour Cell Params struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more Iu Mode Only Neighbour Cell Params if more than 1 Iu Mode Only Neighbour Cell Params are required in the Constraint.

Reference : 3GPP TS 44.060 clause 11.2.20.1

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
iuModeOnlyNCParams1	IuModeOnlyNCParams		not present if prefix1 = 0
endingRepetition	B1		Value always ZERO, indicates the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : TimeSlotAllocation
Encoding Variation :
Comments : used for down link and up link TBF

Element Name	Type Definition	Field Encoding	Comments
physicalChId	PhysicalChId		Single PDCH or multi−slot configured PDCHs
tN0	BOOLEAN		TRUE − time slot 0 is allocated; FALSE −− not allocated
tN1	BOOLEAN		TRUE − time slot 1 is allocated; FALSE −− not allocated
tN2	BOOLEAN		TRUE − time slot 2 is allocated; FALSE −− not allocated
tN3	BOOLEAN		TRUE − time slot 3 is allocated; FALSE −− not allocated
tN4	BOOLEAN		TRUE − time slot 4 is allocated; FALSE −− not allocated
tN5	BOOLEAN		TRUE − time slot 5 is allocated; FALSE −− not allocated
tN6	BOOLEAN		TRUE − time slot 6 is allocated; FALSE −− not allocated
tN7	BOOLEAN		TRUE − time slot 7 is allocated; FALSE −− not allocated

Detailed Comments :

Structured Type Definition

Type Name : ARFCN_IndexList
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.10a

Element Name	Type Definition	Field Encoding	Comments
aRFCN_Index1	B6		
aRFCN_Index2	B6		
aRFCN_Index3	B6		
aRFCN_Index4	B6		
aRFCN_Index5	B6		
end_Bit	B1		the value of the bit is always zero to indicate the end of the structure

Detailed Comments : It's a recursive structure. The definition is
<ARFCN index list struct> ::=
<ARFCN_INDEX : bit(6)>
{0 | 1 <ARFCN index list struct>}.
This TTCN definition shall be modified to include more aRFCN_Index if more than 5 aRFCN_Index are required in the Constraint.

Structured Type Definition

Type Name : AccessTechRequest
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16
the definition is
<Access Technologies Request struct> ::=
<Access Technology Type : bit(4)>
{0 | 1 <Access Technology Request struct>}
if more than 4 access technologies are required in the constraint the TTCN definition shall be modified.

Element Name	Type Definition	Field Encoding	Comments
accessTechType1	B4		
prefix1	B1		always = 1
accessTechType2	B4		
prefix2	B1		always = 1
accessTechType3	B4		
prefix3	B1		always = 1
accessTechType4	B4		
endingReptition	B1		always = 0 indicating the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : AdditionalInfoFor1xAuxPilot
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
qOF	B2		
wALSH_LEN_A	B3		
aUX_PILOT_WALSH	BITSTRING[6..13]		the length of this field is (6+ val(wALSH_LEN_A))

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : AdditionalInfoFor1xAuxPilotDiversity
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
qOF	B2		
wALSH_LEN_B	B3		
aUX_TD_WALSH	BITSTRING[6..13]		the length of this field is (6+ val(wALSH_LEN_B))
aUX_TD_POWER_LEVEL	B2		
tD_MODE	B2		

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : AdditionalInfoFor1xCommonPilotDiversity
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
tD_MODE	B2		
tD_POWER_LEVEL	B3		

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : AdditionalInfoFor3xAuxPilot
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
sR3_PRIM_PILOT	B2		
sR3_PILOT_POWER1	B3		
sR3_PILOT_POWER2	B3		
qOF	B2		
wALSH_LEN_C	B3		
aUX_WALSH_LEN	BITSTRING[6..13]		the length of this field is (6+ val(wALSH_LEN_C))
qof1Mask	B1		
qOF1	B2		not present if qof1Mask = 0
wALSH_LEN_1	B3		not present if qof1Mask = 0
aUX_PILOT_WALSH1	BITSTRING[6..13]		not present if qof1Mask = 0 the length of this field is (6+ val(wALSH_LEN_1))
qof2Mask	B1		
qOF2	B2		not present if qof2Mask = 0
wALSH_LEN_2	B3		not present if qof2Mask = 0
aUX_PILOT_WALSH2	BITSTRING[6..13]		not present if qof2Mask = 0 the length of this field is (6+ val(wALSH_LEN_2))

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : AdditionalInfoFor3xCommonPilot
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
sR3_PRIM_PILOT	B2		
sR3_PILOT_POWER1	B3		
sR3_PILOT_POWER2	B3		

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition			
Type Name : AdditionalMeasParam3G **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
fddQminOffset	B3		
fddRSCPmin	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : AdditionalPSIMessages **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
nON_GSM_INFORMATION	B2		
pSI8_BROADCAST	B1		
pSI3ter_BROADCAST	B1		
pSI3quater_BROADCAST	B1		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : BA_FreqList **Encoding Variation** : **Comments** : BA Freq list 3GPP TS 44.018 clause 10.5.2.1c			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
prefixBit1	B1		always = 1
bA_Freq1	B10		
prefixBit2	B1		always = 1
bA_Freq2	B10		
prefixBit3	B1		always = 1
bA_Freq3	B10		
prefixBit4	B1		always = 1
bA_Freq4	B10		
prefixBit5	B1		always = 1
bA_Freq5	B10		
prefixBit6	B1		always = 1
bA_Freq6	B10		
prefixBit7	B1		always = 1
bA_Freq7	B10		
prefixBit8	B1		always = 1
bA_Freq8	B10		
prefixBit9	B1		always = 1
bA_Freq9	B10		
prefixBit10	B1		always = 1
bA_Freq10	B10		
endingBit	B1		always = 0 indicating the end of the structure
Detailed Comments : the TTCN definition shall be modified if more than 10 BA Freq are required in the constraint			

Structured Type Definition			
Type Name : BA_ListPref **Encoding Variation** : **Comments** : BA list pref 3GPP TS 44.018 clause 10.5.2.1c			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI_8		’01110101’B
iel	O1		
rangeList	RangeList		1
bA_FreqList	BA_FreqList		
spareBits	BITSTRING		
Detailed Comments :			

Structured Type Definition

Type Name : BA_Range
Encoding Variation :
Comments : BA range
3GPP TS 44.018 clause 10.5.2.1a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
numberOfRanges	O1		number of ranges, at least 1
ranges	OCTETSTRING		

Detailed Comments :

Structured Type Definition

Type Name : BSIC_Descr
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
baIndexMask	B1		
bAIndexStartBSIC	B5		not present if baIndexMask = 0
bSIC	B6		
numberRemainingBSIC	B7		
freqScrolling1	B1		the number of repetition of following two fields is val(numberRemainingBSIC). the maximum repetition is 127. if more than 16 repetition is required in the cinstraint the TTCN definition shall be modified.
bSIC1	B6		
freqScrolling2	B1		
bSIC2	B6		
freqScrolling3	B1		
bSIC3	B6		
freqScrolling4	B1		
bSIC4	B6		
freqScrolling5	B1		
bSIC5	B6		
freqScrolling6	B1		
bSIC6	B6		
freqScrolling7	B1		
bSIC7	B6		
freqScrolling8	B1		
bSIC8	B6		
freqScrolling9	B1		
bSIC9	B6		
freqScrolling10	B1		
bSIC10	B6		
freqScrolling11	B1		
bSIC11	B6		
freqScrolling12	B1		
bSIC12	B6		
freqScrolling13	B1		
bSIC13	B6		
freqScrolling14	B1		
bSIC14	B6		
freqScrolling15	B1		
bSIC15	B6		
freqScrolling16	B1		
bSIC16	B6		

Detailed Comments : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : CCCH_Info
Encoding Variation :
Comments : parameters for common control channels

Element Name	Type Definition	Field Encoding	Comments
bS_PA_MFRMS	B3		the number of 51−multiframes between transmission of paging messages. Definition see 3GPP TS 44.018 section 10.5.2.11
bS_AG_BLKS_RES	B3		the number of blocks on each common control channel reserved for access grant messages. Definition see 3GPP TS 44.018 section 10.5.2.11

Detailed Comments :

Structured Type Definition

Type Name : CCN_SupportDescr
Encoding Variation :
Comments : CCN Support Description. the definition is
<CCN Support Description struct> ::=
<Number_Cells> : bit(7)>
{CCN_SUPPORTED : bit}* (Val(Number_Cells)),
the number of cells can be upto 127 from above definition. The TTCN definition here includes only 1 cell, the TTCN shall be modified if more than 1 cell is reqired in the test case.

Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
cCN_SUPPORTED1	B1		

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20

Structured Type Definition			
Type Name : CDMA2000CellDescr			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
pilotPN_Offset	B9		
mask	B1		
additionalInfoMask	B3		
additionalInfoFor1xCommonPilot_Diversity	AdditionalInfoFor1xCommonPilotDiversity		not present if mask = 0 or additionalInfoMask <> 000
additionalInfoFor1xAuxPilot	AdditionalInfoFor1xAuxPilot		not present if mask = 0 or additionalInfoMask <> 001
additionalInfoFor1xAuxPilot_Diversity	AdditionalInfoFor1xAuxPilotDiversity		not present if mask = 0 or additionalInfoMask <> 010
additionalInfoFor3xCommonPilot	AdditionalInfoFor3xCommonPilot		not present if mask = 0 or additionalInfoMask <> 011
additionalInfoFor3xAuxPilot	AdditionalInfoFor3xAuxPilot		not present if mask = 0 or additionalInfoMask <> 110
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : CDMA2000Descr			
Encoding Variation :			
Comments : Only 1 repetition has been included. If more are required, the TTCN will be changed			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
cdma2000FreqBand	B5		
cdma2000Freq	B11		
numberCDMA2000Cells	B5		
cdma2000CellDescr1	CDMA2000CellDescr		
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : COMPACT_NCP2_Property			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
sAME_RA_AS_SERVING_CELL	B1		
cELL_BAR_ACCESS_2	B1		
bCC	B3		
timeMask	B1		
tIME_GROUP	B2		not present if timeMask = 0
Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition

Type Name : COMPACT_NCP2_Repeat

Encoding Variation :

Comments : Only 1 repetition has been included. If more are required, the TTCN will be changed

Element Name	Type Definition	Field Encoding	Comments
prefix	B1		The rest fields are all OMITted if prefix = 0
sTART_FREQUENCY1	B10		
nCP2_Property1	COMPACT_NCP2_Property		
nR_OF_REMAINING_CELLS1	B4		if value is equal to 0, the rest fiekds except endingRepetition are all OMITted
fREQ_DIFF_LENGTH1	B3		
fREQUENCY_DIFF2	BITSTRING[1..8]		number of bits in the BITSTRING= 1+val(fREQ_DIFF_LENTH1)
nCP2_Property2	COMPACT_NCP2_Property		
fREQUENCY_DIFF3	BITSTRING[1..8]		
nCP2_Property3	COMPACT_NCP2_Property		
fREQUENCY_DIFF4	BITSTRING[1..8]		
nCP2_Property4	COMPACT_NCP2_Property		
recursionBreak	B4		if present always = '0000'B indicating the end of COMPACT_NCP2 resursion, i.e NR_OF_REMAINING_CELLS = 0000
endingRepetition	B1		if present always = '0'B indicating no more START_FREQUENCY

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21

Structured Type Definition			
Type Name : COMPACT_NeighParamSet			
Encoding Variation :			
Comments : COMPACT Neighbour parameters set structure			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
nccMask	B1		
nCC	B3		not present if nccMask = 0
eXC_ACC	B1		
rxlevMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if rxlevMask = 0
txpwrMask	B1		
gPRS_MS_TXPWR_MAX_CCH	B5		not present if txpwrMask = 0
priorityMask	B1		
pRIORITY_CLASS	B3		not present if priorityMask = 0
hcsMask	B1		
hCS_THR	B5		not present if hcsMask = 0
gPRS_TEMPORARY_OFFSET	B3		
gPRS_PENALTY_TIME	B5		
gPRS_RESELECT_OFFSET	B5		
guarMmask	B1		
gUAR_CONSTANT_PWR_BLKS	B2		not present if guarMask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition			
Type Name : CellAlloc			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
rFL_NUMBER	B4		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition

Type Name : CellAllocLists
Encoding Variation :
Comments : The definition in CSN.1 is {1 < Cell Allocation struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more CellAllocation if more than 1 CellAllocation are required in the Constraint.

Refernce : 3GPP TS 44.060 clause 11.2.19

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
cellAlloc1	CellAlloc		not present if prefix1 = 0
endingRepetition	B1		Value always ZERO, indicates the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : CellChDescr
Encoding Variation :
Comments : Cell channel description
3GPP TS 44.018 clause 10.5.2.1b

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		’01100010’B
refFreqList	O16		reference frequency list, the first octet is length

Detailed Comments :

Structured Type Definition

Type Name : CellIdentification
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.23

Element Name	Type Definition	Field Encoding	Comments
locationAreaIdentificationIE	LocAreaId_v		3GPP TS 44.018
rAC	O1		3GPP TS 23.003
cellIdentityIE	O2		3GPP TS 44.018

Detailed Comments :

Structured Type Definition

Type Name : CellOptionBCCH
Encoding Variation :
Comments : Cell options (BCCH)
3GPP TS 44.018 clause 10.5.2.3

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information lelement identifier
dN_Ind	B1		dynamic ARFCN mapping indicator
pwrc	B1		power control indicator
dtx	B2		discontinuous transmission indicator
radioLinkTimeout	B4		radio link timeout

Detailed Comments :

Structured Type Definition

Type Name : CellOptionSACCH
Encoding Variation :
Comments : Cell options (SACCH)
3GPP TS 44.018 clause 10.5.2.3a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information lelement identifier
dtx8	B1		high bit of discontinuous transmission
pwrc	B1		power control indicator
dtx65	B2		lower 2 bits of discontinuous transmission indicator
radioLinkTimeout	B4		radio link timeout

Detailed Comments :

Structured Type Definition

Type Name : CellSelParam
Encoding Variation :
Comments : Cell selection parameters
3GPP TS 44.018 clause 10.5.2.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
cellReselHysteresis	B3		cell reselected hysteresis
mS_TXPWR_MAX_CCH	B5		MS maximum TX power for CCH
acs	B1		additional reselect parameter indicator
neci	B1		half rate support
rXLEV_ACCESS_MIN	B6		MS minimum received signal level

Detailed Comments :

Structured Type Definition

Type Name : CellSelection
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Type Definition	Field Encoding	Comments
bSIC	B6		
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_PwrMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_PwrMask = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_PwrMask = 0
gPRS_SelectMask	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_ReselectMask = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
sI13_Mask	B1		
sI13_PBCCH_LOCATION	SI13PBCCH_Location		not present if sI13_Mask = 0

Detailed Comments :

Structured Type Definition

Type Name : ChMode
Encoding Variation :
Comments : Channel mode
3GPP TS 44.018 clause 10.5.2.6

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01100011'B
mode	B8		

Detailed Comments :

0 0 0 0 0 0 0 0	signalling only
0 0 0 0 0 0 0 1	speech full rate or half rate version 1
0 0 1 0 0 0 0 1	speech full rate or half rate version 2
0 1 0 0 0 0 0 1	speech full rate or half rate version 3
0 1 1 0 0 0 0 1	data, 43.5 kbit/s (downlink)+14.5 kbps (uplink)
0 1 1 0 0 0 1 0	data, 29.0 kbit/s (downlink)+14.5 kbps (uplink)
0 1 1 0 0 1 0 0	data, 43.5 kbit/s (downlink)+29.0 kbps (uplink)
0 1 1 0 0 1 1 1	data, 14.5 kbit/s (downlink)+43.5 kbps (uplink)
0 1 1 0 0 1 0 1	data, 14.5 kbit/s (downlink)+29.0 kbps (uplink)
0 1 1 0 0 1 1 0	data, 29.0 kbit/s (downlink)+43.5 kbps (uplink)
0 0 1 0 0 1 1 1	data, 43.5 kbit/s radio interface rate
0 1 1 0 0 0 1 1	data, 32.0 kbit/s radio interface rate
0 1 0 0 0 0 1 1	data, 29.0 kbit/s radio interface rate
0 0 0 0 1 1 1 1	data, 14.5 kbit/s radio interface rate
0 0 0 0 0 0 1 1	data, 12.0 kbit/s radio interface rate
0 0 0 0 1 0 1 1	data, 6.0 kbit/s radio interface rate
0 0 0 1 0 0 1 1	data, 3.6 kbit/s radio interface rate

Structured Type Definition

Type Name : ChMode2
Encoding Variation :
Comments : Channel mode 2
3GPP TS 44.018 clause 10.5.2.7

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01100110'B
mode	B8		

Detailed Comments :

Structured Type Definition

Type Name : ChNeeded
Encoding Variation :
Comments : Channels needed
3GPP TS 44.018 clause 10.5.2.8

Element Name	Type Definition	Field Encoding	Comments	
iei	B4		information element identity	
ch2	Channel		needed channel 2	O
ch1	Channel		needed channel 1	M

Detailed Comments :

Structured Type Definition

Type Name : ChannelDescr
Encoding Variation :
Comments : Channel description
3GPP TS 44.018 clause 10.5.2.5

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		’01100100’B
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
hch	B1		hch = 1 indicating hopping channel
maio	B6		mobile allocation index offset − hopping
hsn	B6		hopping sequence number − hopping
spr	B2		’00’B − non hopping
arfcn	B10		absolute RF channel number − non hopping

Detailed Comments :

Structured Type Definition

Type Name : ChannelDescr2
Encoding Variation :
Comments : Channel description 2
3GPP TS 44.018 clause 10.5.2.5a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		’01100110’B
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
hch	B1		hch = 1 indicating hopping channel
maio	B6		mobile allocation index offset − hopping
hsn	B6		hopping sequence number − hopping
spr	B2		’00’B − non hopping
arfcn	B10		absolute RF channel number − non hopping

Detailed Comments :

Structured Type Definition

Type Name : ChannelSpecificInfo
Encoding Variation :
Comments : parameters for individual channel

Element Name	Type Definition	Field Encoding	Comments
dedCH_Info	DedCH_Info		parameters for dedicated channel. valid for combinations: 1, 2, 3, 5, 7, 8, 9, 10
cCCH_Info	CCCH_Info		parameters for common control channels: PCH, SCH, ... valid for combinations: 4, 5, 6
pCCCH_Info	PCCCH_Info		parameters for packet common control channels: PCCCH, PPCH, ... valid for combinations: 11, 12
pBCCH_Info	PBCCH_Info		parameters for packet broadcast channel: PBCCH. valid for combination: 11

Detailed Comments :

Structured Type Definition

Type Name : CipherModeSetting
Encoding Variation :
Comments : Cipher mode setting
3GPP TS 44.018 clause 10.5.2.9

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_4		’1001’B
algId	B3		algorithm identifier
startingCiph	B1		starting ciphering, 1 = start

Detailed Comments :

Structured Type Definition

Type Name : CipherResponse
Encoding Variation :
Comments : Cipher response
3GPP TS 44.018 clause 10.5.2.10

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_4		’1010’B
spareBits	B3		spare bits
cipherResponse	B1		cipher response bit

Detailed Comments :

Structured Type Definition			
Type Name : ClassmarkEnquiryMask			
Encoding Variation :			
Comments : 3GPP TS 04.08 / 3GPP TS 44.018 Section 10.5.2.7c			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI_8		OCTETSTRING [1]
length	Length		OCTETSTRING [1]
value	O1		OCTETSTRING [1]
Detailed Comments :			

Structured Type Definition			
Type Name : CompactCellSelection			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.20			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
bSIC	B6		
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
sAME_RA_AS_SERVING_CELL	B1		
gPRS_Mask1	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if gPRS_Mask1 = 0
gPRS_MS_TXPWR_MAX_CCH	B5		not present if gPRS_Mask1 = 0
gPRS_Mask2	B1		
gPRS_TEMPORARY_OFFSET	B3		not present if gPRS_Mask2 = 0
gPRS_PENALTY_TIME	B5		not present if gPRS_Mask2 = 0
gPRS_Mask3	B1		
gPRS_RESELECT_OFFSET	B5		not present if gPRS_Mask3 = 0
hCS_Mask	B1		
hCS_Params	HCS		not present if hCS_Mask = 0
tIME_GROUPMask	B1		
tIME_GROUP	B2		not present if tIME_GROUPMask = 0
gUARMask	B1		
gUAR_CONSTANT_PWR_BLKS	B2		not present if gUARMask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : CompactControlInfo			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
largeCellOperation	B1		
numberOfIdleMask	B1		
numberOfIdleBlocks	NumberOfIdleBlocks		not present if numberOfIdleMask = 0
n_CCCH_NH_Mask	B1		
n_CCCH_NH	B4		not present if n_CCCH_NH_Mask = 0
Detailed Comments : Reference :3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : CompactInfo			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
cellIdentification	CellIdentification		
compactNeighbourCellParam	CompactNeighCellParamList		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition

Type Name : CompactNeighCellParam
Encoding Variation :
Comments : Compact Neighbour Cell Parameters Structure

Element Name	Type Definition	Field Encoding	Comments
sTART_FREQUENCY	B10		
compactCellSelectionParams	CompactCellSelection		
nR_OF_REMAINING_CELLS	B4		
fREQ_DIFF_LENGTH	B3		
fREQUENCY_DIFF1	BITSTRING[1..8]		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
compactCellSelectionParams1	CompactCellSelection		
fREQUENCY_DIFF2	BITSTRING[1..8]		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
compactCellSelectionParams2	CompactCellSelection		

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20
More fREQUENCY_DIFF + compactCellSelectionParams shall be added in this type definition if value of nR_OF_REMAINING_CELLS is greater than 2 . In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fREQUENCY_DIFF and compactCellSelectionParams

Structured Type Definition

Type Name : CompactNeighCellParam2
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
messageEscape	B2		always = ’00’B
prefix1	B1		The rest fields are all OMITted if prefix1 = 0
cOMPACT_NCP2_Repeat1	COMPACT_NCP2_Repeat		
cell_PARAMS_POINTER1	B2		
prefix2	B1		The rest fields are all OMITted if prefix2 = 0
cOMPACT_NCP2_Repeat2	COMPACT_NCP2_Repeat		
cELL_PARAMS_POINTER2	B2		
endingOfRepeat	B1		if present always = ’0’B indicating the end of the repetition
cOMPACT_NeighParaMSet1	COMPACT_NeighParamSet		
cOMPACT_NeighParaMSet2	COMPACT_NeighParamSet		
cOMPACT_NeighParaMSet3	COMPACT_NeighParamSet		
cOMPACT_NeighParaMSet4	COMPACT_NeighParamSet		

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21

Structured Type Definition

Type Name : CompactNeighCellParamList

Encoding Variation :

Comments : The type definition is
{1 < COMPACT Neighbour Cell params struct>}**0,
it is an indeterminate number of repetiton of <COMPACT Neighour Cell params struct>, so the TTCN definition shall be modified to include more compactNeighourCellParam if more 1 compactNeighourCellParam are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefix0	B1		Always "1"
compactNeighCellParam0	CompactNeighCellParam		
endingRepetition	B1		Always "0" to indicate the end of the structure

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20

Structured Type Definition

Type Name : CompactNeighCellParams2List

Encoding Variation :

Comments : this type definition is
{1 < COMPACT Neighbour Cell params 2 struct>}**0
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		
compactNeighCellParam2	CompactNeighCellParam2		not present if prefix1 = 0
endingRepetition	B1		not present if prefix1 = 0. If present, always = 0 indicating the end of the repetition

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

Structured Type Definition

Type Name : ControlChDescr
Encoding Variation :
Comments : Control channel description
3GPP TS 44.018 clause 10.5.2.11

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
mSCRelease	B1		MSC release
att	B1		attach−detach allowed
bS_AG_BLKS_RES	B3		base station access grant blocks reservation
cCCH_CONF	B3		CCCH configuration
spareBits	B3		spare bits
cBQ2	B2		cell bar qualify 2
bS_PA_MFRMS	B3		number of multiframes for paging request
t3212	O1		t3212 value

Detailed Comments :

Structured Type Definition

Type Name : DedCH_Info
Encoding Variation :
Comments : parameters for dedicated channel

Element Name	Type Definition	Field Encoding	Comments
chMode	ChMode		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	CipherModeSetting		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	B64		
powerLevel	B5		Initial MS uplink transmission power level. This value is used in the L1 header of SACCH.
timingAdvance	B7		Initial timing advance. This value is used in the L1 header of SACCH.This field shall be set to the same value as in timingAdvance of G_CL1_CreateCell_REQ.

Detailed Comments : In addition to ciphering algorithm the cipherMode specifies the initial ciphering mode of the physical channel in both transmission and receiving direction.by startingCiph bit. During ciphering mode setting procedure the ciphering mode of receiving direction can be changed by G_CL1_CipheringControl_REQ.

Structured Type Definition

Type Name : DedicatedModeOrTBF
Encoding Variation :
Comments : Reference : 3GPP TS 44.018 clause 10.5.2.25b

Element Name	Type Definition	Field Encoding	Comments
iei	B4		information element identifier
spareBit	B1		always = 0
twoMsgAssig	B1		two message assignment
downlink	B1		down link assignement
tBForDedicated	B1		TBF or dedicated mode

Detailed Comments :

Structured Type Definition

Type Name : DirectEncoding1
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.8

Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
gPRS_MobileAllocation	GPRSMobileAlloc		

Detailed Comments :

Structured Type Definition

Type Name : DirectEncoding2
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.8

Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
hSN	B6		
lengthOfMA_FreqList	B4		
mA_FreqList	OCTETSTRING[3..18]		length of this field is indicated in lengthOfMA_FreqList

Detailed Comments :

Structured Type Definition

Type Name : DynamicAllocation
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
extendedAlloc	B1		0 − dynamic allocation; 1 − extended dynamic allocation
uSFGranularity	B1		0 − one block; 1 − four blocks
physicalChId	PhysicalChId		Single PDCH or multislot−configured PDCHs
tN0	BOOLEAN		TRUE − time slot 0 is allocated; FALSE −− not allocated
uSF_TN0	B3		USF value for slot 0
tN1	BOOLEAN		TRUE − time slot 1 is allocated; FALSE −− not allocated
uSF_TN1	B3		USF value for slot 1
tN2	BOOLEAN		TRUE − time slot 2 is allocated; FALSE −− not allocated
uSF_TN2	B3		USF value for slot 2
tN3	BOOLEAN		TRUE − time slot 3 is allocated; FALSE −− not allocated
uSF_TN3	B3		USF value for slot 3
tN4	BOOLEAN		TRUE − time slot 4 is allocated; FALSE −− not allocated
uSF_TN4	B3		USF value for slot 4
tN5	BOOLEAN		TRUE − time slot 5 is allocated; FALSE −− not allocated
uSF_TN5	B3		USF value for slot 5
tN6	BOOLEAN		TRUE − time slot 6 is allocated; FALSE −− not allocated
uSF_TN6	B3		USF value for slot 6
tN7	BOOLEAN		TRUE − time slot 7 is allocated; FALSE −− not allocated
uSF_TN7	B3		USF value for slot 7

Detailed Comments : The uSF_TNx field is not applicable when tNx = FALSE.

Structured Type Definition

Type Name : EDGE_Struct

Encoding Variation :

Comments : Reference : 3GPP TS 24.008 clause 10.5.1.7

Element Name	Type Definition	Field Encoding	Comments
modulationCapability	B1		
pwrMask1	B1		
eDGE_RF_PowerCapability 1	B2		not present if pwrMask1 = 0
pwrMask2	B1		
eDGE_RF_PowerCapability 2	B2		not present if pwrMask2 = 0

Detailed Comments :

Structured Type Definition

Type Name : EGPRS_UplinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16 @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
extendedRA	B5		
accessTechMmask	B1		
accessTechRequest	AccessTechRequest		not present if accessTechMask = 0
allocMask	B1		'0' −> multiBlock Allocation; '1' −> dynamic allocation
tFI_Assignment	B5		temporary flow identifier
			not present if allocMask = 0
pOLLING	B1		not present if allocMask = 0
spareBit	B1		not present if allocMask = 0.
			set to 0
uSF	B3		not present if allocMask = 0
uSFGranularity	B1		not present if allocMask = 0
p0Mask	B1		not present if allocMask = 0
p0	B4		not present if allocMask = 0 or p0Mask = 0
pR_MODE	B1		not present if allocMask = 0 or p0Mask = 0
eGPRSChannelCodingCommand	B4		not present if allocMask = 0
tLLI_BlockChannelCodeing	B1		not present if allocMask = 0
bepPeriod2Mask	B1		not present if allocMask = 0
bepPeriod2	B4		not present if allocMask = 0 or bepPeriod2Mask = 0
resegment	B1		not present if allocMask = 0
eGPRSWindowSize	EGPRSWindowSize		not present if allocMask = 0
alphaMask	B1		not present if allocMask = 0
aLPHA	B4		not present if allocMask = 0 or alphaMask = 0
gMMA	B5		not present if allocMask = 0
taIndexMask	B1		not present if allocMask = 0
tIMING_ADVANCE_INDEX	B4		not present if allocMask = 0 or taIndexMask = 0
tbfStartingTimemask	B1		not present if allocMask = 0
tBF_STARTING_TIME	B16		not present if allocMask = 0 or tbfStartingTimemask = 0
alpha1Mask	B1		present if allocMask = 0
			multi block allocation
aLPHA1	B4		not present if allocMask = 1 or alpha1Mask = 0
gMMA1	B5		not present if allocMask = 1
tBF_STARTING_TIME1	B16		not present if allocMask = 1
numberOfRadioBlocks	B2		not present if allocMask = 1
p02Mask	B1		not present if allocMask = 1
p02	B4		not present if allocMask = 1 or p02Mask = 0

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
spareBit2	B1		not present if allocMask = 1 or p02Mask = 0 set to 0
pR_MODE2	B1		not present if allocMask = 1 or p02Mask = 0
Detailed Comments :			

Structured Type Definition			
Type Name : EM1			
Encoding Variation :			
Comments : Reference : 3GPP TS 44.060 clause 11.2.23			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
typeMask	B1		
eXT_REPORTING_TYPE	B2		not present if typeMask = 0
nCC_PERMITTED	B8		present if typeMask = 1 and eXT_REPORTING_TYPE = '01'B
intFreqMask	B1		present if typeMask = 1 and eXT_REPORTING_TYPE = '10'B
iNT_FREQUENCY	B5		present if typeMask = 1 and eXT_REPORTING_TYPE = '10'B and intFreqMask = 1
periodMask	B1		
eXT_REPORTING_PERIOD	B3		not present if periodMask = 0
eXT_FREQUENCY_LIST	EXT_FreqListDescr		
Detailed Comments :			

Structured Type Definition			
Type Name : ENH_ReportingParam **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
reportType	B1		
rEPORTING_RATE	B1		
iNVALID_BSIC_REPORTING	B1		
nccPermittedMask	B1		
nCC_PERMITTED	B8		not present if nccPermittedMask = 0
gPRS_MeasParamDesMask	B1		
gPRS_MeasureParamDescr	GPRS_MeasParamDescr		not present if gPRS_MeasParamDescrMask = 0
gPRS_3G_MeasParamDescrMmask	B1		
gPRS_3G_MeasParamDescr	GPRS_3G_MeasParamDescr		not present if gPRS_3G_MeasParamDescrMask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23			

Structured Type Definition			
Type Name : EXT_FreqList **Encoding Variation** : **Comments** : Only 1 repetition has been included. If more are required, the TTCN will be changed			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
sTART_FREQUENCY	B10		
nR_OF_FREQUENCIES	B5		
fREQ_DIFF_LENGTH	B3		
fREQUENCY_DIFF1	BITSTRING[1..8]		
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23			

Structured Type Definition

Type Name : EXT_FreqListDescr
Encoding Variation :
Comments : The definition is
<EXT Frequency List Description> ::=
<EXT Frequency List struct> {1 <EXT Frequency List struct>}**0
The EXT Frequency List may repeat infinite times, so, this TTCN definition shall be modified to iclude more eXT_FrequencyList if more than 1 eXT_FrequencyList are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
eXT_FreqList	EXT_FreqList		
prefix1	B1		value = '1'B
eXT_FreqList1	EXT_FreqList		
endingRepetition	B1		Value always equal to "0"

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Structured Type Definition

Type Name : ExtInfo_NonGPRSCellOptions
Encoding Variation :
Comments : 44.18 v5.14.0 Table 12.27

Element Name	Type Definition	Field Encoding	Comments
extLength	B6		
eCSC	B1		
ECSR3G	B1		

Detailed Comments :

Structured Type Definition

Type Name : ExtMeasParam
Encoding Variation :
Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Element Name	Type Definition	Field Encoding	Comments
extMeasurmentOrder	B2		
eM1	EM1		present if extMeasurementOrder = '01'B

Detailed Comments :

Structured Type Definition

Type Name : ExtensionInfo
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.24

Element Name	Type Definition	Field Encoding	Comments
extensionMask	B1		R99 extension
eGPRS_PACKET_CHANNEL_REQUEST	B1		not present if extensionMask = 0
bEP_PERIOD	B4		not present if extensionMask = 0
pFC_FEATURE_MODE	B1		not present if extensionMask = 0
dTM_SUPPORT	B1		not present if extensionMask = 0
bSS_PAGING_COORDINATION	B1		not present if extensionMask = 0
cCN_ACTIVE	B4		not present if extensionMask = 0, R4 extension
nW_EXT_UTBF	B1		not present if extensionMask = 0, R4 extension
spareBit	BITSTRING		not present if extensionMask = 0

Detailed Comments :

Structured Type Definition

Type Name : FreqChannelSeq
Encoding Variation :
Comments : Frequency channel sequence
3GPP TSS 44.018 clause 10.5.2.12

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		’01101001’B
larfcn	O1		lowest ARFCN (1−124)
incs	O8		increment skip ARFCN n

Detailed Comments :

Structured Type Definition

Type Name : FreqInfo
Encoding Variation :
Comments : Parameters for Description of basic physical channel in frequency domain.

Element Name	Type Definition	Field Encoding	Comments
h	B1		h=’1’B: hopping channel; h=’0’B: non−hopping channel
spr	B3		’000’B
spr1	B2		’00’B, if h = ’0’B, otherwise OMIT
maio	B6		mobile allocation index offset if h = ’1’B, otherwise OMIT
hsn	BITSTRING [6]		hopping sequence number if h = ’1’B, otherwise OMIT
arfcn	BITSTRING [10]		absolute RF channel number if h = ’0’B, otherwise OMIT
hoppingFreqList	FreqListNoIEI		hopping frequency list if h=’1’B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13

Detailed Comments : macLength is the length of mac field = (NF div 8) + 1. NF is the number of frequencies in the cell allocation.

mac i : mobile allocation RF channel i, i = 1, 2,..., NF. The mac i bit indicates whether or not the mobile allocation frequency list includes the i’th frequency in the cell allocation frequency list. In the cell allocation frequency list the absolute RF channel numbers are placed in increasing order of ARFCN, except that ARFCN 0, if included in the set, is put in the last position in the list. From I =1, 2,Ç, NF, for a RF channel belonging to the mobile allocation the mac i bit is coded with a "1"; for a RF channel not belonging to the mobile allocation the mac i bit is coded with a "0". If NF mod 8 <> 0 then bits from NF to 8*macLength must be coded with a "0" in each.

Structured Type Definition

Type Name : FreqList
Encoding Variation :
Comments : Frequency list
3GPP TS 44.018 clause 10.5.2.13

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		’00000101’B
iel	O1		OCTETSTRING [1]
frequencyList	OCTETSTRING		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Definition			
Type Name : FreqListNoIEI			
Encoding Variation :			
Comments : Frequency list without IEI GSM 44.018, 10.5.2.13			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
length	O1		OCTETSTRING [1]
fl	OCTETSTRING		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Definition			
Type Name : FreqParam			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.8			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
tSC	B3		
encodingMask	B2		
aRFCN	B10		present if encodingMask = ’00’B
indirectEncoding	IndirectEncoding		present if encodingMask = ’01’B
directEncoding1	DirectEncoding1		present if encodingMask = ’10’B
directEncoding2	DirectEncoding2		present if encodingMask = ’11’B
Detailed Comments :			

Structured Type Definition			
Type Name : FreqParam_bt			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.16			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
maskBits	B2		always = 00
mAIO	B6		MAIO
mobileAloc	OCTETSTRING		length of this field is (value of lengthOfFreqParam −1), lengthOfFreqParam is definied in IARO
Detailed Comments :			

Structured Type Definition

Type Name : GPRSMobileAlloc
Encoding Variation :
Comments : Reference: 3GPP TS 44.060 clause 12.10a

Element Name	Type Definition	Field Encoding	Comments
hSN	B6		3GPP TS 45.002
rFL_Mask	B1		
rFL_NumberList	RFL_NumberList		not present if rFL_Mask = 0
mA_ARFCN_Mask	B1		
mA_LENGTH	B6		not present if mA_ARFCN_Mask = 1
mA_BITMAP	BITSTRING[1..64]		not present if mA_ARFCN_Mask = 1
aRFCN_IndexMask	B1		not present if mA_ARFCN_Mask = 0
aRFCN_IndexList	ARFCN_IndexList		not present if mA_ARFCN_Mask = 0 or aRFCN_IndexMask = 0

Detailed Comments :

Structured Type Definition

Type Name : GPRSMobileAllocations
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
mA_NUMBER	B4		
GPRSMobileAllocation	GPRSMobileAlloc		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : GPRS_3G_MeasParamDescr
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
fDD_REP_QUANT_Mask	B1		
fDD_REP_QUANT	B1		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTING	B2		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRESHOLD	B3		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	B1		
tDD_MULTIRAT_REPORTING	B2		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRESHOLD	B3		not present if tDD_ReportingMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Structured Type Definition

Type Name : GPRS_BSIC_Descr

Encoding Variation :

Comments : The CSN.1 definition for this type is
<GPRS BSIC Descreiption struct> ::=
{0 | 1 <BA_Index_Start_BSIC : bit(5) > }
<BSIC : bit (6) >
<Number_Remaining_BSIC : bir (7) >
{ < Frequency_Scrolling : bit >
<BSIC : bit (6) } ** (val(Number_Remaining_BSIC)),
the number of repetitions of "Frequency_Scrolling" is determined by "Number_Remaining_BSIC",
the maximum repetition is 127. So the TTCN definition shall be modified to include more
"Frequency_Scrolling" if more than 8 "Frequency_Scrolling" are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
indexMask	B1		
bA_IndexStart_BSIC	B5		not present if indexMask = 0
bSIC	B6		
numberRemainingBSIC	B7		
frequencfScrolling1	B1		
bSIC1	B6		
frequencfScrolling2	B1		
bSIC2	B6		
frequencfScrolling3	B1		
bSIC3	B6		
frequencfScrolling4	B1		
bSIC4	B6		
frequencfScrolling5	B1		
bSIC5	B6		
frequencfScrolling6	B1		
bSIC6	B6		
frequencfScrolling7	B1		
bSIC7	B6		
frequencfScrolling8	B1		
bSIC8	B6		

Detailed Comments : Reference : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : GPRS_CellOptions
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.24

Element Name	Type Definition	Field Encoding	Comments
nMO	B2		network mode of operation
t3168	B3		
t3192	B3		
dRX_TIMER_MAX	B3		
aCCESS_BURST_TYPE	B1		
cONTROL_ACK_TYPE	B1		
bS_CV_MAX	B4		
pAN_Mask	B1		
pAN_DEC	B3		not present if pAN_Mask = 0
pAN_INC	B3		not present if pAN_Mask = 0
pAN_MAX	B3		not present if pAN_Mask = 0
optionalExtMask	B1		
extensionLength	B6		not present if optionalExtMask =0
extensionInfo	ExtensionInfo		not present if optionalExtMask = 0

Detailed Comments :

Structured Type Definition

Type Name : GPRS_MeasParamDescr
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
ServingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD_Mask	B1		
sCALE_ORD	B2		not present if sCALE_ORD_Mask = 0
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask400	B1		
rEPORTING_OFFSET_400	B3		not present if mask400 = 0
rEPORTING_THRESHOLD_400	B3		not present if mask400 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Structured Type Definition

Type Name : GPRS_MobileAllocationLists

Encoding Variation :

Comments : The definition in CSN.1 is {1 < GPRS Mobile Allocations struct >}**0, so the prefix bit and following structure may repeat infinite times, this struct definition shall be changed if more than 5 GPRSMobileAllocation are required in the Constraint.

Reference : 3GPP TS 44.060 clause 11.2.19

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 1
gPRS_MobileAllocation1	GPRSMobileAllocations		
prefix2	B1		always = 1
gPRS_MobileAllocation2	GPRSMobileAllocations		
prefix3	B1		always = 1
gPRS_MobileAllocation3	GPRSMobileAllocations		
prefix4	B1		always = 1
gPRS_MobileAllocation4	GPRSMobileAllocations		
prefix5	B1		always = 1
gPRS_MobileAllocation5	GPRSMobileAllocations		
endingRepetiton	B1		Its value is always zero and indicating the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : GPRS_PowerControlParam

Encoding Variation :

Comments : 3GPP TS 44.060 clause 11.2.25

Element Name	Type Definition	Field Encoding	Comments
aLPHA	B4		
t_AVG_W	B5		
t_AVG_T	B5		
pC_MEAS_CHAN	B1		0--BCCH 1--PDCH
n_AVG_I	B4		

Detailed Comments :

Structured Type Definition

Type Name : GPRS_REP_PRIORITY_Descr

Encoding Variation :

Comments : GPRS report priority description
the number of repetition of the rEP_PRIORITY is determined by value of numberCells, the maximum repetition is 127. the TTCN definition defines 8 repetitions, it shall be modified to include more repetitions if more 8 rEP_PRIORITY are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
rEP_PRIORITY1	B1		
rEP_PRIORITY2	B1		
rEP_PRIORITY3	B1		
rEP_PRIORITY4	B1		
rEP_PRIORITY5	B1		
rEP_PRIORITY6	B1		
rEP_PRIORITY7	B1		
rEP_PRIORITY8	B1		

Detailed Comments : 3GPP TS 44.018 clause 10.5.2.33b

Structured Type Definition

Type Name : GPRS_RTD12_List

Encoding Variation :

Comments : the CSN.1 definition for RTD12_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more rTD if more than 5 rTD are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 0
rTD1	B12		
prefix2	B1		always = 0
rTD2	B12		
prefix3	B1		always = 0
rTD3	B12		
prefix4	B1		always = 0
rTD4	B12		
prefix5	B1		always = 0
rTD5	B12		
endingRepetiton	B1		always = ’1’B indicating the end of the structure

Detailed Comments : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : GPRS_RTD6_List

Encoding Variation :

Comments : the CSN.1 definition for RTD6_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more rTD if more than 5 rTD are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		always = 0
rTD1	B6		
prefixBit2	B1		always = 0
rTD2	B6		
prefixBit3	B1		always = 0
rTD3	B6		
prefixBit4	B1		always = 0
rTD4	B6		
prefixBit5	B1		always = 0
rTD5	B6		
endingBit	B1		always = '1'B indicating the end of the structure

Detailed Comments : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : GPRS_RealTimeDiffDescr

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
rtdMask1	B1		
baIndexMask1	B1		not present if rtdMask1 = 0
bAIndexStartRTD1	B5		not present if rtdMask1 = 0 or baIndexMask1 = 0
rTD6_List	RTD6_List_List		not present if rtdMask1 = 0
rtdMask2	B1		
baIndexMask2	B1		not present if rtdMask2 = 0
bAIndexStartRTD2	B5		not present if rtdMask2 = 0 or baIndexMask2 = 0
rTD12_List	RTD12_List_List		not present if rtdMask2 = 0

Detailed Comments : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : GPRS_Resumption
Encoding Variation :
Comments : GPRS resumption
3GPP TS 44.018 clause 10.5.2.14c

Element Name	Type Definition	Field Encoding	Comments
iei	B4		
spareBits	B3		
ack	B1		

Detailed Comments :

Structured Type Definition

Type Name : G_CellConfigInfo

Encoding Variation :

Comments : This structure contains relevant information describing a GERAN cell configuration as needed for basic test Steps.

Element Name	Type Definition	Field Encoding	Comments
bCCH_Freq	BITSTRING [10]		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 20 for GSM 900 (alternative 40 or 60); 590 for DCS 1800 (alternative 690 or 830); 263 for GSM 450 (alternative 274 or 276); 310 for GSM 480 (alternative 321 or 323)
tCH_Freq	FreqInfo		frequency parameters for traffic channel
sDCCH8_Freq	FreqInfo		frequency parameters for stand alone dedicated control channel
downlinkPowerLevel	INTEGER		Downlink transmission power level in dBþVemf(). Default = 63
cellIdentity	O2		cell identity, 3GPP TS 24.008 clause 10.5.1.1. Default = ’0001’O
mcc	H3		mobile country code, 3 digits. 3GPP TS 24.008 clause 10.5.1.3. Default = 001 (decimal)
mnc	H3		mobile network code, 2 BCD digits. 3GPP TS 24.008 clause 10.5.1.3. Default = 01 (desimal)
lac	O2		location area code. 3GPP TS 24.008 clause 10.5.1.3. Default = ’0001’O
ncc	B3		PLMN colour code, 3GPP TS 23.003 clause 4.3.2. Default = ’001’B
bcc	B3		BS colour code, 3GPP TS 23.003 clause 4.3.2. Default = ’101’B
dTX	B2		Uplink discontinuous transmission indecation, 3GPP TS 44.018 clause 10.5.2.3. Dfault = MS must not use
dtx8	B1		Uplink discontinuous transmission indecation, 3GPP TS 44.018 clause 10.5.2.3a.

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
dtx65	B2		Uplink discontinuous transmission indecation, 3GPP TS 44.018 clause 10.5.2.3a.
attFlag	B1		IMSI attach/detach allowed, Default = MS shall not allpy
cCCH_CONF	B3		CCCH configuration, 3GPP TS 44.018 clause 10.5.2.11. Default = 1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	B3		3GPP TS 44.018 clause 10.5.2.11. Default = 0 block reserved
bS_PA_MFRMS	B3		3GPP TS 44.018 clause 10.5.2.11. Default = 5 paging subgroups
splitOnCCCH	B1		3GPP TS 24.008 clause 10.5.5.6. 0 = no split pg cycle on CCCH. value taken from PICS.
cell_BAR_ACCESS	B1		cell barred for access, 3GPP TS 44.018 clause 10.5.2.29. Default = not barred
cellBarQualify2	B2		cell bar qualify 2. 3GPP TS 44.018 clause 10.5.2.11
callReestab	B1		Call re−establishment allowed, 3GPP TS 44.018 clause 10.5.2.29.
timingAdvance	O1		timing advance value, 3GPP TS 44.018 clause 10.5.2.40
tSC	B3		training sequence code for dedicated channels. TSC of broadcast channel and common channel shall be equal to BCC.
cellAllocation	CellChDescr		cell allocation, 3GPP TS 44.018 clause 10.5.2.1b with IEI omitted
neighBCCHFreqList	NeighCellDescr		neighbour cell BCCH/CCCH ARFCN's, 3GPP TS 44.018 clause 10.5.2.22 with IEI omitted.
extNeighBCCHFreqList	NeighCellDescr		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis, 3GPP TS 44.018 clause 10.5.2.22 with IEI omitted.
extNeighBCCHFreqList2ter	NeighCellDescr2		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter, 3GPP TS 44.018 clause 10.5.2.22a with IEI omitted.
cipherKey	B64		cipher key
cipherMode	CipherModeSetting		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
emergencyCall	B1		Emergency call allowed, 3GPP TS 44.018 clause 10.5.2.29. Default = allowed
accessControlClass2	B5		Access control class 11..15, 3GPP TS 44.018 clause 10.5.2.29.
accessControlClass1	B10		Access control class 0..9, 3GPP TS 44.018 clause 10.5.2.29.
radioLinkTimeout	B4		RADIO−LINK−TIMEOUT, 3GPP TS 44.018 clause 10.5.2.3. Default = 8
t3212	O1		T3212 value, Default = infinite
maxRetrans	B2		Maxmum number of retransmission, 3GPP TS 44.018 clause 10.5.2.29. Default = 1
txInteger	B4		Number of slots to spread transmission, 3GPP TS 44.018 clause 10.5.2.29. Default = 5
cELL_RESELECT_HYSTERESIS	B3		3GPP TS 44.018 clause 10.5.2.4 and 3GPP TS 45.008. Default = 12 dB,
mS_TXPWR_MAX_CCH	B5		3GPP TS 44.018 clause 10.5.2.4 and 3GPP TS 45.008. Default = minimum level
rXLEV_ACCESS_MIN	B6		minimum received signal level at MS, 3GPP TS 44.018 clause 10.5.2.4. Default = minimum
nECI	B1		New establishment causes supported, 3GPP TS 44.018 clause 10.5.2.4. Default = not supported
aCS	B1		Additional reselection parameter indication, 3GPP TS 44.018 clause 10.5.2.4. Default = no additional parameters in SI 7 and 8.
bandIndicator	B1		ARFCN band. 0= DCS1800 band; 1= PCS1900 band. This value shall be consistent with bandIndicatorAsn1
bandIndicatorAsn1	Frequency_Band		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	O1		NCC permitted. 3GPP TS 44.018 clause 10.5.2.27
dN_Ind	B1		dynamic ARFCN mapping indecator. 3GPP TS 44.018 clause 10.5.2.3

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
pwrc	B1		power control indication, default ='0' PWRC is not set.
cellConfiguration	CellConfiguration		current configuration of the cell, used to control the behaviour of postamble
Detailed Comments :			

Structured Type Definition			
Type Name : GenCellSel			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
gPRS_CELL_RESELECT_HYSTERESIS	B3		
c31_HYST	B1		
c32_QUAL	B1		
rANDOM_ACCESS_RETRY	B1		
t_ReselMask	B1		
t_RESEL	B3		not present if t_ReselMask = 0
rA_ReselectHysteresisMask	B1		
rA_RESELECT_HYTERESIS	B3		not present if rA_ReselectHysteresisMask = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

Structured Type Definition			
Type Name : GlobalPowerControlParameters			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 12.9			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
aLPHA	B4		
t_AVG_W	B5		
t_AVG_T	B5		
pb	B4		
pC_MEAS_CHAN	B1		
iNT_MEAS_CHANNEL_LIST_AVAIL	B1		
n_AVG_I	B4		
Detailed Comments :			

Structured Type Definition

Type Name : GroupCallInfo

Encoding Variation :

Comments : 3GPP TS 44.018 clause 9.1.21a
the definition is
<Group Call information> ::=
<Group Call Reference : bit(36)>
{0 | 1 <Group Call Reference>}
if more than 5 Group Call Reference are needed in the constraint the TTCN definition shall be modified.

Element Name	Type Definition	Field Encoding	Comments
groupCallRef1	B36		
prefixBit1	B1		
groupCallRef2	B36		
prefixBit2	B1		
groupCallRef3	B36		
prefixBit3	B1		
groupCallRef4	B36		
prefixBit4	B1		
groupCallRef5	B36		
endingBit	B1		always = 0 indicating the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : GroupChannelDescr
Encoding Variation :
Comments : Group Channel description
3GPP TS 44.018 clause 10.5.2.14b

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
cht_schn	B5		channel type and TDMA offset
tn	B3		timeslot number
tsc	B3		training sequence code
hch	B1		hch = 1 indicating hopping channel
maio	B6		mobile allocation index offset − hopping
hsn	B6		hopping sequence number − hopping
spr	B2		’00’B − non hopping
arfcn	B10		absolute RF channel number − non hopping
mac_8n	B8		mac64 − mac57
mac_7n	B8		mac56 − mac49
mac_6n	B8		mac48 − mac41
mac_5n	B8		mac40 − mac33
mac_4n	B8		mac32 − mac25
mac_3n	B8		mac24 − mac17
mac_2n	B8		mac16 − mac9
mac_1n	B8		mac8 − mac1

Detailed Comments :

Structured Type Definition

Type Name : GroupCipherKey
Encoding Variation :
Comments : Group cipher key number
3GPP TS 24.008 clause 10.5.1.10

Element Name	Type Definition	Field Encoding	Comments
iei	B4		
keyNumber	B4		

Detailed Comments :

Structured Type Definition

Type Name : HCS
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
priorityClass	B3		
hCS_THR	B5		

Detailed Comments : 3GPP TS 44.060 clause 11.2.20

Structured Type Definition

Type Name : HandoverToUTRANCmd
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
lengthOfContents	O1		
valuePart	OCTETSTRING		basic production of Handover to UTRAN command defined in 3GPP TS 25.331 it is 8−bit aligned bitstring resulted from PER encoding

Detailed Comments : used in INTER SYSTEM TO UTRAN HANDOVER COMMAND
3GPP TS 44.018 clause 9.1.15a and 10.5.2.51

Structured Type Definition

Type Name : HoppingPCCCHCarrierList
Encoding Variation :
Comments : The definition of this type is
<Hopping PCCCH Carriers Lists struct> ::=
{1<Hopping PCCCH Carriers struct>}**0.
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more hoppingPCCCHCarriers if more 3 hoppingPCCCHCarriers are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		
hoppingPCCCHCarriers1	HoppingPCCCHCarriers		not present if prefixBit1 = 0
prefixBit2	B1		
hoppingPCCCHCarriers2	HoppingPCCCHCarriers		not present if prefixBit2 = 0
prefixBit3	B1		
hoppingPCCCHCarriers3	HoppingPCCCHCarriers		not present if prefixBit3 = 0
endingBit	B1		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition			
Type Name : HoppingPCCCHCarriers			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
mAIO	B6		
timeslotAllocation	B8		
Detailed Comments : 3GPP TS 44.060 clause 11.2.19			

Structured Type Definition			
Type Name : IARO			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.16 @sic R5s050095 sic@			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
constructMask	B2	LowHigh_Rule3	
compressInterRATHO	B1	LowHigh_Rule3	present if constructMask = LL
reservMask1	B1		present if constructMask = LH
reservMask2	B1		present if reservMask1 = 0
eGPRS_UplinkAssign	EGPRS_UplinkAssign		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	B6		present if constructMask = HL
freqParam_bt	FreqParam_bt		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	B1	LowHigh_Rule3	present if constructMask = HL
mask1	B1		present if constructMask = HH
mask2	B1		
packetUplinkAssign	PacketUplinkAssign		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	PacketDownlinkAssign		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	SecondPacketAssign		present if mask1 = 1 and constructMask = HH
Detailed Comments :			

Structured Type Definition

Type Name : IndirectEncoding
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.8

Element Name	Type Definition	Field Encoding	Comments
mAIO	B6		MAIO
mA_NUMBER	B4		MA_NUMBER
changeMark1Mask	B1		
mA_ChangeMark1	B2		not present if changeMark1Mask = 0
changeMark2Mask	B1		not present if changeMark1Mask = 0
mA_ChangeMark2	B2		not present if changeMark1Mask = 0 or changeMark2Mask = 0

Detailed Comments :

Structured Type Definition

Type Name : LSA_ID_Info

Encoding Variation :

Comments : The definition is < LSA ID Information stsruct> ::=
{1 {0 <LSA_ID : bit(24)>
| 1 <ShortLSA_ID : (10)>}}**0, so the TTCN definition shall be modified to include more lSA_ID if the constaint requires more than 5 lSA_ID.
Reference : 3GPP TS 44.060 clause 12.28

Element Name	Type Definition	Field Encoding	Comments
prefixBit1	B1		value always equal to "1"
lSA_ID_Mask1	B1		
lSA_ID1	B24		not present if lSA_ID_Mask1 = 1
ShortLSA_ID1	B10		not present if lSA_ID_Mask1 = 0
prefixBit2	B1		value always equal to "1"
lSA_ID_Mask2	B1		
lSA_ID2	B24		not present if lSA_ID_Mask2 = 1
ShortLSA_ID2	B10		not present if lSA_ID_Mask2 = 0
prefixBit3	B1		value always equal to "1"
lSA_ID_Mask3	B1		
lSA_ID3	B24		not present if lSA_ID_Mask3 = 1
ShortLSA_ID3	B10		not present if lSA_ID_Mask3 = 0
prefixBit4	B1		value always equal to "1"
lSA_ID_Mask4	B1		
lSA_ID4	B24		not present if lSA_ID_Mask4 = 1
ShortLSA_ID4	B10		not present if lSA_ID_Mask4 = 0
prefixBit5	B1		value always equal to "1"
lSA_ID_Mask5	B1		
lSA_ID5	B24		not present if lSA_ID_Mask4 = 1
ShortLSA_ID5	B10		not present if lSA_ID_Mask4 = 0
endBit	B1		value always equal to "0" to indicate the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : LSA_Param

Encoding Variation :

Comments : Reference: 3GPP TS 44.060 clause 12.28

Element Name	Type Definition	Field Encoding	Comments
nR_OF_FREQ_OR_CELLS	B5		
lSA_ID_Info_1	LSA_ID_Info		
lSA_ID_Info_2	LSA_ID_Info		
lSA_ID_Info_3	LSA_ID_Info		
lSA_ID_Info_4	LSA_ID_Info		
lSA_ID_Info_5	LSA_ID_Info		

Detailed Comments : More LSA_ID_Info shall be added into this type definition if value of nR_OF_FREQ_OR_CELLS is greater than 5.

Structured Type Definition

Type Name : MSCLSMK3
Encoding Variation :
Comments : Mobile station classmark 3
3GPP TS 24.008 clause 10.5.1.7 @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	B8		'00100000'B
iel	O1		OCTETSTRING [1]
spareBit	B1		spare bit
multibandSupported	B3		
a5_7	B1		a5/7 algorithm supported
a5_6	B1		a5/6 algorithm supported
a5_5	B1		a5/5 algorithm supported
a5_4	B1		a5/4 algorithm supported
associatedRadioCapabilty2	B4		present if multibandSupported = 101 or 110
spareBits1	B4		present if multibandSupported = 001 or 010 or 100
associatedRadioCapabilty1	B4		present if multibandSupported = 001 or 010 or 100 or 101 or 110
maskBit1	B1		
rGSM_RadioCapability	B3		R−GSM band associated radio capability. not present if maskBit1 = 0
maskBit2	B1		
multiSlotClass	B5		multi slot class. not present if multiSlotClass = 0
uCS2Treatment	B1		
extMeasurementCapability	B1		extended measurement capability
maskBit3	B1		
msMeasurementCapability	MS_MeasCapability		MS measurement capability not present if maskBit3 = 0
maskBit4	B1		
msPositioningMethod	B5		MS positioning method capability not present if maskBit4 = 0
maskBit5	B1		
eDGE_MultiSlot	B5		EDGE multi slot capability not present if maskBit5 = 0
maskBit6	B1		
eDGE_Struct	EDGE_Struct		EDGE struct not present if maskBit6 = 0
maskBit7	B1		
gSM400BandsSupported	B2		not present if maskBIt7 = 0
gSM400AssociatedRadioCapability	B4		not present if gSM400BandsSupported = 00 or maskBit7 = 0
maskBIt8	B1		

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
gSM850AssociatedRadiioCapability	B4		not present if maskBIt8 = 0
maskBIt9	B1		
pCS1900AssociatedRadiioCapability	B4		not present if maskBIt9 = 0
uMTS_FDD_RAT_Capability	B1		
uMTS384TDD_RAT_Capability	B1		
cDMA2000_RAT_Capability	B1		
maskBit10	B1		
dTM_GPRS_MultiSlotSubclass	B2		not present if maskBit10 = 0
singleSlotDTM	B1		not present if maskBit10 = 0
maskBit11	B1		not present if maskBit10 = 0
dTM_EGPRS_MultiSlorSubclass	B2		not present if maskBit10 = 0 or maskBit11 = 0
maskBit12	B1		
singleBandSupport	B4		not present if maskBit12 = 0
maskBit13	B1		
gSM700AssociatedRadioCapability	B4		not present if maskBit13 = 0
uMTS128TDD_RAT_Capability	B1		
gERANFeatPack1	B1		
mask14	B1		
extDTM_GPRS_MultiSlotSubclass	B2		not present if maskBit14 = 0
etxDTM_EGPRS_MultiSlotSubclass	B2		not present if maskBit14 = 0
mask15	B1		
highMultislotCap	B2		not present if mask15 = 0
mask16	B1		
gERANIuModeLength	B4		not present if maskBit16 = 0
gERANIuModeSpareBits	BITSTRING[0..15]		not present if maskBit16 = 0
gERANFeatPack2	B1		
gMSKMultislotPowerProfile	B2		
pSKMultislotPowerProfile	B2		
spareBits2	BITSTRING		
Detailed Comments : The information element has 14 octets maximum length			

Structured Type Definition			
Type Name : MS_MeasCapability			
Encoding Variation :			
Comments : Reference : 3GPP TS 24.008 clause 10.5.1.7			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
sMS_VALUE	B4		
sM_VALUE	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : MeasParamDescr			
Encoding Variation :			
Comments : MEASUREMENT PARAMETERSl description in SI2quater rest octets			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
rEPORT_TYPE	B1		
sERVING_BAND_REPORTING	B2		
Detailed Comments :			

Structured Type Definition

Type Name : MeasParamDescr3GMI

Encoding Variation :

Comments : 3G MEASUREMENT PARAMETERS description struct in MEASURMENT INFORMATION message

Element Name	Type Definition	Field Encoding	Comments
qsearsh_C	B4		
sEARSCH_PRIO_3G	B1		
fDD_REP_QUANT	B1		
multiRatFddMask	B1		
fDD_MULTIRAT_REPORTING	B2		not present if multiRatFddMask = 0
fDDMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDDMask = 0
fDD_REPORTING_THRESHOLD	B3		not present if fDDMask = 0
multiRatTddMask	B1		
tDD_MULTIRAT_REPORTING	B2		not present if multiRatTddMask = 0
tDDMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDDMask = 0
tDD_REPORTING_THRESHOLD	B3		not present if tDDMask = 0
multiRat2000Mask	B1		
cDMA2000MULTIRAT_REPORTING	B2		not present if multiRat2000Mask = 0
cdma2000Mask	B1		
cDMA2000REPORTING_OFFSET	B3		not present if cdma2000Mask = 0
cDMA2000REPORTING_THRESHOLD	B3		not present if cdma2000Mask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 9.1.54

Structured Type Definition

Type Name : MeasParamDescrMI
Encoding Variation :
Comments : measurement parameters description struct

Element Name	Type Definition	Field Encoding	Comments
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
servingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD	B2		not present if sCALE_ORD_Mask = 0
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask450	B1		
rEPORTING_OFFSET_450	B3		not present if mask450 = 0
rEPORTING_THRESHOLD_450	B3		not present if mask450 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments : Reference : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : MeasResults
Encoding Variation :
Comments : measurement results
3GPP TS 44.018 clause 10.5.2.20

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
ba_used	B1		bcch allocation used
dtx_used	B1		dtx was used
rxlev_fsc	RxLevel		received signal strength on the full serving cell
ba3G_used	B1		3G bcch allocation used
meas_valid	B1		measurement results valid
rxlev_ssc	RxLevel		received signal strength on a subset of the serving cell
spareBit1	B1		spare bit
rxqual_fsc	B3		received signal quality on the full serving cell
rxqual_ssc	B3		received signal quality on a subset of the serving cell
no_neighCells	B3		number of neighbouring cells (nc)
rxlev_nc1	RxLevel		received signal strength on nc1
bcchfrq_nc1	BCCHFreq		bcch frequency position of nc1
bsic_nc1	B6		base station identity code of nc1
rxlev_nc2	RxLevel		received signal strength on nc2
bcchfrq_nc2	BCCHFreq		bcch frequency position of nc2
bsic_nc2	B6		base station identity code of nc2
rxlev_nc3	RxLevel		received signal strength on nc3
bcchfrq_nc3	BCCHFreq		bcch frequency position of nc3
bsic_nc3	B6		base station identity code of nc3
rxlev_nc4	RxLevel		received signal strength on nc4
bcchfrq_nc4	BCCHFreq		bcch frequency position of nc4
bsic_nc4	B6		base station identity code of nc4
rxlev_nc5	RxLevel		received signal strength on nc5
bcchfrq_nc5	BCCHFreq		bcch frequency position of nc5
bsic_nc5	B6		base station identity code nc5
rxlev_nc6	RxLevel		received signal strength on nc6

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
bcchfrq_nc6	BCCHFreq		bcch frequency position of nc6
bsic_nc6	B6		base station identity code of nc6
Detailed Comments : The info element has a fixed length of 16 octets exclude IEI.			

Structured Type Definition			
Type Name : MobileAlloc			
Encoding Variation :			
Comments : Mobile allocation 3GPP TS 44.018 clause 10.5.2.21			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI_8		’01110010’B
iel	O1		’00’O for non hopping
mac_8n	B8		mac64 − mac57
mac_7n	B8		mac56 − mac49
mac_6n	B8		mac48 − mac41
mac_5n	B8		mac40 − mac33
mac_4n	B8		mac32 − mac25
mac_3n	B8		mac24 − mac17
mac_2n	B8		mac16 − mac9
mac_1n	B8		mac8 − mac1
Detailed Comments :			

Structured Type Definition			
Type Name : MultiRateConfig			
Encoding Variation :			
Comments : 3GPP TS 44.018 clause 10.5.2.21aa			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI_8		
iel	O1		
mrVersion	B3		multirate speech version
nSCB	B1		noise suppression control bit
iCMI	B1		initial codec mode indicator
spareBit	B1		0
startMode	B2		start mode
mrSpeechPara	OCTETSTRING[1..5]		parameters for multirate speech
Detailed Comments :			

Structured Type Definition

Type Name : MultislotAlloc
Encoding Variation :
Comments : multislot allocation
3GPP TS 44.018 clause 10.5.2.21b

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		IEI
iel	O1		OCTETSTRING [1]
ext1	B1		
da7	B1		down link time slot allocation bit
da6	B1		down link time slot allocation bit
da5	B1		down link time slot allocation bit
da4	B1		down link time slot allocation bit
da3	B1		down link time slot allocation bit
da2	B1		down link time slot allocation bit
da1	B1		down link time slot allocation bit
ext2	B1		always = 1
ua7	B1		uplink link time slot allocation bit
ua6	B1		uplink link time slot allocation bit
ua5	B1		uplink link time slot allocation bit
ua4	B1		uplink link time slot allocation bit
ua3	B1		uplink link time slot allocation bit
ua2	B1		uplink link time slot allocation bit
ua1	B1		uplink link time slot allocation bit
channelset1	O1		channel set 1
channelset2	O1		channel set 2
channelset3	O1		channel set 3
channelset4	O1		channel set 4
channelset5	O1		channel set 5
channelset6	O1		channel set 6
channelset7	O1		channel set 7
channelset8	O1		channel set 8

Detailed Comments :

Structured Type Definition			
Type Name : NCP2			
Encoding Variation :			
Comments :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
prefixBit	B1		always = '1'B
sTART_FREQUENCY	B10		
nCP2_Property	NCP2_Property		
nR_OF_REMAINING_CELLS	B4		value shall not be equal to 0, maximum number of repetition of fields fREQUENCY_DIFF and nCP2_Property is 15
fREQ_DIFF_LENGTH	B3		
fREQUENCY_DIFF1	BITSTRING[1..8]		
nCP2_Property1	NCP2_Property		
fREQUENCY_DIFF2	BITSTRING[1..8]		
nCP2_Property2	NCP2_Property		
fREQUENCY_DIFF3	BITSTRING[1..8]		
nCP2_Property3	NCP2_Property		
Detailed Comments : 3GPP TS 44.060 clause 11.2.21 More fields fREQUENCY_DIFF and nCP2_Property shall be added into this type definition if more than 4 neighbour cells are required.			

Structured Type Definition			
Type Name : NCP2_Property			
Encoding Variation :			
Comments : 3GPP TS 44.060 clause 11.2.21			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
sAME_RA_AS_SERVING_CELL	B1		
cELL_BAR_ACCESS_2	B1		
bCC	B3		
Detailed Comments :			

Structured Type Definition			
Type Name : NCP2_Repeat			
Encoding Variation :			
Comments : if more than 8 cells are needed, the TTCN definition shall be modified			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
nCP2_1	NCP2		
nCP2_2	NCP2		
breakRecursion	B4		always = 0000
endingBit	B1		always = 0
Detailed Comments : 3GPP TS 44.060 clause 11.2.21			

Structured Type Definition

Type Name : NC_MeasParams
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.33b

Element Name	Type Definition	Field Encoding	Comments
nETWORK_CONTROL_ORDER	B2		
mask	B1		
nC_NON_DRX_PERIOD	B3		not present if mask = 0
nC_REPORTING_PERIOD_I	B3		not present if mask = 0
nC_Reporting_PERIOD_T	B3		not present if mask = 0

Detailed Comments :

Structured Type Definition

Type Name : NC_MeasRpt
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9d Only 2 repetitions have only been implemented. If more are required, the definition will be changed

Element Name	Type Definition	Field Encoding	Comments
nC_Mode	B1		
mask	B1		
baUsed	B1		not present if mask = 1
ba3GUsed	B1		not present if mask = 1
psi3ChangeMark	B2		not present if mask = 0
pmoUsed	B1		
bsicSeen	B1		
scale	B1		
servMask	B1		
servingCellData	PCCOServingCellData		not present if servMask = 0
rptdInvalidBSIC	RptdInvalidBSICInfo		
rptMask	B1		
rptQuantityMask1	B1		not present if rptMask = 0
rptQuantity1	B6		not present if rptMask or prtQuantity1Mask = 0
rptQuantityMask2	B1		not present if rptMask = 0
rptQuantity2	B6		not present if rptMask or prtQuantity2Mask = 0
endingRepetition	B1		always = '0'B indicating the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : NeighCellDescr
Encoding Variation :
Comments : Neighbour cells description
3GPP TS 44.018 clause 10.5.2.22

Element Name	Type Definition	Field Encoding	Comments
rfl2	B2		bits 128−127
extind	B1		extension indication
baind	B1		bcch allocation sequence number indication
rfl4	B4		bits 124−121
rfl	O15		bits 120−0

Detailed Comments :

Structured Type Definition

Type Name : NeighCellDescr2
Encoding Variation :
Comments : Neighbour cells description2
3GPP TS 44.018 clause 10.5.2.22a

Element Name	Type Definition	Field Encoding	Comments
b128	B1		Bit 128, format−ID
mbrpt	B2		Multiband reporting
baind	B1		bcch allocation sequence number indication
b121_124	B4		Bit 124 − 121, format ID next
rfl	O15		remaining reference frequency list

Detailed Comments :

Structured Type Definition

Type Name : NeighCellDescr3G
Encoding Variation :
Comments : 3G neighbour cell description

Element Name	Type Definition	Field Encoding	Comments
indexMask	B1		
indexStart3G	B7		not present if indexMask = 0
absoluteIndexMask	B1		
absoluteIndexStartEMR	B7		not present if absoluteIndexMask = 0
fDDMask	B1		
uTRAN_FDD_Description	UTRAN_FDD_Descr		not present if fDDMask = 0
tDDMask	B1		
uTRAN_TDD_Description	UTRAN_TDD_Descr		not present if tDDMask = 0

Detailed Comments : 3GPP TS 44.060 clause 11.2.21b

Structured Type Definition

Type Name : NeighCellDescr3G_MI
Encoding Variation :
Comments : 3G neighbour cell description in MEASUREMENT INFORMATION message

Element Name	Type Definition	Field Encoding	Comments
waitMask	B1		
wait3G	B3		not present if waitMask = 0
indexMask	B1		
indexStart3G	B7		not present if indexMask = 0
absoluteIndexMask	B1		
absoluteIndexStartEMR	B7		not present if absoluteIndexMask = 0
fDDMask	B1		
uTRAN_FDD_Description	UTRAN_FDD_Descr		not present if fDDMask = 0
tDDMask	B1		
uTRAN_TDD_Description	UTRAN_TDD_Descr		not present if tDDMask = 0
cdma2000Mask	B1		
cDMA2000Descr	CDMA2000Descr		not present if cdma2000Mask = 0

Detailed Comments : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : NeighCellParam
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
sTART_FREQUNCY	B10		
cellSelectionParams	CellSelection		
nR_OF_REMAINING_CELLS	B4		
fREQ_DIFF_LENGTH	B3		
fREQUENCY_DIFF1	BITSTRING[1..8]		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
cellSelectionParams1	CellSelection		
fREQUENCY_DIFF2	BITSTRING[1..8]		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
cellSelectionParams2	CellSelection		

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.20.
More fREQUENCY_DIFF + cellSelectionParams shall be added into this type definition if nR_OF_REMAINING_CELLS is greater than 2. In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fREQUENCY_DIFF and cellSelectionParams

Structured Type Definition

Type Name : NeighCellParam2
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
messageEscape	B2		always = '00'B
prefix1	B1		value = 1 if present
nCP2_Repeat1	NCP2_Repeat		
cELL_PARAMS_POINTER1	B2		
prefix2	B1		value = 1 if present
nCP2_Repeat2	NCP2_Repeat		
cELL_PARAMS_POINTER2	B2		
endingBit1	B1		always = '0'B indicating the end of the recursion
neighParaMSet1	NeighParamSet		
neighParaMSet2	NeighParamSet		
neighParaMSet3	NeighParamSet		
neighParaMSet4	NeighParamSet		

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.21
only two repetitions are defined for the recursion of nCP2_Repeat + cELL_PARAMS_POINTER.
This type definition shall be modified if more repetition is needed

Structured Type Definition

Type Name : NeighCellParams2List
Encoding Variation :
Comments : this type definition is
{1 < Neighbour Cell params 2 struct>}**0
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
neighCellParam2_1	NeighCellParam2		
endingRepetition	B1		always = 0 indicating the end of the structure

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

Structured Type Definition

Type Name : NeighCellParamsList

Encoding Variation :

Comments : this type definition is
{1 < Neighbour Cell params struct>}**0
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		always = 1 indicating the start of Neighbour Cell params struct
neighCellParam1	NeighCellParam		
endingBit	B1		always = 0 indicating the end of the structure

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20

Structured Type Definition

Type Name : NeighParamSet

Encoding Variation :

Comments : Neighbour parameters set structure

Element Name	Type Definition	Field Encoding	Comments
nccMask	B1		
nCC	B3		not present if nccMask = 0
eXC_ACC	B1		
rxlevMask	B1		
gPRS_RXLEV_ACCESS_MIN	B6		not present if rxlevMask = 0
txpwrMask	B1		
gPRS_MS_TXPWR_MAX_CCH	B5		not present if txpwrMask = 0
priorityMask	B1		
pRIORITY_CLASS	B3		not present if priorityMask = 0
hcsMask	B1		
hCS_THR	B5		not present if hcsMask = 0
pbcchLocMask	B1		
sI13PBCCH_Location	SI13PBCCH_Location		not present if pbcchLocMask = 0
gPRS_TEMPORARY_OFFSET	B3		
gPRS_PENALTY_TIME	B5		
gPRS_RESELECT_OFFSET	B5		

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

Structured Type Definition

Type Name : NonGPRSCellOptions
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.27

Element Name	Type Definition	Field Encoding	Comments
aTT	B1		
t3212Mask	B1		
t3212	B8		not present if t3212Mask = 0
nECI	B1		
pWRC	B1		
dTX	B2		
rADIO_LINK_TIMEOUT	B4		
bS_AG_BLKS_RES	B3		
cCCH_CONF	B3		
bS_PA_MFRMS	B3		
mAX_RETRANS	B2		
tX_INTEGER	B4		
eC	B1		
mS_TXPWR_MAX_CCCH	B5		
extensionBitsMask	B1		
extensionBits	ExtInfo_NonGPRSCellOptions		not present if extensionBitsMask = 0. 3GPP TS 44.060 clause 12.26

Detailed Comments :

Structured Type Definition

Type Name : NonHoppingPCCCHCarrier
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.19

Element Name	Type Definition	Field Encoding	Comments
aRFCN	B10		
timeslotAllocation	B8		

Detailed Comments :

Structured Type Definition

Type Name : NonHoppingPCCCHCarrierList

Encoding Variation :

Comments : The definition of this type is
<Non−hopping PCCCH Carriers Lists struct> ::=
{1 <Non−Hopping PCCCH Carriers struct>}**0.
The prefix bit and following structure may repeat infinite times, so this TTCN definition may shall be modified to include more nonHoppingPCCCHCarriers if more than 1 nonHoppingPCCCHCarriers are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
nonHoppingPCCCHCarriers1	NonHoppingPCCCHCarrier		
endingRepetition	B1		the value of theis bit is always zero to indicate the end of the structure

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : NumberOfIdleBlocks

Encoding Variation :

Comments :

Element Name	Type Definition	Field Encoding	Comments
nIB_CCCH0_Mask	B1		
nIB_CCCH0	B4		not present if nIB_CCCH0_Mask = 0
nIB_CCCH1_Mask	B1		
nIB_CCCH1	B4		not present if nIB_CCCH1_Mask = 0
nIB_CCCH2_Mask	B1		
nIB_CCCH2	B4		not present if nIB_CCCH2_Mask = 0
nIB_CCCH3_Mask	B1		
nIB_CCCH3	B4		not present if nIB_CCCH3_Mask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : P1RO
Encoding Variation :
Comments : paging request type 1 rest octets.
3GPP TS 44.018 clause 10.5.2.23 @sic T1−040940 sic@

Element Name	Type Definition	Field Encoding	Comments
nlnMask	B1	LowHigh_Rule3	
nLN_PCH	B2		not present if nlnMask = L
nLN_Status	B1		not present if nlnMask = L
priority1Mask	B1	LowHigh_Rule3	
priority1	B3		not present if priority1Mask = L
priority2Mask	B1	LowHigh_Rule3	
priority2	B3		not present if priority2Mask = L
groupCallMask	B1	LowHigh_Rule3	
groupCallInfo	GroupCallInfo		not present if groupCallMask = L
packetPageInd1	B1	LowHigh_Rule3	
packetPageInd2	B1	LowHigh_Rule3	

Detailed Comments : total length is 0..17 octets

Structured Type Definition

Type Name : PBCCH_Descr
Encoding Variation :
Comments : used in SI13 rest octets

Element Name	Type Definition	Field Encoding	Comments
pb	B4		
tSC	B3		
tN	B3		
carrierMask1	B1		
carrierMask2	B1		not present if carrierMask1 = 1. (carrierMask1= carrierMask2 = 0) indicating BCCH carrier
aRFCN	B10		present if (carrierMask1 = 0 and carrierMask2 = 1)
mAIO	B6		present if carrierMask1 = 1

Detailed Comments : 3GPP TS 44.018 clause 10.5.2.37b

Structured Type Definition

Type Name : PBCCH_Info
Encoding Variation :
Comments : parameters for packet broadcast channel

Element Name	Type Definition	Field Encoding	Comments
pSI1_REPEAT_PERIOD	PSI1_REPEAT_PERIOD		The repeat period of packet system information Type 1. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_HR	PSI_COUNT_HR		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_LR	PSI_COUNT_LR		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18

Detailed Comments : see 3GPP TS 44.060 section 12.25

Structured Type Definition

Type Name : PCCCHDescription
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
tSC	B3		
nonHoppingPCCCHCarriersMask	B1		
nonHoppingPCCCHCarriers	NonHoppingPCCCHCarrierList		not present if nonHoppingPCCCH_Carriers = 1
mA_NUNBER	B4		not present if nonHoppingPCCCH_Carriers = 0
hoppingPCCCHCarriers	HoppingPCCCHCarrierList		not present if nonHoppingPCCCH_Carriers = 0

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : PCCCH_DescriptionList
Encoding Variation :
Comments : The definition of this type is <PCCCH Description Lists struct> ::= {1 <PCCCH Description struct>}**0, so the prefix bit and following structure may repeat infinite times. This TTCN definition shall be modified to include more pCCCHDescription if more than 1 pCCCHDescription are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
pCCCHDescription1	PCCCHDescription		
endingRepetition	B1		the value of this bit is always zero to indicate the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : PCCCH_Info
Encoding Variation :
Comments : parameters for packet common control channels. 3GPP TS 44.060 clause 12.25

Element Name	Type Definition	Field Encoding	Comments
bS_PBCCH_BLKS	B2		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25
bS_PAG_BLKS_RES	B4		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25
bS_PRACH_BLKS	B4		3GPP TS 04.60 or 3GPP TS 44.060 clause 12.25

Detailed Comments :

Structured Type Definition

Type Name : PCCCH_OrganisationParameters
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
bS_PCC_REL	B1		
bS_PBCCH_BLKS	B2		
bS_PAG_BLKS_RES	B4		
bS_PRACH_BLKS	B4		

Detailed Comments : 3GPP TS 44.060 clause 12.25

Structured Type Definition

Type Name : PCCOServingCellData
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9d

Element Name	Type Definition	Field Encoding	Comments
rxLevServingCell	B6		
mask	B1		
interferenceServingCell	B6		not present if mask = 0

Detailed Comments :

Structured Type Definition

Type Name : PRACH_ControlParameters
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.14

Element Name	Type Definition	Field Encoding	Comments
aCC_CONTR_CLASS	B16		
mAX_RETRANS1	B2		
mAX_RETRANS2	B2		
mAX_RETRANS3	B2		
mAX_RETRANS4	B2		
sParameter	B4		
tX_INT	B4		
persistenceLevelMask	B1		
pERSISTENCE_LEVEL1	B4		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL2	B4		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL3	B4		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL4	B4		not present if persistenceLevelMask = 0

Detailed Comments :

Structured Type Definition

Type Name : PacketChDescr
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.25a

Element Name	Type Definition	Field Encoding	Comments
chType	B5		channel type
tN	B3		time slot
tSC	B3		training sequence code
maskBit1	B1		
maskBit2	B1		not present if maskBit1 = 1.
spareBit1	B1		not present if maskBit1 = 1 or maskBit2 = 1
aRFCN	B10		not present if maskBit1 = 1 or maskBit2 = 1
spareBit	B1		not present if maskBit1 = 1 or maskBit2 = 0
mAIO	B6		not present if maskBit1 = 1 or maskBit2 = 0
mA_NumberInd	B1		
maskBit3	B1		
spareBits	B2		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 1
cHANGE_MARK_1	B2		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 0
mIAO	B6		not present if maskBit1 = 0
hSN	B6		not present if maskBit1 = 0

Detailed Comments :

Structured Type Definition

Type Name : PacketDownlinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16 @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
tLLI	O4		TLLI
mask	B1		
tFI_Assignment	B5		temporary flow identifier not present if mask = 0
rLC_Mode	B1		RLC mode not present if mask = 0
alphaMask	B1		not present if mask = 0.
aLPHA	B4		not present if mask = 0 or alphaMask = 0
gAMMA	B5		not present if mask = 0
pOLLING	B1		not present if mask = 0
tA_VALID	B1		not present if mask = 0
taIndexMask	B1		
tIMING_ADVANCE_INDEX	B4		not present if mask = 0 or taIndexMask = 0
startingTimeMask	B1		not present if mask = 0
tBF_STARTING_TIME	B16		not present if mask = 0 or startingTimeMask = 0
pwrCtrlMask	B1		not present if mask = 0
p0	B4		not present if mask = 0 or pwrCtrlMask = 0
spareBit	B1		not present if mask = 0 or pwrCtrlMask = 0 Set to 0
pR_MODE	B1		not present if mask = 0 or pwrCtrlMask = 0
egprsMask	B1	LowHigh_Rule3	
eGPRSWindowSize	EGPRSWindowSize		not present if egprsMask = L
linkQualityMeasMode	B2		not present if egprsMask = L
bepPriod2Mask	B1		not present if egprsMask = L
BepPeriod2	B4		not present if egprsMask = L or bepPriod2Mask = 0

Detailed Comments :

Structured Type Definition

Type Name : PacketTimingAdvance
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.12

Element Name	Type Definition	Field Encoding	Comments
taValueMask	B1		
timingAdvanceValue	B6		not present if taValueMask = 0
taIndexMask	B1		
timingAdvanceIndex	B4		not present if taIndexMask = 0
timingAdvanceSlotNumber	B3		not present if taIndexMask = 0

Detailed Comments :

Structured Type Definition

Type Name : PacketUplinkAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16 @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
allocMask	B1		0 −> indicating single block allocation
tFI_Assignment	B5		temporary flow identifier not present if allocMask = 0
pOLLING	B1		not present if allocMask = 0
spareBit	B1		not present if allocMask = 0. Set to 0
uSF	B3		not present if allocMask = 0
uSFGranularity	B1		not present if allocMask = 0
p0Mask	B1		not present if allocMask = 0
p0	B4		not present if allocMask = 0 or p0Mask = 0
pR_MODE	B1		not present if allocMask = 0 or p0Mask = 0
ChannelCodingCommand	B2		not present if allocMask = 0
tLLI_BlockChannelCodeing	B1		not present if allocMask = 0
alphaMask	B1		not present if allocMask = 0
aLPHA	B4		not present if allocMask = 0 or alphaMask = 0
gMMA	B5		not present if allocMask = 0
taMask	B1		not present if allocMask = 0
tIMING_ADVANCE_INDEX	B4		not present if allocMask = 0 or taMask = 0
startingTimeMask	B1		not present if allocMask = 0
tBF_STARTING_TIME	B16		not present if allocMask = 0 or startingTimeMask = 0
alpha1Mask	B1		present if allocMask = 0 single block allocation
aLPHA1	B4		not present if allocMask = 1 or alpha1Mask = 0
gMMA1	B5		not present if allocMask = 1
prefixBits	B2		not present if allocMask = 1 the value is 01 if present
tBF_STARTING_TIME1	B16		not present if allocMask = 1
p02Mask	B1	LowHigh_Rule3	not present if allocMask = 1
p02	B4		not present if allocMask = 1 or p02Mask = L
spareBit2	B1		not present if allocMask = 1 or p02Mask = L Set to 0
pR_MODE2	B1		not present if allocMask = 1 or p02Mask = L
r99Mask	B1	LowHigh_Rule3	
extRAMask	B1		not present if r99Mask = L
extRA	B5		not present if r99Mask = L or extRAMask = 0

Detailed Comments :

Structured Type Definition

Type Name : PageModeIE
Encoding Variation :
Comments : Page mode
3GPP TS 44.018 clause 10.5.2.26

Element Name	Type Definition	Field Encoding	Comments
iei	B4		
sprb	B2		spare bits
pgm	B2		page mode

Detailed Comments :

Structured Type Definition

Type Name : PowerCommand
Encoding Variation :
Comments : Power command
3GPP TS 44.018 clause 10.5.2.28

Element Name	Type Definition	Field Encoding	Comments
iei	B8		information element identifier
spareBits	B2		spare bits
fpc	B1		fast measurement reporting and power control
powerLevel	B5		power level (0−31)

Detailed Comments :

Structured Type Definition

Type Name : PowerControlParam
Encoding Variation :
Comments : Power control parameters
3GPP TS 44.018 clause 12.13

Element Name	Type Definition	Field Encoding	Comments
aLPHA	B4		
gmmaMask0	B1		
gMMA_TN0	B5		not present if gmmaMask0 = 0
gmmaMask1	B1		
gMMA_TN1	B5		not present if gmmaMask1 = 0
gmmaMask2	B1		
gMMA_TN2	B5		not present if gmmaMask2 = 0
gmmaMask3	B1		
gMMA_TN3	B5		not present if gmmaMask3 = 0
gmmaMask4	B1		
gMMA_TN4	B5		not present if gmmaMask4 = 0
gmmaMask5	B1		
gMMA_TN5	B5		not present if gmmaMask5 = 0
gmmaMask6	B1		
gMMA_TN6	B5		not present if gmmaMask6 = 0
gmmaMask7	B1		
gMMA_TN7	B5		not present if gmmaMask7 = 0

Detailed Comments :

Structured Type Definition

Type Name : RACHControlParam
Encoding Variation :
Comments : Rach control parameters
3GPP TS 44.018 clause 10.5.2.29

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
maxretx	B2		maximum retransmissions
txInteger	B4		Tx integer, number of slots to spread transmission
cellBarAccess	B1		cell barred for access
re	B1		call reestablishment allowed
acc_2	B5		access control class 15−11
ec	B1		emergency call allowed
acc_1	B10		access control class 9−0

Detailed Comments : The info element has a fixed length of 3 octets.

Structured Type Definition

Type Name : RFL_NumberList
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.10a

Element Name	Type Definition	Field Encoding	Comments
rFL_Number1	B4		
prefix2	B1		value = 1 if present
rFL_Number2	B4		
prefix3	B1		value = 1 if present
rFL_Number3	B4		
prefix4	B1		value = 1 if present
rFL_Number4	B4		
prefix5	B1		value = 1 if present
rFL_Number5	B4		
endBit	B1		The value of this bit is always zero to indicate the end of the structure

Detailed Comments : It's a recursive structure. The definition is
<RFL number list struct> ::=
<RFL_NUMBER : bit(4)>
{0 | 1 <RFL number list struct>}
the rFL_Number can be repeated infinite times, this TTCN definition shall be modified to include more rFL_Number if more than 5 rFL_Number are required in the constraint.

Structured Type Definition

Type Name : RFN
Encoding Variation :
Comments : The reduced frame number corresponding to the absolute frame number (FN) modulo 42432.

Element Name	Type Definition	Field Encoding	Comments
t1_	B5		(FN div 1326) mod 32
t3	B6		FN mod 51
t2	B5		FN mod 26

Detailed Comments : see 3Gpp TS 44.018 section 10.5.2.38. The reduced frame number, FN modulo 42432 can be calculated in the fowllowing formula: 51 * ((t3 − t2) mod 26) + t3 + 1326 * t1_.

Structured Type Definition

Type Name : RR_Cause
Encoding Variation :
Comments : RR Cause
3GPP TS 44.018 clause 10.5.2.31

Element Name	Type Definition	Field Encoding	Comments
iei	B8		
cause	B8		

Detailed Comments :

Structured Type Definition

Type Name : RTD12_List_List

Encoding Variation :

Comments : the CSN.1 definition for RTD12_List_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more bA_RTD12_List if more than 1 bA_RTD12_List is required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
rTD12_List	GPRS_RTD12_List		
prefix1	B1		always = 0
rTD12_List1	GPRS_RTD12_List		
endingRepetition	B1		always = '1'B indicating the end of the structure

Detailed Comments : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : RTD6_List_List

Encoding Variation :

Comments : the CSN.1 definition for RTD6_List_List in GPRS Real Time Difference Description is an indeterminate repetition, so the TTCN definition shall be modified to include more bA_RTD6_List if more than 1 bA_RTD6_List are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
rTD6_List	GPRS_RTD6_List		
prefix1	B1		always = 0
rTD6_List1	GPRS_RTD6_List		
endingBit	B1		always = '1'B indicating the end of the structure

Detailed Comments : 3GPP TS 44.018, 10.5.2.33b

Structured Type Definition

Type Name : RangeList

Encoding Variation :

Comments : Range list
3GPP TS 44.018 clause 10.5.2.1c Only 1 repetition has been included. If more are required, the TTCN will be changed

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
rangeLower1	B10		
rangeUper1	B10		
endingRepetition	B1		always = 0 indicating the end of the structure

Detailed Comments : the TTCN definition shall be modified if more than 10 ranges are required in the constraint

Structured Type Definition

Type Name : RealTimeDiffDescr_MI
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
rtd6Mask	B1		
indexMask1	B1		not present if rtd6Mask = 0
bAIndexStartRTD1	B5		not present if rtd6Mask = 0 or indexMask1 = 0
rTD6_List	RTD6_List_List		not present if rtd6Mask = 0
rtd12Mask	B1		
indexMask2	B1		not present if rtd12Mask = 0
bAIndexStartRTD2	B5		not present if rtd12Mask = 0 or indexMask2 = 0
rTD12_List	RTD12_List_List		not present if rtd12Mask = 0

Detailed Comments : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition

Type Name : ReferenceFreq
Encoding Variation :
Comments : Reference : 3GPP TS 44.060 clause 11.2.19
rFL_Contents is the value part of "Frequency List" information element, the allowed formats are bit map 0, 1024 range, 512 range, 256 range, 128 range and variable bit map

Element Name	Type Definition	Field Encoding	Comments
rFL_NUMBER	B4		identification of the RFL
lengthOfRFLContents	B4		
rFL_Contents	OCTETSTRING[3..18]		the value part of "Frequency List" information element defined in 3GPP TS 44.018 clause 10.5.2.13

Detailed Comments :

Structured Type Definition

Type Name : ReferenceFreqLists
Encoding Variation :
Comments : The definition in CSN.1 is {1 < Reference Frequency struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more ReferenceFreq if more than 1 ReferenceFreq are required in the Constraint.

Reference : 3GPP TS 44.060 clause 11.2.19

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
referenceFreq1	ReferenceFreq		
endingRepetition	B1		Value always ZERO, indicates the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Definition

Type Name : RepeatedUTRAN_FDD_NeighCells
Encoding Variation :
Comments : 3GPP TS 44.018 clause 9.1.54

Element Name	Type Definition	Field Encoding	Comments
arfcnIndexMask	B1		
fDD_ARFCN	B14		present if arfcnIndexMask = 0
fDD_Indic0	B1		
nR_OF_FDD_CELLS	B5		
fDD_CELL_INFORMATION	BITSTRING		length of this bitstring = p(nR_OF_FDD_CELLS)

Detailed Comments : function p(x) is:
p(0) = 0, p(1) = 10, p(2) = 19, p(3) = 28, p(4) = 36, p(5) = 44,
p(6) = 52, p(7) = 60, p(8) = 67, p(9) = 74, p(10) = 81, p(11) = 88,
p(12) = 95, p(13) = 102, p(14) = 109, p(15) = 116, p(16) = 122,
p(x) = 0 for x = 17−31.

Structured Type Definition

Type Name : RepeatedUTRAN_TDD_NeighCells
Encoding Variation :
Comments : 3GPP TS 44.018 clause 9.1.54

Element Name	Type Definition	Field Encoding	Comments
arfcnIndexMask	B1		
tDD_ARFCN	B14		not present if arfcnIndexMask = 0
tDD_Indic0	B1		
nR_OF_TDD_CELLS	B5		
tDD_CELL_INFORMATION	BITSTRING		length of this bitstring = p(nR_OF_TDD_CELLS)

Detailed Comments : function p(x) is:
p(0) = 0, p(1) = 10, p(2) = 19, p(3) = 28, p(4) = 36, p(5) = 44,
p(6) = 52, p(7) = 60, p(8) = 67, p(9) = 74, p(10) = 81, p(11) = 88,
p(12) = 95, p(13) = 102, p(14) = 109, p(15) = 116, p(16) = 122,
p(x) = 0 for x = 17−31.

Structured Type Definition

Type Name : ReportPriorityDescr
Encoding Variation :
Comments : 3GPP TS 44.018 clause 9.1.54. Only 1 repetition has been included. If more are required, the TTCN will be changed

Element Name	Type Definition	Field Encoding	Comments
numberCells	B7		
reportPriority1	B1		this field is repeated for val(numberCells) times

Detailed Comments :

Structured Type Definition

Type Name : ReqRef
Encoding Variation :
Comments : Request reference
3GPP TS 44.018 clause 10.5.2.30

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		information element identifier
radoAccessInfo	B8		
fn	RFN		

Detailed Comments :

Structured Type Definition

Type Name : ResAndStartValue
Encoding Variation :
Comments : Used to receive the return result from o_CheckUtranClassmark

Element Name	Type Definition	Field Encoding	Comments
res	BOOLEAN		
start	START_Value		

Detailed Comments :

Structured Type Definition

Type Name : RptdInvalidBSICInfo
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9d Only 2 repetitions have only been implemented. If more are required, the definition will be changed

Element Name	Type Definition	Field Encoding	Comments
mask1	B1		
bCCHFreqNCell1	B5		not present if mask1 = 0
bSIC1	B6		not present if mask1 = 0
rxLevNCell1	B6		not present if mask1 = 0
mask2	B1		
bCCHFreqNCell2	B5		not present if mask2 = 0
bSIC2	B6		not present if mask2 = 0
rxLevNCell2	B6		not present if mask2 = 0
endingRepetition	B1		always = '0'B indicating the end of the structure

Detailed Comments :

Structured Type Definition

Type Name : SI13PBCCH_Location
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.37b

Element Name	Type Definition	Field Encoding	Comments
sI13LocationMask	B1		
sI13_LOCATION	B1		not present if sI13LocationMask = 1
PBCCH_LOCATION	B2		not present if sI13LocationMask = 0
pSI1_REPEAT_PERIOD	B4		not present if sI13LocationMask = 0

Detailed Comments :

Structured Type Definition

Type Name : SI13RO
Encoding Variation :
Comments : SI13 Rest Octets
3GPP TS 44.018 clause 10.5.2.37b

Element Name	Type Definition	Field Encoding	Comments
mask	B1	LowHigh_Rule3	the remainer of the fields are all not present if mask = L
bCCH_CHANGE_MARK	B3		
sI_CHANGE_FIELD	B4		
sI3ChangeMask	B1		
sI13_CHANGE_MARK	B2		not present if sI3ChangeMask = 0
gPRS_MobileAllocation	GPRSMobileAlloc		not present if sI3ChangeMask = 0
pbcchMask	B1		'0' −> no PBCCH
rAC	O1		present if pbcchMask = 0
sPGC_CCCH_SUP	B1		present if pbcchMask = 0
pRIORITY_ACCESS_THR	B3		present if pbcchMask = 0
nETWORK_CONTROLI_ORDER	B2		present if pbcchMask = 0
gPRS_CellOptions	GPRS_CellOptions		present if pbcchMask = 0
gPRS_PowerControlParameters	GPRS_PowerControlParam		present if pbcchMask = 0
pSI1_REPEAT_PERIOD	B4		present if pbcchMask = 1
pBCCH_Description	PBCCH_Descr		present if pbcchMask = 1
r99Mask	B1	LowHigh_Rule3	addition in R99
sGSNR	B1		present if r99Mask = H
r4Mask	B1	LowHigh_Rule3	addition in R4
sI_STATUS_IND	B1		present if r4Mask = H

Detailed Comments : The info element has a fixed length of 20 octets.

Structured Type Definition

Type Name : SI1RO
Encoding Variation :
Comments : SI1 Rest Octets
3GPP TS 04.018 clause 10.5.2.32

Element Name	Type Definition	Field Encoding	Comments
mask	B1	LowHigh_Rule3	
nCH_Position	B5		not present if mask = L
bandIndicator	B1	LowHigh_Rule3	L= DCS1800; H=PCS1900

Detailed Comments : The info element has a fixed length of 1 octet.

Structured Type Definition

Type Name : SI2quaterRO
Encoding Variation :
Comments : SI2quater Rest Octets
3GPP TS 44.018 clause 10.5.2.33b @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
bA_IND	B1		
bA_IND_3G	B1		
mP_CHANGE_MARK	B1		
sI2quater_INDEX	B4		
sI2quater_COUNT	B4		
measParamMask	B1		
measParamDescription	MeasParamDescr		not present if measParamMask = 0
gprsRTDMask	B1		
gPRS_RealTimeDiffDescr	GPRS_RealTimeDiffDescr		not present if gprsRTDMask = 0
gprsBSICMask	B1		
gPRS_BSIC_Description	GPRS_BSIC_Descr		not present if gprsBSICMask = 0
gprsRepPrioMask	B1		
gPRS_REP_PRIORITY_Descr	GPRS_REP_PRIORITY_Descr		not present if gprsRepPrioMask = 0
gprsMeasParamMask	B1		
gPRS_MeasParamsDescr	SI2quaterRO_GPRS_MeasParamDescr		not present if gprsMeasParamMask = 0
ncMeasParamMask	B1		
NC_Measurement_Parameters	NC_MeasParams		not present if ncMeasParamMask = 0
extnLengthMask	B1		
extensionLength	ExtLengthDescr		
neighCellMask	B1		
neighCellDes3G	NeighCellDescr3G		not present if neighCellMask = 0
measParam3GMask	B1		
measurementParams3G	SI2quaterRO_MeasParamDescr3G		not present if measParam3GMask = 0
gprsMeasParam3GMask	B1		
gPRS_3G_MeasParamDescr	SI2quaterRO_GPRS_3G_MeasParamDescr		not present if gprsMeasParam3GMask = 0
rel5Mask	B1	LowHigh_Rule3	
addMeasMask	B1		not present if mask = L or rel5Mask = L
addMeasParam3G	AdditionalMeasParam3G		not present if mask = L, rel5Mask = L or addMeasMask = 0
addMeasMask2	B1		not present if mask = L or rel5Mask = L
fddRepThres2Mask	B1		not present if mask = L, rel5Mask = L or addMeasMask2 = 0

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
fddRepThreshold2	B6		not present if mask = L, rel5Mask = L, addMeasMask2 = 0 or fddRepThres2Mask = 0
Detailed Comments : The info element has a fixed length of 20 octets.			

Structured Type Definition			
Type Name : SI2quaterRO_GPRS_3G_MeasParamDescr **Encoding Variation :** **Comments :**			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
qsearch_P	B4		
sEARCH_PRIO_3G	B1		
fDD_REP_QUANT_Mask	B1		
fDD_REP_QUANT	B1		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTING	B2		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	B1		
fDD_REPORTING_OFFSET	B3		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRESHOLD	B3		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	B1		
tDD_MULTIRAT_REPORTING	B2		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	B1		
tDD_REPORTING_OFFSET	B3		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRESHOLD	B3		not present if tDD_ReportingMask = 0
Detailed Comments : Reference : 3GPP TS 44.018 clause 10.5.2.33b			

Structured Type Definition

Type Name : SI2quaterRO_GPRS_MeasParamDescr
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
rEPORT_TYPE	B1		
rEPORTING_RATE	B1		
iNVALID_BSIC_REPORTING	B1		
multibandReportingMask	B1		
multibandReporting	B2		not present if multibandReportingMask = 0
servingBandReportingMask	B1		not present if servingBandReportingMask = 0
servingBandReporting	B2		not present if servingBandReportingMask = 0
sCALE_ORD_Mask	B1		
sCALE_ORD	B2		not present if sCALE_ORD_Mask = 0
mask900	B1		
rEPORTING_OFFSET_900	B3		not present if mask900 = 0
rEPORTING_THRESHOLD_900	B3		not present if mask900 = 0
mask1800	B1		
rEPORTING_OFFSET_1800	B3		not present if mask1800 = 0
rEPORTING_THRESHOLD_1800	B3		not present if mask1800 = 0
mask450	B1		
rEPORTING_OFFSET_450	B3		not present if mask450 = 0
rEPORTING_THRESHOLD_450	B3		not present if mask450 = 0
mask1900	B1		
rEPORTING_OFFSET_1900	B3		not present if mask1900 = 0
rEPORTING_THRESHOLD_1900	B3		not present if mask1900 = 0
mask850	B1		
rEPORTING_OFFSET_850	B3		not present if mask850 = 0
rEPORTING_THRESHOLD_850	B3		not present if mask850 = 0

Detailed Comments : Reference : 3GPP TS 44.018 clause 10.5.2.33b

Structured Type Definition

Type Name : SI2quaterRO_MeasParamDescr3G

Encoding Variation :

Comments : 3G MEASUREMENT PARAMETERSI description in SI2quater rest octets

Element Name	Type Definition	Field Encoding	Comments
qsearsh_I	B4		
qsearch_C_Initial	B1		
fDDMask	B1		
fDD_Qoffset	B4		not present if fDDMask = 0
fDD_REP_QUANT	B1		not present if fDDMask = 0
fDD_MULTIRAT_REPORTING	B2		not present if fDDMask = 0
fDD_Qmin	B3		not present if fDDMask = 0
tDDMask	B1		
tDD_Qoffset	B4		not present if tDDMask = 0
tDD_MULTIRAT_REPORTING	B2		not present if tDDMask = 0

Detailed Comments :

Structured Type Definition

Type Name : SI3RO

Encoding Variation :

Comments : SI3 Rest Octets
3GPP TS 44.018 clause 10.5.2.34

Element Name	Type Definition	Field Encoding	Comments
cellSelectMask	B1	LowHigh_Rule3	Cell select parameter mask
cbq	B1		not present if cellSelectMask = L, Cell bar qualify
cellReselectOffset	B6		not present if cellSelectMask = L
temporaryOffset	B3		not present if cellSelectMask = L
penaltyTime	B5		not present if cellSelectMask = L
powerOffsetMask	B1	LowHigh_Rule3	Power offset mask
powerOffset	B2		not present if powerOffsetMask = L
sI2terIndicator	B1	LowHigh_Rule3	SI 2ter indicator L= no SI2ter
earlyClassMarkSendingControl	B1	LowHigh_Rule3	L= forbidden, H= allowed
mask3	B1	LowHigh_Rule3	mask bit for scheduling info
schedulingWhere	B3		not present if mask3 = L
mask4	B1	LowHigh_Rule3	mask bit for GPRS indicator
rA_Colour	B3		not present if mask4 = L
sI13Position	B1		not present if mask4 = L
earlyClassMarksendingRestriction3G	B1	LowHigh_Rule3	L=no early 3G classmark sending
mask5	B1	LowHigh_Rule3	mask bit for SI2quaterPosition
sI2quaterPosition	B1		not present if mask5 = L
SI13altPosition	B1		only present if Iu supported in cell

Detailed Comments : The info element has a fixed length of 4 octets.

Structured Type Definition

Type Name : SI4RO
Encoding Variation :
Comments : SI4 Rest Octets
3GPP TS 44.018 clause 10.5.2.35

Element Name	Type Definition	Field Encoding	Comments
cellSelectMask	B1	LowHigh_Rule3	Cell selection parameter mask
cbq	B1		not present if cellSelectMask = L, Cell bar qualify
cellReselectOffset	B6		not present if cellSelectMask = L
temporaryOffset	B3		not present if cellSelectMask = L
penaltyTime	B5		not present if cellSelectMask = L
powerOffsetMask	B1	LowHigh_Rule3	Power offset mask
powerOffset	B2		not present if powerOffsetMask = L
raColourMask	B1	LowHigh_Rule3	GPRS indicator
rA_Colour	B3		not present if raColourMask = L
sI13Position	B1		not present if raColourMask = L
breakMask	B1	LowHigh_Rule3	
breakIndicator	B1	LowHigh_Rule3	present if breakMask = L
lsaParamMask	B1	LowHigh_Rule3	present if breakMask = H
pRIO_THR	B3		not present if lsaParamMask = L or breakMask = L
lSA_OFFSET	B3		not present if lsaParamMask = L or breakMask = L
mccMask	B1		not present if breakMask = L orlSAParamMask = L
mCC	B12		not present if mccMask = 0 or breakMask = L orlSAParamMask = L
nMC	B12		not present if mccMask = 0 or breakMask = L or lSAParamMask= L
cellIDMask	B1	LowHigh_Rule3	not present if breakMask = L
cellIdentity	B16		not present if cellIDMask = L or breakMask = L
lsaMask	B1	LowHigh_Rule3	not present if breakMask = L
sI4RO_LSA_ID_Info	SI4RO_LSA_ID_Info		not present if lsaMask = L or breakMask = L
cBQ3Mask	B1	LowHigh_Rule3	not present if breakMask = L
cBQ3	B2		not present if breakMask = L or cBQ3Mask = L
si13altMask	B1		not present if breakMask = L or cBQ3Mask = L
si13altPosition	B1		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments : The info element has a length of 0 to 10 octets.

Structured Type Definition

Type Name : SI4RO_LSA_ID_Info

Encoding Variation :

Comments : The definition is < LSA ID Information > ::=
< LSA identity> {0 | 1 <LSA ID information>};

<LSA identity> ::=
{0 <LSA_ID : bit(24)>
| 1 <ShortLSA_ID : (10)>},

this a recusive definition, can be repeated many times. So the TTCN definition shall be modified to include more lSA_ID if the constaint requires more than 1 lSA_ID.
Reference : 3GPP TS 44.018 clause 10.5.2.35

Element Name	Type Definition	Field Encoding	Comments
lSA_ID_Mask1	B1		
lSA_ID1	B24		not present if lSA_ID_Mask1 = 1
ShortLSA_ID1	B10		not present if lSA_ID_Mask1 = 0
endingRepetition	B1		value always equal to "0" to indicate the end of the structure

Detailed Comments : 3GPP TS 44.018 clause 10.5.2.35

Structured Type Definition

Type Name : SI6RO
Encoding Variation :
Comments : SI6 Rest Octets
3GPP TS 44.018 clause 10.5.2.35a @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
pchNchMask	B1	LowHigh_Rule3	PCH, NCH info mask
pagingChRestructuring	B1		not present if pchNchMask = L
nLN_SACCH	B2		not present if pchNchMask = L
prioMask	B1		not present if pchNchMask = L
callPriority	B3		not present if pchNchMask = L or prioMask = 0
nLN_Status	B1		not present if pchNchMask = L
inbandMask	B1	LowHigh_Rule3	
inbandNotifications	B1		not present if inbandMask = L
inbandPagings	B1		not present if inbandMask = L
dTM_Supported	B1	LowHigh_Rule3	
rAC	B8		not present if dTM_Supported = L
mAX_LAPDm	B3		not present if dTM_Supported = L
bandIndicator	B1	LowHigh_Rule3	L = 1800 band supported, H = 1900 band supported
txPwrMask	B1	LowHigh_Rule3	
gPRS_MS_TXPWT_MAX_CCH	B5		not present if txPwrMask = L

Detailed Comments : The info element has a fixed length of 7 octets.

Structured Type Definition

Type Name : SecondPacketAssign
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16

Element Name	Type Definition	Field Encoding	Comments
mask1	B1	LowHigh_Rule3	
mask2	B1		not present if mask1 = L
extendedRA	B5		not present if mask1 = L or mask2 = 0

Detailed Comments :

Structured Type Definition

Type Name : ServingCellParams
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
cELL_BAR_ACCESS_2	B1		
eXC_ACC	B1		
gPRS_RXLEV_ACCESS_MIN	B6		
gPRS_MS_TXPWR_MAX_CCH	B5		
hCS_ServingCellParametersMask	B1		
hCS_ServingCellParameters	HCS		not present if hCS_ServingCellParametersMask = 0
mULTIBAND_REPORTING	B2		

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20

Structured Type Definition

Type Name : StartingTime
Encoding Variation :
Comments : Starting time
3GPP TS 44.018 clause 10.5.2.38

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01111100'B
fn	RFN		

Detailed Comments :

Structured Type Definition

Type Name : TA
Encoding Variation :
Comments : Timing advance
GSM 04.08, 10.5.2.40

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		'01111101'B
sprb	BITSTRING [2]		'00'B
value	BITSTRING [6]		one unit = 48/13 microseconds (in 1 bit periods)

Detailed Comments :

Structured Type Definition

Type Name : UTRANPreConfigInfo
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.7a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI_8		
iel	O1		
value	OCTETSTRING		used to be: InterRATHandoverInfo @sic ER2012 sic@

Detailed Comments :

Structured Type Definition

Type Name : UTRAN_ARFCN
Encoding Variation :
Comments : The CSN.1 definition is an indeterminate repetition, so the TTCN definition shall be modified to include more uTRAN_ARFCN in more than 1 uTRAN_ARFCN are required in the constraint.

Element Name	Type Definition	Field Encoding	Comments
prefix1	B1		value = 1 if present
uTRAN_ARFCN1	B14		
endingRepetition	B1		always = '0'B indicating the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.25b

Structured Type Definition

Type Name : UTRAN_FDD_Descr
Encoding Variation :
Comments : the CSN.1definition is
<UTRAN FDD description struct> ::=
{0 | 1 <Bandwidth_FDD : bit(3) >}
{1 <Repeated UTRAN FDD Neighbour Cells : <Repeated UTRAN FDD Neighbour Cells struct>>}**0, the "Repeated UTRAN FDD Neighbour Cells" can be repeated many times as required, the current TTCN definition contains 3 repetitions only, it shall be modified if more repetition is required in the constaint.

Element Name	Type Definition	Field Encoding	Comments
bandwidthMask	B1		
bandwidthFDD	B3		not present if bandwidthMask = 0
prefix1	B1		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells1	RepeatedUTRAN_FDD_NeighCells		
prefix2	B1		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells2	RepeatedUTRAN_FDD_NeighCells		
endingRepetition	B1		always = '0'B indicating the end of the structure

Detailed Comments : 3GPP TS 44.018 clause 9.1.54

Structured Type Definition			
Type Name : UTRAN_FreqList **Encoding Variation** : **Comments** : UTRAN frequency list 3GPP TS 44.018 clause 10.5.2.1d			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	B8		’01001100’B
iel	O1		
fDD_ARFCN	UTRAN_ARFCN		FDD frequencies
tDD_ARFCN	UTRAN_ARFCN		TDD frequencies
spareBits	BITSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : UTRAN_TDD_Descr **Encoding Variation** : **Comments** : the CSN.1definition is <UTRAN TDD description struct> ::= {0 | 1 <Bandwidth_TDD : bit(3) >} {1 <Repeated UTRAN TDD Neighbour Cells : <Repeated UTRAN TDD Neighbour Cells struct>>}**0, the "Repeated UTRAN TDD Neighbour Cells" can be repeated many times as required, the current TTCN definition contains 1 repetitions only, it shall be modified if more repetition is required in the constaint.			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
bandwidthMask	B1		
bandwidthTDD	B3		not present if bandwidthMask = 0
prefix1	B1		value = 1 if present
repeatedUTRAN_TDD_NeighbourCells1	RepeatedUTRAN_TDD_NeighCells		
endingRepetition	B1		always = ’0’B indicating the end of the structure
Detailed Comments : 3GPP TS 44.018 clause 9.1.54			

Structured Type Definition			
Type Name : VGCS_TargetMode **Encoding Variation** : **Comments** : 3GPP TS 44.018 clause 10.5.2.42a			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI_8		
iel	O1		
targetMode	B2		
groupCipherKey	B4		
spareBits	B2		
Detailed Comments :			

Structured Type Definition			
Type Name : ExtLengthDescr **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
extensionLength	B8		
sparebit	BITSTRING		
Detailed Comments :			

Structured Type Definition			
Type Name : AccessTechnology **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
accessTechnologyType1	B4		
prefix1	B1		value 1 if present
accessTechnologyType2	B4		
prefix2	B1		value 1 if present
accessTechnologyType3	B4		
endBit	B1		shall always be 0
Detailed Comments :			

Structured Type Definition			
Type Name : CompactReducedMA **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
reducedMABitmapLen	B7		
reducedMABitmap	BITSTRING[0..128]		contents of length reducedMABitmapLen
MAIO_2mask	B1		
MAIO_2	B6		not present if MAIOmask=0
Detailed Comments :			

Structured Type Definition

Type Name : DynamicAllocationPacket
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
extendedAllocMask	B1		0 − dynamic allocation; 1 − extended dynamic allocation
mask	B1		
p0	B4		not present if mask=0
pR_Mode	B1		not present if mask=0
uSFGranularity	B1		0 − one block; 1 − four blocks
uplinkTFImask	B1		
uplinkTFI	B5		not present if uplinkTFImask=0
spareBit	B1		set to 0 @sic R5s050095 sic@
tBFStartingTimeMask	B1		
tBFStartingTime	StartingFrameNumberDscr		not present if tBFStartingTimeMask=0
timeSlotAllocMask	B1		
timeSlotAlloc	TimeSlotAllocation_UA		not present if timeSlotAllocMask=1
timeSlotAllocPowerControl	TimeSlotAllocationPowerControl		not present if timeSlotAllocMask=0

Detailed Comments :

Structured Type Definition

Type Name : EGPRSPktUplinkAssigment
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
constantVal	B2		shall be ’00’B
tLLImask	B1		
contensionResolutionTLLI	B32		not present if tLLImask=0
compactReducedMAmask	B1		
compactReducedMA	CompactReducedMA		not present if compactReducedMAmask=0
channelCodingCommand	B4		note 1
resegment	B1		0 − Retransmitted RLC data blocks shall not be re−segmented. 1 − Retransmitted RLC data blocks shall be re−segmented according to commanded MCS
windowSize	B5		
accessTechMask	B1		
accessTechnology	AccessTechnology		not present if accessTechMask = 0
ARACRetransReq	B1		0 − retransmission of an ADDITIONAL MS RADIO ACCESS CAPABILITIES message is not requested. 1 − retransmission of an ADDITIONAL MS RADIO ACCESS CAPABILITIES message is requested
tLLIBlockChannelCoding	B1		0 − MS shall use CS−1 in GPRS TBF mode and MCS−1 in EGPRS TBF mode. 1 − MS shall use the value commanded in the CHANNEL_CODING_COMMAND or EGPRS_CHANNEL_CODING_COMMAND
bep_Period2Mask	B1		
bep_Period2	B4		not present if bep_Period2Mask=0
packetTimingAdvance	PacketTimingAdvance		
packetExtTAmask	B1		
packetExtendedTA	B2		not present if packetExtTImask=0
freqParamMask	B1		
freqParam	FreqParam		not present if freqParamMask=0
allocationMask	B2		
dynamicAllocation	DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	SingleBlockAllocationPacket		present if allocationMask=10
multiBlockAllocation	MultiBlockAllocationPacket		present if allocationMask=11

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
r5Mask	B1		
gRNTIMask	B1		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	B4		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBIdMask	B1		not present if r99Mask=0 and r5Mask=0
rBId	B5		not present if r99Mask=0, r5Mask=0 and rBIdMask=0
Detailed Comments : note 1 : bits 4 3 2 1 value 0 0 0 0 MCS−1 0 0 0 1 MCS−2 0 0 1 0 MCS−3 0 0 1 1 MCS−4 0 1 0 0 MCS−5 0 1 0 1 MCS−6 0 1 1 0 MCS−7 0 1 1 1 MCS−8 1 0 0 0 MCS−9 1 0 0 1 MCS−5−7 1 0 1 0 MCS−6−9			

Structured Type Definition			
Type Name : GlobalTFI			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.10			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
TFImask	B1		
uplinkTFI	B5		not present if TFImask=1
downlinkTFI	B5		not present if TFImask=0
Detailed Comments :			

Structured Type Definition			
Type Name : PacketRequestReference			
Encoding Variation :			
Comments : 3GPP TS 44.046 clause 12.11			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
randomAccessInfo	B11		
frameNumber	RFN		
Detailed Comments :			

Structured Type Definition			
Type Name : PSI2Info **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
rFL_Contents_Len	B4		Length of RFL contents Reference : 3GPP TS 44.060 clause 11.2.19
rFL_Contents	OCTETSTRING		RFL contents
mALen	B6		Length of GPRS MA contents Reference: 3GPP TS 44.060 clause 12.10a
mABitmap	BITSTRING		GPRS MA bitmap
Detailed Comments :			

Structured Type Definition			
Type Name : PSI3Info **Encoding Variation** : **Comments** :			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
startFreq	B10		Start Frequency Reference: 3GPP TS 44.060 clause 11.2.20.
freqDiffLen	B3		Frequency Difference length
freqDiff	BITSTRING		Frequency Difference
Detailed Comments :			

Structured Type Definition

Type Name : ReferenceAddress
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
globalTFImask	B1		
gLOBAL_TFI	GlobalTFI		not present if globalTFImask=1
mask2	B1		not present if globalTFImask=0
tLLI	O4		not present if globalTFImask=0 and mask2=1
mask3	B1		not present if globalTFImask=0 and mask2=0
tQI	B16		not present if globalTFImask=0 and mask2=0 and mask3=1
packetRequestRef	PacketRequestReference		not present if globalTFImask=0 and mask2=0 and mask3=0

Detailed Comments :

Structured Type Definition

Type Name : MultiBlockAllocationPacket
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
timeslotNumber	B3		
PowerControlMask	B1		
alpha	B4		not present if PowerControlMask=0
gamma	B5		not present if PowerControlMask=0
mask	B1		
P0	B4		not present if mask=0
spareBit	B1		set to 0. not present if mask=0
prMode	B1		not present if mask=0
tBFStartingTime	StartingFrameNumberDscr		
noRadioBlocksAlloc	B2		

Detailed Comments :

Structured Type Definition

Type Name : SingleBlockAllocationPacket
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
timeSlot	B3		
PowerControlMask	B1		
alpha	B4		not present if PowerControlMask=0
gamma	B5		not present if PowerControlMask=0
mask	B1		
P0	B4		not present if mask=0
spareBit	B1		set to 0. not present if mask=0 @sic R5s050095 sic@
prMode	B1		not present if mask=0
tBFStartingTime	StartingFrameNumberDscr		

Detailed Comments :

Structured Type Definition

Type Name : StartingFrameNumberDscr
Encoding Variation :
Comments : 3GPP TS 44.046 clause 12.21

Element Name	Type Definition	Field Encoding	Comments
encodingMask	B1		
absoluteFrameNumEnc	RFN		not present if encodingMask=1
relativeFrameNumEnc	BITSTRING[0..13]		not present if encodingMask=0

Detailed Comments :

Structured Type Definition

Type Name : TimeSlotAllocation_UA
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
tN0mask	B1		
uSF_TN0	B3		not present if tN0mask=0
tN1mask	B1		
uSF_TN1	B3		not present if tN1mask=0
tN2mask	B1		
uSF_TN2	B3		not present if tN2mask=0
tN3mask	B1		
uSF_TN3	B3		not present if tN3mask=0
tN4mask	B1		
uSF_TN4	B3		not present if tN4mask=0
tN5mask	B1		
uSF_TN5	B3		not present if tN5mask=0
tN6mask	B1		
uSF_TN6	B3		not present if tN6mask=0
tN7mask	B1		
uSF_TN7	B3		not present if tN7mask=0

Detailed Comments :

Structured Type Definition

Type Name : TimeSlotAllocationPowerControl
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
tN0mask	B1		
uSF_TN0	B3		not present if tN0mask=0
gAMMA_TN0	B5		not present if tN0mask=0
tN1mask	B1		
uSF_TN1	B3		not present if tN1mask=0
gAMMA_TN1	B5		not present if tN1mask=0
tN2mask	B1		
uSF_TN2	B3		not present if tN2mask=0
gAMMA_TN2	B5		not present if tN2mask=0
tN3mask	B1		
uSF_TN3	B3		not present if tN3mask=0
gAMMA_TN3	B5		not present if tN3mask=0
tN5mask	B1		
uSF_TN5	B3		not present if tN5mask=0
gAMMA_TN5	B5		not present if tN5mask=0
tN6mask	B1		
uSF_TN6	B3		not present if tN6mask=0
gAMMA_TN6	B5		not present if tN6mask=0
tN7mask	B1		
uSF_TN7	B3		not present if tN7mask=0
gAMMA_TN7	B5		not present if tN7mask=0

Detailed Comments :

Structured Type Definition

Type Name : AlertPattern
Encoding Variation :
Comments : Alerting pattern (used for NIA)
3G TS 24.008 cl. 10.5.4.26
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00011001’B
iel	Length		length
spare4	B4		4 spare bits
val	B4		alerting pattern value

Detailed Comments :

Structured Type Definition

Type Name : BuBcap
Encoding Variation :
Comments : Backup Bearer capability
3G TS 24.008 cl. 10.5.4.4a
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’01000001’B (41 hex)
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue−>n, GSM, octet 3
codingStd	B1		coding standard, ’0’B, octet 3
transferMode	B1		transfer mode octet 3
itc	B3		information transfer capability, octet 3
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue−>network, octet 4
structure	B2		structure, ’0, 3’, octet 4
duplexMode	B1		duplex mode, ’1’B, octet 4
cfg	B1		configuration, ’0’B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, ’0’B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, ’00’B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	B3		signalling access protocol, ’1 − 6’, octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC , octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	B3		spare bits − 3 bits
extBit6	B1		extension bit, octet 6
layer1Id	B2		Layter 1 identity, ’01’B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, ’0000’B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet 6a
nego	B1		negotiation bit, ’0’B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
intermRate	B2		intermediate rate, octet 6b
nicTx	B1		network independent clock on transmission, GSM, octet 6b
nicRx	B1		network independent clock on reception, GSM, octet 6b
parity	B3		parity information, octet 6b
extBit6c	B1		extension bit, octet 6c
connectElem	B2		connection element, octet 6c
modemType	B5		modem type, octet 6c
extBit6d	B1		extension bit, octet 6d
OtherModemType	B2		Other Modem type, octet 6d
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d
extBit6e	B1		extension bit, octet 6e
acceptChCoding	B4		acceptable channel coding, octet 6e
maxNumTrafficCh	B3		maximum number of traffic channel, octet 6e
extBit6f	B1		extension bit, octet 6f
uIMI	B3		User initiated modification indication, octet 6f
wAIUR	B4		wanted air interface user rate, octet 6f
extBit6g	B1		extension bit, octet 6g
acceptChCodingExt	B3		acceptable channel coding extended, octet 6g
asymInd	B2		asymmetry indication, octet 6g
spare2	B2		spare 2 bits , octet 6g
extBit7	B1		extension bit, octet 7
layer2id	B2		L2 identity, octet 7
userInfoLayer2	B5		user information L2 protocol, octet 7
Detailed Comments :			

Structured Type Definition

Type Name : CGPN
Encoding Variation :
Comments : Calling party BCD number (CC information element)
3G TS 24.008 cl. 10.5.4.9
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’01011100’B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[0..10]		numbers

Detailed Comments :

Structured Type Definition

Type Name : CauNoCLI
Encoding Variation :
Comments : Cause of no CLI information elemnt
3G TS 24.008 cl. 10.5.4.30

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00111010’B
iel	Length		length
causeNoCLI	B8		cause of no CLI

Detailed Comments :

Structured Type Definition

Type Name : ConnectedSubAdrs
Encoding Variation :
Comments : Connected subaddress
3G TS 24.008 cl. 10.5.4.14

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’01001101’B
iel	Length		length
subadrs	Subadrs		Subaddress

Detailed Comments :

Structured Type Definition

Type Name : NtwCCCapabilities
Encoding Variation :
Comments : Network Call Control Capabilities
3G TS 24.008 cl. 10.5.4.29

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00101111’B
iel	Length		length
spare7	B7		spare
mCS	B1		MCS

Detailed Comments :

Structured Type Definition

Type Name : PresentIndScreeningInd
Encoding Variation :
Comments : Presentation indicator & screening indicator
3G TS 24.008 cl. 10.5.4.9, 10.5.4.13

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
presentInd	B2		presentation indicator
spare3	B3		3 spare bits
screeningInd	B2		screening indicator

Detailed Comments :

Structured Type Definition

Type Name : RedirectingPN
Encoding Variation :
Comments : Redirecting party BCD number
3G TS 24.008 cl. 10.5.4.21b
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’01110100’B (74hex)
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[0..15]		numbers

Detailed Comments :

Structured Type Definition

Type Name : RedirectingPS

Encoding Variation :

Comments : redirecting party subaddress
3G TS 24.008 cl. 10.5.4.21c
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’01110101’B (75hex)
iel	Length		length
subadrs	Subadrs		Subaddress

Detailed Comments :

Structured Type Definition

Type Name : Signal

Encoding Variation :

Comments : Signal information element
3G TS 24.008 cl. 10.5.4.23

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00110100’B
val	B8		Value

Detailed Comments :

Structured Type Definition

Type Name : CellInfoCfg

Encoding Variation :

Comments : This structure contains relevant information describing a cell configuration as needed for basic test Steps like ts_CreateCell and ts_IdleUpdated.
NOTE: this information is not related to any PDUs, IEs or ASPs

Element Name	Type Definition	Field Encoding	Comments
cellId	INTEGER		Cell Id
frequencyInfo	FrequencyInfo		Frequency information for current cell
attenuationLevel	INTEGER		Value of RF attenuator
priScrmCode	PrimaryScramblingCode		Primary Scrambling Code
powerpCPICH	DL_TxPower_PCPICH		Absolute Tx Power of (primary) CPICH
powerpSCH	DL_TxPower		Tx power level of primary SCH relative to CPICH
powersSCH	DL_TxPower		Tx power level of secondary SCH relative to CPICH
powerpCCPCH	DL_TxPower		Tx power level of primary CCPCH relative to CPICH
powersCCPCH	DL_TxPower		Tx power level of secondary CCPCH relative to CPICH
powersCCPCH1	DL_TxPower		Tx power level of secondary CCPCH1 relative to CPICH
timingsCCPCH1	INTEGER		Timing offset for secondary CCPCH1
powerAICH	AICH_PowerOffset		Tx power level of AICH relative to CPICH
powerPICH	PICH_PowerOffset		Tx power level of PICH relative to CPICH
cellTxPowerLevel	CellTxPowerLevel		Total cell power level (>= sum of all configured physical channels)
tCell	Tcell		Cell timing offset (in chips)
sfnOffset	INTEGER		SFN offset (in frames)
puncLimit	PuncturingLimit		Puncturing limit for PRACH
sf_PRACH	SF_PRACH		Spreading factor for PRACH
slotFormatsCCPCH1	SCCPCHSlotFormat		Slot format for secondary CCPCH1
mcc	HEXSTRING		MCC
mnc	HEXSTRING		MNC
lac	OCTETSTRING		LAC
rac	OCTETSTRING		RAC
attFlag	INTEGER		Attach flag (as broadcasted in BCCH)
nmo	OCTETSTRING		Network mode of operation
ura_Identity	BITSTRING		URA Identity (3GPP 25.331 clause 10.3.2.6)
t3212	OCTETSTRING		T3212 value

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
cRNTI	C_RNTI		cell radio network temporary identity assigned to the UE under test, this initial value is for ts_SS_CreateCellFACH. (from 34.123−1)
uRNTI	U_RNTI		srnc_Identity and s_RNTI
cellConfig	RB_ConfigType		Current configuration of the cell
dRX_CycleLength	DRX_CycleLengthStructure		To hold the 3 dRX_CycleLength
uL_ScramblingCode	UL_ScramblingCode		To hold the UL scrambling to be used in the cell
DL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
UL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
dl_DPCH_2ndScrCode	SecondaryScramblingCode		Secondary scrambling code for the DL DPCH
Detailed Comments :			

Structured Type Definition			
Type Name : DRX_CycleLengthStructure			
Encoding Variation :			
Comments : Structure taht contains CN DRX cycle length (CS and PS) and the UTRAN DRX Cycle length. This type is to be used in the CellInfoCfg in order to keep all DRX values.			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
cN_CS_DRX_CycleLength	CN_DRX_CycleLengthCoefficient		
cN_PS_DRX_CycleLength	CN_DRX_CycleLengthCoefficient		
uTRAN_DRX_CycleLength	UTRAN_DRX_CycleLength Coefficient		
Detailed Comments :			

Structured Type Definition

Type Name : AuthenticationFailureParameter

Encoding Variation :

Comments : Authentication Failure Parameter (TLV)
3G TS 24.008 cl. 10.5.3.2.2
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100010'B for MM (22 hex) '00110000'B for GMM (30 hex)
iel	Length		M 1 octet
auts	BITSTRING[112]		AUTS, 14 octets

Detailed Comments :

Structured Type Definition

Type Name : AC_ReferenceNumber

Encoding Variation :

Comments : Cipher Algorithm
3GPP 24.008 / 10.5.5.19

Element Name	Type Definition	Field Encoding	Comments
value	B4		

Detailed Comments :

Structured Type Definition

Type Name : AUTN

Encoding Variation :

Comments : Authentication Parameter AUTN
3G TS 24.008 cl. 10.5.3.1.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100000'B
iel	Length		'10'O
aUTN	BITSTRING[128]		Authentication Parameter AUTN

Detailed Comments :

Structured Type Definition

Type Name : AllowedAction
Encoding Variation :
Comments : Allowed actions
3G TS 24.008 cl. 10.5.4.27

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111011'B
iel	Length		Length
cCBS_Act	B1		CCBS Activation
spare7	B7		7 spare bits

Detailed Comments :

Structured Type Definition

Type Name : AttachResult
Encoding Variation :
Comments : Attach result
3GPP 24.008 / 10.5.5.1

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
result	B3		Attach result

Detailed Comments :

Structured Type Definition

Type Name : AttachType
Encoding Variation :
Comments : Attach type
3GPP 24.008 / 10.5.5.2

Element Name	Type Definition	Field Encoding	Comments
for	B1		Follow−on request
type	B3		Type of attach

Detailed Comments :

Structured Type Definition

Type Name : AuthRspExt

Encoding Variation :

Comments : Authentication Response parameter (extension)
3G TS 24.008 cl. 10.5.3.2.1
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100001'B for MM (21 hex) '00101001'B for GMM (29 hex)
iel	Length		
rES	BITSTRING[1..96]		Authentication Parameter RES

Detailed Comments :

Structured Type Definition

Type Name : AuthRsp_tv

Encoding Variation :

Comments : Authentication Response parameter (TV, 5 octets)
3G TS 24.008 cl. 10.5.3.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100010'B (22 hex)
value	BITSTRING[32]		Authentication Parameter RES

Detailed Comments :

Structured Type Definition

Type Name : AuthenticationParamterRAND

Encoding Variation :

Comments : Authentication Parameter RAND (TV, 17 octets)
3G TS 24.008 cl. 10.5.3.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100001'B (21 hex)
randValue	BITSTRING[128]		Authentication Parameter RAND value

Detailed Comments :

Structured Type Definition

Type Name : Bcap
Encoding Variation :
Comments : Bearer capability (CC information element)
3G TS 24.008 cl. 10.5.4.5

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00000100’B
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue−>n, GSM, octet 3
codingStd	B1		coding standard, ’0’B, octet 3
transferMode	B1		transfer mode octet 3
itc	B3		information transfer capability, octet 3
bcap3aEtc1	Bcap3aEtc		octet 3a etc no.1
bcap3aEtc2	Bcap3aEtc		octet 3a etc no.2
bcap3aEtc3	Bcap3aEtc		octet 3a etc no.3
bcap3aEtc4	Bcap3aEtc		octet 3a etc no.4
bcap3aEtc5	Bcap3aEtc		octet 3a etc no.5
bcap3aEtc6	Bcap3aEtc		octet 3a etc no.6
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue−>network, octet 4
structure	B2		structure, ’0, 3’, octet 4
duplexMode	B1		duplex mode, ’1’B, octet 4
cfg	B1		configuration, ’0’B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, ’0’B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, ’00’B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	B3		signalling access protocol, ’1 − 6’, octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC , octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	B3		spare bits − 3 bits
extBit5b	B1		extension bit, ’1’B, octet 5b
rateAdaptHeader	B1		rate adaptation header, octet 5b
multiFrame	B1		Multi frame, octet 5b
mode	B1		Mode of operation, octet 5b
logLinkId	B1		logical link identifier negotiation, octet 5b

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
assignorAssignee	B1		assignor/assignee, octet 5b
inBandOutBand	B1		in band/out band negotiation, octet 5b
spare1	B1		sapre bit − 1 bit
extBit6	B1		extension bit, octet 6
layer1Id	B2		Layter 1 identity, ’01’B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, ’0000’B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet 6a
nego	B1		negotiation bit, ’0’B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b
intermRate	B2		intermediate rate, octet 6b
nicTx	B1		network independent clock on transmission, GSM, octet 6b
nicRx	B1		network independent clock on reception, GSM, octet 6b
parity	B3		parity information, octet 6b
extBit6c	B1		extension bit, octet 6c
connectElem	B2		connection element, octet 6c
modemType	B5		modem type, octet 6c
extBit6d	B1		extension bit, octet 6d
OtherModemType	B2		Other Modem type, octet 6d
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d
extBit6e	B1		extension bit, octet 6e
acceptChCoding	B4		acceptable channel coding, octet 6e
maxNumTrafficCh	B3		maximum number of traffic channel, octet 6e
extBit6f	B1		extension bit, octet 6f
uIMI	B3		User initiated modification indication, octet 6f
wAIUR	B4		wanted air interface user rate, octet 6f
extBit6g	B1		extension bit, octet 6g
acceptChCodingExt	B3		acceptable channel coding extended, octet 6g
asymInd	B2		asymmetry indication, octet 6g
spare2	B2		spare 2 bits , octet 6g

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
extBit7	B1		extension bit, octet 7
layer2id	B2		L2 identity, octet 7
userInfoLayer2	B5		user information L2 protocol, octet 7
Detailed Comments :			

Structured Type Definition			
Type Name : Bcap3aEtc			
Encoding Variation :			
Comments : Speech Versions preferences as supported by the EFR mobile − see 3G TS 24.008 cl. 10.5.4.5/octet 3a etc/"speech version indication"			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
extBit	B1		extension bit (’0’B)
coding	B1		Octet a1, Coding (’0’B)
spare2	B2		Octet a1, Spare bits (’00’B)
speechVersion	B4		Octet a1, Speech version indication
Detailed Comments :			

Structured Type Definition			
Type Name : CC_Capabilities			
Encoding Variation :			
Comments : Call Control Capabilities 3G TS 24.008 cl. 10.5.4.5a			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI8		information element identifier ’00010101’B
iel	Length		length
maxNumBearer	B4		maximum number o fudpported bearer
spare2	B2		spare bits
pcp	B1		PCP
dtmf	B1		indication of supporting DTMF
spare4	B4		spare bits
maxNumSpeechBearer	B4		maximum number of speech bearers
Detailed Comments :			

Structured Type Definition			
Type Name : CDPN			
Encoding Variation :			
Comments : Called party BCD number (CC information element) 3G TS 24.008 cl. 10.5.4.7			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI8		information element identifier '01011110'B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
digits	OCTETSTRING[0..40]		BCD numbers
Detailed Comments :			

Structured Type Definition			
Type Name : CDPS			
Encoding Variation :			
Comments : Called party subaddress (CC information element) 3G TS cl. 10.5.4.8			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI8		information element identifier '01101101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition			
Type Name : CGPS			
Encoding Variation :			
Comments : Calling party subaddress (CC information element) 3G TS 24.008 cl. 10.5.4.10			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI8		information element identifier '01011101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition

Type Name : Cau
Encoding Variation :
Comments : Cause (CC information element)
3G TS 24.008 cl. 10.5.4.11

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00001000’B
iel	Length		length
extBit3	B1		extension bit, octet 3
codingStd	B2		coding standard
spare1	B1		spare bit
loc	B4		location
extBit3a	B1		extension bit, ’1’B, octet 3a
recommend	B7		recommendation
extBit4	B1		extension bit, ’1’B
cauValue	B7		cause value
diagnostic	OCTETSTRING [0..27]		Diagnostics

Detailed Comments :

Structured Type Definition

Type Name : Cau_lv
Encoding Variation :
Comments : Cause (CC information element)
3G TS 24.008 cl. 10.5.4.11

Element Name	Type Definition	Field Encoding	Comments
iel	Length		length
extBit3	B1		extension bit, octet 3
codingStd	B2		coding standard
spare1	B1		spare bit
loc	B4		location
extBit3a	B1		extension bit, ’1’B, octet 3a
recommend	B7		recommendation
extBit4	B1		extension bit, ’1’B
cauValue	B7		cause value
diagnostic	OCTETSTRING [0..27]		Diagnostics

Detailed Comments :

Structured Type Definition

Type Name : CellIndependantInfo
Encoding Variation :
Comments : This structure contains relevant information independant from the cell

Element Name	Type Definition	Field Encoding	Comments
cs_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
ps_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
recentSecureDomain	CN_DomainIdentity		the domain on which security was recently started, and hence the SRB are ciphered and Integrit protected with this domain.
dL_CipherMode	CipheringModeCommand		To hold the DL cipher mode to be used in RAB Steps.
uL_CipherMode	RB_ActivationTimeInfoList		To hold the UL cipher mode to be used in RAB Steps.
cipheringAlgorithmCapability	BITSTRING		BITSTRING thats hold the ciphering algorithm capability supported by UE
integrityStarted	BOOLEAN		Set to TRUE when integrity is started
dL_Integrity	IntegrityProtectionModeInfo		To hold the DL integrity protection active during a test case
uL_Integrity	IntegrityProtActivationInfo		To hold the UL integrity protection active during a test case
dl_IntegrityCheckInfo	IntegrityCheckInfo		To hold the integrity information to be sent
start_CS	START_Value		To hold the START value for CS Domain
start_PS	START_Value		To hold the START value for PS Domain

Detailed Comments :

Structured Type Definition

Type Name : CellNotification
Encoding Variation :
Comments : Cell notification
3GPP 24.008 / 10.5.5.21
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’10001100’B (8C hex)

Detailed Comments :

Structured Type Definition

Type Name : CiphAlgorithm
Encoding Variation :
Comments : Cipher Algorithm
3GPP 24.008 / 10.5.5.3

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
algorithm	B3		

Detailed Comments :

Structured Type Definition

Type Name : CiphKeySeqNum
Encoding Variation :
Comments : Ciphering Key Sequence Number
3G TS 24.008 cl. 10.5.1.2

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
keySeq	KeySeq		

Detailed Comments :

Structured Type Definition

Type Name : CiphKeySeqNum_tv
Encoding Variation :
Comments : Ciphering Key Sequence Number
3G TS 24.008 cl. 10.5.1.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		’1000’B
spare1	B1		
keySeq	KeySeq		

Detailed Comments :

Structured Type Definition

Type Name : Codec
Encoding Variation :
Comments : Codec
3G TS 24.008 cl. 10.5.4.32
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
sysId	OCTETSTRING[1]		system identifcation
len	Length		length
bitMap1to8	BITSTRING[8]		codec bitmap bits 1−8
bitMap9to16	BITSTRING[8]		codec bitmap bits 9−16

Detailed Comments :

Structured Type Definition

Type Name : CodecList
Encoding Variation :
Comments : Supported Codec List
3G TS 24.008 cl. 10.5.3.32
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000000'B (40 hex)
iel	Length		length
codec1	Codec		Codec
codec2	Codec		Codec
codec3	Codec		Codec
codec4	Codec		Codec
codec5	Codec		Codec

Detailed Comments :

Structured Type Definition

Type Name : CodeWord
Encoding Variation :
Comments : Code word within an RList super field. Ref 3G TS 25.322 clause 9.2.2.11.6

Element Name	Type Definition	Field Encoding	Comments
numberPart	CW_NumberPart		
statusInd	BITSTRING[1]		

Detailed Comments :

Structured Type Definition

Type Name : DRXparamter
Encoding Variation :
Comments : DRX paramter
3GPP 24.008 / 10.5.5.6

Element Name	Type Definition	Field Encoding	Comments
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non−DRX timer

Detailed Comments :

Structured Type Definition

Type Name : DRXparamter_tv
Encoding Variation :
Comments : DRX paramter
3GPP 24.008 / 10.5.5.6

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100111'B (hex 27)
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non−DRX timer

Detailed Comments :

Structured Type Definition

Type Name : DetachType
Encoding Variation :
Comments : Detach type
3GPP 24.008 / 10.5.5.5

Element Name	Type Definition	Field Encoding	Comments
powOff	B1		
type	B3		

Detailed Comments :

Structured Type Definition

Type Name : EmergNum
Encoding Variation :
Comments : Emergency Number
3G TS 24.008 cl. 10.5.3.13
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
len	Length		length
emergServCat	EmergServCat		Emergency Service Category
digits	OCTETSTRING[0..10]		BCD numbers

Detailed Comments :

Structured Type Definition

Type Name : EmergNumList
Encoding Variation :
Comments : Emergency Number List
3G TS 24.008 cl. 10.5.3.13
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110100'B (34 hex)
iel	Length		length
emergNum1	EmergNum		Emergency Number
emergNum2	EmergNum		Emergency Number
emergNum3	EmergNum		Emergency Number
emergNum4	EmergNum		Emergency Number
emergNum5	EmergNum		Emergency Number

Detailed Comments :

Structured Type Definition

Type Name : EmergServCat
Encoding Variation :
Comments : Emergency Service Category
3GPP 24.008 / 10.5.4.33
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
spare	B3		
value	B5		Emergency Service Category value

Detailed Comments :

Structured Type Definition

Type Name : Facility
Encoding Variation :
Comments : Facility information element
3G TS 24.008 cl. 10.5.4.15

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011100'B
iel	Length		length
comps	OCTETSTRING		Component

Detailed Comments :

Structured Type Definition

Type Name : ForceToStandby
Encoding Variation :
Comments : Force to standby
3GPP 24.008 / 10.5.5.7

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Force to standby value

Detailed Comments :

Structured Type Definition

Type Name : GMM_AUTN
Encoding Variation :
Comments : Authentication Parameter AUTN− to be used in GMM constraints
3G TS 24.008 cl. 10.5.3.1.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00101000’B
iel	Length		’10’O
aUTN	BITSTRING[128]		Authentication Parameter AUTN

Detailed Comments :

Structured Type Definition

Type Name : GMM_Cause
Encoding Variation :
Comments : GMM cause
3GPP 24.008 / 10.5.5.14

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00100101’B (25 hex)
value	B8		Cause value

Detailed Comments :

Structured Type Definition

Type Name : GMM_MS_Identity
Encoding Variation :
Comments : Mobile Identity
3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00100011’B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits

Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : GMM_MS_IdentityPTMSI
Encoding Variation :
Comments : Mobile Identity
3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00011000’B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits

Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : GPRS_Timer
Encoding Variation :
Comments : GPRS timer
3GPP 24.008 / 10.5.7.3

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		00010111’B (17 hex)
unit	B3		Unit
value	B5		Timer value

Detailed Comments :

Structured Type Definition

Type Name : GPRS_Timer2
Encoding Variation :
Comments : GPRS timer
3GPP 24.008 / 10.5.7.4
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101010'B (2A hex)
iel	Length		length
unit	B3		Unit
value	B5		Timer value

Detailed Comments :

Structured Type Definition

Type Name : GPRS_Timer_v
Encoding Variation :
Comments : GPRS timer
3GPP 24.008 / 10.5.7.3

Element Name	Type Definition	Field Encoding	Comments
unit	B3		Unit
value	B5		Timer value

Detailed Comments :

Structured Type Definition

Type Name : HLC
Encoding Variation :
Comments : High layer compatibility (CC information element)
3G TS 24.008 cl. 10.5.4.16, ITU Q.931

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111101'B
iel	Length		length
extBit3	B1		extension bit ('1'B)
codingStd	B2		coding standard
interpretation	B3		interpretation
presentModeProtocolProfile	B2		presentation method of protocol profile
extBit4	B1		extension bit, octet 4
hlcId	B7		high layer characteristics identification
extBit4a	B1		extension bit, '1'B, octet 4a
exteHlcId	B7		extended high layer characteristics identification

Detailed Comments :

Structured Type Definition

Type Name : IMEISVRequest

Encoding Variation :

Comments : IMEISV Request
3GPP 24.008 / 10.5.5.10

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
value	B3		

Detailed Comments :

Structured Type Definition

Type Name : LLC
Encoding Variation :
Comments : Low layer compatibility (CC information element)
3G TS 24.008 cl. 10.5.4.18 and ETS DE/SPS−5034−1 (update of ETS 300 102−1)

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’01111100’B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard, octet 3
itc	B5		information transfer capability, octet 3
extBit3a	B1		extension bit, octet 3a
negoInd	B1		negotiation indicator, octet 3a
spare6	B6		6 spare bits
extBit4	B1		extension bit, octet 4
transferMode	B2		transfer mode
infoTransferRate	B5		information transfer rate, octet 4
extBit4_1	B1		extension bit, octet 4.1
rateMultiplier	B7		rate multiplier, octet 4.1
extBit5	B1		extension bit, octet 5
layer1Id	B2		Layter 1 identity, ’01’B, octet 5
userInfoLayer1	B5		user information Layer 1 protocol, ’0000’B, octet 5
extBit5a	B1		extension bit, octet 5a
syncAsync	B1		synchronous bit, octet 5a
nego	B1		negotiation bit, octet 5a
userRate	B5		user rate, octet 5a
extBit5b1	B1		extension bit, octet 5b1
intermRate	B2		intermediate rate, octet 5b1
nicTx	B1		network independent clock on transmission, octet 5b1
nicRx	B1		network independent clock on reception, octet 5b1
flowCtrlTx	B1		flow control on transmission, octet 5b1
flowCtrlRx	B1		flow control on reception, octet 5b1
spare1	B1		1 spare bit, ’0’B, octet 5b1
extBit5b2	B1		extension bit, octet 5b2
rateAdaptHeader	B1		rate adaptation header, octet 5b2
multiFrame	B1		Multi frame, octet 5b2
mode	B1		Mode of operation, octet 5b2
logLinkId	B1		logical link identifier negotiation, octet 5b2
assignorAssignee	B1		assignor/assignee, octet 5b2

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
inBandOutBand	B1		in band/out band negotiation, octet 5b2
spare1_5b2	B1		sapre bit − 1 bit, octet 5b2
extBit5c	B1		extension bit, octet 5c
numStopBits	B2		number of stop bits, octet 5c
numDataBits	B2		number of data bits, octet 5c
parity	B3		parity, octet 5c
extBit5d	B1		extension bit, octet 5d
duplexMode	B1		duplex mode, octet 5d
modemType	B6		modem type, octet 5d
extBit6	B1		extension bit, octet 6
layer2id	B2		L2 identity, octet 6
userInfoLayer2	B5		user information L2 protocol, octet 6
extBit6a1	B1		extension bit, octet 6a1
modeLayer2	B2		mode, octet 6a1
spare3	B3		spare bits , ’000’B, octet 6a1
q933	B2		Q.933 use, octet 6a1
extBit6a2	B1		extension bit, octet 6a2
userSpecifLayer2	B7		user specified layer 2 protocol information, octet 6a2
extBit6b	B1		extension bit, octet 6b
windowSize	B7		window size, octet 6b
extBit7	B1		extension bit, octet 7
layer3id	B2		L3 identity, octet 7
userInfoLayer3	B5		user information L3 protocol, octet 7
extBit7a1	B1		extension bit, octet 7a2
OptionUserSpecifLayer3	B7		user specified layer 3 protocol information, octet 7a2
extBit7a2	B1		extension bit, ’1’B, octet 7a2
modeLayer3	B2		mode, octet 7a2
spare5	B5		spare bits , ’00000’B, octet 7a2
extb7b	B1		extension bit, octet 7b
spare3_7b	B3		spare bits , ’000’B, octet 7b
defaultPacketSize	B4		default packet size, octet 7b
extBit7c	B1		extension bit, ’1’B, octet 7c
packetWindowSize	B7		packet window size, octet 7bc
extBit7a3	B1		extension bit, octet 7a3
spare3_7a3	B3		3 spare bits

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
addLayer3ProtocolInfo	B4		additional layer 3 protocol information (most significant bits), octet 7a3
extBit7a4	B1		extension bit, octet 7a4
spare3_7a4	B3		3 spare bits
addLayer3ProtocolInfoL	B4		additional layer 3 protocol information (least significant bits), octet 7a4
Detailed Comments :			

Structured Type Definition			
Type Name : LocAreaId_v			
Encoding Variation :			
Comments : Location Area Identification Value 3G TS 24.008 cl. 10.5.1.3			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each
lac	OCTETSTRING[2]		LAC
Detailed Comments :			

Structured Type Definition			
Type Name : LocUpdType			
Encoding Variation :			
Comments : Location Updating Type 3G TS 24.008 cl. 10.5.3.5			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
fOR	B1		Follow−On Request
spare1	B1		
lUT	B2		Location Updating Type
Detailed Comments :			

Structured Type Definition

Type Name : MM_MS_Identity
Encoding Variation :
Comments : Mobile Identity
3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00010111'B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits

Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : MSRadioAccessCap_lv
Encoding Variation :
Comments : MS radio access capability
3GPP 24.008 / 10.5.5.12a
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
value	OCTETSTRING[0..50]		MS radio access capability value (CSN.1 coding)

Detailed Comments :

Structured Type Definition

Type Name : MS_Clsmk1
Encoding Variation :
Comments : Mobile Station Classmark 1
3G TS 24.008 cl. 10.5.1.5

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 supported
rFPwrCap	B3		RF Power Capability

Detailed Comments :

Structured Type Definition

Type Name : MS_Clsmk2
Encoding Variation :
Comments : Mobile Station Classmark 2
3G TS 24.008 cl. 10.5.1.6

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
iel	Length		
spare1_1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	B3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCap	B1		Short Message Capability
vBS	B1		VBS Capability
vGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
lCSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support

Detailed Comments :

Structured Type Definition

Type Name : MS_Clsmk2_lv
Encoding Variation :
Comments : Mobile Station Classmark 2
3G TS 24.008 cl. 10.5.1.6

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
spare1_1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	B3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCap	B1		Short Message Capability
vBS	B1		VBS Capability
vGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
lCSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support

Detailed Comments :

Structured Type Definition

Type Name : MS_Identity_lv
Encoding Variation :
Comments : Mobile Identity LV
3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[0..8]		Other identity digits

Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : MS_NetworkCap_lv
Encoding Variation :
Comments : MS network capabilityt LV
3GPP 24.008 / 10.5.5.12

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
value	OCTETSTRING[0..8]		MS network capability value (CSN.1 coding)

Detailed Comments :

Structured Type Definition

Type Name : MS_NetworkCap_tlv
Encoding Variation :
Comments : MS network capabilityt T LV
3GPP 24.008 / 10.5.5.12

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00110001’B (hex 31)
iel	Length		
value	OCTETSTRING[0..8]		MS network capability value (CSN.1 coding)

Detailed Comments :

Structured Type Definition

Type Name : NtwFeatureSupport_tv
Encoding Variation :
Comments : Network Feature Support
3G TS 24.008 cl. 10.5.5.23
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		’1011’B (B− hex)
lCS_MOLR	B1		
spare3	B3		

Detailed Comments :

Structured Type Definition

Type Name : PDP_ContextStatus
Encoding Variation :
Comments : PDP_ContextStatus
3G TS 24.008 cl. 10.5.7.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110010'B
iel	Length		
nSAPI	BITSTRING[16]		

Detailed Comments :

Structured Type Definition

Type Name : PLMN_List
Encoding Variation :
Comments : PLMN list
3G TS 24.008 cl. 10.5.1.13

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01001010''B
iel	Length		
plmn1	OCTETSTRING[3]		PLMN 1
plmn2	OCTETSTRING[3]		PLMN 2
plmn3	OCTETSTRING[3]		PLMN 3
plmn4	OCTETSTRING[3]		PLMN 4
plmn5	OCTETSTRING[3]		PLMN 5

Detailed Comments :

Structured Type Definition

Type Name : PS_LCS_Capability
Encoding Variation :
Comments : PS LCS Capability
3GPP 24.008 / 10.5.5.22
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110011'B (33 hex)
iel	Length		'01'O
spare	B3		
oTD_A	B1		
oTD_B	B1		
gPS_A	B1		
gPS_B	B1		
gPS_C	B1		

Detailed Comments :

Structured Type Definition

Type Name : PTMSI_Signature
Encoding Variation :
Comments : P−TMSI signature
3GPP 24.008 / 10.5.5.8

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00011001’B (19 hex)
value	OCTETSTRING[3]		P−TMSI signature value

Detailed Comments :

Structured Type Definition

Type Name : PTMSI_Signature_tlv
Encoding Variation :
Comments : P−TMSI signature
3GPP 24.008 / 10.5.5.8

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00011001’B (19 hex)
iel	Length		
value	OCTETSTRING[3]		P−TMSI signature value

Detailed Comments :

Structured Type Definition

Type Name : PriorityLvl
Encoding Variation :
Comments : Priority Level
3G TS 24.008 cl. 10.5.1.11

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		’1000’B
spare1	B1		
callPrio	B3		Call Priority

Detailed Comments :

Structured Type Definition

Type Name : ProgInd
Encoding Variation :
Comments : Progrees indicator information element
3G TS 24.008 cl. 10.5.4.21

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011110'B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard
spare	B1		spare bit
location	B4		location
extBit4	B1		extension bit
progressDescr	B7		progress description

Detailed Comments :

Structured Type Definition

Type Name : ProtoCfgOpt
Encoding Variation :
Comments : 24.007, clause 10.5.6.3
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B (27hex)
length	Length		
ext	B1		extension bit
spare	B4		
configprotocol	B3		configuration protocol
protocolIdContents	ProtoIdContents		information related to additional external protocols

Detailed Comments :

Structured Type Definition

Type Name : RAI_v
Encoding Variation :
Comments : Routing Area Identification
3GPP 24.008 / 10.5.5.15

Element Name	Type Definition	Field Encoding	Comments
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each
lac	OCTETSTRING[2]		LAC
rac	OCTETSTRING[1]		RAC

Detailed Comments :

Structured Type Definition

Type Name : RadioPriority_v
Encoding Variation :
Comments : Radio priority
3GPP 24.008 / 10.5.7.2

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value

Detailed Comments :

Structured Type Definition

Type Name : RadioPriority2_v
Encoding Variation :
Comments : Radio priority 2
3GPP 24.008 / 10.5.7.5
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value

Detailed Comments :

Structured Type Definition

Type Name : ReceiveN_PDU_Numbers_tlv
Encoding Variation :
Comments : Receive N−PDU Numbers list
3GPP 24.008 / 10.5.5.11
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00100110’B (hex 26)
iel	Length		
value	OCTETSTRING[0..17]		MS network capability value (CSN.1 coding)

Detailed Comments :

Structured Type Definition

Type Name : RepeatInd
Encoding Variation :
Comments : Repeat indicator
3G TS 24.008 cl. 10.5.4.22

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		
repeatInd	B4		

Detailed Comments :

Structured Type Definition

Type Name : SM_Cause_v
Encoding Variation :
Comments : Ref 24.008, 10.5.6.6

Element Name	Type Definition	Field Encoding	Comments
causeValue	CauseValue		

Detailed Comments :

Structured Type Definition

Type Name : SNiLiPair
Encoding Variation :
Comments :

Element Name	Type Definition	Field Encoding	Comments
sNi	AM_SeqNum		
li	SUFI_ListLi		

Detailed Comments :

Structured Type Definition

Type Name : SS_VersionInd
Encoding Variation :
Comments : SS version indicator
3G TS 24.008 cl. 10.5.4.24
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111111'B
iel	Length		length
sS_VersionInfo	OCTETSTRING [1]		ss version information 1.

Detailed Comments : 1. Usually this IE has only one octet of content.
Exact definition see TS 24.080

Structured Type Definition

Type Name : SUFI_Ack
Encoding Variation :
Comments : Acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.2. The ACK SUFI shall always be placed as the last SUFI if it is included in a STATUS PDU.

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_Ack
lsn	AM_SeqNum		1.

Detailed Comments : 1. Acknowledges the reception of all PDUs with sequence numbers < LSN that are not indicated to be erroneous in earlier parts of the STATUS PDU.

Structured Type Definition			
Type Name : SUFI_Bitmap			
Encoding Variation :			
Comments : Bitmap super field. Ref 3G TS 25.322 clause 9.2.2.11.5			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
type	SUFI_Type		Always tsc_SUFI_Bitmap
len	BitmapLen		1.
fsn	AM_SeqNum		2.
bitmap	Bitmap		3.
Detailed Comments : 1. The size of the bitmap in octets = len+1. len='0000'B means that the bitmap is one octet, and len='1111'B means that the bitmap is the maximum size of 16 octets 2. The sequence number for the first bit in the bitmap. 3. Status of the SNs in the interval [FSN, FSN + (len + 1) * 8 −1] where each bit_position can take on the following values:− * '1'B indicates that FSN + bit_position has been correctly received * '0'B indicates that FSN + bit_position has not been correctly received			

Structured Type Definition			
Type Name : SUFI_List			
Encoding Variation :			
Comments : List super field. Ref 3G TS 25.322 clause 9.2.2.11.4 This type definition assumes that a maximum of 3 (SNi, Li) pairs will be required for RLC test purposes.			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
type	SUFI_Type		Always tsc_SUFI_List
len	LIST_Len		1.
sN1L1	SNiLiPair		2.
sN2L2	SNiLiPair		2.
sN3L3	SNiLiPair		2.
Detailed Comments : 1. The number of (SNi, Li) pairs in the super field. 2. SNi: Sequence number of PDU which was not correctly received; Li: The number of consecutive PDUs not correctly received following PDU with sequence number SNi.			

Structured Type Definition

Type Name : SUFI_MRW

Encoding Variation :

Comments : Move receiving window super field. Ref 3G TS 25.322 clause 9.2.2.11.8
This type definition assumes that a maximum of three SN_MRWi will be required for RLC testing.

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW
len	MRW_Len		1.
sN_MRW1	SUFI_SN_MRWi		2.
sN_MRW2	SUFI_SN_MRWi		2.
sN_MRW3	SUFI_SN_MRWi		2.
nLength	N_Length		3.

Detailed Comments : 1. The number of SN_MRWi fields in the super−field.
2. Each SN_MRWi is used to indicate the end of each discarded SDU. SN_MRWi is the sequenec number of the PDU that contains the LI of the i:th discarded SDU.
3. nLength is used together with SN_MRW_Length to indicate the end of the last discarded SDU

Structured Type Definition

Type Name : SUFI_MRW_ACK

Encoding Variation :

Comments : Move receiving window acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.7

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW_ACK
n	N_Length		1.
sN_ACK	AM_SeqNum		2.

Detailed Comments : 1. The N field shall be set equal to the N_Length field in the received MRW SUFI if the SN_ACK field is equal to the SN_MRW_Length field. Otherwise N shall be set to 0.
2. The SN_ACK field indicates the updated value of VR(R) after the reception of the MRW SUFI.

Structured Type Definition

Type Name : SUFI_NoMore

Encoding Variation :

Comments : No more data super field. Ref 3G TS 25.322 clause 9.2.2.11.1

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_NoMore

Detailed Comments :

Structured Type Definition

Type Name : SUFI_RList
Encoding Variation :
Comments : Relative list super field. Ref 3G TS 25.322 clause 9.2.2.11.6
This type definition assumes that a maximum of three codewords will be required for RLC testing

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_RList
len	RLIST_Len		1.
fsn	AM_SeqNum		2.
CW1	CodeWord		3.
CW2	CodeWord		3.
CW3	CodeWord		3.

Detailed Comments : 1. The number of codewords in the super−field
2. The sequence number of the first erroneous PDU in the RLIST. Note that len = '0000'B means that only FSN is present in the SUFI.
3. Each CW consists of 4 bits where the first three bits are part of a number, and the last bit is a status indicator. see 3G TS 25.25.322 clause 9.2.2.11.6 for a detailed description.

Structured Type Definition

Type Name : SUFI_WindowSize
Encoding Variation :
Comments : Window size super field. Ref 3G TS 25.322 clause 9.2.2.11.3

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_WindowSize
wsn	BITSTRING[12]		1.

Detailed Comments : 1. The allowed Tx window size to be used by the transmitter.

Structured Type Definition

Type Name : ServiceType_v
Encoding Variation :
Comments : Service type
3GPP 24.008 / 10.5.5.20

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
type	B3		type

Detailed Comments :

Structured Type Definition

Type Name : StreamId
Encoding Variation :
Comments : stream identifier
3G TS 24.008 cl. 10.5.4.28

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier ’00101101’B
iel	Length		length
val	B8		stream identifier value

Detailed Comments :

Structured Type Definition

Type Name : Subadrs
Encoding Variation :
Comments : Subaddress
3G TS 24.008 cl. 10.5.4.8, 10.5.4.10, 10.5.4.14

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typrOfSubadrs	B3		Type of subaddress
oddEven	B1		odd/even indicator
spare3	B3		3 spare bits
subadrsInfo	OCTETSTRING [0..20]		subaddress information

Detailed Comments :

Structured Type Definition

Type Name : SuperFields
Encoding Variation :
Comments : This type is used to represent the set of super−fields within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.1.5.

Element Name	Type Definition	Field Encoding	Comments
windowSize	SUFI_WindowSize		1
list	SUFI_List		1
rList	SUFI_RList		1
bitmap	SUFI_Bitmap		1
mRW	SUFI_MRW		1
mRW_Ack	SUFI_MRW_ACK		1
noMore	SUFI_NoMore		2
ack	SUFI_Ack		2, 3

Detailed Comments : 1. These super fields may arrive in any order, and may or may not be present. This type definition only supports a single super−field, followed by either a NO_MORE SUFI, or an ACK SUFI.
2. The NO_MORE SUFI, and the ACK SUFI are mutually exclusive, and should never both be present in the same STATUS PDU.
3. The ACK SUFI is used to acknowledge reception of all PDUs up to LSN, EXCEPT for any PDUs indicated as incorrectly received in the previous SUFIs.

Structured Type Definition

Type Name : TI
Encoding Variation :
Comments : Transaction identifier
3G TS 24.007 cl. 11.2.3.1.3

Element Name	Type Definition	Field Encoding	Comments
tiFlag	B1		Flag
tiVal	B3		TIO

Detailed Comments :

Structured Type Definition

Type Name : TMSI_Status
Encoding Variation :
Comments : TMSI status
3GPP 24.008 cl. 10.5.5.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		’1001’B
spare3	B3		
flag	B1		Flag

Detailed Comments :

Structured Type Definition

Type Name : TearDwnInd_tv
Encoding Variation :
Comments : Ref 24.008, clause 10.5.6.10
@sic EW R5s050095 sic@

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		’1001’B (9 hex)
spare	B3		
tdiflag	B1		TDI Flag

Detailed Comments :

Structured Type Definition

Type Name : TypeOfNumPlan
Encoding Variation :
Comments : Type of number and numbering plan
3G TS 24.008 cl.10.5.4.7, 10.5.4.9, 10.5.4.13

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typeOfNum	B3		Type of number
numbPlanId	B4		Numbering plan id.

Detailed Comments :

Structured Type Definition

Type Name : UpdateResult_v
Encoding Variation :
Comments : Update result
3GPP 24.008 / 10.5.5.17

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Update result value

Detailed Comments :

Structured Type Definition

Type Name : UpdateType_v
Encoding Variation :
Comments : Update result
3GPP 24.008 / 10.5.5.18

Element Name	Type Definition	Field Encoding	Comments
for	B1		Follow−on request
value	B3		Update type value

Detailed Comments :

Structured Type Definition

Type Name : UserUser
Encoding Variation :
Comments : User−user
3G TS 24.008 cl. 10.5.4.25

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier 01111110’B
iel	Length		length
userUserProtocolDiscr	B8		user−user protocol discriminator
userUserInfo	OCTETSTRING [1..128]		user user information

Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE messages the userUserInfo length is of 0 − 32 bytes.
In USER INFORMATION messages the userUserInfo length is of 1 − 128.

ASN.1 Type Definition

Type Name : RB_Type

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  speech_12_2k (0),
  speech_10_2k (1),
  speech_7_95k (2),
  speech_7_4k (3),
  speech_6_7k (4),
  speech_5_9k (5),
  speech_5_15k (6),
  speech_4_75k (7),
  convUnknown_28_8k (8),
  convUnknown_64k_20 (9),
  convUnknown_32k_20 (10),
  convUnknown_64k_40 (11),
  convUnknown_32k_40 (12),
  streamUnknown_14_4k (13),
  streamUnknown_28_8k (14),
  streamUnknown_57_6k (15),
  streamUnknown_0k_64k (16),
  streamUnknown_64k_0k (17),
  streamUnknown_0k_128k (18),
  streamUnknown_128k_0k (19),
  streamUnknown_0k_384k (20),
  interact_32k_8k_TC_10 (21),
  backgrnd_32k_8k_TC_10 (22),
  interact_32k_8k_TC_20 (23),
  backgrnd_32k_8k_TC_20 (24),
  interact_32k_8k_CC_10 (25),
  backgrnd_32k_8k_CC_10 (26),
  interact_32k_8k_CC_20 (27),
  backgrnd_32k_8k_CC_20 (28),
  interact_64k_8k (29),
  backgrnd_64k_8k (30),
  interact_32k_64k_TC_10 (31),
  backgrnd_32k_64k_TC_10 (32),
  interact_32k_64k_TC_20 (33),
  backgrnd_32k_64k_TC_20 (34),
  interact_32k_64k_CC_10 (35),
  backgrnd_32k_64k_CC_10 (36),
  interact_32k_64k_CC_20 (37),
  backgrnd_32k_64k_CC_20 (38),
  interact_64k (39),
  backgrnd_64k (40),
  interact_64k_128k (41),
  backgrnd_64k_128k (42),
  interact_128k (43),
  backgrnd_128k (44),
  interact_64k_144k (45),
  backgrnd_64k_144k (46),
  interact_144k (47),
  backgrnd_144k (48),
  interact_64k_256k_10 (49),
  backgrnd_64k_256k_10 (50),
  interact_64k_256k_20 (51),
  backgrnd_64k_256k_20 (52),
  interact_64k_384k_10 (53),
  backgrnd_64k_384k_10 (54),
  interact_64k_384k_20 (55),
  backgrnd_64k_384k_20 (56),
  interact_128k_384k_10 (57),
```

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ASN.1 Type Definition
Type Definition
backgrnd_128k_384k_10 (58), interact_128k_384k_20 (59), backgrnd_128k_384k_20 (60), interact_384k_10 (61), backgrnd_384k_10 (62), interact_384k_20 (63), backgrnd_384k_20 (64), interact_64k_2048k_10 (65), backgrnd_64k_2048k_10 (66), interact_64k_2048k_20 (67), backgrnd_64k_2048k_20 (68), interact_128k_2048k_10 (69), backgrnd_128k_2048k_10 (70), interact_128k_2048k_20 (71), backgrnd_128k_2048k_20 (72), interact_384k_2048k_10 (73), backgrnd_384k_2048k_10 (74), interact_384k_2048k_20 (75), backgrnd_384k_2048k_20 (76), speech_12_2k_Interact_32k_8k_TC_20 (77) , speech_12_2k_Backgrnd_32k_8k_TC_20 (78), speech_12_2k_Interact_32k_8k_TC_10 (79), speech_12_2k_Backgrnd_32k_8k_TC_10 (80), speech_12_2k_Interact_32k_8k_CC_20 (81), speech_12_2k_Backgrnd_32k_8k_CC_20 (82), speech_12_2k_Interact_32k_8k_CC_10 (83) , speech_12_2k_Backgrnd_32k_8k_CC_10 (84), speech_12_2k_Interact_32k_64k_TC_10 (85) , speech_12_2k_Backgrnd_32k_64k_TC_10 (86), speech_12_2k_Interact_32k_64k_TC_20 (87) , speech_12_2k_Backgrnd_32k_64k_TC_20 (88), speech_12_2k_Interact_32k_64k_CC_10 (89), speech_12_2k_Backgrnd_32k_64k_CC_10 (90), speech_12_2k_Interact_32k_64k_CC_20 (91), speech_12_2k_Backgrnd_32k_64k_CC_20 (92), speech_12_2k_Interact_64k(93), speech_12_2k_Backgrnd_64k(94), speech_12_2k_Interact_64k_128k(95), speech_12_2k_Backgrnd_64k_128k (96), speech_12_2k_Interact_64k_256k_10 (97), speech_12_2k_Backgrnd_64k_256k_10(98), speech_12_2k_Interact_64k_256k_20(99), speech_12_2k_Backgrnd_64k_256k_20(100), speech_12_2k_Interact_64k_384k_10 (101), speech_12_2k_Backgrnd_64k_384k_10 (102) , speech_12_2k_Interact_64k_384k_20 (103), speech_12_2k_Backgrnd_64k_384k_20 (104), speech_12_2k_Interact_128k_2048k_10 (105), speech_12_2k_Backgrnd_128k_2048k_10 (106), speech_12_2k_Interact_128k_2048k_20 (107), speech_12_2k_Backgrnd_128k_2048k_20 (108), speech_12_2k_StreamUnknown_57_6k (109) , speech_12_2k_StreamUnknown_0_64k (110) , speech_12_2k_StreamUnknown_0_128k (111) , speech_12_2k_StreamUnknown_0_384k (112) , speech_12_2k_ConvUnknown_64k_20(113), speech_12_2k_ConvUnknown_64k_40(114), convUnknown_64k_ConvUnknown_64k_20(115), convUnknown_64k_ConvUnknown_64k_40(116) , convUnknown_64k_Interact_64k_20 (117), convUnknown_64k_Interact_64k_40 (118), convUnknown_64k_Backgrnd_64k_20 (119),

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ASN.1 Type Definition
Type Definition
convUnknown_64k_Backgrnd_64k_40 (120), convUnknown_64k_Interact_64k_128k_20 (121), convUnknown_64k_Interact_64k_128k_40 (122), convUnknown_64k_Backgrnd_64k_128k_20 (123), convUnknown_64k_Backgrnd_64k_128k_40 (124), convUnknown_64k_Interact_128k_128k_20 (125), convUnknown_64k_Interact_128k_128k_40 (126), convUnknown_64k_Backgrnd_128k_128k_20 (127), convUnknown_64k_Backgrnd_128k_128k_40 (128), interact_64k_128k_StreamingUnknown_0k_64k(129), backgrnd_64k_128k_StreamingUnknown_0k_64k (130), interact_64k_128k_StreamingUnknown_0k_128k (131), backgrnd_64k_128k_StreamingUnknown_0k_128k (132), interact_64k_8k_CC (133), backgrnd_64k_8k_CC (134) , interact_32k_TC_40 (135), backgrnd_32k_TC_40 (136) , speech_12_2k_7_95k_5_9k_4_75k (137), interact_16k_TC_40(138), backgrnd_16k_TC_40(139), speech_12_2k_7_95k_5_9k_4_75k_Interact_8k_8k_40 (140) , speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_8k_8k_40 (141), speech_12_2k_7_95k_5_9k_4_75k_Interact_16k_16k_40 (142) , speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_16k_16k_40 (143), speech_12_2k_7_95k_5_9k_4_75k_Interact_32k_32k_40(144), speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_32k_32k_40(145), speech_12_2k_7_95k_5_9k_4_75k_Interact_64k_64k_20(146), speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_64k_64k_20(147), speech_12_2k_7_95k_5_9k_4_75k_Interact_64k_128k_20(148), speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_64k_128k_20(149), speech_10_2k_6_7k_5_9k_4_75k (150), speech_7_4k_6_7k_5_9k_4_75k (151), interact_8k_TC_40(152), backgrnd_8k_TC_40(153), speech_12_2k_Interact_0k_0k_CC_20 (154) , speech_12_2k_Backgrnd_0k_0k_CC_20 (155), speech_12_2k_Interact_8k_8k_TC_40 (156) , speech_12_2k_Backgrnd_8k_8k_TC_40 (157), speech_12_2k_7_95k_5_9k_4_75k_Interact_0k_0k_CC_20(158), speech_12_2k_7_95k_5_9k_4_75k_Backgrnd_0k_0k_CC_20(159), convUnknown_64k_Interact_8k_20(160), convUnknown_64k_Backgrnd_8k_20(161), convUnknown_64k_Interact_8k_40(162), convUnknown_64k_Backgrnd_8k_40(163), convUnknown_64k_Interact_16k_64k_20(164), convUnknown_64k_Backgrnd_16k_64k_20(165), convUnknown_64k_Interact_16k_64k_40(166), convUnknown_64k_Backgrnd_16k_64k_40(167) , interact_32k_TC_20 (168), backgrnd_32k_TC_20 (169), speech_12_2k_7_95k_5_9k_4_75k_ConvUnknown_64k_20(170), speech_12_2k_Interact_32k_32k_40(171), speech_12_2k_Backgrnd_32k_32k_40(172), interact_64k_TC_20(173), backgrnd_64k_TC_20(174), interact_8k_Interact_8k_TC_40(175), backgrnd_8k_Backgrnd_8k_TC_40(176), streamUnknown_16k_64k_Interact_8k(177), streamUnknown_16k_64k_Backgrnd_8k(178), speech_12_2k_Interact_64k_64k_TC_20(179),

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ASN.1 Type Definition
Type Definition
speech_12_2k_Backgrnd_64k_64k_TC_20(180), speech_12_2k_7_95k_5_9k_4_75k_ConvUnknown_64k_40(181) , interact_64k_384k_DSCH_10 (182), backgrnd_64k_384k_DSCH_10(183), interact_64k_384k_DSCH_20(184), backgrnd_64k_384k_DSCH_20(185), interact_64k_2048k_DSCH_10(186), backgrnd_64k_2048k_DSCH_10(187), interact_64k_2048k_DSCH_20(188), backgrnd_64k_2048k_DSCH_20(189), speech_12_2k_Interact_64k_384k_DSCH_10 (190), speech_12_2k_Backgrnd_64k_384k_DSCH_10 (191), speech_12_2k_Interact_64k_384k_DSCH_20 (192), speech_12_2k_Backgrnd_64k_384k_DSCH_20 (193), speech_12_2k_Interact_64k_2048k_DSCH_10 (194), speech_12_2k_Backgrnd_64k_2048k_DSCH_10 (195), speech_12_2k_Interact_64k_2048k_DSCH_20 (196), speech_12_2k_Backgrnd_64k_2048k_DSCH_20 (197), −−@sic 2 new types added sic@ interact_8k_CC_40(198), backgrnd_8k_CC_40(199), interact_64k_768k_10(200), −−@sic rash 4 new types added 20−Jun−04 sic@ interact_64k_768k_20(201), backgrnd_64k_768k_10(202), backgrnd_64k_768k_20(203), streamUnknown_16k_128k_Interact_8k(204), streamUnknown_16k_128k_Backgrnd_8k(205) }
Detailed Comments :

ASN.1 Type Definition	
Type Name	**:** CellConfiguration
Encoding Variation	**:**
Comments	**:**
Type Definition	
ENUMERATED { cell_EFR(0), cell_AMR(1) −− TBD }	
Detailed Comments :	

ASN.1 Type Definition	
Type Name	**:** GSM_GPRSConfiguration
Encoding Variation	**:**
Comments	**:**
Type Definition	
ENUMERATED { gsmonly(0), gprs(1) }	
Detailed Comments :	

ASN.1 Type Definition	
Type Name	: GPRSCellConfiguration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { bcch(0), pbcch(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SI2quaterConfiguration
Encoding Variation	:
Comments	: @sic T1s040275 sic@
Type Definition	
ENUMERATED { nosi2quater(0), si2quater(1), si2ter(2), si2terand2quater(3) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PSI5Configuration
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { nopsi5(0), psi5(1) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: HS_DPCCHInfo
Encoding Variation	:
Comments	:
Type Definition	

SEQUENCE {
cqi_RepetitionFactor CQI_RepetitionFactor,
ackNackRepetitionFactor ACK_NACK_repetitionFactor
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: AICHInfo
Encoding Variation	:
Comments	:
Type Definition	

SEQUENCE {
  aichinfo AICH_Info,
  dl_TxPower AICH_PowerOffset
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: AmConfirmationRequest
Encoding Variation	:
Comments	: If the noConfirmationRequested option is used, then an RLC_AM_DATA_CNF is not expected from the RLC AM entity. If the confirmationRequested option is used, then the RLC AM entity is being requested to provide an RLC_DATA_CNF primitive containing the same mui value.
Type Definition	

CHOICE {
  noConfirmationRequest NULL,
  confirmationRequested Mui
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CellToBeCreated
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { cell_DCH (0), cell_FACH (10) }	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: CellTxPowerLevel
Encoding Variation	:
Comments	: The defaultCellTxPowerLvl is a default setting and is used for the most signalling tests. The real total cell DL Tx power level equals to the sum of the DL Tx power of the individual physical channels configured. The totalCellTxPowerLvl applies to e.g. the idle mode tests in a non−default multi−cell radio environment.

Type Definition

```
CHOICE
{
  defaultCellTxPowerLvl NULL,
  totalCellTxPowerLvl DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CiphActivationInfo
Encoding Variation	:
Comments	: DL or UL ciphering activation infoIf RB is omitted in rB_UL_CiphActivationTimeInfo the SS takes no action on this RB and the ciphering configuration keeps unchanged on this RB. CipheringModeCommand = dummy NULL means no ciphering.

Type Definition

```
CHOICE {
  cipheringModeInfo CipheringModeInfo,
  rb_UL_CipheringActivationTimeInfo RB_ActivationTimeInfoList
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CmacConfigReq
Encoding Variation	:
Comments	: To request to configure MAC

Type Definition

```
SEQUENCE {
  activationTime SS_ActivationTime,
  uE_Info UE_Info,
  trCHInfo TrCHInfo,
  trCH_LogCHMapping TrCH_LogCHMappingList1
  −− RACHTransmissionCtrolElements
  −− CPCHTransmissionControlElements
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CmacSysinfoConfigReq
Encoding Variation	:
Comments	: if bcch_ModificationTime = OMIT SS shall modify the Sysinfo immediately

Type Definition

```
SEQUENCE {
  sg_REP INTEGER (2..12),
  -- Repetition period is the sg_REP-th power of 2.
  sg_POS INTEGER (0..2047),
  -- The position of each segment is 2 * sg_POS.
  bcch_ModificationTime BCCH_ModificationTime OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_Info
Encoding Variation	:
Comments	: Transport Format Set

Type Definition

```
SEQUENCE {
  tb_Size INTEGER (0..5035),
  numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks,
  logicalChannelList LogicalChannelList
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_InfoList
Encoding Variation	:
Comments	: Transport Format Set

Type Definition

```
SEQUENCE (SIZE (1..maxTF)) OF CommonOrDedicatedTF_Info
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTF_InfoList_DynamicTTI
Encoding Variation	:
Comments	:

Type Definition

```
SEQUENCE
{
  tb_Size INTEGER (0..5035),
  numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks,
  logicalChannelList LogicalChannelList
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: CommonOrDedicatedTFS
Encoding Variation	:
Comments	: Transport Format Set

Type Definition

```
SEQUENCE {
  tti CHOICE {
    tti10 CommonOrDedicatedTF_InfoList,
    tti20 CommonOrDedicatedTF_InfoList,
    tti40 CommonOrDedicatedTF_InfoList,
    tti80 CommonOrDedicatedTF_InfoList,
    dynamic CommonOrDedicatedTF_InfoList_DynamicTTI
  },
  semistaticTF_Information SemistaticTF_Information
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: COUNT_I_MSB
Encoding Variation	:
Comments	: 28 bits long

Type Definition

```
INTEGER (0..268435455 )
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CrlcConfigReq

Encoding Variation :

Comments : To request to setup, re_configure or release RLC entityThe Stop parameter indicates that the RLC entity shall not transmit or receive RLC PDUs. The Continue parameter indicates that the RLC entity shall continue transmission and reception of RLC PDUs. When the RLC entity is stopped, the RLC timers are not affected. Triggered polls and status transmissions are delayed until the RLC entity is continued.

Type Definition

```
CHOICE {
  setup RBInfo,
  reconfigure RBInfo,
  release NULL,
  sS_stop NULL,
  sS_continue NULL −−@sic T1−041410 sic@
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DL_DPCHInfo

Encoding Variation :

Comments : The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0−6 dB, 0.25 dB per step.

Type Definition

```
SEQUENCE {
  dl_CommonInformation DL_CommonInformation,
  dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL,
  powerOffsetOfTFCI_PO1 INTEGER (0..24),
  powerOffsetOfTPC_PO2 INTEGER (0..24),
  powerOffsetOfPILOT_PO3 INTEGER (0..24),
  dl_TxPower DL_TxPower,
  dl_TxPowerMax DL_TxPower,
  dl_TxPowerMin DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DL_TxPower

Encoding Variation :

Comments : Downlink Tx Power relative to PCPICH

Type Definition

```
INTEGER (−35..15)
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: DL_TxPower_PCPICH
Encoding Variation	:
Comments	: Absolute Tx Power of PCPICH
Type Definition	
INTEGER (−60..−30)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: HyperFrameNumber
Encoding Variation	:
Comments	:
Type Definition	
BIT STRING (SIZE (20))	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Increment_Mode
Encoding Variation	:
Comments	: @sic T1−031732 sic@
Type Definition	
ENUMERATED {incPerCFN_Cycle(0), notInc(1), incByOne_IncPerCFN_Cycle(2)}	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityActivationInfo
Encoding Variation	:
Comments	: Comment DL or UL integrity activation info.At the RRC message sequence numbers specified in the ul_IntegProtActivationInfo the SS shall initialise COUNT−I for the SRB's indicated in the ul_IntegProtActivationInfo and start using the new configuration on uplink for the indicated SRB's.If the START value is omitted in the CRLC_SecurityMode_Config_REQ above COUNT−I initialisation shall not be performed. Type Definition
Type Definition	

CHOICE {
integrityProtectionModeInfo IntegrityProtectionModeInfo,
ul_IntegProtActivationInfo IntegrityProtActivationInfoList
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityProtActivationInfoList
Encoding Variation	:
Comments	: List of SS IntegrityProtActivationInfo
Type Definition	
SEQUENCE (SIZE (1..maxRB)) OF SS_IntegrityProtActivationTimeInfo	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityResult
Encoding Variation	:
Comments	:
Type Definition	

CHOICE {
integrityNotUsed NULL,
integrityUsed IntegrityStatus
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: IntegrityStatus
Encoding Variation	:
Comments	:
Type Definition	

ENUMERATED {
i_pass(0),
i_fail(1)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_ActiveSetUpdate
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE {
  r3 SEQUENCE {
    activeSetUpdate_r3 ActiveSetUpdate_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_CCCH_MsgShort
Encoding Variation	:
Comments	:

Type Definition

```
NULL
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_CellUpdateConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    cellUpdateConfirm_r3 CellUpdateConfirm_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      cellUpdateConfirm_v3a0ext CellUpdateConfirm_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_DCCH_MsgShort
Encoding Variation	:
Comments	:
Type Definition	
NULL	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Invalid_DL_CCCH_MsgType
Encoding Variation	:
Comments	:
Type Definition	

```
CHOICE {
  invalid_cellUpdateConfirm [0] Invalid_CCCH_MsgShort,
  invalid_rrcConnectionReject [1] Invalid_CCCH_MsgShort,
  invalid_rrcConnectionRelease [2] Invalid_CCCH_MsgShort,
  invalid_rrcConnectionSetup [3] Invalid_RRCConnectionSetup, -- Specific invalid message
  invalid_uraUpdateConfirm [4] Invalid_UraUpdateConfirm,
  invalid_extension [5] NULL,
  unkown_Type_CCCH_message [6] Invalid_CCCH_MsgShort
}
```

Detailed Comments	:

ASN.1 Type Definition

Type Name : Invalid_DL_DCCH_MsgType

Encoding Variation :

Comments :

Type Definition

```
CHOICE {
  invalid_activeSetUpdate [0] Invalid_ActiveSetUpdate,
  invalid_assistanceDataDelivery [1] Invalid_DCCH_MsgShort,
  invalid_cellChangeOrderFromUTRAN [2] Invalid_DCCH_MsgShort,
  invalid_cellUpdateConfirm [3] Invalid_CellUpdateConfirm ,
  invalid_counterCheck [4] Invalid_DCCH_MsgShort,
  invalid_downlinkDirectTransfer [5] Invalid_DownlinkDirectTransfer,
  invalid_handoverFromUTRANCommand_GSM [6] Invalid_HandoverFromUTRANCommand_GSM, −−@sic T1−041053
sic@
  invalid_handoverFromUTRANCommand_CDMA2000 [7] Invalid_DCCH_MsgShort,
  invalid_measurementControl [8] Invalid_MeasurementControl,
  invalid_pagingType2 [9] Invalid_DCCH_MsgShort,
  invalid_physicalChannelReconfiguration [10] Invalid_PhysicalChannelReconfiguration,
  invalid_physicalSharedChannelAllocation [11] Invalid_DCCH_MsgShort,
  invalid_radioBearerReconfiguration [12] Invalid_RadioBearerReconfiguration,
  invalid_radioBearerRelease [13] Invalid_RadioBearerRelease,
  invalid_radioBearerSetup [14] Invalid_RadioBearerSetup,
  invalid_rrcConnectionRelease [15] Invalid_RRC_ConnectionRelease,
  invalid_securityModeCommand [16] Invalid_SecurityModeCommand,
  invalid_signallingConnectionRelease [17] Invalid_DCCH_MsgShort,
  invalid_transportChannelReconfiguration [18] Invalid_TransportChannelReconfiguration,
  invalid_transportFormatCombinationControl [19] Invalid_DCCH_MsgShort,
  invalid_ueCapabilityEnquiry [20] Invalid_UECapabilityEnquiry, −− Specific invalid message
  invalid_ueCapabilityInformationConfirm [21] Invalid_UECapabilityInformationConfirm, −− Specific invalid message
  invalid_uplinkPhysicalChannelControl [22] Invalid_DCCH_MsgShort,
  invalid_uraUpdateConfirm [23] Invalid_UraUpdateConfirm,
  invalid_utranMobilityInformation [24] Invalid_UtranMobilityInformation,
  invalid_extension [25] NULL,
  unkown_Type_DCCH_message [26] Invalid_DCCH_MsgShort
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : Invalid_DL_SHCCH_MsgType

Encoding Variation :

Comments :

Type Definition

```
CHOICE {
  invalid_physicalSharedChannelAllocation [0] Invalid_SHCCH_Message_short,
  extension [1] NULL,
  unkown_Type_SHCCH_message [2] Invalid_SHCCH_Message_short

}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_DownlinkDirectTransfer
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    downlinkDirectTransfer_r3 DownlinkDirectTransfer_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_HandoverFromUTRANCommand_GSM
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    handoverFromUTRANCommand_GSM_r3 HandoverFromUTRANCommand_GSM_r3_IEs,
    laterNonCriticalExtensions SEQUENCE
    {
      handoverFromUTRANCommand_GSM_r3_add_ext BIT STRING OPTIONAL,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : Invalid_MeasurementControl

Encoding Variation :

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    measurementControl_r3 MeasurementControl_r3_IEs,
    v390nonCriticalExtensions SEQUENCE
    {
      measurementControl_v390ext MeasurementControl_v390ext,
      v3a0NonCriticalExtensions SEQUENCE
      {
        measurementControl_v3a0ext MeasurementControl_v3a0ext,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
      } OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : Invalid_PhysicalChannelReconfiguration

Encoding Variation :

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    physicalChannelReconfiguration_r3 PhysicalChannelReconfiguration_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      physicalChannelReconfiguration_v3a0ext PhysicalChannelReconfiguration_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RadioBearerReconfiguration
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    radioBearerReconfiguration_r3 RadioBearerReconfiguration_r3_IEs,
    v3aoNonCriticalExtensions SEQUENCE
    {
      radioBearerReconfiguration_v3a0ext RadioBearerReconfiguration_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RadioBearerRelease
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    radioBearerRelease_r3 RadioBearerRelease_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      radioBearerRelease_v3a0ext RadioBearerRelease_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RadioBearerSetup
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    radioBearerSetup_r3 RadioBearerSetup_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      radioBearerSetup_v3a0ext RadioBearerSetup_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RRC_ConnectionRelease
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    rrcConnectionRelease_r3 RRCConnectionRelease_r3_IEs,
    laterNonCriticalExtensions SEQUENCE
    {
      rrcConnectionRelease_r3_add_ext BIT STRING OPTIONAL,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- instead of SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_RRCConnectionSetup
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    rrcConnectionSetup_r3 RRCConnectionSetup_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_SecurityModeCommand
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    securityModeCommand_r3 SecurityModeCommand_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_SHCCH_Message_short
Encoding Variation	:
Comments	:

Type Definition

CounterCheckResponse

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_TransportChannelReconfiguration
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    transportChannelReconfiguration_r3 TransportChannelReconfiguration_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      transportChannelReconfiguration_v3a0ext TransportChannelReconfiguration_v3a0ext,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_UECapabilityEnquiry
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    ueCapabilityEnquiry_r3 UECapabilityEnquiry_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_UECapabilityInformationConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    ueCapabilityInformationConfirm_r3 UECapabilityInformationConfirm_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_UraUpdateConfirm
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    uraUpdateConfirm_r3 URAUpdateConfirm_r3_IEs,
    nonCriticalExtensions SEQUENCE {} OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: Invalid_UtranMobilityInformation
Encoding Variation	:
Comments	: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
  r3 SEQUENCE
  {
    utranMobilityInformation_r3 UTRANMobilityInformation_r3_IEs,
    v3a0NonCriticalExtensions SEQUENCE
    {
      utranMobilityInformation_v3a0ext UTRANMobilityInformation_v3a0ext_IEs,
      nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
  },
  later_than_r3 SEQUENCE
  {
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
  }
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: KeyCiphering
Encoding Variation	:
Comments	:

Type Definition

```
BIT STRING (SIZE (128))
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: LogicalChannelType
Encoding Variation	:
Comments	:

Type Definition

```
ENUMERATED
{
  bCCH (0),
  pCCH (1),
  cCCH (2),
  cTCH (3),
  dCCH (4),
  dTCH (5),
  sHCCH (6)
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: MAC_HeaderManipulation
Encoding Variation	:
Comments	:
Type Definition	

ENUMERATED
{
  normalMacHeader (0),
  omitMacHeader (1)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: Mui
Encoding Variation	:
Comments	:
Type Definition	
INTEGER (0..4095)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PayloadSize
Encoding Variation	:
Comments	:
Type Definition	
INTEGER (0..4992)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: PDSCHInfo
Encoding Variation	:
Comments	:

Type Definition

```
SEQUENCE {
  fdd_tdd CHOICE {
    fdd SEQUENCE {
      pdsch_CodeMapping PDSCH_CodeMapping
    } ,
    tdd SEQUENCE {
      -- pdsch-Identity PDSCH-Identity,
      -- pdsch-Info PDSCH-Info,
      -- pdsch-PowerControlInfo PDSCH-PowerControlInfo OPTIONAL
    }
  },
  dl_TxPower DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: PhysicalChannelIdentity
Encoding Variation	:
Comments	:

Type Definition

```
INTEGER (0..31)
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: PICHInfo
Encoding Variation	:
Comments	:

Type Definition

```
SEQUENCE {
  pichinfo PICH_Info,
  dl_TxPower PICH_PowerOffset,
  sccpchId_associated INTEGER (0..31)
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : PRACHInfo

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  fdd_tdd CHOICE {
    fdd SEQUENCE {
      preambleSignature AvailableSignatures,
      spreadingFactorForDataPart SF_PRACH,
      preambleScramblingCode PreambleScramblingCodeWordNumber,
      puncturingLimit PuncturingLimit,
      accessSlot AvailableSubChannelNumbers
    },
    tdd SEQUENCE {
      -- timeSlot TimeSlot,
      -- spreadingCode SpreadingCode,
      -- midambleCode MidambleCode,
    }
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : PrimaryCCPCHInfo

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  sttd_Indicator BOOLEAN,
  dl_TxPower DL_TxPower
  -- timeSlot TimeSlot OPTIONAL,
  -- burstType BurstType OPTIONAL,
  -- offset Offset OPTIONAL,
  -- repetitionPeriod RepetitionPeriod OPTIONAL,
  -- repetitionLength RepetitionLength OPTIONAL,
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : PrimaryCPICHInfo

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  dl_TxPower_PCPICH DL_TxPower_PCPICH,
  txdiversityIndicator BOOLEAN
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: PrimarySCHInfo
Encoding Variation	:
Comments	:
Type Definition	

SEQUENCE {
  tstdIndicator BOOLEAN,
  dl_TxPower DL_TxPower
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RatType
Encoding Variation	:
Comments	: To select route between each channels
Type Definition	

ENUMERATED {
  fdd(0),
  tdd(1)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RB_LogCH_Mapping
Encoding Variation	:
Comments	:
Type Definition	

SEQUENCE {
  uLlogicalChannelIdentity LogicalChannelIdentity OPTIONAL,
  dLlogicalChannelIdentity LogicalChannelIdentity OPTIONAL,
  logicalChannelType LogicalChannelType OPTIONAL,
  cn_DomainIdentity CN_DomainIdentity OPTIONAL
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RBInfo
Encoding Variation	:
Comments	:
Type Definition	

SEQUENCE {
  sS_rlc_Info SS_RLC_Info OPTIONAL,
  rB_LogCH_Mapping RB_LogCH_Mapping
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RegOr_MO
Encoding Variation	:
Comments	:
Type Definition	

ENUMERATED {
  est_Reg(0),
  est_MO(1),
  est_MT(2)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RLC_IncMode
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED {notInc(0), inc(1)}	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RoutingInfo
Encoding Variation	:
Comments	:
Type Definition	

CHOICE {
  physicalChannelIdentity INTEGER (0..31),
  transportChannelIdentity TransportChannelIdentity,
  logicalChannelIdentity LogicalChannelIdentity,
  rB_Identity INTEGER (−31..32),
  cn_DomainIdentity CN_DomainIdentity
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_Rel_Status
Encoding Variation	:
Comments	:
Type Definition	

ENUMERATED {
  cell_Dch(0),
  cell_Fach_Dcch(1),
  cell_Fach_Ccch(2)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_SequenceNumber
Encoding Variation	:
Comments	: 4 bits long
Type Definition	
INTEGER (0..15)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: RRC_ServTested
Encoding Variation	:
Comments	:
Type Definition	

ENUMERATED {
  speech (0),
  conversational_64k (1),
  streaming_57_6k (2),
  ps_Interactive (3),
  ps_Background (4)
}	

Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SCCPCHSlotFormat
Encoding Variation	:
Comments	: Reference to TS25.211
Type Definition	
INTEGER (0..17)	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: SecondaryCCPCHInfo
Encoding Variation	:
Comments	: The range for powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0−6 dB, 0.25 dB per step.

Type Definition

```
SEQUENCE {
  scramblingCode INTEGER(0..15),
  dl_ChannelizationCode SF256_AndCodeNumber,
  sCCPCHSlotFormat SCCPCHSlotFormat,
  timingOffset INTEGER (0..149),
  positionFixedOrFlexible PositionFixedOrFlexible,
  sttd_Indicator BOOLEAN,
  dl_TxPower DL_TxPower,
  powerOffsetOfTFCI_PO1 INTEGER (0..24),
  powerOffsetOfPILOT_PO3 INTEGER (0..24)
  -- timeSlot TimeSlot OPTIONAL,
  -- burstType BurstType OPTIONAL,
  -- midambleShift MidambleShift OPTIONAL,
  -- offset Offset OPTIONAL,
  -- repetitionPeriod RepetitionPeriod OPTIONAL,
  -- repetitionLength RepetitionLength OPTIONAL,
  -- tFCIPresence TFCIPresence OPTIONAL,
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SecondaryCPICHInfo
Encoding Variation	:
Comments	:

Type Definition

```
SEQUENCE {
  scramblingCode INTEGER(0..63),
  dl_ChannelizationCode SF512_AndCodeNumber,
  dl_TxPower DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SecondarySCHInfo
Encoding Variation	:
Comments	:

Type Definition

```
SEQUENCE {
  tstdIndicator BOOLEAN,
  dl_TxPower DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SecurityInfo

Encoding Variation :

Comments : The integrityKey is not applicable to MAC

Type Definition

```
SEQUENCE {
  cn_DomainIdentity CN_DomainIdentity,
  startValue START_Value OPTIONAL,
  cipheringKey BIT STRING (SIZE (128)) OPTIONAL,
  integrityKey BIT STRING (SIZE (128)) OPTIONAL,
  gsmCipheringKey BIT STRING (SIZE (64)) OPTIONAL
}
```

Detailed Comments : When the SS receives SecuritiyInfo, the SS first stores the contents. The SecurityInfo contents is not activated ion of the contents follows until receiving the subsequent ASP, CRLC_Ciphering_Activate_REQ, CMAC_Ciphering_Activate_REQ or CRLC_Integrity_Activate_REQ. Omitted fields of SecurityInfo shall not be affected by the subsequent ASP at the activation time.EXAMPLE: Omitting of startValue indicates not to re−initialize the relevant COUNT?C or COUNT−I, omitting of cipheringKey indicates that the current ciphering key is valid..

ASN.1 Type Definition

Type Name : SegmentsOfSysInfoBlock

Encoding Variation :

Comments : The structure holding the segments of a MIB/SIB/SB, maximum number of segments is 16.

Type Definition

```
SEQUENCE
{
  segCount INTEGER (1..16),
  seg1 BIT STRING (SIZE (1..226)),
  seg2 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg3 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg4 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg5 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg6 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg7 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg8 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg9 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg10 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg11 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg12 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg13 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg14 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg15 BIT STRING (SIZE (1..222)) OPTIONAL,
  seg16 BIT STRING (SIZE (1..222)) OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SIB
Encoding Variation	:
Comments	: Union of all system information blocks

Type Definition

```
CHOICE {
  sIB1 SysInfoType1,
  sIB2 SysInfoType2,
  sIB3 SysInfoType3,
  sIB4 SysInfoType4,
  sIB5 SysInfoType5,
  sIB6 SysInfoType6,
  sIB7 SysInfoType7,
  sIB8 SysInfoType8,
  sIB9 SysInfoType9,
  sIB10 SysInfoType10,
  sIB11 SysInfoType11,
  sIB12 SysInfoType12,
  sIB13 SysInfoType13,
  sIB13_1 SysInfoType13_1,
  sIB13_2 SysInfoType13_2,
  sIB13_3 SysInfoType13_3,
  sIB13_4 SysInfoType13_4,
  sIB14 SysInfoType14,
  sIB15 SysInfoType15,
  sIB15_1 SysInfoType15_1,
  sIB15_2 SysInfoType15_2,
  sIB15_3 SysInfoType15_3,
  sIB16 SysInfoType16,
  sIB17 SysInfoType17,
  sIB18 SysInfoType18,
  mIB MasterInformationBlock,
  sB1 SysInfoTypeSB1,
  sB2 SysInfoTypeSB2
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_ActivationTime
Encoding Variation	:
Comments	:

Type Definition

```
CHOICE {
  activationCFN ActivationTime,
  activateNow NULL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_DL_LogicalChannelMapping

Encoding Variation :

Comments : If the macHeaderManipulation field is 'normalMacHeader', then data transmitted on this logical channel shall have an appropriate MAC header added before it is sent to lower layers for transmission.
If the macHeaderManipulation field is 'OmitMacHeader', then data transmitted on this logical channel shall not have any MAC header information added, even if the logical channel type and mapping indicates that there should be a MAC header present. This allows the entire MAC PDU to be specified in the TTCN, so individual fields in the MAC header can be modified.
When used for logical channel to MAC_d flow mapping rlc_SizeList should choose RLC_SizeExplicitList.

Type Definition

```
SEQUENCE {
  macHeaderManipulation MAC_HeaderManipulation,
  dl_TransportChannelType SS_DL_TransportChannelType,
  logicalChannelIdentity LogicalChannelIdentity,
  logicalChannelType LogicalChannelType ,
  rlc_SizeList CHOICE {
    allSizes NULL,
    configured NULL,
    explicitList RLC_SizeExplicitList
  },
  mac_LogicalChannelPriority MAC_LogicalChannelPriority OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_DL_RLC_Mode

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  dl_PayloadSize PayloadSize OPTIONAL,
  dl_RLCModeInfo UL_RLC_Mode
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_IntegrityProtActivationTimeInfo

Encoding Variation :

Comments : Omitting rrc_MessageSequenceNumber means activation time set to "now".

Type Definition

```
SEQUENCE
{
  rb_Identity INTEGER (−31..32),
  rrc_MessageSequenceNumber RRC_MessageSequenceNumber OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_UL_LogicalChannelMapping

Encoding Variation :

Comments : If the macHeaderManipulation field is 'normalMacHeader', then data received on the transport channel supporting this logical channel shall have it's MAC header inspected to determine the appropriate routing, and removed as normal. The MAC SDU shall be passed to the appropriate logical channel.
If the macHeaderManipulation field field is 'OmitMacHeader', then data received on the transport channel supporting this logical channel shall have it's MAC header inspected to determine the appropriate routing, but the MAC layer shall not remove the MAC header. Thus the entire MAC PDU shall be passed to the appropriate logical channel, and the MAC header can be checked by the TTCN.

Type Definition

```
SEQUENCE {
  macHeaderManipulation MAC_HeaderManipulation,
  ul_TransportChannelType SS_UL_TransportChannelType,
  logicalChannelIdentity LogicalChannelIdentity,
  logicalChannelType LogicalChannelType
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_UL_TransportChannelType

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  dch(0),
  rach(1),
  cpch(2),
  usch(3)
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : Tcell

Encoding Variation :

Comments : Timing offset between reference channel and this channel (unit : 256 chips)

Type Definition

```
INTEGER (0..38399)
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: TrCH_LogCHMappingList
Encoding Variation	:
Comments	: maxLogCHperTrCH = 8
Type Definition	
SEQUENCE (SIZE (1..maxLogCHperTrCH)) OF TrCH_LogicalChannelMapping	
Detailed Comments	:

ASN.1 Type Definition	
Type Name	: TrCH_LogicalChannelMapping
Encoding Variation	:
Comments	: When used for logical channel to MAC_d flow mapping dl_LogicalChannelMapping shall be chosen,
Type Definition	

```
SEQUENCE {
  logicalChannel_Mapping CHOICE {
    ul_LogicalChannelMapping SS_UL_LogicalChannelMapping,
    dl_LogicalChannelMapping SS_DL_LogicalChannelMapping
  },
  rB_Identity INTEGER (−31..32) OPTIONAL,
  cn_DomainIdentity CN_DomainIdentity OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: TrChConfigType
Encoding Variation	:
Comments	:
Type Definition	

```
CHOICE {
  nonDch NULL,
  dch ENUMERATED {normal(0), softHO(1)}} −−@sic T1−041410 sic@
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: UE_Info
Encoding Variation	:
Comments	: The value of c_RNTI_DSCH_RNTI is 16 bits, used either for C−RNTI or DSCH−RNTI. DSCH is configured if the physical channel in CMAC_config_REQ is a PDSCH. Otherwise, C−RNTI is applied. For MAC−hs configuration both u_RNTI and c_RNTI_DSCH_RNTI are omitted.
Type Definition	

```
SEQUENCE {
  u_RNTI U_RNTI OPTIONAL,
  c_RNTI C_RNTI OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: UE_OperationMode
Encoding Variation	:
Comments	:
Type Definition	
ENUMERATED { opModeA (0), opModeC (1) }	
Detailed Comments	:

ASN.1 Type Definition

Type Name : RB_ConfigType

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  cell_NotConfigured (0),
  −− Configurations on DPCH
  cell_DCH_StandAloneSRB_NoConn (1),
  cell_NoDPCH (2),
  cell_DCH_StandAloneSRB (3),
  cell_DCH_Speech (4),
  cell_DCH_64kCS_RAB_SRB (5),
  cell_DCH_57_6kCS_RAB_SRB (6),
  cell_DCH_64kPS_RAB_SRB (7),
  cell_RLC_DCH_AM_RAB_15Lis (8),
  cell_RLC_DCH_AM_RAB_7Lis (9),
  cell_RLC_DCH_UM_RAB_15Lis (10),
  cell_RLC_DCH_UM_RAB_7Lis (11),
  cell_PDCP_AM_RAB (12),
  cell_PDCP_UM_RAB (13),
  cell_PDCP_AM_UM_RAB (14),
  cell_DCH_MAC_SRB_NoConn (15),
  cell_DCH_MAC_SRB (16),
  cell_DCH_2AM_PS (17),
  −− Configurations on FACH
  cell_FACH_NoConn (18),
  cell_FACH (19),
  cell_FACH_NoDedicated (20),
  cell_FACH_PS (21),
  cell_FACH_BMC (22),
  cell_FACH_BMC_NoConn (23),
  cell_FACH_2_PRACH_NoConn (24), −−no RAB
  cell_FACH_2_PRACH (25), −− no RAB
  cell_FACH_2_SCCPCH_NoConn (26), −−used in BMC
  cell_FACH_2_SCCPCH (27), −−Used in BMC
  cell_FACH_MAC_SRB_NoConn (28),
  cell_FACH_MAC_SRB (29),
  cell_FACH_MAC_SRB0_NoConn (30),
  cell_FACH_MAC_SRB0 (31),

  −− Configurations for RAB test cases
  −− for these configuarations Security step does not handle RAB eastablished situation, as in RAB test procedure
  −− Security procedure is called before RAB establishment
  cell_FACH_2SCCPCH_StandAlonePCH_NoConn (32),
  cell_FACH_2SCCPCH_StandAlonePCH (33),
  cell_FACH_2SCCPCH_StandAlonePCH_PS (34),
  cell_Two_DTCH (35),
  cell_Four_DTCH_CS (36),
  cell_Two_DTCH_CS_PS (37),
  cell_Four_DTCH_CS_PS ( 38 ),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn (39),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg1 (40),
  cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn (41),
  cell_FACH_3_SCCPCH_3_FACH_CTCH (42),
  cell_Two_DTCH_PS_CS (43),
  cell_Four_DTCH_PS_CS (44) ,
  cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn (45),
  cell_FACH_3_SCCPCH_4_FACH_Cnfg2 (46),
  cell_DCH_2_PS_Call(47),
  −− Configurations for DSCH RAB test cases
  cell_DCH_DSCH_PS (48),
  cell_DCH_DSCH_CS_PS ( 49 ), −−@sic New Types Added for RAB test cases sic@
  cell_FACH_2SCCPCH_StandAlonePCH_PS_2a(50),
```

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Continued from previous page

ASN.1 Type Definition

Type Definition

```
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn (51),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1 (52),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn (53),
  cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2 (54),
  cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn (55),
  cell_FACH_3_SCCPCH_3_FACH_2a_CTCH (56),
  cell_Two_DTCH_CS_PS_Init (57),
  cell_Four_DTCH_CS_PS_Init ( 58 ),−−@sic T1s040622 sic@
  cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn (59),
  cell_FACH_2SCCPCH_StandAlonePCH_2a (60),
  cell_Two_DTCH_PS_CS_Init (61), −−@sic R5s050086 sic@
  cell_Four_DTCH_PS_CS_Init (62), −−@sic R5s050086 sic@
  cell_DCH_HS_DSCH(63),
  cell_FACH_HS(64),
  cell_DCH_64kPS_RAB_SRB_HS(65),
  cell_One_DTCH_HS_DSCH_MAC(66)
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_RLC_Info

Encoding Variation :

Comments : @sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  sS_ul_RLC_Mode DL_RLC_Mode OPTIONAL,
  sS_dl_RLC_Mode SS_DL_RLC_Mode OPTIONAL,
  sS_ul_RLC_Mode_r5 DL_RLC_Mode_r5 OPTIONAL −− Rel−5 or later
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CphyRlModifyReq

Encoding Variation :

Comments : @sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  activationTime SS_ActivationTime,
  physicalChannelInfo
  CHOICE {
    dpch_CompressedModeStatusInfo DPCH_CompressedModeStatusInfo,
    secondaryCCPCHInfo SecondaryCCPCHInfo,
    pRACHInfo PRACHInfo,
    dPCHInfo DPCHInfo,
    dPCHInfo_r5 DPCHInfo_r5, −− Rel−5 or later
    hS_PDSCHInfo HS_PDSCHInfo −− Rel−5 or later
  },
  trchConfigToFollow BOOLEAN DEFAULT TRUE −−−@sic T1−041694 sic@
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CphyRlSetupReq

Encoding Variation :

Comments : To request to setup the Radio Link
@sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  physicalChannelInfo CHOICE {
    primaryCPICHInfo PrimaryCPICHInfo,
    secondaryCPICHInfo SecondaryCPICHInfo,
    primarySCHInfo PrimarySCHInfo,
    secondarySCHInfo SecondarySCHInfo,
    primaryCCPCHInfo PrimaryCCPCHInfo,
    secondaryCCPCHInfo SecondaryCCPCHInfo,
    pRACHInfo PRACHInfo,
    pICHInfo PICHInfo,
    aICHInfo AICHInfo,
    dPCHInfo DPCHInfo,
    pDSCHInfo PDSCHInfo,
    dPCHInfo_r5 DPCHInfo_r5, −− Rel−5 or later
    hS_PDSCHInfo HS_PDSCHInfo −− Rel−5 or later
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : HS_PDSCHInfo

Encoding Variation :

Comments : Applicable Rel−5 or later
When CHY_RL_Setup_REQ is called with CHOICE of hS_PDSCHInfo the SS shall not only configure the HS_PDSCH but also the HS−SCCH;
The following HS−DSCH related parameters are passed to the SS implicitly by HSDSCH_physical_layer_category: "Maximum number of HS−DSCH codes can be received by UE", "Minimum inter−TTI interval", "Maximum number of bits of an HS−DSCH transport block within an HS−DSCH TTI" and "Total number of soft channel bits".
The HSDSCH_physical_Layer_category is also used for interpret the meaning of CQI value.
@sic R5−050639 sic@

Type Definition

```
SEQUENCE{
  hSDSCHPhysicalLayerCategory HSDSCH_physical_layer_category,
  h_RNTI H_RNTI,
  dlHSPDSCHInformation DL_HSPDSCH_Information,
  sttd_Indicator BOOLEAN,
  hs_SCCH_TxPower DL_TxPower −− offset related to pilot bits on DL−DPCCH
  −− (TS 25.433 subcluse 9.2.2.18I)
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DL_DPCHInfo_r5

Encoding Variation :

Comments : Applicable Rel−5 or later
@sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  dl_CommonInformation DL_CommonInformation_r5,
  dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL_r5,
  powerOffsetOfTFCI_PO1 INTEGER (0..24),
  powerOffsetOfTPC_PO2 INTEGER (0..24),
  powerOffsetOfPILOT_PO3 INTEGER (0..24),
  dl_TxPower DL_TxPower,
  dl_TxPowerMax DL_TxPower,
  dl_TxPowerMin DL_TxPower
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DPCHInfo_r5

Encoding Variation :

Comments : Applicable Rel−5 or later
At least one of the first two fields shall be present.
Presence of hs_DPCCHInd (value = truevalue) means that the HS−DPCCH shall be configured in the uplink DPCH. If hs_DPCCHInd is absent no HS−DPCCH shall be configured in the uplink DPCH, or the configured HS−DPCCH shall be removed in the modify ASP. In the active set which has radio links from more than one cell the HS−DPCCH is configured only in the HS−DSCH serving cell.
Three combinations are valid: ul_DPCH_Info only, dl_DPCHInfo only and ul_DPCH_Info + hs_DPCCHInd.
@sic R5−050639 sic@
@sic R5−050975 sic@

Type Definition

```
SEQUENCE {
  ul_DPCHInfo UL_DPCH_Info_r5 OPTIONAL,
  dl_DPCHInfo DL_DPCHInfo_r5 OPTIONAL,
  hs_DPCCHInd HS_DPCCHInfo OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : DPCHInfo

Encoding Variation :

Comments : The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0 dB to 6 dB, 0,25 dB per step.

Type Definition

```
SEQUENCE {
  ul_DPCHInfo UL_DPCH_Info OPTIONAL,
  dl_DPCHInfo DL_DPCHInfo OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CphyTrchConfigReq

Encoding Variation :

Comments : To request to configure the transport channel.The same TFCS information should be provided to the PHY and MAC layers at all times. When a CPHY_TrCH_Config_REQ is used to configure the PHY layer, a corresponding CMAC_Config_REQ should be sent to the MAC layer to ensure that the configuration is consistent.
For configuring HS−DSCH transport channel, the ulconnectedTrCHList, ulTFCS, dlconnectedTrCHList and dlTFCS shall be omitted.
@sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  activationTime SS_ActivationTime,
  ulconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    ul_TransportChannelType SS_UL_TransportChannelType,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL,
  ulTFCS TFCS OPTIONAL,
  dlconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    dl_TransportChannelType SS_DL_TransportChannelType,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL ,
  dlTFCS TFCS OPTIONAL,
  hsDSCHMacdFlows HS_DSCHMACdFlows OPTIONAL −− Rel−5 or later
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : HS_DSCHMACdFlows

Encoding Variation :

Comments : Applicable Rel−5 or later.
Within the ACK/NACK repetition period indicated by ackNackRepetitionFactor the SS shall not transmit MAC−hs PDU's on HS−PDSCH.
@sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  harqInfo HARQ_Info OPTIONAL,
  addOrReconfMACdFlow SS_AddOrReconfMAC_dFlow OPTIONAL,
  ackNackRepetitionFactor ACK_NACK_repetitionFactor OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_AddOrReconfMAC_dFlow
Encoding Variation	:
Comments	: Applicable Rel−5 or later. @sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  mac_hs_AddReconfQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hs_AddReconfQueue SS_MAC_hs_AddReconfQueue } OPTIONAL,
  mac_hs_DelQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hsQueueId INTEGER(0..7)
  } OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_MAC_hs_AddReconfQueue
Encoding Variation	:
Comments	: Applicable Rel−5 or later. When writing TTCN constraints the TTCN writer shall set the priority of PriorityQueue in this object correctly acoording to the priority of logical channels which is mapped on to this priority queue. And please note that : the range of priority of PriorityQueue is from 0 to 7 and 0 is the lowest priority. @sic R5−050639 sic@

Type Definition

```
SEQUENCE {
  mAChsAddReconfQueue MAC_hs_AddReconfQueue,
  logicalChannelList SEQUENCE OF LogicalChannelIdentity,
  −− logical channels mapping onto the priority queue
  −− which is specified in maChsAddReconfQueue
  priority INTEGER(0..7),
  discardTimer ENUMERATED { v20(0),v40(1),v60(2),v80(3),v100(4),
    v120(5),v140(6),v160(7),v180(8),v200(9),
    v250(10),v300(11),v400(12),v500(13),
    v750(14),v1000(15),v1250(16),v1500(17),
    v1750(18),v2000(19),v2500(20),v3000(21),
    v3500(22),v4000(23),v4500(24),v5000(25),
    v7500(26)
  } OPTIONAL
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : TrCH_LogCHMappingList1

Encoding Variation :

Comments : maxulTrCH = maxdlTrCH = 16
@sic R5−050639 sic@

Type Definition

```
SEQUENCE
{
  ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    trCH_LogCHMappingList TrCH_LogCHMappingList} OPTIONAL,
  dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    trCH_LogCHMappingList TrCH_LogCHMappingList} OPTIONAL,
  dlconnectedMACdFlows SEQUENCE (SIZE (1..8)) OF SEQUENCE {
    mac_dFlowId MAC_d_FlowIdentity,
    trCH_LogCHMappingList TrCH_LogCHMappingList
  } OPTIONAL −− Rel−5 or later
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : TrCHInfo

Encoding Variation :

Comments : The same TFCS information should be provided to the PHY and MAC layers at all times. When a CMAC_Config_REQ is used to configure the MAC layer, a corresponding CPHY_TrCH_Config_REQ should be sent to the PHY layer to ensure that the configuration is consistent.
For MAC−hs configuration:
When ulconnectedTrCHList, ulTFCS, dlconnectedTrCHList and dlTFCS are omitted this ASP configures an MAC−hs entity.
@sic R5−050639 sic@

Type Definition

```
SEQUENCE
{
  ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL,
  ulTFCS TFCS OPTIONAL,
  dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE {
    trchid TransportChannelIdentity,
    transportChannelInfo CommonOrDedicatedTFS
  } OPTIONAL,
  dlTFCS TFCS OPTIONAL,
  hsDSCHMacdFlows HS_DSCHMACdFlows OPTIONAL −− Rel−5 or later
}
```

Detailed Comments :

ASN.1 Type Definition	
Type Name	: SS_DL_TransportChannelType
Encoding Variation	:
Comments	: @sic R5−050639 sic@

Type Definition

```
ENUMERATED {
  dch(0),
  fach(1),
  bch(2),
  pch(3),
  dsch(4),
  hsdsch(5) −− Rel−5 or later
}
```

Detailed Comments :

ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DL_DCCH_MessageType	DL−DCCH−MessageType	Class−definitions		
UL_DCCH_MessageType	UL−DCCH−MessageType	Class−definitions		
DL_CCCH_MessageType	DL−CCCH−MessageType	Class−definitions		
UL_CCCH_MessageType	UL−CCCH−MessageType	Class−definitions		
PCCH_MessageType	PCCH−MessageType	Class−definitions		
DL_SHCCH_MessageType	DL−SHCCH−MessageType	Class−definitions		
UL_SHCCH_MessageType	UL−SHCCH−MessageType	Class−definitions		
BCCH_FACH_MessageType	BCCH−FACH−MessageType	Class−definitions		
ActiveSetUpdate	ActiveSetUpdate	Class−definitions		
ActiveSetUpdate_r3_IEs	ActiveSetUpdate−r3−IEs	Class−definitions		
ActiveSetUpdate_v4b0ext_IEs	ActiveSetUpdate−v4b0ext−IEs	Class−definitions		
ActiveSetUpdate_v590ext_IEs	ActiveSetUpdate−v590ext−IEs	Class−definitions		
ActiveSetUpdateComplete	ActiveSetUpdateComplete	Class−definitions		
ActiveSetUpdateFailure	ActiveSetUpdateFailure	Class−definitions		
AssistanceDataDelivery	AssistanceDataDelivery	Class−definitions		
AssistanceDataDelivery_r3_IEs	AssistanceDataDelivery−r3−IEs	Class−definitions		
AssistanceDataDelivery_v3a0ext	AssistanceDataDelivery−v3a0ext	Class−definitions		
AssistanceDataDelivery_v4b0ext_IEs	AssistanceDataDelivery−v4b0ext−IEs	Class−definitions		
CellChangeOrderFromUTRAN	CellChangeOrderFromUTRAN	Class−definitions		
CellChangeOrderFromUTRAN_r3_IEs	CellChangeOrderFromUTRAN−r3−IEs	Class−definitions		
CellChangeOrderFromUTRAN_v590ext_IEs	CellChangeOrderFromUTRAN−v590ext−IEs	Class−definitions		
CellChangeOrderFromUTRANFailure	CellChangeOrderFromUTRANFailure	Class−definitions		
CellChangeOrderFromUTRANFailure_r3_IEs	CellChangeOrderFromUTRANFailure−r3−IEs	Class−definitions		
CellUpdate	CellUpdate	Class−definitions		
CellUpdate_v590ext	CellUpdate−v590ext	Class−definitions		
CellUpdateConfirm	CellUpdateConfirm	Class−definitions		
CellUpdateConfirm_r3_IEs	CellUpdateConfirm−r3−IEs	Class−definitions		
CellUpdateConfirm_v3a0ext	CellUpdateConfirm−v3a0ext	Class−definitions		
CellUpdateConfirm_v4b0ext_IEs	CellUpdateConfirm−v4b0ext−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CellUpdateConfirm_v590ext_IEs	CellUpdateConfirm−v590ext−IEs	Class−definitions		
CellUpdateConfirm_r4_IEs	CellUpdateConfirm−r4−IEs	Class−definitions		
CellUpdateConfirm_r5_IEs	CellUpdateConfirm−r5−IEs	Class−definitions		
CellUpdateConfirm_CCCH	CellUpdateConfirm−CCCH	Class−definitions		
CounterCheck	CounterCheck	Class−definitions		
CounterCheck_r3_IEs	CounterCheck−r3−IEs	Class−definitions		
CounterCheckResponse	CounterCheckResponse	Class−definitions		
DownlinkDirectTransfer	DownlinkDirectTransfer	Class−definitions		
DownlinkDirectTransfer_r3_IEs	DownlinkDirectTransfer−r3−IEs	Class−definitions		
HandoverToUTRANCommand	HandoverToUTRANCommand	Class−definitions		
HandoverToUTRANCommand_r3_IEs	HandoverToUTRANCommand−r3−IEs	Class−definitions		
HandoverToUTRANCommand_r4_IEs	HandoverToUTRANCommand−r4−IEs	Class−definitions		
HandoverToUTRANCommand_r5_IEs	HandoverToUTRANCommand−r5−IEs	Class−definitions		
HandoverToUTRANComplete	HandoverToUTRANComplete	Class−definitions		
InitialDirectTransfer	InitialDirectTransfer	Class−definitions		
InitialDirectTransfer_v3a0ext	InitialDirectTransfer−v3a0ext	Class−definitions		
InitialDirectTransfer_v590ext	InitialDirectTransfer−v590ext	Class−definitions		
HandoverFromUTRANCommand_GSM	HandoverFromUTRANCommand−GSM	Class−definitions		
HandoverFromUTRANCommand_GSM_r3_IEs	HandoverFromUTRANCommand−GSM−r3−IEs	Class−definitions		
HandoverFromUTRANCommand_GERANIu	HandoverFromUTRANCommand−GERANIu	Class−definitions		
HandoverFromUTRANCommand_GERANIu_r5_IEs	HandoverFromUTRANCommand−GERANIu−r5−IEs	Class−definitions		
HandoverFromUTRANCommand_CDMA2000	HandoverFromUTRANCommand−CDMA2000	Class−definitions		
HandoverFromUTRANCommand_CDMA2000_r3_IEs	HandoverFromUTRANCommand−CDMA2000−r3−IEs	Class−definitions		
HandoverFromUTRANFailure	HandoverFromUTRANFailure	Class−definitions		
HandoverFromUtranFailure_v590ext_IEs	HandoverFromUtranFailure−v590ext−IEs	Class−definitions		
MeasurementControl	MeasurementControl	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
MeasurementControl_r3_IEs	MeasurementControl−r3−IEs	Class−definitions		
MeasurementControl_v390ext	MeasurementControl−v390ext	Class−definitions		
MeasurementControl_v3a0ext	MeasurementControl−v3a0ext	Class−definitions		
MeasurementControl_r4_IEs	MeasurementControl−r4−IEs	Class−definitions		
MeasurementControl_v590ext_IEs	MeasurementControl−v590ext−IEs	Class−definitions		
MeasurementControl_v5b0ext_IEs	MeasurementControl−v5b0ext−IEs	Class−definitions		
MeasurementControlFailure	MeasurementControlFailure	Class−definitions		
MeasurementControlFailure_v590ext_IEs	MeasurementControlFailure−v590ext−IEs	Class−definitions		
MeasurementReport	MeasurementReport	Class−definitions		
MeasurementReport_v390ext	MeasurementReport−v390ext	Class−definitions		
MeasurementReport_v4b0ext_IEs	MeasurementReport−v4b0ext−IEs	Class−definitions		
MeasurementReport_v590ext_IEs	MeasurementReport−v590ext−IEs	Class−definitions		
MeasurementReport_v5b0ext_IEs	MeasurementReport−v5b0ext−IEs	Class−definitions		
PagingType1	PagingType1	Class−definitions		
PagingType1_v590ext_IEs	PagingType1−v590ext−IEs	Class−definitions		
PagingType2	PagingType2	Class−definitions		
PhysicalChannelReconfiguration	PhysicalChannelReconfiguration	Class−definitions		
PhysicalChannelReconfiguration_r3_IEs	PhysicalChannelReconfiguration−r3−IEs	Class−definitions		
PhysicalChannelReconfiguration_v3a0ext	PhysicalChannelReconfiguration−v3a0ext	Class−definitions		
PhysicalChannelReconfiguration_v4b0ext_IEs	PhysicalChannelReconfiguration−v4b0ext−IEs	Class−definitions		
PhysicalChannelReconfiguration_v590ext_IEs	PhysicalChannelReconfiguration−v590ext−IEs	Class−definitions		
PhysicalChannelReconfiguration_r4_IEs	PhysicalChannelReconfiguration−r4−IEs	Class−definitions		
PhysicalChannelReconfiguration_r5_IEs	PhysicalChannelReconfiguration−r5−IEs	Class−definitions		
PhysicalChannelReconfigurationComplete	PhysicalChannelReconfigurationComplete	Class−definitions		
PhysicalChannelReconfigurationFailure	PhysicalChannelReconfigurationFailure	Class−definitions		
PhysicalSharedChannelAllocation	PhysicalSharedChannelAllocation	Class−definitions		
PhysicalSharedChannelAllocation_r3_IEs	PhysicalSharedChannelAllocation−r3−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PhysicalSharedChannelAllocation_r4_IEs	PhysicalSharedChannelAllocation−r4−IEs	Class−definitions		
PUSCHCapacityRequest	PUSCHCapacityRequest	Class−definitions		
PUSCHCapacityRequest_v590ext	PUSCHCapacityRequest−v590ext	Class−definitions		
RadioBearerReconfiguration	RadioBearerReconfiguration	Class−definitions		
RadioBearerReconfiguration_r3_IEs	RadioBearerReconfiguration−r3−IEs	Class−definitions		
RadioBearerReconfiguration_v3a0ext	RadioBearerReconfiguration−v3a0ext	Class−definitions		
RadioBearerReconfiguration_v4b0ext_IEs	RadioBearerReconfiguration−v4b0ext−IEs	Class−definitions		
RadioBearerReconfiguration_v590ext_IEs	RadioBearerReconfiguration−v590ext−IEs	Class−definitions		
RadioBearerReconfiguration_r4_IEs	RadioBearerReconfiguration−r4−IEs	Class−definitions		
RadioBearerReconfiguration_r5_IEs	RadioBearerReconfiguration−r5−IEs	Class−definitions		
RadioBearerReconfigurationComplete	RadioBearerReconfigurationComplete	Class−definitions		
RadioBearerReconfigurationFailure	RadioBearerReconfigurationFailure	Class−definitions		
RadioBearerRelease	RadioBearerRelease	Class−definitions		
RadioBearerRelease_r3_IEs	RadioBearerRelease−r3−IEs	Class−definitions		
RadioBearerRelease_v3a0ext	RadioBearerRelease−v3a0ext	Class−definitions		
RadioBearerRelease_v4b0ext_IEs	RadioBearerRelease−v4b0ext−IEs	Class−definitions		
RadioBearerRelease_v590ext_IEs	RadioBearerRelease−v590ext−IEs	Class−definitions		
RadioBearerRelease_r4_IEs	RadioBearerRelease−r4−IEs	Class−definitions		
RadioBearerRelease_r5_IEs	RadioBearerRelease−r5−IEs	Class−definitions		
RadioBearerReleaseComplete	RadioBearerReleaseComplete	Class−definitions		
RadioBearerReleaseFailure	RadioBearerReleaseFailure	Class−definitions		
RadioBearerSetup	RadioBearerSetup	Class−definitions		
RadioBearerSetup_r3_IEs	RadioBearerSetup−r3−IEs	Class−definitions		
RadioBearerSetup_v3a0ext	RadioBearerSetup−v3a0ext	Class−definitions		
RadioBearerSetup_v4b0ext_IEs	RadioBearerSetup−v4b0ext−IEs	Class−definitions		
RadioBearerSetup_v590ext_IEs	RadioBearerSetup−v590ext−IEs	Class−definitions		
RadioBearerSetup_r4_IEs	RadioBearerSetup−r4−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RadioBearerSetup_r5_IEs	RadioBearerSetup−r5−IEs	Class−definitions		
RadioBearerSetupComplete	RadioBearerSetupComplete	Class−definitions		
RadioBearerSetupFailure	RadioBearerSetupFailure	Class−definitions		
RRCConnectionReject	RRCConnectionReject	Class−definitions		
RRCConnectionReject_r3_IEs	RRCConnectionReject−r3−IEs	Class−definitions		
RRCConnectionRelease	RRCConnectionRelease	Class−definitions		
RRCConnectionRelease_r3_IEs	RRCConnectionRelease−r3−IEs	Class−definitions		
RRCConnectionRelease_r4_IEs	RRCConnectionRelease−r4−IEs	Class−definitions		
RRCConnectionRelease_CCCH	RRCConnectionRelease−CCCH	Class−definitions		
RRCConnectionRelease_CCCH_r3_IEs	RRCConnectionRelease−CCCH−r3−IEs	Class−definitions		
RRCConnectionRelease_CCCH_r4_IEs	RRCConnectionRelease−CCCH−r4−IEs	Class−definitions		
RRCConnectionRelease_CCCH_r5_IEs	RRCConnectionRelease−CCCH−r5−IEs	Class−definitions		
RRCConnectionReleaseComplete	RRCConnectionReleaseComplete	Class−definitions		
RRCConnectionRequest	RRCConnectionRequest	Class−definitions		
RRCConnectionRequest_v3d0ext_IEs	RRCConnectionRequest−v3d0ext−IEs	Class−definitions		
RRCConnectionRequest_v4b0ext_IEs	RRCConnectionRequest−v4b0ext−IEs	Class−definitions		
RRCConnectionRequest_v590ext_IEs	RRCConnectionRequest−v590ext−IEs	Class−definitions		
RRCConnectionSetup	RRCConnectionSetup	Class−definitions		
RRCConnectionSetup_r3_IEs	RRCConnectionSetup−r3−IEs	Class−definitions		
RRCConnectionSetup_v4b0ext_IEs	RRCConnectionSetup−v4b0ext−IEs	Class−definitions		
RRCConnectionSetup_v590ext_IEs	RRCConnectionSetup−v590ext−IEs	Class−definitions		
RRCConnectionSetup_r4_IEs	RRCConnectionSetup−r4−IEs	Class−definitions		
RRCConnectionSetup_r5_IEs	RRCConnectionSetup−r5−IEs	Class−definitions		
RRCConnectionSetupComplete	RRCConnectionSetupComplete	Class−definitions		
RRCConnectionSetupComplete_v370ext	RRCConnectionSetupComplete−v370ext	Class−definitions		
RRCConnectionSetupComplete_v380ext_IEs	RRCConnectionSetupComplete−v380ext−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RRCConnectionSetupComplete_v3a0ext_IEs	RRCConnectionSetupComplete−v3a0ext−IEs	Class−definitions		
RRCConnectionSetupComplete_v3g0ext_IEs	RRCConnectionSetupComplete−v3g0ext−IEs	Class−definitions		
RRCConnectionSetupComplete_v4b0ext_IEs	RRCConnectionSetupComplete−v4b0ext−IEs	Class−definitions		
RRCConnectionSetupComplete_v590ext_IEs	RRCConnectionSetupComplete−v590ext−IEs	Class−definitions		
RRCStatus	RRCStatus	Class−definitions		
SecurityModeCommand	SecurityModeCommand	Class−definitions		
SecurityModeCommand_r3_IEs	SecurityModeCommand−r3−IEs	Class−definitions		
SecurityModeComplete	SecurityModeComplete	Class−definitions		
SecurityModeFailure	SecurityModeFailure	Class−definitions		
SignallingConnectionRelease	SignallingConnectionRelease	Class−definitions		
SignallingConnectionRelease_r3_IEs	SignallingConnectionRelease−r3−IEs	Class−definitions		
SignallingConnectionReleaseIndication	SignallingConnectionReleaseIndication	Class−definitions		
SystemInformation_BCH	SystemInformation−BCH	Class−definitions		
SystemInformation_FACH	SystemInformation−FACH	Class−definitions		
FirstSegment	FirstSegment	Class−definitions		
FirstSegmentShort	FirstSegmentShort	Class−definitions		
SubsequentSegment	SubsequentSegment	Class−definitions		
LastSegment	LastSegment	Class−definitions		
LastSegmentShort	LastSegmentShort	Class−definitions		
CompleteSIB_List	CompleteSIB−List	Class−definitions		
CompleteSIB	CompleteSIB	Class−definitions		
CompleteSIBshort	CompleteSIBshort	Class−definitions		
SystemInformationChangeIndication	SystemInformationChangeIndication	Class−definitions		
TransportChannelReconfiguration	TransportChannelReconfiguration	Class−definitions		
TransportChannelReconfiguration_r3_IEs	TransportChannelReconfiguration−r3−IEs	Class−definitions		
TransportChannelReconfiguration_v3a0ext	TransportChannelReconfiguration−v3a0ext	Class−definitions		
TransportChannelReconfiguration_v4b0ext_IEs	TransportChannelReconfiguration−v4b0ext−IEs	Class−definitions		
TransportChannelReconfiguration_v590ext_IEs	TransportChannelReconfiguration−v590ext−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
TransportChannelReconfiguration_r4_IEs	TransportChannelReconfiguration−r4−IEs	Class−definitions		
TransportChannelReconfiguration_r5_IEs	TransportChannelReconfiguration−r5−IEs	Class−definitions		
TransportChannelReconfigurationComplete	TransportChannelReconfigurationComplete	Class−definitions		
TransportChannelReconfigurationFailure	TransportChannelReconfigurationFailure	Class−definitions		
TransportFormatCombinationControl	TransportFormatCombinationControl	Class−definitions		
TransportFormatCombinationControlFailure	TransportFormatCombinationControlFailure	Class−definitions		
UECapabilityEnquiry	UECapabilityEnquiry	Class−definitions		
UECapabilityEnquiry_r3_IEs	UECapabilityEnquiry−r3−IEs	Class−definitions		
UECapabilityEnquiry_v4b0ext_IEs	UECapabilityEnquiry−v4b0ext−IEs	Class−definitions		
UECapabilityEnquiry_v590ext_IEs	UECapabilityEnquiry−v590ext−IEs	Class−definitions		
UECapabilityInformation	UECapabilityInformation	Class−definitions		
UECapabilityInformation_v370ext	UECapabilityInformation−v370ext	Class−definitions		
UECapabilityInformation_v380ext_IEs	UECapabilityInformation−v380ext−IEs	Class−definitions		
UECapabilityInformation_v3a0ext_IEs	UECapabilityInformation−v3a0ext−IEs	Class−definitions		
UECapabilityInformation_v4b0ext	UECapabilityInformation−v4b0ext	Class−definitions		
UECapabilityInformation_v590ext	UECapabilityInformation−v590ext	Class−definitions		
UECapabilityInformationConfirm	UECapabilityInformationConfirm	Class−definitions		
UECapabilityInformationConfirm_r3_IEs	UECapabilityInformationConfirm−r3−IEs	Class−definitions		
UplinkDirectTransfer	UplinkDirectTransfer	Class−definitions		
UplinkPhysicalChannelControl	UplinkPhysicalChannelControl	Class−definitions		
UplinkPhysicalChannelControl_r3_IEs	UplinkPhysicalChannelControl−r3−IEs	Class−definitions		
UplinkPhysicalChannelControl_v4b0ext_IEs	UplinkPhysicalChannelControl−v4b0ext−IEs	Class−definitions		
UplinkPhysicalChannelControl_r4_IEs	UplinkPhysicalChannelControl−r4−IEs	Class−definitions		
UplinkPhysicalChannelControl_r5_IEs	UplinkPhysicalChannelControl−r5−IEs	Class−definitions		
URAUpdate	URAUpdate	Class−definitions		
URAUpdateConfirm	URAUpdateConfirm	Class−definitions		
URAUpdateConfirm_r3_IEs	URAUpdateConfirm−r3−IEs	Class−definitions		
URAUpdateConfirm_r5_IEs	URAUpdateConfirm−r5−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
URAUpdateConfirm_CCCH	URAUpdateConfirm−CCCH	Class−definitions		
URAUpdateConfirm_CCCH_r3_IEs	URAUpdateConfirm−CCCH−r3−IEs	Class−definitions		
UTRANMobilityInformation	UTRANMobilityInformation	Class−definitions		
UTRANMobilityInformation_r3_IEs	UTRANMobilityInformation−r3−IEs	Class−definitions		
UTRANMobilityInformation_v3a0ext_IEs	UTRANMobilityInformation−v3a0ext−IEs	Class−definitions		
UTRANMobilityInformation_r5_IEs	UTRANMobilityInformation−r5−IEs	Class−definitions		
UTRANMobilityInformationConfirm	UTRANMobilityInformationConfirm	Class−definitions		
UTRANMobilityInformationFailure	UTRANMobilityInformationFailure	Class−definitions		
Ansi_41_IDNNS	Ansi−41−IDNNS	Class−definitions		
CN_DomainIdentity	CN−DomainIdentity	Class−definitions		
CN_DomainInformation	CN−DomainInformation	Class−definitions		
CN_DomainInformationFull	CN−DomainInformationFull	Class−definitions		
CN_DomainInformationList	CN−DomainInformationList	Class−definitions		
CN_DomainInformationListFull	CN−DomainInformationListFull	Class−definitions		
CN_DomainSysInfo	CN−DomainSysInfo	Class−definitions		
CN_DomainSysInfoList	CN−DomainSysInfoList	Class−definitions		
CN_InformationInfo	CN−InformationInfo	Class−definitions		
CN_InformationInfoFull	CN−InformationInfoFull	Class−definitions		
Digit	Digit	Class−definitions		
Gsm_map_IDNNS	Gsm−map−IDNNS	Class−definitions		
IMEI	IMEI	Class−definitions		
IMEI_Digit	IMEI−Digit	Class−definitions		
IMSI_GSM_MAP	IMSI−GSM−MAP	Class−definitions		
IntraDomainNasNodeSelector	IntraDomainNasNodeSelector	Class−definitions		
LAI	LAI	Class−definitions		
MCC	MCC	Class−definitions		
MNC	MNC	Class−definitions		
NAS_Message	NAS−Message	Class−definitions		
NAS_Synchronisation_Indicator	NAS−Synchronisation−Indicator	Class−definitions		
NAS_SystemInformationGSM_MAP	NAS−SystemInformationGSM−MAP	Class−definitions		
P_TMSI_GSM_MAP	P−TMSI−GSM−MAP	Class−definitions		
PagingRecordTypeID	PagingRecordTypeID	Class−definitions		
PLMN_Identity	PLMN−Identity	Class−definitions		
PLMN_Type	PLMN−Type	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RAB_Identity	RAB−Identity	Class−definitions		
RAI	RAI	Class−definitions		
RoutingAreaCode	RoutingAreaCode	Class−definitions		
RoutingParameter	RoutingParameter	Class−definitions		
TMSI_GSM_MAP	TMSI−GSM−MAP	Class−definitions		
AccessClassBarred	AccessClassBarred	Class−definitions		
AccessClassBarredList	AccessClassBarredList	Class−definitions		
AllowedIndicator	AllowedIndicator	Class−definitions		
CellAccessRestriction	CellAccessRestriction	Class−definitions		
CellBarred	CellBarred	Class−definitions		
CellIdentity	CellIdentity	Class−definitions		
CellIdentity_PerRL_List	CellIdentity−PerRL−List	Class−definitions		
CellSelectReselectInfoSIB_3_4	CellSelectReselectInfoSIB−3−4	Class−definitions		
MapParameter	MapParameter	Class−definitions		
Mapping	Mapping	Class−definitions		
Mapping_LCR_r4	Mapping−LCR−r4	Class−definitions		
MappingFunctionParameter	MappingFunctionParameter	Class−definitions		
MappingFunctionParameterList	MappingFunctionParameterList	Class−definitions		
MappingFunctionType	MappingFunctionType	Class−definitions		
MappingInfo	MappingInfo	Class−definitions		
Q_Hyst_S	Q−Hyst−S	Class−definitions		
Q_Hyst_S_Fine	Q−Hyst−S−Fine	Class−definitions		
RAT	RAT	Class−definitions		
RAT_FDD_Info	RAT−FDD−Info	Class−definitions		
RAT_FDD_InfoList	RAT−FDD−InfoList	Class−definitions		
RAT_Identifier	RAT−Identifier	Class−definitions		
RAT_TDD_Info	RAT−TDD−Info	Class−definitions		
RAT_TDD_InfoList	RAT−TDD−InfoList	Class−definitions		
ReservedIndicator	ReservedIndicator	Class−definitions		
S_SearchQual	S−SearchQual	Class−definitions		
S_SearchRXLEV	S−SearchRXLEV	Class−definitions		
T_Barred	T−Barred	Class−definitions		
T_Reselection_S	T−Reselection−S	Class−definitions		
T_Reselection_S_Fine	T−Reselection−S−Fine	Class−definitions		
UpperLimit	UpperLimit	Class−definitions		
URA_Identity	URA−Identity	Class−definitions		
URA_IdentityList	URA−IdentityList	Class−definitions		
AccessStratumReleaseIndicator	AccessStratumReleaseIndicator	Class−definitions		
ActivationTime	ActivationTime	Class−definitions		
BackoffControlParams	BackoffControlParams	Class−definitions		
C_RNTI	C−RNTI	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CapabilityUpdateRequirement	CapabilityUpdateRequirement	Class−definitions		
CapabilityUpdateRequirement_r4_ext	CapabilityUpdateRequirement−r4−ext	Class−definitions		
CapabilityUpdateRequirement_r4	CapabilityUpdateRequirement−r4	Class−definitions		
CellUpdateCause	CellUpdateCause	Class−definitions		
ChipRateCapability	ChipRateCapability	Class−definitions		
CipheringAlgorithm	CipheringAlgorithm	Class−definitions		
CipheringModeCommand	CipheringModeCommand	Class−definitions		
CipheringModeInfo	CipheringModeInfo	Class−definitions		
CN_DRX_CycleLengthCoefficient	CN−DRX−CycleLengthCoefficient	Class−definitions		
CN_PagedUE_Identity	CN−PagedUE−Identity	Class−definitions		
CompressedModeMeasCapability	CompressedModeMeasCapability	Class−definitions		
CompressedModeMeasCapability_LCR_r4	CompressedModeMeasCapability−LCR−r4	Class−definitions		
CompressedModeMeasCapabFDDList	CompressedModeMeasCapabFDDList	Class−definitions		
CompressedModeMeasCapabFDD	CompressedModeMeasCapabFDD	Class−definitions		
CompressedModeMeasCapabTDDList	CompressedModeMeasCapabTDDList	Class−definitions		
CompressedModeMeasCapabTDD	CompressedModeMeasCapabTDD	Class−definitions		
CompressedModeMeasCapabGSMList	CompressedModeMeasCapabGSMList	Class−definitions		
CompressedModeMeasCapabGSM	CompressedModeMeasCapabGSM	Class−definitions		
CompressedModeMeasCapabMC	CompressedModeMeasCapabMC	Class−definitions		
CPCH_Parameters	CPCH−Parameters	Class−definitions		
DL_CapabilityWithSimultaneousHS_DSCHConfig	DL−CapabilityWithSimultaneousHS−DSCHConfig	Class−definitions		
DL_DPCCH_BER	DL−DPCCH−BER	Class−definitions		
DL_PhysChCapabilityFDD	DL−PhysChCapabilityFDD	Class−definitions		
DL_PhysChCapabilityFDD_v380ext	DL−PhysChCapabilityFDD−v380ext	Class−definitions		
SupportOfDedicatedPilotsForChEstimation	SupportOfDedicatedPilotsForChEstimation	Class−definitions		
DL_PhysChCapabilityTDD	DL−PhysChCapabilityTDD	Class−definitions		
DL_PhysChCapabilityTDD_LCR_r4	DL−PhysChCapabilityTDD−LCR−r4	Class−definitions		
DL_TransChCapability	DL−TransChCapability	Class−definitions		
DRAC_SysInfo	DRAC−SysInfo	Class−definitions		
DRAC_SysInfoList	DRAC−SysInfoList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DSCH_RNTI	DSCH−RNTI	Class−definitions		
ESN_DS_41	ESN−DS−41	Class−definitions		
EstablishmentCause	EstablishmentCause	Class−definitions		
FailureCauseWithProtErr	FailureCauseWithProtErr	Class−definitions		
FailureCauseWithProtErrTrId	FailureCauseWithProtErrTrId	Class−definitions		
GroupIdentityWithReleaseInformation	GroupIdentityWithReleaseInformation	Class−definitions		
GroupReleaseInformation	GroupReleaseInformation	Class−definitions		
GSM_Measurements	GSM−Measurements	Class−definitions		
H_RNTI	H−RNTI	Class−definitions		
HSDSCH_physical_layer_category	HSDSCH−physical−layer−category	Class−definitions		
UESpecificBehaviourInformation1idle	UESpecificBehaviourInformation1idle	Class−definitions		
IMSI_and_ESN_DS_41	IMSI−and−ESN−DS−41	Class−definitions		
IMSI_DS_41	IMSI−DS−41	Class−definitions		
InitialPriorityDelayList	InitialPriorityDelayList	Class−definitions		
InitialUE_Identity	InitialUE−Identity	Class−definitions		
IntegrityCheckInfo	IntegrityCheckInfo	Class−definitions		
IntegrityProtActivationInfo	IntegrityProtActivationInfo	Class−definitions		
IntegrityProtectionAlgorithm	IntegrityProtectionAlgorithm	Class−definitions		
IntegrityProtectionModeCommand	IntegrityProtectionModeCommand	Class−definitions		
IntegrityProtectionModeInfo	IntegrityProtectionModeInfo	Class−definitions		
IntegrityProtInitNumber	IntegrityProtInitNumber	Class−definitions		
MaxHcContextSpace	MaxHcContextSpace	Class−definitions		
MaxHcContextSpace_r5_ext	MaxHcContextSpace−r5−ext	Class−definitions		
MaxROHC_ContextSessions_r4	MaxROHC−ContextSessions−r4	Class−definitions		
MaximumAM_EntityNumberRLC_Cap	MaximumAM−EntityNumberRLC−Cap	Class−definitions		
MaximumBitRate	MaximumBitRate	Class−definitions		
MaximumRLC_WindowSize	MaximumRLC−WindowSize	Class−definitions		
MaxNoDPDCH_BitsTransmitted	MaxNoDPDCH−BitsTransmitted	Class−definitions		
MaxNoBits	MaxNoBits	Class−definitions		
MaxNoPhysChBitsReceived	MaxNoPhysChBitsReceived	Class−definitions		
MaxNoSCCPCH_RL	MaxNoSCCPCH−RL	Class−definitions		
MaxNumberOfTF	MaxNumberOfTF	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
MaxNumberOfTFC_DL	MaxNumberOfTFC−DL	Class−definitions		
MaxNumberOfTFC_UL	MaxNumberOfTFC−UL	Class−definitions		
MaxPhysChPerFrame	MaxPhysChPerFrame	Class−definitions		
MaxPhysChPerSubFrame_r4	MaxPhysChPerSubFrame−r4	Class−definitions		
MaxPhysChPerTimeslot	MaxPhysChPerTimeslot	Class−definitions		
MaxPhysChPerTS	MaxPhysChPerTS	Class−definitions		
MaxSimultaneousCCTrCH_Count	MaxSimultaneousCCTrCH−Count	Class−definitions		
MaxSimultaneousTransChsDL	MaxSimultaneousTransChsDL	Class−definitions		
MaxSimultaneousTransChsUL	MaxSimultaneousTransChsUL	Class−definitions		
MaxTransportBlocksDL	MaxTransportBlocksDL	Class−definitions		
MaxTransportBlocksUL	MaxTransportBlocksUL	Class−definitions		
MaxTS_PerFrame	MaxTS−PerFrame	Class−definitions		
MaxTS_PerSubFrame_r4	MaxTS−PerSubFrame−r4	Class−definitions		
MeasurementCapability	MeasurementCapability	Class−definitions		
MeasurementCapabilityExt	MeasurementCapabilityExt	Class−definitions		
MeasurementCapability_r4_ext	MeasurementCapability−r4−ext	Class−definitions		
MessageAuthenticationCode	MessageAuthenticationCode	Class−definitions		
MinimumSF_DL	MinimumSF−DL	Class−definitions		
MinimumSF_UL	MinimumSF−UL	Class−definitions		
MultiModeCapability	MultiModeCapability	Class−definitions		
MultiRAT_Capability	MultiRAT−Capability	Class−definitions		
MultiModeRAT_Capability_v590ext	MultiModeRAT−Capability−v590ext	Class−definitions		
N_300	N−300	Class−definitions		
N_301	N−301	Class−definitions		
N_302	N−302	Class−definitions		
N_304	N−304	Class−definitions		
N_308	N−308	Class−definitions		
N_310	N−310	Class−definitions		
N_312	N−312	Class−definitions		
N_312ext	N−312ext	Class−definitions		
N_312_r5	N−312−r5	Class−definitions		
N_313	N−313	Class−definitions		
N_315	N−315	Class−definitions		
N_315ext	N−315ext	Class−definitions		
N_315_r5	N−315−r5	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
N_AccessFails	N−AccessFails	Class−definitions		
N_AP_RetransMax	N−AP−RetransMax	Class−definitions		
NetworkAssistedGPS_Supported	NetworkAssistedGPS−Supported	Class−definitions		
NF_BO_AllBusy	NF−BO−AllBusy	Class−definitions		
NF_BO_NoAICH	NF−BO−NoAICH	Class−definitions		
NF_BO_Mismatch	NF−BO−Mismatch	Class−definitions		
NS_BO_Busy	NS−BO−Busy	Class−definitions		
NS_IP	NS−IP	Class−definitions		
P_TMSI_and_RAI_GSM_MAP	P−TMSI−and−RAI−GSM−MAP	Class−definitions		
PagingCause	PagingCause	Class−definitions		
PagingRecord	PagingRecord	Class−definitions		
PagingRecord2_r5	PagingRecord2−r5	Class−definitions		
PagingRecordList	PagingRecordList	Class−definitions		
PagingRecord2List_r5	PagingRecord2List−r5	Class−definitions		
PDCP_Capability	PDCP−Capability	Class−definitions		
PDCP_Capability_r4_ext	PDCP−Capability−r4−ext	Class−definitions		
PDCP_Capability_r5_ext	PDCP−Capability−r5−ext	Class−definitions		
PhysicalChannelCapability	PhysicalChannelCapability	Class−definitions		
PhysicalChannelCapability_LCR_r4	PhysicalChannelCapability−LCR−r4	Class−definitions		
PhysicalChannelCapability_hspdsch_r5	PhysicalChannelCapability−hspdsch−r5	Class−definitions		
PNBSCH_Allocation_r4	PNBSCH−Allocation−r4	Class−definitions		
ProtocolErrorCause	ProtocolErrorCause	Class−definitions		
ProtocolErrorIndicator	ProtocolErrorIndicator	Class−definitions		
ProtocolErrorIndicatorWithMoreInfo	ProtocolErrorIndicatorWithMoreInfo	Class−definitions		
ProtocolErrorMoreInformation	ProtocolErrorMoreInformation	Class−definitions		
RadioFrequencyBandFDD	RadioFrequencyBandFDD	Class−definitions		
RadioFrequencyBandFDDSpare	RadioFrequencyBandFDDSpare	Class−definitions		
RadioFrequencyBandTDDList	RadioFrequencyBandTDDList	Class−definitions		
RadioFrequencyBandTDD	RadioFrequencyBandTDD	Class−definitions		
RadioFrequencyBandGSM	RadioFrequencyBandGSM	Class−definitions		
Rb_timer_indicator	Rb−timer−indicator	Class−definitions		
Re_EstablishmentTimer	Re−EstablishmentTimer	Class−definitions		
RedirectionInfo	RedirectionInfo	Class−definitions		
RejectionCause	RejectionCause	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ReleaseCause	ReleaseCause	Class−definitions		
RF_Capability	RF−Capability	Class−definitions		
RF_Capability_r4_ext	RF−Capability−r4−ext	Class−definitions		
RLC_Capability	RLC−Capability	Class−definitions		
RLC_Capability_r5_ext	RLC−Capability−r5−ext	Class−definitions		
RRC_ConnectionReleaseInformation	RRC−ConnectionReleaseInformation	Class−definitions		
RRC_MessageSequenceNumber	RRC−MessageSequenceNumber	Class−definitions		
RRC_MessageSequenceNumberList	RRC−MessageSequenceNumberList	Class−definitions		
RRC_StateIndicator	RRC−StateIndicator	Class−definitions		
RRC_TransactionIdentifier	RRC−TransactionIdentifier	Class−definitions		
S_RNTI	S−RNTI	Class−definitions		
S_RNTI_2	S−RNTI−2	Class−definitions		
SecurityCapability	SecurityCapability	Class−definitions		
SimultaneousSCCPCH_DPCH_Reception	SimultaneousSCCPCH−DPCH−Reception	Class−definitions		
SRNC_Identity	SRNC−Identity	Class−definitions		
START_Value	START−Value	Class−definitions		
STARTList	STARTList	Class−definitions		
STARTSingle	STARTSingle	Class−definitions		
CapabilityUpdateRequirement_r5	CapabilityUpdateRequirement−r5	Class−definitions		
SystemSpecificCapUpdateReq	SystemSpecificCapUpdateReq	Class−definitions		
SystemSpecificCapUpdateReq_v590ext	SystemSpecificCapUpdateReq−v590ext	Class−definitions		
SystemSpecificCapUpdateReq_r5	SystemSpecificCapUpdateReq−r5	Class−definitions		
SystemSpecificCapUpdateReqList	SystemSpecificCapUpdateReqList	Class−definitions		
SystemSpecificCapUpdateReqList_r5	SystemSpecificCapUpdateReqList−r5	Class−definitions		
T_300	T−300	Class−definitions		
T_301	T−301	Class−definitions		
T_302	T−302	Class−definitions		
T_304	T−304	Class−definitions		
T_305	T−305	Class−definitions		
T_307	T−307	Class−definitions		
T_308	T−308	Class−definitions		
T_309	T−309	Class−definitions		
T_310	T−310	Class−definitions		
T_311	T−311	Class−definitions		
T_312	T−312	Class−definitions		
T_313	T−313	Class−definitions		
T_314	T−314	Class−definitions		
T_315	T−315	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
T_316	T−316	Class−definitions		
T_317	T−317	Class−definitions		
T_CPCH	T−CPCH	Class−definitions		
TMSI_and_LAI_GSM_MAP	TMSI−and−LAI−GSM−MAP	Class−definitions		
TMSI_DS_41	TMSI−DS−41	Class−definitions		
TotalRLC_AM_BufferSize	TotalRLC−AM−BufferSize	Class−definitions		
TotalRLC_AM_BufferSize_r5_ext	TotalRLC−AM−BufferSize−r5−ext	Class−definitions		
TransmissionProbability	TransmissionProbability	Class−definitions		
TransportChannelCapability	TransportChannelCapability	Class−definitions		
TurboSupport	TurboSupport	Class−definitions		
TxRxFrequencySeparation	TxRxFrequencySeparation	Class−definitions		
U_RNTI	U−RNTI	Class−definitions		
U_RNTI_Group	U−RNTI−Group	Class−definitions		
U_RNTI_Short	U−RNTI−Short	Class−definitions		
UE_ConnTimersAndConstants	UE−ConnTimersAndConstants	Class−definitions		
UE_ConnTimersAndConstants_v3a0ext	UE−ConnTimersAndConstants−v3a0ext	Class−definitions		
UE_ConnTimersAndConstants_r5	UE−ConnTimersAndConstants−r5	Class−definitions		
UE_IdleTimersAndConstants	UE−IdleTimersAndConstants	Class−definitions		
UE_IdleTimersAndConstants_v3a0ext	UE−IdleTimersAndConstants−v3a0ext	Class−definitions		
UE_MultiModeRAT_Capability	UE−MultiModeRAT−Capability	Class−definitions		
UE_PowerClass	UE−PowerClass	Class−definitions		
UE_PowerClassExt	UE−PowerClassExt	Class−definitions		
UE_RadioAccessCapability	UE−RadioAccessCapability	Class−definitions		
UE_RadioAccessCapability_v370ext	UE−RadioAccessCapability−v370ext	Class−definitions		
UE_RadioAccessCapability_v380ext	UE−RadioAccessCapability−v380ext	Class−definitions		
UE_RadioAccessCapability_v3a0ext	UE−RadioAccessCapability−v3a0ext	Class−definitions		
UE_RadioAccessCapability_v3g0ext	UE−RadioAccessCapability−v3g0ext	Class−definitions		
UE_PositioningCapabilityExt_v380	UE−PositioningCapabilityExt−v380	Class−definitions		
UE_PositioningCapabilityExt_v3a0	UE−PositioningCapabilityExt−v3a0	Class−definitions		
UE_PositioningCapabilityExt_v3g0	UE−PositioningCapabilityExt−v3g0	Class−definitions		
UE_RadioAccessCapabBandFDDList	UE−RadioAccessCapabBandFDDList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_RadioAccessCapabBandFDD	UE−RadioAccessCapabBandFDD	Class−definitions		
UE_RadioAccessCapability_v4b0ext	UE−RadioAccessCapability−v4b0ext	Class−definitions		
UE_RadioAccessCapability_v590ext	UE−RadioAccessCapability−v590ext	Class−definitions		
UL_PhysChCapabilityFDD	UL−PhysChCapabilityFDD	Class−definitions		
UL_PhysChCapabilityTDD	UL−PhysChCapabilityTDD	Class−definitions		
UL_PhysChCapabilityTDD_LCR_r4	UL−PhysChCapabilityTDD−LCR−r4	Class−definitions		
UL_TransChCapability	UL−TransChCapability	Class−definitions		
UE_Positioning_Capability	UE−Positioning−Capability	Class−definitions		
URA_UpdateCause	URA−UpdateCause	Class−definitions		
UTRAN_DRX_CycleLengthCoefficient	UTRAN−DRX−CycleLengthCoefficient	Class−definitions		
WaitTime	WaitTime	Class−definitions		
AlgorithmSpecificInfo	AlgorithmSpecificInfo	Class−definitions		
AlgorithmSpecificInfo_r4	AlgorithmSpecificInfo−r4	Class−definitions		
CID_InclusionInfo_r4	CID−InclusionInfo−r4	Class−definitions		
COUNT_C	COUNT−C	Class−definitions		
COUNT_C_MSB	COUNT−C−MSB	Class−definitions		
DefaultConfigIdentity	DefaultConfigIdentity	Class−definitions		
DefaultConfigIdentity_r4	DefaultConfigIdentity−r4	Class−definitions		
DefaultConfigIdentity_r5	DefaultConfigIdentity−r5	Class−definitions		
DefaultConfigMode	DefaultConfigMode	Class−definitions		
DL_AM_RLC_Mode	DL−AM−RLC−Mode	Class−definitions		
DL_AM_RLC_Mode_r5	DL−AM−RLC−Mode−r5	Class−definitions		
DL_CounterSynchronisationInfo	DL−CounterSynchronisationInfo	Class−definitions		
DL_CounterSynchronisationInfo_r5	DL−CounterSynchronisationInfo−r5	Class−definitions		
DL_LogicalChannelMapping	DL−LogicalChannelMapping	Class−definitions		
DL_LogicalChannelMapping_r5	DL−LogicalChannelMapping−r5	Class−definitions		
DL_LogicalChannelMappingList	DL−LogicalChannelMappingList	Class−definitions		
DL_LogicalChannelMappingList_r5	DL−LogicalChannelMappingList−r5	Class−definitions		
DL_RFC3095_r4	DL−RFC3095−r4	Class−definitions		
DL_RLC_Mode	DL−RLC−Mode	Class−definitions		
DL_RLC_Mode_r5	DL−RLC−Mode−r5	Class−definitions		
DL_RLC_StatusInfo	DL−RLC−StatusInfo	Class−definitions		
DL_TM_RLC_Mode	DL−TM−RLC−Mode	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DL_TransportChannelType	DL−TransportChannelType	Class−definitions		
DL_TransportChannelType_r5	DL−TransportChannelType−r5	Class−definitions		
DL_UM_RLC_LI_size	DL−UM−RLC−LI−size	Class−definitions		
DL_UM_RLC_Mode_r5	DL−UM−RLC−Mode−r5	Class−definitions		
ExpectReordering	ExpectReordering	Class−definitions		
ExplicitDiscard	ExplicitDiscard	Class−definitions		
HeaderCompressionInfo	HeaderCompressionInfo	Class−definitions		
HeaderCompressionInfoList	HeaderCompressionInfoList	Class−definitions		
HeaderCompressionInfo_r4	HeaderCompressionInfo−r4	Class−definitions		
HeaderCompressionInfoList_r4	HeaderCompressionInfoList−r4	Class−definitions		
LogicalChannelIdentity	LogicalChannelIdentity	Class−definitions		
LosslessSRNS_RelocSupport	LosslessSRNS−RelocSupport	Class−definitions		
MAC_d_HFN_initial_value	MAC−d−HFN−initial−value	Class−definitions		
MAC_LogicalChannelPriority	MAC−LogicalChannelPriority	Class−definitions		
MaxDAT	MaxDAT	Class−definitions		
MaxDAT_Retransmissions	MaxDAT−Retransmissions	Class−definitions		
MaxMRW	MaxMRW	Class−definitions		
MaxPDCP_SN_WindowSize	MaxPDCP−SN−WindowSize	Class−definitions		
MaxRST	MaxRST	Class−definitions		
NoExplicitDiscard	NoExplicitDiscard	Class−definitions		
PDCP_Info	PDCP−Info	Class−definitions		
PDCP_Info_r4	PDCP−Info−r4	Class−definitions		
PDCP_InfoReconfig	PDCP−InfoReconfig	Class−definitions		
PDCP_InfoReconfig_r4	PDCP−InfoReconfig−r4	Class−definitions		
PDCP_PDU_Header	PDCP−PDU−Header	Class−definitions		
PDCP_SN_Info	PDCP−SN−Info	Class−definitions		
Poll_PDU	Poll−PDU	Class−definitions		
Poll_SDU	Poll−SDU	Class−definitions		
PollingInfo	PollingInfo	Class−definitions		
PollWindow	PollWindow	Class−definitions		
PredefinedConfigIdentity	PredefinedConfigIdentity	Class−definitions		
PredefinedConfigValueTag	PredefinedConfigValueTag	Class−definitions		
PredefinedRB_Configuration	PredefinedRB−Configuration	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PreDefRadioConfiguration	PreDefRadioConfiguration	Class−definitions		
RAB_Info	RAB−Info	Class−definitions		
RAB_InformationList	RAB−InformationList	Class−definitions		
RAB_InformationReconfigList	RAB−InformationReconfigList	Class−definitions		
RAB_InformationReconfig	RAB−InformationReconfig	Class−definitions		
RAB_Info_Post	RAB−Info−Post	Class−definitions		
RAB_InformationSetup	RAB−InformationSetup	Class−definitions		
RAB_InformationSetup_r4	RAB−InformationSetup−r4	Class−definitions		
RAB_InformationSetup_r5	RAB−InformationSetup−r5	Class−definitions		
RAB_InformationSetupList	RAB−InformationSetupList	Class−definitions		
RAB_InformationSetupList_r4	RAB−InformationSetupList−r4	Class−definitions		
RAB_InformationSetupList_r5	RAB−InformationSetupList−r5	Class−definitions		
RB_ActivationTimeInfo	RB−ActivationTimeInfo	Class−definitions		
RB_ActivationTimeInfoList	RB−ActivationTimeInfoList	Class−definitions		
RB_COUNT_C_Information	RB−COUNT−C−Information	Class−definitions		
RB_COUNT_C_InformationList	RB−COUNT−C−InformationList	Class−definitions		
RB_COUNT_C_MSB_Information	RB−COUNT−C−MSB−Information	Class−definitions		
RB_COUNT_C_MSB_InformationList	RB−COUNT−C−MSB−InformationList	Class−definitions		
RB_Identity	RB−Identity	Class−definitions		
RB_IdentityList	RB−IdentityList	Class−definitions		
RB_InformationAffected	RB−InformationAffected	Class−definitions		
RB_InformationAffected_r5	RB−InformationAffected−r5	Class−definitions		
RB_InformationAffectedList	RB−InformationAffectedList	Class−definitions		
RB_InformationAffectedList_r5	RB−InformationAffectedList−r5	Class−definitions		
RB_InformationReconfig	RB−InformationReconfig	Class−definitions		
RB_InformationReconfig_r4	RB−InformationReconfig−r4	Class−definitions		
RB_InformationReconfig_r5	RB−InformationReconfig−r5	Class−definitions		
RB_InformationReconfigList	RB−InformationReconfigList	Class−definitions		
RB_InformationReconfigList_r4	RB−InformationReconfigList−r4	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RB_InformationReconfigList_r5	RB−InformationReconfigList−r5	Class−definitions		
RB_InformationReleaseList	RB−InformationReleaseList	Class−definitions		
RB_InformationSetup	RB−InformationSetup	Class−definitions		
RB_InformationSetup_r4	RB−InformationSetup−r4	Class−definitions		
RB_InformationSetup_r5	RB−InformationSetup−r5	Class−definitions		
RB_InformationSetupList	RB−InformationSetupList	Class−definitions		
RB_InformationSetupList_r4	RB−InformationSetupList−r4	Class−definitions		
RB_InformationSetupList_r5	RB−InformationSetupList−r5	Class−definitions		
RB_MappingInfo	RB−MappingInfo	Class−definitions		
RB_MappingInfo_r5	RB−MappingInfo−r5	Class−definitions		
RB_MappingOption	RB−MappingOption	Class−definitions		
RB_MappingOption_r5	RB−MappingOption−r5	Class−definitions		
RB_PDCPContextRelocation	RB−PDCPContextRelocation	Class−definitions		
RB_PDCPContextRelocationList	RB−PDCPContextRelocationList	Class−definitions		
RB_StopContinue	RB−StopContinue	Class−definitions		
RB_WithPDCP_Info	RB−WithPDCP−Info	Class−definitions		
RB_WithPDCP_InfoList	RB−WithPDCP−InfoList	Class−definitions		
ReceivingWindowSize	ReceivingWindowSize	Class−definitions		
RFC2507_Info	RFC2507−Info	Class−definitions		
RFC3095_Info_r4	RFC3095−Info−r4	Class−definitions		
RLC_Info	RLC−Info	Class−definitions		
RLC_Info_r5	RLC−Info−r5	Class−definitions		
RLC_InfoChoice	RLC−InfoChoice	Class−definitions		
RLC_InfoChoice_r5	RLC−InfoChoice−r5	Class−definitions		
RLC_SequenceNumber	RLC−SequenceNumber	Class−definitions		
RLC_SizeInfo	RLC−SizeInfo	Class−definitions		
RLC_SizeExplicitList	RLC−SizeExplicitList	Class−definitions		
ROHC_Profile_r4	ROHC−Profile−r4	Class−definitions		
ROHC_ProfileList_r4	ROHC−ProfileList−r4	Class−definitions		
ROHC_PacketSize_r4	ROHC−PacketSize−r4	Class−definitions		
ROHC_PacketSizeList_r4	ROHC−PacketSizeList−r4	Class−definitions		
SRB_InformationSetup	SRB−InformationSetup	Class−definitions		
SRB_InformationSetup_r5	SRB−InformationSetup−r5	Class−definitions		
SRB_InformationSetupList	SRB−InformationSetupList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SRB_InformationSetupList_r5	SRB−InformationSetupList−r5	Class−definitions		
SRB_InformationSetupList2	SRB−InformationSetupList2	Class−definitions		
TimerDiscard	TimerDiscard	Class−definitions		
TimerEPC	TimerEPC	Class−definitions		
TimerMRW	TimerMRW	Class−definitions		
TimerPoll	TimerPoll	Class−definitions		
TimerPollPeriodic	TimerPollPeriodic	Class−definitions		
TimerPollProhibit	TimerPollProhibit	Class−definitions		
TimerRST	TimerRST	Class−definitions		
TimerStatusPeriodic	TimerStatusPeriodic	Class−definitions		
TimerStatusProhibit	TimerStatusProhibit	Class−definitions		
TransmissionRLC_Discard	TransmissionRLC−Discard	Class−definitions		
TransmissionWindowSize	TransmissionWindowSize	Class−definitions		
UL_AM_RLC_Mode	UL−AM−RLC−Mode	Class−definitions		
UL_CounterSynchronisationInfo	UL−CounterSynchronisationInfo	Class−definitions		
UL_LogicalChannelMapping	UL−LogicalChannelMapping	Class−definitions		
UL_LogicalChannelMappingList	UL−LogicalChannelMappingList	Class−definitions		
UL_LogicalChannelMappings	UL−LogicalChannelMappings	Class−definitions		
UL_RFC3095_r4	UL−RFC3095−r4	Class−definitions		
UL_RLC_Mode	UL−RLC−Mode	Class−definitions		
UL_TM_RLC_Mode	UL−TM−RLC−Mode	Class−definitions		
UL_UM_RLC_Mode	UL−UM−RLC−Mode	Class−definitions		
UL_TransportChannelType	UL−TransportChannelType	Class−definitions		
AddOrReconfMAC_dFlow	AddOrReconfMAC−dFlow	Class−definitions		
AllowedTFC_List	AllowedTFC−List	Class−definitions		
AllowedTFI_List	AllowedTFI−List	Class−definitions		
BitModeRLC_SizeInfo	BitModeRLC−SizeInfo	Class−definitions		
BLER_QualityValue	BLER−QualityValue	Class−definitions		
ChannelCodingType	ChannelCodingType	Class−definitions		
CodingRate	CodingRate	Class−definitions		
CommonDynamicTF_Info	CommonDynamicTF−Info	Class−definitions		
CommonDynamicTF_Info_DynamicTTI	CommonDynamicTF−Info−DynamicTTI	Class−definitions		
CommonDynamicTF_InfoList	CommonDynamicTF−InfoList	Class−definitions		
CommonDynamicTF_InfoList_DynamicTTI	CommonDynamicTF−InfoList−DynamicTTI	Class−definitions		
CommonTransChTFS	CommonTransChTFS	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CommonTransChTFS_LCR	CommonTransChTFS−LCR	Class−definitions		
CPCH_SetID	CPCH−SetID	Class−definitions		
CRC_Size	CRC−Size	Class−definitions		
DedicatedDynamicTF_Info	DedicatedDynamicTF−Info	Class−definitions		
DedicatedDynamicTF_Info_DynamicTTI	DedicatedDynamicTF−Info−DynamicTTI	Class−definitions		
DedicatedDynamicTF_InfoList	DedicatedDynamicTF−InfoList	Class−definitions		
DedicatedDynamicTF_InfoList_DynamicTTI	DedicatedDynamicTF−InfoList−DynamicTTI	Class−definitions		
DedicatedTransChTFS	DedicatedTransChTFS	Class−definitions		
DL_AddReconfTransChInfo2List	DL−AddReconfTransChInfo2List	Class−definitions		
DL_AddReconfTransChInfoList	DL−AddReconfTransChInfoList	Class−definitions		
DL_AddReconfTransChInfoList_r4	DL−AddReconfTransChInfoList−r4	Class−definitions		
DL_AddReconfTransChInfoList_r5	DL−AddReconfTransChInfoList−r5	Class−definitions		
DL_AddReconfTransChInformation	DL−AddReconfTransChInformation	Class−definitions		
DL_AddReconfTransChInformation_r4	DL−AddReconfTransChInformation−r4	Class−definitions		
DL_AddReconfTransChInformation_r5	DL−AddReconfTransChInformation−r5	Class−definitions		
DL_AddReconfTransChInformation2	DL−AddReconfTransChInformation2	Class−definitions		
DL_CommonTransChInfo	DL−CommonTransChInfo	Class−definitions		
DL_CommonTransChInfo_r4	DL−CommonTransChInfo−r4	Class−definitions		
DL_DeletedTransChInfoList	DL−DeletedTransChInfoList	Class−definitions		
DL_DeletedTransChInfoList_r5	DL−DeletedTransChInfoList−r5	Class−definitions		
DL_TransportChannelIdentity	DL−TransportChannelIdentity	Class−definitions		
DL_TransportChannelIdentity_r5	DL−TransportChannelIdentity−r5	Class−definitions		
DL_TrCH_Type	DL−TrCH−Type	Class−definitions		
DL_TrCH_TypeId1_r5	DL−TrCH−TypeId1−r5	Class−definitions		
DL_TrCH_TypeId2_r5	DL−TrCH−TypeId2−r5	Class−definitions		
DRAC_ClassIdentity	DRAC−ClassIdentity	Class−definitions		
DRAC_StaticInformation	DRAC−StaticInformation	Class−definitions		
DRAC_StaticInformationList	DRAC−StaticInformationList	Class−definitions		
ExplicitTFCS_Configuration	ExplicitTFCS−Configuration	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
GainFactor	GainFactor	Class−definitions		
GainFactorInformation	GainFactorInformation	Class−definitions		
HSDSCH_Info	HSDSCH−Info	Class−definitions		
HARQ_Info	HARQ−Info	Class−definitions		
HARQMemorySize	HARQMemorySize	Class−definitions		
IndividualDL_CCTrCH_Info	IndividualDL−CCTrCH−Info	Class−definitions		
IndividualDL_CCTrCH_InfoList	IndividualDL−CCTrCH−InfoList	Class−definitions		
IndividualUL_CCTrCH_Info	IndividualUL−CCTrCH−Info	Class−definitions		
IndividualUL_CCTrCH_InfoList	IndividualUL−CCTrCH−InfoList	Class−definitions		
LogicalChannelByRB	LogicalChannelByRB	Class−definitions		
LogicalChannelList	LogicalChannelList	Class−definitions		
MAC_d_FlowIdentityDCHandHSDSCH	MAC−d−FlowIdentityDCHandHSDSCH	Class−definitions		
MAC_d_FlowIdentity	MAC−d−FlowIdentity	Class−definitions		
MAC_d_PDU_SizeInfo_List	MAC−d−PDU−SizeInfo−List	Class−definitions		
MAC_d_PDUsizeInfo	MAC−d−PDUsizeInfo	Class−definitions		
MAC_hs_AddReconfQueue_List	MAC−hs−AddReconfQueue−List	Class−definitions		
MAC_hs_AddReconfQueue	MAC−hs−AddReconfQueue	Class−definitions		
MAC_hs_DelQueue_List	MAC−hs−DelQueue−List	Class−definitions		
MAC_hs_DelQueue	MAC−hs−DelQueue	Class−definitions		
MAC_hs_WindowSize	MAC−hs−WindowSize	Class−definitions		
NumberOfTbSizeAndTTIList	NumberOfTbSizeAndTTIList	Class−definitions		
MessType	MessType	Class−definitions		
Non_allowedTFC_List	Non−allowedTFC−List	Class−definitions		
NumberOfTransportBlocks	NumberOfTransportBlocks	Class−definitions		
OctetModeRLC_SizeInfoType1	OctetModeRLC−SizeInfoType1	Class−definitions		
OctetModeRLC_SizeInfoType2	OctetModeRLC−SizeInfoType2	Class−definitions		
PowerOffsetInformation	PowerOffsetInformation	Class−definitions		
PowerOffsetPp_m	PowerOffsetPp−m	Class−definitions		
PreDefTransChConfiguration	PreDefTransChConfiguration	Class−definitions		
QualityTarget	QualityTarget	Class−definitions		
RateMatchingAttribute	RateMatchingAttribute	Class−definitions		
ReferenceTFC_ID	ReferenceTFC−ID	Class−definitions		
RestrictedTrChInfo	RestrictedTrChInfo	Class−definitions		
RestrictedTrChInfoList	RestrictedTrChInfoList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SemistaticTF_Information	SemistaticTF−Information	Class−definitions		
SignalledGainFactors	SignalledGainFactors	Class−definitions		
SplitTFCI_Signalling	SplitTFCI−Signalling	Class−definitions		
SplitType	SplitType	Class−definitions		
T1_ReleaseTimer	T1−ReleaseTimer	Class−definitions		
TFC_Subset	TFC−Subset	Class−definitions		
TFC_SubsetList	TFC−SubsetList	Class−definitions		
TFC_Value	TFC−Value	Class−definitions		
TFCI_Field2_Information	TFCI−Field2−Information	Class−definitions		
TFCI_Range	TFCI−Range	Class−definitions		
TFCI_RangeList	TFCI−RangeList	Class−definitions		
TFCS	TFCS	Class−definitions		
TFCS_Identity	TFCS−Identity	Class−definitions		
TFCS_IdentityPlain	TFCS−IdentityPlain	Class−definitions		
TFCS_InfoForDSCH	TFCS−InfoForDSCH	Class−definitions		
TFCS_ReconfAdd	TFCS−ReconfAdd	Class−definitions		
TFCS_Removal	TFCS−Removal	Class−definitions		
TFCS_RemovalList	TFCS−RemovalList	Class−definitions		
TimeDurationBeforeRetry	TimeDurationBeforeRetry	Class−definitions		
TM_SignallingInfo	TM−SignallingInfo	Class−definitions		
TransmissionTimeInterval	TransmissionTimeInterval	Class−definitions		
TransmissionTimeValidity	TransmissionTimeValidity	Class−definitions		
TransportChannelIdentity	TransportChannelIdentity	Class−definitions		
TransportChannelIdentityDCHandDSCH	TransportChannelIdentityDCHandDSCH	Class−definitions		
TransportFormatSet	TransportFormatSet	Class−definitions		
TransportFormatSet_LCR	TransportFormatSet−LCR	Class−definitions		
UL_AddReconfTransChInfoList	UL−AddReconfTransChInfoList	Class−definitions		
UL_AddReconfTransChInformation	UL−AddReconfTransChInformation	Class−definitions		
UL_CommonTransChInfo	UL−CommonTransChInfo	Class−definitions		
UL_CommonTransChInfo_r4	UL−CommonTransChInfo−r4	Class−definitions		
UL_ControlledTrChList	UL−ControlledTrChList	Class−definitions		
UL_DeletedTransChInfoList	UL−DeletedTransChInfoList	Class−definitions		
UL_TransportChannelIdentity	UL−TransportChannelIdentity	Class−definitions		
UL_TrCH_Type	UL−TrCH−Type	Class−definitions		
USCH_TransportChannelsInfo	USCH−TransportChannelsInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ACK_NACK_repetitionFactor	ACK−NACK−repetitionFactor	Class−definitions		
AC_To_ASC_Mapping	AC−To−ASC−Mapping	Class−definitions		
AC_To_ASC_MappingTable	AC−To−ASC−MappingTable	Class−definitions		
AccessServiceClass_FDD	AccessServiceClass−FDD	Class−definitions		
AccessServiceClass_TDD	AccessServiceClass−TDD	Class−definitions		
AccessServiceClass_TDD_LCR_r4	AccessServiceClass−TDD−LCR−r4	Class−definitions		
AICH_Info	AICH−Info	Class−definitions		
AICH_PowerOffset	AICH−PowerOffset	Class−definitions		
AICH_TransmissionTiming	AICH−TransmissionTiming	Class−definitions		
AllocationPeriodInfo	AllocationPeriodInfo	Class−definitions		
Alpha	Alpha	Class−definitions		
AP_AICH_ChannelisationCode	AP−AICH−ChannelisationCode	Class−definitions		
AP_PreambleScramblingCode	AP−PreambleScramblingCode	Class−definitions		
AP_Signature	AP−Signature	Class−definitions		
AP_Signature_VCAM	AP−Signature−VCAM	Class−definitions		
AP_Subchannel	AP−Subchannel	Class−definitions		
ASCSetting_FDD	ASCSetting−FDD	Class−definitions		
ASCSetting_TDD	ASCSetting−TDD	Class−definitions		
ASCSetting_TDD_LCR_r4	ASCSetting−TDD−LCR−r4	Class−definitions		
AvailableAP_Signature_VCAMList	AvailableAP−Signature−VCAMList	Class−definitions		
AvailableAP_SignatureList	AvailableAP−SignatureList	Class−definitions		
AvailableAP_SubchannelList	AvailableAP−SubchannelList	Class−definitions		
AvailableMinimumSF_ListVCAM	AvailableMinimumSF−ListVCAM	Class−definitions		
AvailableMinimumSF_VCAM	AvailableMinimumSF−VCAM	Class−definitions		
AvailableSignatures	AvailableSignatures	Class−definitions		
AvailableSubChannelNumbers	AvailableSubChannelNumbers	Class−definitions		
BurstType	BurstType	Class−definitions		
Bler_Target	Bler−Target	Class−definitions		
CCTrCH_PowerControlInfo	CCTrCH−PowerControlInfo	Class−definitions		
CCTrCH_PowerControlInfo_r4	CCTrCH−PowerControlInfo−r4	Class−definitions		
CCTrCH_PowerControlInfo_r5	CCTrCH−PowerControlInfo−r5	Class−definitions		
CD_AccessSlotSubchannel	CD−AccessSlotSubchannel	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CD_AccessSlotSubchannelList	CD−AccessSlotSubchannelList	Class−definitions		
CD_CA_ICH_ChannelisationCode	CD−CA−ICH−ChannelisationCode	Class−definitions		
CD_PreambleScramblingCode	CD−PreambleScramblingCode	Class−definitions		
CD_SignatureCode	CD−SignatureCode	Class−definitions		
CD_SignatureCodeList	CD−SignatureCodeList	Class−definitions		
CellAndChannelIdentity	CellAndChannelIdentity	Class−definitions		
CellParametersID	CellParametersID	Class−definitions		
Cfntargetsfnframeoffset	Cfntargetsfnframeoffset	Class−definitions		
ChannelAssignmentActive	ChannelAssignmentActive	Class−definitions		
ChannelisationCode256	ChannelisationCode256	Class−definitions		
ChannelReqParamsForUCSM	ChannelReqParamsForUCSM	Class−definitions		
ClosedLoopTimingAdjMode	ClosedLoopTimingAdjMode	Class−definitions		
CodeNumberDSCH	CodeNumberDSCH	Class−definitions		
CodeRange	CodeRange	Class−definitions		
CodeWordSet	CodeWordSet	Class−definitions		
CommonTimeslotInfo	CommonTimeslotInfo	Class−definitions		
CommonTimeslotInfoSCCPCH	CommonTimeslotInfoSCCPCH	Class−definitions		
ConstantValue	ConstantValue	Class−definitions		
ConstantValueTdd	ConstantValueTdd	Class−definitions		
CPCH_PersistenceLevels	CPCH−PersistenceLevels	Class−definitions		
CPCH_PersistenceLevelsList	CPCH−PersistenceLevelsList	Class−definitions		
CPCH_SetInfo	CPCH−SetInfo	Class−definitions		
CPCH_SetInfoList	CPCH−SetInfoList	Class−definitions		
CPCH_StatusIndicationMode	CPCH−StatusIndicationMode	Class−definitions		
CQI_RepetitionFactor	CQI−RepetitionFactor	Class−definitions		
CSICH_PowerOffset	CSICH−PowerOffset	Class−definitions		
DefaultDPCH_OffsetValueFDD	DefaultDPCH−OffsetValueFDD	Class−definitions		
DefaultDPCH_OffsetValueTDD	DefaultDPCH−OffsetValueTDD	Class−definitions		
DeltaPp_m	DeltaPp−m	Class−definitions		
DeltaCQI	DeltaCQI	Class−definitions		
DeltaNACK	DeltaNACK	Class−definitions		
DeltaACK	DeltaACK	Class−definitions		
DeltaSIR	DeltaSIR	Class−definitions		
DL_CCTrCh	DL−CCTrCh	Class−definitions		
DL_CCTrCh_r4	DL−CCTrCh−r4	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DL_CCTrChList	DL−CCTrChList	Class−definitions		
DL_CCTrChList_r4	DL−CCTrChList−r4	Class−definitions		
DL_CCTrChListToRemove	DL−CCTrChListToRemove	Class−definitions		
DL_ChannelisationCode	DL−ChannelisationCode	Class−definitions		
DL_ChannelisationCodeList	DL−ChannelisationCodeList	Class−definitions		
DL_CommonInformation	DL−CommonInformation	Class−definitions		
DL_CommonInformation_r4	DL−CommonInformation−r4	Class−definitions		
DL_CommonInformation_r5	DL−CommonInformation−r5	Class−definitions		
DL_CommonInformationPost	DL−CommonInformationPost	Class−definitions		
DL_CommonInformationPredef	DL−CommonInformationPredef	Class−definitions		
DL_CompressedModeMethod	DL−CompressedModeMethod	Class−definitions		
DL_DPCH_InfoCommon	DL−DPCH−InfoCommon	Class−definitions		
DL_DPCH_InfoCommon_r4	DL−DPCH−InfoCommon−r4	Class−definitions		
DL_DPCH_InfoCommonPost	DL−DPCH−InfoCommonPost	Class−definitions		
DL_DPCH_InfoCommonPredef	DL−DPCH−InfoCommonPredef	Class−definitions		
DL_DPCH_InfoPerRL	DL−DPCH−InfoPerRL	Class−definitions		
DL_DPCH_InfoPerRL_r4	DL−DPCH−InfoPerRL−r4	Class−definitions		
DL_DPCH_InfoPerRL_r5	DL−DPCH−InfoPerRL−r5	Class−definitions		
DL_DPCH_InfoPerRL_PostFDD	DL−DPCH−InfoPerRL−PostFDD	Class−definitions		
DL_DPCH_InfoPerRL_PostTDD	DL−DPCH−InfoPerRL−PostTDD	Class−definitions		
DL_DPCH_InfoPerRL_PostTDD_LCR_r4	DL−DPCH−InfoPerRL−PostTDD−LCR−r4	Class−definitions		
DL_DPCH_PowerControlInfo	DL−DPCH−PowerControlInfo	Class−definitions		
DL_FrameType	DL−FrameType	Class−definitions		
DL_HSPDSCH_Information	DL−HSPDSCH−Information	Class−definitions		
DL_HSPDSCH_TS_Configuration	DL−HSPDSCH−TS−Configuration	Class−definitions		
DL_InformationPerRL	DL−InformationPerRL	Class−definitions		
DL_InformationPerRL_r4	DL−InformationPerRL−r4	Class−definitions		
DL_InformationPerRL_r5	DL−InformationPerRL−r5	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DL_InformationPerRL_r5bis	DL−InformationPerRL−r5bis	Class−definitions		
DL_InformationPerRL_List	DL−InformationPerRL−List	Class−definitions		
DL_InformationPerRL_List_r4	DL−InformationPerRL−List−r4	Class−definitions		
DL_InformationPerRL_List_r5	DL−InformationPerRL−List−r5	Class−definitions		
DL_InformationPerRL_List_r5bis	DL−InformationPerRL−List−r5bis	Class−definitions		
DL_InformationPerRL_ListPostFDD	DL−InformationPerRL−ListPostFDD	Class−definitions		
DL_InformationPerRL_PostFDD	DL−InformationPerRL−PostFDD	Class−definitions		
DL_InformationPerRL_PostTDD	DL−InformationPerRL−PostTDD	Class−definitions		
DL_InformationPerRL_PostTDD_LCR_r4	DL−InformationPerRL−PostTDD−LCR−r4	Class−definitions		
DL_PDSCH_Information	DL−PDSCH−Information	Class−definitions		
Dl_rate_matching_restriction	Dl−rate−matching−restriction	Class−definitions		
DL_TPC_PowerOffsetPerRL	DL−TPC−PowerOffsetPerRL	Class−definitions		
DL_TPC_PowerOffsetPerRL_List	DL−TPC−PowerOffsetPerRL−List	Class−definitions		
DL_TS_ChannelisationCode	DL−TS−ChannelisationCode	Class−definitions		
DL_TS_ChannelisationCodesShort	DL−TS−ChannelisationCodesShort	Class−definitions		
DownlinkAdditionalTimeslots	DownlinkAdditionalTimeslots	Class−definitions		
DownlinkAdditionalTimeslots_LCR_r4	DownlinkAdditionalTimeslots−LCR−r4	Class−definitions		
DownlinkTimeslotsCodes	DownlinkTimeslotsCodes	Class−definitions		
DownlinkTimeslotsCodes_LCR_r4	DownlinkTimeslotsCodes−LCR−r4	Class−definitions		
DPC_Mode	DPC−Mode	Class−definitions		
DPCCH_PowerOffset	DPCCH−PowerOffset	Class−definitions		
DPCCH_PowerOffset2	DPCCH−PowerOffset2	Class−definitions		
DPCH_CompressedModeInfo	DPCH−CompressedModeInfo	Class−definitions		
DPCH_CompressedModeStatusInfo	DPCH−CompressedModeStatusInfo	Class−definitions		
DPCH_FrameOffset	DPCH−FrameOffset	Class−definitions		
DSCH_Mapping	DSCH−Mapping	Class−definitions		
DSCH_MappingList	DSCH−MappingList	Class−definitions		
DSCH_RadioLinkIdentifier	DSCH−RadioLinkIdentifier	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DSCH_TransportChannelsInfo	DSCH−TransportChannelsInfo	Class−definitions		
DurationTimeInfo	DurationTimeInfo	Class−definitions		
DynamicPersistenceLevel	DynamicPersistenceLevel	Class−definitions		
DynamicPersistenceLevelList	DynamicPersistenceLevelList	Class−definitions		
DynamicPersistenceLevelTF_List	DynamicPersistenceLevelTF−List	Class−definitions		
FACH_PCH_Information	FACH−PCH−Information	Class−definitions		
FACH_PCH_InformationList	FACH−PCH−InformationList	Class−definitions		
Feedback_cycle	Feedback−cycle	Class−definitions		
FPACH_Info_r4	FPACH−Info−r4	Class−definitions		
FrequencyInfo	FrequencyInfo	Class−definitions		
FrequencyInfoFDD	FrequencyInfoFDD	Class−definitions		
FrequencyInfoTDD	FrequencyInfoTDD	Class−definitions		
HS_ChannelisationCode_LCR	HS−ChannelisationCode−LCR	Class−definitions		
HS_PDSCH_Midamble_Configuration_TDD128	HS−PDSCH−Midamble−Configuration−TDD128	Class−definitions		
HS_SCCH_Info	HS−SCCH−Info	Class−definitions		
HS_SCCH_Codes	HS−SCCH−Codes	Class−definitions		
HS_SCCH_TDD128	HS−SCCH−TDD128	Class−definitions		
HS_SICH_Configuration_TDD128	HS−SICH−Configuration−TDD128	Class−definitions		
HS_SCCH_TDD384	HS−SCCH−TDD384	Class−definitions		
HS_SICH_Configuration_TDD384	HS−SICH−Configuration−TDD384	Class−definitions		
HS_SICH_Power_Control_Info_TDD384	HS−SICH−Power−Control−Info−TDD384	Class−definitions		
IndividualTimeslotInfo	IndividualTimeslotInfo	Class−definitions		
IndividualTimeslotInfo_LCR_r4	IndividualTimeslotInfo−LCR−r4	Class−definitions		
IndividualTimeslotInfo_LCR_r4_ext	IndividualTimeslotInfo−LCR−r4−ext	Class−definitions		
IndividualTS_Interference	IndividualTS−Interference	Class−definitions		
IndividualTS_InterferenceList	IndividualTS−InterferenceList	Class−definitions		
ITP	ITP	Class−definitions		
NidentifyAbort	NidentifyAbort	Class−definitions		
MaxAllowedUL_TX_Power	MaxAllowedUL−TX−Power	Class−definitions		
MaxAvailablePCPCH_Number	MaxAvailablePCPCH−Number	Class−definitions		
MaxPowerIncrease_r4	MaxPowerIncrease−r4	Class−definitions		
MaxTFCI_Field2Value	MaxTFCI−Field2Value	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
Measurement_Feedback_Info	Measurement−Feedback−Info	Class−definitions		
MidambleConfigurationBurstType1and3	MidambleConfigurationBurstType1and3	Class−definitions		
MidambleConfigurationBurstType2	MidambleConfigurationBurstType2	Class−definitions		
MidambleShiftAndBurstType	MidambleShiftAndBurstType	Class−definitions		
MidambleShiftAndBurstType_LCR_r4	MidambleShiftAndBurstType−LCR−r4	Class−definitions		
MidambleShiftAndBurstType_DL	MidambleShiftAndBurstType−DL	Class−definitions		
MidambleShiftLong	MidambleShiftLong	Class−definitions		
MidambleShiftShort	MidambleShiftShort	Class−definitions		
MinimumSpreadingFactor	MinimumSpreadingFactor	Class−definitions		
MultiCodeInfo	MultiCodeInfo	Class−definitions		
N_EOT	N−EOT	Class−definitions		
N_GAP	N−GAP	Class−definitions		
N_PCH	N−PCH	Class−definitions		
N_StartMessage	N−StartMessage	Class−definitions		
NB01	NB01	Class−definitions		
NF_Max	NF−Max	Class−definitions		
NumberOfDPDCH	NumberOfDPDCH	Class−definitions		
NumberOfFBI_Bits	NumberOfFBI−Bits	Class−definitions		
OpenLoopPowerControl_TDD	OpenLoopPowerControl−TDD	Class−definitions		
OpenLoopPowerControl_IPDL_TDD_r4	OpenLoopPowerControl−IPDL−TDD−r4	Class−definitions		
PagingIndicatorLength	PagingIndicatorLength	Class−definitions		
PC_Preamble	PC−Preamble	Class−definitions		
PCP_Length	PCP−Length	Class−definitions		
PCPCH_ChannelInfo	PCPCH−ChannelInfo	Class−definitions		
PCPCH_ChannelInfoList	PCPCH−ChannelInfoList	Class−definitions		
PCPICH_UsageForChannelEst	PCPICH−UsageForChannelEst	Class−definitions		
PDSCH_CapacityAllocationInfo	PDSCH−CapacityAllocationInfo	Class−definitions		
PDSCH_CapacityAllocationInfo_r4	PDSCH−CapacityAllocationInfo−r4	Class−definitions		
PDSCH_CodeInfo	PDSCH−CodeInfo	Class−definitions		
PDSCH_CodeInfoList	PDSCH−CodeInfoList	Class−definitions		
PDSCH_CodeMap	PDSCH−CodeMap	Class−definitions		
PDSCH_CodeMapList	PDSCH−CodeMapList	Class−definitions		
PDSCH_CodeMapping	PDSCH−CodeMapping	Class−definitions		
PDSCH_Identity	PDSCH−Identity	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PDSCH_Info	PDSCH−Info	Class−definitions		
PDSCH_Info_r4	PDSCH−Info−r4	Class−definitions		
PDSCH_Info_LCR_r4	PDSCH−Info−LCR−r4	Class−definitions		
PDSCH_PowerControlInfo	PDSCH−PowerControlInfo	Class−definitions		
PDSCH_SHO_DCH_Info	PDSCH−SHO−DCH−Info	Class−definitions		
PDSCH_SysInfo	PDSCH−SysInfo	Class−definitions		
PDSCH_SysInfo_HCR_r5	PDSCH−SysInfo−HCR−r5	Class−definitions		
PDSCH_SysInfo_LCR_r4	PDSCH−SysInfo−LCR−r4	Class−definitions		
PDSCH_SysInfoList	PDSCH−SysInfoList	Class−definitions		
PDSCH_SysInfoList_HCR_r5	PDSCH−SysInfoList−HCR−r5	Class−definitions		
PDSCH_SysInfoList_LCR_r4	PDSCH−SysInfoList−LCR−r4	Class−definitions		
PDSCH_SysInfoList_SFN	PDSCH−SysInfoList−SFN	Class−definitions		
PDSCH_SysInfoList_SFN_HCR_r5	PDSCH−SysInfoList−SFN−HCR−r5	Class−definitions		
PDSCH_SysInfoList_SFN_LCR_r4	PDSCH−SysInfoList−SFN−LCR−r4	Class−definitions		
PersistenceScalingFactor	PersistenceScalingFactor	Class−definitions		
PersistenceScalingFactorList	PersistenceScalingFactorList	Class−definitions		
PI_CountPerFrame	PI−CountPerFrame	Class−definitions		
PichChannelisationCodeList_LCR_r4	PichChannelisationCodeList−LCR−r4	Class−definitions		
PICH_Info	PICH−Info	Class−definitions		
PICH_Info_LCR_r4	PICH−Info−LCR−r4	Class−definitions		
PICH_PowerOffset	PICH−PowerOffset	Class−definitions		
PilotBits128	PilotBits128	Class−definitions		
PilotBits256	PilotBits256	Class−definitions		
MeasurementPowerOffset	MeasurementPowerOffset	Class−definitions		
PositionFixedOrFlexible	PositionFixedOrFlexible	Class−definitions		
PowerControlAlgorithm	PowerControlAlgorithm	Class−definitions		
PowerOffsetPilot_pdpdch	PowerOffsetPilot−pdpdch	Class−definitions		
PowerOffsetTPC_pdpdch	PowerOffsetTPC−pdpdch	Class−definitions		
PowerRampStep	PowerRampStep	Class−definitions		
PRACH_ChanCodes_LCR_r4	PRACH−ChanCodes−LCR−r4	Class−definitions		
PRACH_Definition_LCR_r4	PRACH−Definition−LCR−r4	Class−definitions		
PRACH_Midamble	PRACH−Midamble	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PRACH_Partitioning	PRACH−Partitioning	Class−definitions		
PRACH_Partitioning_LCR_r4	PRACH−Partitioning−LCR−r4	Class−definitions		
PRACH_PowerOffset	PRACH−PowerOffset	Class−definitions		
PRACH_RACH_Info	PRACH−RACH−Info	Class−definitions		
PRACH_RACH_Info_LCR_r4	PRACH−RACH−Info−LCR−r4	Class−definitions		
PRACH_SystemInformation	PRACH−SystemInformation	Class−definitions		
PRACH_SystemInformation_LCR_r4	PRACH−SystemInformation−LCR−r4	Class−definitions		
PRACH_SystemInformationList	PRACH−SystemInformationList	Class−definitions		
PRACH_SystemInformationList_LCR_r4	PRACH−SystemInformationList−LCR−r4	Class−definitions		
PreambleRetransMax	PreambleRetransMax	Class−definitions		
PreambleScramblingCodeWordNumber	PreambleScramblingCodeWordNumber	Class−definitions		
PreDefPhyChConfiguration	PreDefPhyChConfiguration	Class−definitions		
PrimaryCCPCH_Info	PrimaryCCPCH−Info	Class−definitions		
PrimaryCCPCH_Info_r4	PrimaryCCPCH−Info−r4	Class−definitions		
PrimaryCCPCH_Info_LCR_r4	PrimaryCCPCH−Info−LCR−r4	Class−definitions		
PrimaryCCPCH_Info_LCR_r4_ext	PrimaryCCPCH−Info−LCR−r4−ext	Class−definitions		
PrimaryCCPCH_InfoPost	PrimaryCCPCH−InfoPost	Class−definitions		
PrimaryCCPCH_InfoPostTDD_LCR_r4	PrimaryCCPCH−InfoPostTDD−LCR−r4	Class−definitions		
PrimaryCCPCH_TX_Power	PrimaryCCPCH−TX−Power	Class−definitions		
PrimaryCPICH_Info	PrimaryCPICH−Info	Class−definitions		
PrimaryCPICH_TX_Power	PrimaryCPICH−TX−Power	Class−definitions		
PrimaryScramblingCode	PrimaryScramblingCode	Class−definitions		
PuncturingLimit	PuncturingLimit	Class−definitions		
PUSCH_CapacityAllocationInfo	PUSCH−CapacityAllocationInfo	Class−definitions		
PUSCH_CapacityAllocationInfo_r4	PUSCH−CapacityAllocationInfo−r4	Class−definitions		
PUSCH_Identity	PUSCH−Identity	Class−definitions		
PUSCH_Info	PUSCH−Info	Class−definitions		
PUSCH_Info_r4	PUSCH−Info−r4	Class−definitions		
PUSCH_Info_LCR_r4	PUSCH−Info−LCR−r4	Class−definitions		
PUSCH_PowerControlInfo_r4	PUSCH−PowerControlInfo−r4	Class−definitions		
PUSCH_SysInfo	PUSCH−SysInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PUSCH_SysInfo_HCR_r5	PUSCH−SysInfo−HCR−r5	Class−definitions		
PUSCH_SysInfo_LCR_r4	PUSCH−SysInfo−LCR−r4	Class−definitions		
PUSCH_SysInfoList	PUSCH−SysInfoList	Class−definitions		
PUSCH_SysInfoList_HCR_r5	PUSCH−SysInfoList−HCR−r5	Class−definitions		
PUSCH_SysInfoList_LCR_r4	PUSCH−SysInfoList−LCR−r4	Class−definitions		
PUSCH_SysInfoList_SFN	PUSCH−SysInfoList−SFN	Class−definitions		
PUSCH_SysInfoList_SFN_HCR_r5	PUSCH−SysInfoList−SFN−HCR−r5	Class−definitions		
PUSCH_SysInfoList_SFN_LCR_r4	PUSCH−SysInfoList−SFN−LCR−r4	Class−definitions		
RACH_TransmissionParameters	RACH−TransmissionParameters	Class−definitions		
ReducedScramblingCodeNumber	ReducedScramblingCodeNumber	Class−definitions		
RepetitionPeriodAndLength	RepetitionPeriodAndLength	Class−definitions		
RepetitionPeriodLengthAndOffset	RepetitionPeriodLengthAndOffset	Class−definitions		
ReplacedPDSCH_CodeInfo	ReplacedPDSCH−CodeInfo	Class−definitions		
ReplacedPDSCH_CodeInfoList	ReplacedPDSCH−CodeInfoList	Class−definitions		
RepPerLengthOffset_PICH	RepPerLengthOffset−PICH	Class−definitions		
RestrictedTrCH	RestrictedTrCH	Class−definitions		
RestrictedTrCH_InfoList	RestrictedTrCH−InfoList	Class−definitions		
RL_AdditionInformation	RL−AdditionInformation	Class−definitions		
RL_AdditionInformationList	RL−AdditionInformationList	Class−definitions		
RL_IdentifierList	RL−IdentifierList	Class−definitions		
RL_RemovalInformationList	RL−RemovalInformationList	Class−definitions		
RPP	RPP	Class−definitions		
S_Field	S−Field	Class−definitions		
SCCPCH_ChannelisationCode	SCCPCH−ChannelisationCode	Class−definitions		
SCCPCH_ChannelisationCodeList	SCCPCH−ChannelisationCodeList	Class−definitions		
SCCPCH_InfoForFACH	SCCPCH−InfoForFACH	Class−definitions		
SCCPCH_InfoForFACH_r4	SCCPCH−InfoForFACH−r4	Class−definitions		
SCCPCH_SystemInformation	SCCPCH−SystemInformation	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SCCPCH_SystemInformation_LCR_r4_ext	SCCPCH−SystemInformation−LCR−r4−ext	Class−definitions		
SCCPCH_SystemInformationList	SCCPCH−SystemInformationList	Class−definitions		
SCCPCH_SystemInformationList_LCR_r4_ext	SCCPCH−SystemInformationList−LCR−r4−ext	Class−definitions		
ScramblingCodeChange	ScramblingCodeChange	Class−definitions		
ScramblingCodeType	ScramblingCodeType	Class−definitions		
SecondaryCCPCH_Info	SecondaryCCPCH−Info	Class−definitions		
SecondaryCCPCH_Info_r4	SecondaryCCPCH−Info−r4	Class−definitions		
SecondaryCCPCH_Info_LCR_r4_ext	SecondaryCCPCH−Info−LCR−r4−ext	Class−definitions		
SecondaryCPICH_Info	SecondaryCPICH−Info	Class−definitions		
SecondaryScramblingCode	SecondaryScramblingCode	Class−definitions		
SecondInterleavingMode	SecondInterleavingMode	Class−definitions		
SF256_AndCodeNumber	SF256−AndCodeNumber	Class−definitions		
SF512_AndCodeNumber	SF512−AndCodeNumber	Class−definitions		
SF512_AndPilot	SF512−AndPilot	Class−definitions		
SF_PDSCH	SF−PDSCH	Class−definitions		
SF_PRACH	SF−PRACH	Class−definitions		
SFN_TimeInfo	SFN−TimeInfo	Class−definitions		
SpecialBurstScheduling	SpecialBurstScheduling	Class−definitions		
SpreadingFactor	SpreadingFactor	Class−definitions		
SRB_delay	SRB−delay	Class−definitions		
SSDT_CellIdentity	SSDT−CellIdentity	Class−definitions		
SSDT_Information	SSDT−Information	Class−definitions		
SSDT_Information_r4	SSDT−Information−r4	Class−definitions		
SSDT_UL	SSDT−UL	Class−definitions		
SynchronisationParameters_r4	SynchronisationParameters−r4	Class−definitions		
SYNC_UL_Procedure_r4	SYNC−UL−Procedure−r4	Class−definitions		
SYNC_UL_Info_r4	SYNC−UL−Info−r4	Class−definitions		
TDD_FPACH_CCode16_r4	TDD−FPACH−CCode16−r4	Class−definitions		
TDD_UL_Interference	TDD−UL−Interference	Class−definitions		
TDD_PICH_CCode	TDD−PICH−CCode	Class−definitions		
TDD_PRACH_CCode8	TDD−PRACH−CCode8	Class−definitions		
TDD_PRACH_CCode16	TDD−PRACH−CCode16	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
TDD_PRACH_CCode_LCR_r4	TDD−PRACH−CCode−LCR−r4	Class−definitions		
TDD_PRACH_CCodeList	TDD−PRACH−CCodeList	Class−definitions		
TFC_ControlDuration	TFC−ControlDuration	Class−definitions		
TFCI_Coding	TFCI−Coding	Class−definitions		
TGCFN	TGCFN	Class−definitions		
TGD	TGD	Class−definitions		
TGL	TGL	Class−definitions		
TGMP	TGMP	Class−definitions		
TGP_Sequence	TGP−Sequence	Class−definitions		
TGPS_Reconfiguration_CFN	TGPS−Reconfiguration−CFN	Class−definitions		
TGP_SequenceList	TGP−SequenceList	Class−definitions		
TGP_SequenceShort	TGP−SequenceShort	Class−definitions		
TGPL	TGPL	Class−definitions		
TGPRC	TGPRC	Class−definitions		
TGPS_ConfigurationParams	TGPS−ConfigurationParams	Class−definitions		
TGPSI	TGPSI	Class−definitions		
TGSN	TGSN	Class−definitions		
TimeInfo	TimeInfo	Class−definitions		
TimeslotList	TimeslotList	Class−definitions		
TimeslotList_r4	TimeslotList−r4	Class−definitions		
TimeslotNumber	TimeslotNumber	Class−definitions		
TimeslotNumber_LCR_r4	TimeslotNumber−LCR−r4	Class−definitions		
TimeslotNumber_PRACH_LCR_r4	TimeslotNumber−PRACH−LCR−r4	Class−definitions		
TimeslotSync2	TimeslotSync2	Class−definitions		
TimingOffset	TimingOffset	Class−definitions		
TPC_CombinationIndex	TPC−CombinationIndex	Class−definitions		
TPC_StepSizeFDD	TPC−StepSizeFDD	Class−definitions		
TPC_StepSizeTDD	TPC−StepSizeTDD	Class−definitions		
TreconfirmAbort	TreconfirmAbort	Class−definitions		
TX_DiversityMode	TX−DiversityMode	Class−definitions		
UARFCN	UARFCN	Class−definitions		
UCSM_Info	UCSM−Info	Class−definitions		
UL_CCTrCH	UL−CCTrCH	Class−definitions		
UL_CCTrCH_r4	UL−CCTrCH−r4	Class−definitions		
UL_CCTrCHList	UL−CCTrCHList	Class−definitions		
UL_CCTrCHList_r4	UL−CCTrCHList−r4	Class−definitions		
UL_CCTrCHListToRemove	UL−CCTrCHListToRemove	Class−definitions		
UL_CCTrChTPCList	UL−CCTrChTPCList	Class−definitions		
UL_ChannelRequirement	UL−ChannelRequirement	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UL_ChannelRequirement_r4	UL−ChannelRequirement−r4	Class−definitions		
UL_ChannelRequirement_r5	UL−ChannelRequirement−r5	Class−definitions		
UL_ChannelRequirementWithCPCH_SetID	UL−ChannelRequirementWithCPCH−SetID	Class−definitions		
UL_ChannelRequirementWithCPCH_SetID_r4	UL−ChannelRequirementWithCPCH−SetID−r4	Class−definitions		
UL_ChannelRequirementWithCPCH_SetID_r5	UL−ChannelRequirementWithCPCH−SetID−r5	Class−definitions		
UL_CompressedModeMethod	UL−CompressedModeMethod	Class−definitions		
UL_DL_Mode	UL−DL−Mode	Class−definitions		
UL_DPCCH_SlotFormat	UL−DPCCH−SlotFormat	Class−definitions		
UL_DPCH_Info	UL−DPCH−Info	Class−definitions		
UL_DPCH_Info_r4	UL−DPCH−Info−r4	Class−definitions		
UL_DPCH_Info_r5	UL−DPCH−Info−r5	Class−definitions		
UL_DPCH_InfoPostFDD	UL−DPCH−InfoPostFDD	Class−definitions		
UL_DPCH_InfoPostTDD	UL−DPCH−InfoPostTDD	Class−definitions		
UL_DPCH_InfoPostTDD_LCR_r4	UL−DPCH−InfoPostTDD−LCR−r4	Class−definitions		
UL_DPCH_InfoPredef	UL−DPCH−InfoPredef	Class−definitions		
UL_DPCH_PowerControlInfo	UL−DPCH−PowerControlInfo	Class−definitions		
UL_DPCH_PowerControlInfo_r4	UL−DPCH−PowerControlInfo−r4	Class−definitions		
UL_DPCH_PowerControlInfo_r5	UL−DPCH−PowerControlInfo−r5	Class−definitions		
UL_DPCH_PowerControlInfoPostFDD	UL−DPCH−PowerControlInfoPostFDD	Class−definitions		
UL_DPCH_PowerControlInfoPostTDD	UL−DPCH−PowerControlInfoPostTDD	Class−definitions		
UL_DPCH_PowerControlInfoPostTDD_LCR_r4	UL−DPCH−PowerControlInfoPostTDD−LCR−r4	Class−definitions		
UL_DPCH_PowerControlInfoPredef	UL−DPCH−PowerControlInfoPredef	Class−definitions		
UL_Interference	UL−Interference	Class−definitions		
UL_ScramblingCode	UL−ScramblingCode	Class−definitions		
UL_SynchronisationParameters_r4	UL−SynchronisationParameters−r4	Class−definitions		
UL_TargetSIR	UL−TargetSIR	Class−definitions		
UL_TimingAdvance	UL−TimingAdvance	Class−definitions		
UL_TimingAdvanceControl	UL−TimingAdvanceControl	Class−definitions		
UL_TimingAdvanceControl_r4	UL−TimingAdvanceControl−r4	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UL_TimingAdvanceControl_LCR_r4	UL−TimingAdvanceControl−LCR−r4	Class−definitions		
UL_TS_ChannelisationCode	UL−TS−ChannelisationCode	Class−definitions		
UL_TS_ChannelisationCodeList	UL−TS−ChannelisationCodeList	Class−definitions		
UplinkAdditionalTimeslots	UplinkAdditionalTimeslots	Class−definitions		
UplinkAdditionalTimeslots_LCR_r4	UplinkAdditionalTimeslots−LCR−r4	Class−definitions		
UplinkTimeslotsCodes	UplinkTimeslotsCodes	Class−definitions		
UplinkTimeslotsCodes_LCR_r4	UplinkTimeslotsCodes−LCR−r4	Class−definitions		
Wi_LCR	Wi−LCR	Class−definitions		
AcquisitionSatInfo	AcquisitionSatInfo	Class−definitions		
AcquisitionSatInfoList	AcquisitionSatInfoList	Class−definitions		
AdditionalMeasurementID_List	AdditionalMeasurementID−List	Class−definitions		
AlmanacSatInfo	AlmanacSatInfo	Class−definitions		
AlmanacSatInfoList	AlmanacSatInfoList	Class−definitions		
AverageRLC_BufferPayload	AverageRLC−BufferPayload	Class−definitions		
AzimuthAndElevation	AzimuthAndElevation	Class−definitions		
BadSatList	BadSatList	Class−definitions		
Frequency_Band	Frequency−Band	Class−definitions		
BCCH_ARFCN	BCCH−ARFCN	Class−definitions		
BLER_MeasurementResults	BLER−MeasurementResults	Class−definitions		
BLER_MeasurementResultsList	BLER−MeasurementResultsList	Class−definitions		
BLER_TransChIdList	BLER−TransChIdList	Class−definitions		
BSIC_VerificationRequired	BSIC−VerificationRequired	Class−definitions		
BSICReported	BSICReported	Class−definitions		
BurstModeParameters	BurstModeParameters	Class−definitions		
CellDCH_ReportCriteria	CellDCH−ReportCriteria	Class−definitions		
CellDCH_ReportCriteria_LCR_r4	CellDCH−ReportCriteria−LCR−r4	Class−definitions		
CellIndividualOffset	CellIndividualOffset	Class−definitions		
CellInfo	CellInfo	Class−definitions		
CellInfo_r4	CellInfo−r4	Class−definitions		
CellInfoSI_RSCP	CellInfoSI−RSCP	Class−definitions		
CellInfoSI_RSCP_LCR_r4	CellInfoSI−RSCP−LCR−r4	Class−definitions		
CellInfoSI_ECN0	CellInfoSI−ECN0	Class−definitions		
CellInfoSI_ECN0_LCR_r4	CellInfoSI−ECN0−LCR−r4	Class−definitions		
CellInfoSI_HCS_RSCP	CellInfoSI−HCS−RSCP	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CellInfoSI_HCS_RSCP_LCR_r4	CellInfoSI−HCS−RSCP−LCR−r4	Class−definitions		
CellInfoSI_HCS_ECN0	CellInfoSI−HCS−ECN0	Class−definitions		
CellInfoSI_HCS_ECN0_LCR_r4	CellInfoSI−HCS−ECN0−LCR−r4	Class−definitions		
CellMeasuredResults	CellMeasuredResults	Class−definitions		
CellMeasurementEventResults	CellMeasurementEventResults	Class−definitions		
CellMeasurementEventResults_LCR_r4	CellMeasurementEventResults−LCR−r4	Class−definitions		
CellReportingQuantities	CellReportingQuantities	Class−definitions		
CellSelectReselectInfoSIB_11_12	CellSelectReselectInfoSIB−11−12	Class−definitions		
CellSelectReselectInfoSIB_11_12_RSCP	CellSelectReselectInfoSIB−11−12−RSCP	Class−definitions		
CellSelectReselectInfoSIB_11_12_ECN0	CellSelectReselectInfoSIB−11−12−ECN0	Class−definitions		
CellSelectReselectInfoSIB_11_12_HCS_RSCP	CellSelectReselectInfoSIB−11−12−HCS−RSCP	Class−definitions		
CellSelectReselectInfoSIB_11_12_HCS_ECN0	CellSelectReselectInfoSIB−11−12−HCS−ECN0	Class−definitions		
CellSelectReselectInfo_v590ext	CellSelectReselectInfo−v590ext	Class−definitions		
CellSelectReselectInfoPCHFACH_v5b0ext	CellSelectReselectInfoPCHFACH−v5b0ext	Class−definitions		
CellsForInterFreqMeasList	CellsForInterFreqMeasList	Class−definitions		
CellsForInterRATMeasList	CellsForInterRATMeasList	Class−definitions		
CellsForIntraFreqMeasList	CellsForIntraFreqMeasList	Class−definitions		
CellSynchronisationInfo	CellSynchronisationInfo	Class−definitions		
CellToReport	CellToReport	Class−definitions		
CellToReportList	CellToReportList	Class−definitions		
CodePhaseSearchWindow	CodePhaseSearchWindow	Class−definitions		
CountC_SFN_Frame_difference	CountC−SFN−Frame−difference	Class−definitions		
CPICH_Ec_N0	CPICH−Ec−N0	Class−definitions		
CPICH_RSCP	CPICH−RSCP	Class−definitions		
DeltaPRC	DeltaPRC	Class−definitions		
DeltaQrxlevmin	DeltaQrxlevmin	Class−definitions		
DeltaRSCP	DeltaRSCP	Class−definitions		
DeltaRSCPPerCell	DeltaRSCPPerCell	Class−definitions		
DeltaRRC	DeltaRRC	Class−definitions		
DGPS_CorrectionSatInfo	DGPS−CorrectionSatInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DGPS_CorrectionSatInfoList	DGPS−CorrectionSatInfoList	Class−definitions		
DiffCorrectionStatus	DiffCorrectionStatus	Class−definitions		
DL_TransportChannelBLER	DL−TransportChannelBLER	Class−definitions		
DopplerUncertainty	DopplerUncertainty	Class−definitions		
EllipsoidPoint	EllipsoidPoint	Class−definitions		
EllipsoidPointAltitude	EllipsoidPointAltitude	Class−definitions		
EllipsoidPointAltitudeEllipsoide	EllipsoidPointAltitudeEllipsoide	Class−definitions		
EllipsoidPointUncertCircle	EllipsoidPointUncertCircle	Class−definitions		
EllipsoidPointUncertEllipse	EllipsoidPointUncertEllipse	Class−definitions		
EnvironmentCharacterisation	EnvironmentCharacterisation	Class−definitions		
Event1a	Event1a	Class−definitions		
Event1a_r4	Event1a−r4	Class−definitions		
Event1a_LCR_r4	Event1a−LCR−r4	Class−definitions		
Event1b	Event1b	Class−definitions		
Event1b_r4	Event1b−r4	Class−definitions		
Event1b_LCR_r4	Event1b−LCR−r4	Class−definitions		
Event1c	Event1c	Class−definitions		
Event1e	Event1e	Class−definitions		
Event1f	Event1f	Class−definitions		
Event2a	Event2a	Class−definitions		
Event2b	Event2b	Class−definitions		
Event2c	Event2c	Class−definitions		
Event2d	Event2d	Class−definitions		
Event2e	Event2e	Class−definitions		
Event2f	Event2f	Class−definitions		
Event3a	Event3a	Class−definitions		
Event3b	Event3b	Class−definitions		
Event3c	Event3c	Class−definitions		
Event3d	Event3d	Class−definitions		
EventIDInterFreq	EventIDInterFreq	Class−definitions		
EventIDInterRAT	EventIDInterRAT	Class−definitions		
EventIDIntraFreq	EventIDIntraFreq	Class−definitions		
EventResults	EventResults	Class−definitions		
ExtraDopplerInfo	ExtraDopplerInfo	Class−definitions		
FACH_MeasurementOccasionInfo	FACH−MeasurementOccasionInfo	Class−definitions		
FACH_MeasurementOccasionInfo_LCR_r4_ext	FACH−MeasurementOccasionInfo−LCR−r4−ext	Class−definitions		
FilterCoefficient	FilterCoefficient	Class−definitions		
FineSFN_SFN	FineSFN−SFN	Class−definitions		
ForbiddenAffectCell	ForbiddenAffectCell	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ForbiddenAffectCell_r4	ForbiddenAffectCell−r4	Class−definitions		
ForbiddenAffectCell_LCR_r4	ForbiddenAffectCell−LCR−r4	Class−definitions		
ForbiddenAffectCellList	ForbiddenAffectCellList	Class−definitions		
ForbiddenAffectCellList_r4	ForbiddenAffectCellList−r4	Class−definitions		
ForbiddenAffectCellList_LCR_r4	ForbiddenAffectCellList−LCR−r4	Class−definitions		
FreqQualityEstimateQuantity_FDD	FreqQualityEstimateQuantity−FDD	Class−definitions		
FreqQualityEstimateQuantity_TDD	FreqQualityEstimateQuantity−TDD	Class−definitions		
GPS_MeasurementParam	GPS−MeasurementParam	Class−definitions		
GPS_MeasurementParamList	GPS−MeasurementParamList	Class−definitions		
GSM_CarrierRSSI	GSM−CarrierRSSI	Class−definitions		
GSM_MeasuredResults	GSM−MeasuredResults	Class−definitions		
GSM_MeasuredResultsList	GSM−MeasuredResultsList	Class−definitions		
GPS_TOW_1msec	GPS−TOW−1msec	Class−definitions		
GPS_TOW_Assist	GPS−TOW−Assist	Class−definitions		
GPS_TOW_AssistList	GPS−TOW−AssistList	Class−definitions		
HCS_CellReselectInformation_RSCP	HCS−CellReselectInformation−RSCP	Class−definitions		
HCS_CellReselectInformation_ECN0	HCS−CellReselectInformation−ECN0	Class−definitions		
HCS_NeighbouringCellInformation_RSCP	HCS−NeighbouringCellInformation−RSCP	Class−definitions		
HCS_NeighbouringCellInformation_ECN0	HCS−NeighbouringCellInformation−ECN0	Class−definitions		
HCS_PRIO	HCS−PRIO	Class−definitions		
HCS_ServingCellInformation	HCS−ServingCellInformation	Class−definitions		
Hysteresis	Hysteresis	Class−definitions		
HysteresisInterFreq	HysteresisInterFreq	Class−definitions		
InterFreqCell	InterFreqCell	Class−definitions		
InterFreqCell_LCR_r4	InterFreqCell−LCR−r4	Class−definitions		
InterFreqCellID	InterFreqCellID	Class−definitions		
InterFreqCellInfoList	InterFreqCellInfoList	Class−definitions		
InterFreqCellInfoList_r4	InterFreqCellInfoList−r4	Class−definitions		
InterFreqCellInfoSI_List_RSCP	InterFreqCellInfoSI−List−RSCP	Class−definitions		
InterFreqCellInfoSI_List_ECN0	InterFreqCellInfoSI−List−ECN0	Class−definitions		
InterFreqCellInfoSI_List_HCS_RSCP	InterFreqCellInfoSI−List−HCS−RSCP	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
InterFreqCellInfoSI_List_HCS_ECN0	InterFreqCellInfoSI−List−HCS−ECN0	Class−definitions		
InterFreqCellInfoSI_List_RSCP_LCR	InterFreqCellInfoSI−List−RSCP−LCR	Class−definitions		
InterFreqCellInfoSI_List_ECN0_LCR	InterFreqCellInfoSI−List−ECN0−LCR	Class−definitions		
InterFreqCellInfoSI_List_HCS_RSCP_LCR	InterFreqCellInfoSI−List−HCS−RSCP−LCR	Class−definitions		
InterFreqCellInfoSI_List_HCS_ECN0_LCR	InterFreqCellInfoSI−List−HCS−ECN0−LCR	Class−definitions		
InterFreqCellList	InterFreqCellList	Class−definitions		
InterFreqCellList_LCR_r4_ext	InterFreqCellList−LCR−r4−ext	Class−definitions		
InterFreqCellMeasuredResultsList	InterFreqCellMeasuredResultsList	Class−definitions		
InterFreqEvent	InterFreqEvent	Class−definitions		
InterFreqEventList	InterFreqEventList	Class−definitions		
InterFrequencyMeasuredResultsList_v590ext	InterFrequencyMeasuredResultsList−v590ext	Class−definitions		
Inter_FreqEventCriteria_v590ext	Inter−FreqEventCriteria−v590ext	Class−definitions		
Inter_FreqEventCriteriaList_v590ext	Inter−FreqEventCriteriaList−v590ext	Class−definitions		
Intra_FreqEventCriteriaList_v590ext	Intra−FreqEventCriteriaList−v590ext	Class−definitions		
IntraFrequencyMeasuredResultsList_v590ext	IntraFrequencyMeasuredResultsList−v590ext	Class−definitions		
IntraFreqReportingCriteria_1b_r5	IntraFreqReportingCriteria−1b−r5	Class−definitions		
PeriodicReportingInfo_1b	PeriodicReportingInfo−1b	Class−definitions		
InterFreqEventResults	InterFreqEventResults	Class−definitions		
InterFreqEventResults_LCR_r4_ext	InterFreqEventResults−LCR−r4−ext	Class−definitions		
InterFreqMeasQuantity	InterFreqMeasQuantity	Class−definitions		
InterFreqMeasuredResults	InterFreqMeasuredResults	Class−definitions		
InterFreqMeasuredResultsList	InterFreqMeasuredResultsList	Class−definitions		
InterFreqMeasurementSysInfo_RSCP	InterFreqMeasurementSysInfo−RSCP	Class−definitions		
InterFreqMeasurementSysInfo_ECN0	InterFreqMeasurementSysInfo−ECN0	Class−definitions		
InterFreqMeasurementSysInfo_HCS_RSCP	InterFreqMeasurementSysInfo−HCS−RSCP	Class−definitions		
InterFreqMeasurementSysInfo_HCS_ECN0	InterFreqMeasurementSysInfo−HCS−ECN0	Class−definitions		
InterFreqMeasurementSysInfo_RSCP_LCR_r4	InterFreqMeasurementSysInfo−RSCP−LCR−r4	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
InterFreqMeasurementSysInfo_ECN0_LCR_r4	InterFreqMeasurementSysInfo−ECN0−LCR−r4	Class−definitions		
InterFreqMeasurementSysInfo_HCS_RSCP_LCR_r4	InterFreqMeasurementSysInfo−HCS−RSCP−LCR−r4	Class−definitions		
InterFreqMeasurementSysInfo_HCS_ECN0_LCR_r4	InterFreqMeasurementSysInfo−HCS−ECN0−LCR−r4	Class−definitions		
InterFreqReportCriteria	InterFreqReportCriteria	Class−definitions		
InterFreqReportCriteria_r4	InterFreqReportCriteria−r4	Class−definitions		
InterFreqReportingCriteria	InterFreqReportingCriteria	Class−definitions		
InterFreqReportingQuantity	InterFreqReportingQuantity	Class−definitions		
InterFrequencyMeasurement	InterFrequencyMeasurement	Class−definitions		
InterFrequencyMeasurement_r4	InterFrequencyMeasurement−r4	Class−definitions		
InterRAT_TargetCellDescription	InterRAT−TargetCellDescription	Class−definitions		
InterRATCellID	InterRATCellID	Class−definitions		
InterRATCellInfoIndication	InterRATCellInfoIndication	Class−definitions		
InterRATCellInfoList	InterRATCellInfoList	Class−definitions		
InterRATCellInfoList_B	InterRATCellInfoList−B	Class−definitions		
InterRATCellInfoList_r4	InterRATCellInfoList−r4	Class−definitions		
InterRATCellIndividualOffset	InterRATCellIndividualOffset	Class−definitions		
InterRATEvent	InterRATEvent	Class−definitions		
InterRATEventList	InterRATEventList	Class−definitions		
InterRATEventResults	InterRATEventResults	Class−definitions		
InterRATInfo	InterRATInfo	Class−definitions		
InterRATMeasQuantity	InterRATMeasQuantity	Class−definitions		
InterRATMeasuredResults	InterRATMeasuredResults	Class−definitions		
InterRATMeasuredResultsList	InterRATMeasuredResultsList	Class−definitions		
InterRATMeasurement	InterRATMeasurement	Class−definitions		
InterRATMeasurement_r4	InterRATMeasurement−r4	Class−definitions		
InterRATMeasurementSysInfo	InterRATMeasurementSysInfo	Class−definitions		
InterRATMeasurementSysInfo_B	InterRATMeasurementSysInfo−B	Class−definitions		
InterRATReportCriteria	InterRATReportCriteria	Class−definitions		
InterRATReportingCriteria	InterRATReportingCriteria	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
InterRATReportingQuantity	InterRATReportingQuantity	Class−definitions		
IntraFreqCellID	IntraFreqCellID	Class−definitions		
IntraFreqCellInfoList	IntraFreqCellInfoList	Class−definitions		
IntraFreqCellInfoList_r4	IntraFreqCellInfoList−r4	Class−definitions		
IntraFreqCellInfoSI_List_RSCP	IntraFreqCellInfoSI−List−RSCP	Class−definitions		
IntraFreqCellInfoSI_List_ECN0	IntraFreqCellInfoSI−List−ECN0	Class−definitions		
IntraFreqCellInfoSI_List_HCS_RSCP	IntraFreqCellInfoSI−List−HCS−RSCP	Class−definitions		
IntraFreqCellInfoSI_List_HCS_ECN0	IntraFreqCellInfoSI−List−HCS−ECN0	Class−definitions		
IntraFreqCellInfoSI_List_RSCP_LCR_r4	IntraFreqCellInfoSI−List−RSCP−LCR−r4	Class−definitions		
IntraFreqCellInfoSI_List_ECN0_LCR_r4	IntraFreqCellInfoSI−List−ECN0−LCR−r4	Class−definitions		
IntraFreqCellInfoSI_List_HCS_RSCP_LCR_r4	IntraFreqCellInfoSI−List−HCS−RSCP−LCR−r4	Class−definitions		
IntraFreqCellInfoSI_List_HCS_ECN0_LCR_r4	IntraFreqCellInfoSI−List−HCS−ECN0−LCR−r4	Class−definitions		
IntraFreqEvent	IntraFreqEvent	Class−definitions		
IntraFreqEvent_r4	IntraFreqEvent−r4	Class−definitions		
IntraFreqEvent_LCR_r4	IntraFreqEvent−LCR−r4	Class−definitions		
IntraFreqEvent_1d_r5	IntraFreqEvent−1d−r5	Class−definitions		
IntraFreqEventCriteria	IntraFreqEventCriteria	Class−definitions		
IntraFreqEventCriteria_r4	IntraFreqEventCriteria−r4	Class−definitions		
IntraFreqEventCriteria_LCR_r4	IntraFreqEventCriteria−LCR−r4	Class−definitions		
IntraFreqEventCriteriaList	IntraFreqEventCriteriaList	Class−definitions		
IntraFreqEventCriteriaList_r4	IntraFreqEventCriteriaList−r4	Class−definitions		
IntraFreqEventCriteriaList_LCR_r4	IntraFreqEventCriteriaList−LCR−r4	Class−definitions		
IntraFreqEventResults	IntraFreqEventResults	Class−definitions		
IntraFreqMeasQuantity	IntraFreqMeasQuantity	Class−definitions		
IntraFreqMeasQuantity_FDD	IntraFreqMeasQuantity−FDD	Class−definitions		
IntraFreqMeasQuantity_TDD	IntraFreqMeasQuantity−TDD	Class−definitions		
IntraFreqMeasQuantity_TDDList	IntraFreqMeasQuantity−TDDList	Class−definitions		
IntraFreqMeasuredResultsList	IntraFreqMeasuredResultsList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
IntraFreqMeasurementSysInfo_RSCP	IntraFreqMeasurementSysInfo−RSCP	Class−definitions		
IntraFreqMeasurementSysInfo_ECN0	IntraFreqMeasurementSysInfo−ECN0	Class−definitions		
IntraFreqMeasurementSysInfo_HCS_RSCP	IntraFreqMeasurementSysInfo−HCS−RSCP	Class−definitions		
IntraFreqMeasurementSysInfo_HCS_ECN0	IntraFreqMeasurementSysInfo−HCS−ECN0	Class−definitions		
IntraFreqMeasurementSysInfo_RSCP_LCR_r4	IntraFreqMeasurementSysInfo−RSCP−LCR−r4	Class−definitions		
IntraFreqMeasurementSysInfo_ECN0_LCR_r4	IntraFreqMeasurementSysInfo−ECN0−LCR−r4	Class−definitions		
IntraFreqMeasurementSysInfo_HCS_RSCP_LCR_r4	IntraFreqMeasurementSysInfo−HCS−RSCP−LCR−r4	Class−definitions		
IntraFreqMeasurementSysInfo_HCS_ECN0_LCR_r4	IntraFreqMeasurementSysInfo−HCS−ECN0−LCR−r4	Class−definitions		
IntraFreqReportCriteria	IntraFreqReportCriteria	Class−definitions		
IntraFreqReportCriteria_r4	IntraFreqReportCriteria−r4	Class−definitions		
IntraFreqReportingCriteria	IntraFreqReportingCriteria	Class−definitions		
IntraFreqReportingCriteria_r4	IntraFreqReportingCriteria−r4	Class−definitions		
IntraFreqReportingCriteria_LCR_r4	IntraFreqReportingCriteria−LCR−r4	Class−definitions		
IntraFreqReportingQuantity	IntraFreqReportingQuantity	Class−definitions		
IntraFreqReportingQuantityForRACH	IntraFreqReportingQuantityForRACH	Class−definitions		
IntraFreqRepQuantityRACH_FDD	IntraFreqRepQuantityRACH−FDD	Class−definitions		
IntraFreqRepQuantityRACH_TDD	IntraFreqRepQuantityRACH−TDD	Class−definitions		
IntraFreqRepQuantityRACH_TDDList	IntraFreqRepQuantityRACH−TDDList	Class−definitions		
IntraFrequencyMeasurement	IntraFrequencyMeasurement	Class−definitions		
IntraFrequencyMeasurement_r4	IntraFrequencyMeasurement−r4	Class−definitions		
IODE	IODE	Class−definitions		
IP_Length	IP−Length	Class−definitions		
IP_PCCPCH_r4	IP−PCCPCH−r4	Class−definitions		
IP_Spacing	IP−Spacing	Class−definitions		
IP_Spacing_TDD	IP−Spacing−TDD	Class−definitions		
IS_2000SpecificMeasInfo	IS−2000SpecificMeasInfo	Class−definitions		
MaxNumberOfReportingCellsType1	MaxNumberOfReportingCellsType1	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
MaxNumberOfReportingCellsType2	MaxNumberOfReportingCellsType2	Class−definitions		
MaxNumberOfReportingCellsType3	MaxNumberOfReportingCellsType3	Class−definitions		
MaxReportedCellsOnRACH	MaxReportedCellsOnRACH	Class−definitions		
MeasuredResults	MeasuredResults	Class−definitions		
MeasuredResults_v390ext	MeasuredResults−v390ext	Class−definitions		
MeasuredResults_v590ext	MeasuredResults−v590ext	Class−definitions		
MeasuredResults_LCR_r4	MeasuredResults−LCR−r4	Class−definitions		
MeasuredResultsList	MeasuredResultsList	Class−definitions		
MeasuredResultsList_LCR_r4_ext	MeasuredResultsList−LCR−r4−ext	Class−definitions		
MeasuredResultsOnRACH	MeasuredResultsOnRACH	Class−definitions		
MeasurementCommand	MeasurementCommand	Class−definitions		
MeasurementCommand_r4	MeasurementCommand−r4	Class−definitions		
MeasurementControlSysInfo	MeasurementControlSysInfo	Class−definitions		
MeasurementControlSysInfo_LCR_r4_ext	MeasurementControlSysInfo−LCR−r4−ext	Class−definitions		
MeasurementIdentity	MeasurementIdentity	Class−definitions		
MeasurementQuantityGSM	MeasurementQuantityGSM	Class−definitions		
MeasurementReportingMode	MeasurementReportingMode	Class−definitions		
MeasurementType	MeasurementType	Class−definitions		
MeasurementType_r4	MeasurementType−r4	Class−definitions		
MeasurementValidity	MeasurementValidity	Class−definitions		
MonitoredCellRACH_List	MonitoredCellRACH−List	Class−definitions		
MonitoredCellRACH_Result	MonitoredCellRACH−Result	Class−definitions		
MultipathIndicator	MultipathIndicator	Class−definitions		
N_CR_T_CRMaxHyst	N−CR−T−CRMaxHyst	Class−definitions		
NavigationModelSatInfo	NavigationModelSatInfo	Class−definitions		
NavigationModelSatInfoList	NavigationModelSatInfoList	Class−definitions		
EphemerisParameter	EphemerisParameter	Class−definitions		
NC_Mode	NC−Mode	Class−definitions		
Neighbour	Neighbour	Class−definitions		
Neighbour_v390ext	Neighbour−v390ext	Class−definitions		
NeighbourList	NeighbourList	Class−definitions		
NeighbourList_v390ext	NeighbourList−v390ext	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
NeighbourQuality	NeighbourQuality	Class−definitions		
NewInterFreqCell	NewInterFreqCell	Class−definitions		
NewInterFreqCell_r4	NewInterFreqCell−r4	Class−definitions		
NewInterFreqCellList	NewInterFreqCellList	Class−definitions		
NewInterFreqCellList_r4	NewInterFreqCellList−r4	Class−definitions		
NewInterFreqCellSI_RSCP	NewInterFreqCellSI−RSCP	Class−definitions		
NewInterFreqCellSI_ECN0	NewInterFreqCellSI−ECN0	Class−definitions		
NewInterFreqCellSI_HCS_RSCP	NewInterFreqCellSI−HCS−RSCP	Class−definitions		
NewInterFreqCellSI_HCS_ECN0	NewInterFreqCellSI−HCS−ECN0	Class−definitions		
NewInterFreqCellSI_RSCP_LCR_r4	NewInterFreqCellSI−RSCP−LCR−r4	Class−definitions		
NewInterFreqCellSI_ECN0_LCR_r4	NewInterFreqCellSI−ECN0−LCR−r4	Class−definitions		
NewInterFreqCellSI_HCS_RSCP_LCR_r4	NewInterFreqCellSI−HCS−RSCP−LCR−r4	Class−definitions		
NewInterFreqCellSI_HCS_ECN0_LCR_r4	NewInterFreqCellSI−HCS−ECN0−LCR−r4	Class−definitions		
NewInterFreqCellSI_List_ECN0	NewInterFreqCellSI−List−ECN0	Class−definitions		
NewInterFreqCellSI_List_HCS_RSCP	NewInterFreqCellSI−List−HCS−RSCP	Class−definitions		
NewInterFreqCellSI_List_HCS_ECN0	NewInterFreqCellSI−List−HCS−ECN0	Class−definitions		
NewInterFreqCellSI_List_RSCP	NewInterFreqCellSI−List−RSCP	Class−definitions		
NewInterFreqCellSI_List_ECN0_LCR_r4	NewInterFreqCellSI−List−ECN0−LCR−r4	Class−definitions		
NewInterFreqCellSI_List_HCS_RSCP_LCR_r4	NewInterFreqCellSI−List−HCS−RSCP−LCR−r4	Class−definitions		
NewInterFreqCellSI_List_HCS_ECN0_LCR_r4	NewInterFreqCellSI−List−HCS−ECN0−LCR−r4	Class−definitions		
NewInterFreqCellSI_List_RSCP_LCR_r4	NewInterFreqCellSI−List−RSCP−LCR−r4	Class−definitions		
NewInterRATCell	NewInterRATCell	Class−definitions		
NewInterRATCell_B	NewInterRATCell−B	Class−definitions		
NewInterRATCellList	NewInterRATCellList	Class−definitions		
NewInterRATCellList_B	NewInterRATCellList−B	Class−definitions		
NewIntraFreqCell	NewIntraFreqCell	Class−definitions		
NewIntraFreqCell_r4	NewIntraFreqCell−r4	Class−definitions		
NewIntraFreqCellList	NewIntraFreqCellList	Class−definitions		
NewIntraFreqCellList_r4	NewIntraFreqCellList−r4	Class−definitions		
NewIntraFreqCellSI_RSCP	NewIntraFreqCellSI−RSCP	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
NewIntraFreqCellSI_ECN0	NewIntraFreqCellSI−ECN0	Class−definitions		
NewIntraFreqCellSI_HCS_RSCP	NewIntraFreqCellSI−HCS−RSCP	Class−definitions		
NewIntraFreqCellSI_HCS_ECN0	NewIntraFreqCellSI−HCS−ECN0	Class−definitions		
NewIntraFreqCellSI_RSCP_LCR_r4	NewIntraFreqCellSI−RSCP−LCR−r4	Class−definitions		
NewIntraFreqCellSI_ECN0_LCR_r4	NewIntraFreqCellSI−ECN0−LCR−r4	Class−definitions		
NewIntraFreqCellSI_HCS_RSCP_LCR_r4	NewIntraFreqCellSI−HCS−RSCP−LCR−r4	Class−definitions		
NewIntraFreqCellSI_HCS_ECN0_LCR_r4	NewIntraFreqCellSI−HCS−ECN0−LCR−r4	Class−definitions		
NewIntraFreqCellSI_List_RSCP	NewIntraFreqCellSI−List−RSCP	Class−definitions		
NewIntraFreqCellSI_List_ECN0	NewIntraFreqCellSI−List−ECN0	Class−definitions		
NewIntraFreqCellSI_List_HCS_RSCP	NewIntraFreqCellSI−List−HCS−RSCP	Class−definitions		
NewIntraFreqCellSI_List_HCS_ECN0	NewIntraFreqCellSI−List−HCS−ECN0	Class−definitions		
NewIntraFreqCellSI_List_RSCP_LCR_r4	NewIntraFreqCellSI−List−RSCP−LCR−r4	Class−definitions		
NewIntraFreqCellSI_List_ECN0_LCR_r4	NewIntraFreqCellSI−List−ECN0−LCR−r4	Class−definitions		
NewIntraFreqCellSI_List_HCS_RSCP_LCR_r4	NewIntraFreqCellSI−List−HCS−RSCP−LCR−r4	Class−definitions		
NewIntraFreqCellSI_List_HCS_ECN0_LCR_r4	NewIntraFreqCellSI−List−HCS−ECN0−LCR−r4	Class−definitions		
NonUsedFreqParameter	NonUsedFreqParameter	Class−definitions		
NonUsedFreqParameterList	NonUsedFreqParameterList	Class−definitions		
ObservedTimeDifferenceToGSM	ObservedTimeDifferenceToGSM	Class−definitions		
OTDOA_SearchWindowSize	OTDOA−SearchWindowSize	Class−definitions		
Pathloss	Pathloss	Class−definitions		
PenaltyTime_RSCP	PenaltyTime−RSCP	Class−definitions		
PenaltyTime_ECN0	PenaltyTime−ECN0	Class−definitions		
PendingTimeAfterTrigger	PendingTimeAfterTrigger	Class−definitions		
PeriodicalOrEventTrigger	PeriodicalOrEventTrigger	Class−definitions		
PeriodicalReportingCriteria	PeriodicalReportingCriteria	Class−definitions		
PeriodicalWithReportingCellStatus	PeriodicalWithReportingCellStatus	Class−definitions		
PLMNIdentitiesOfNeighbourCells	PLMNIdentitiesOfNeighbourCells	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PLMNsOfInterFreqCellsList	PLMNsOfInterFreqCellsList	Class−definitions		
PLMNsOfIntraFreqCellsList	PLMNsOfIntraFreqCellsList	Class−definitions		
PLMNsOfInterRATCellsList	PLMNsOfInterRATCellsList	Class−definitions		
PositionEstimate	PositionEstimate	Class−definitions		
PositioningMethod	PositioningMethod	Class−definitions		
PRC	PRC	Class−definitions		
PrimaryCCPCH_RSCP	PrimaryCCPCH−RSCP	Class−definitions		
Q_HCS	Q−HCS	Class−definitions		
Q_OffsetS_N	Q−OffsetS−N	Class−definitions		
Q_QualMin	Q−QualMin	Class−definitions		
Q_RxlevMin	Q−RxlevMin	Class−definitions		
QualityEventResults	QualityEventResults	Class−definitions		
QualityMeasuredResults	QualityMeasuredResults	Class−definitions		
QualityMeasurement	QualityMeasurement	Class−definitions		
QualityReportCriteria	QualityReportCriteria	Class−definitions		
QualityReportingCriteria	QualityReportingCriteria	Class−definitions		
QualityReportingCriteriaSingle	QualityReportingCriteriaSingle	Class−definitions		
QualityReportingQuantity	QualityReportingQuantity	Class−definitions		
RAT_Type	RAT−Type	Class−definitions		
ReferenceCellPosition	ReferenceCellPosition	Class−definitions		
ReferenceLocation	ReferenceLocation	Class−definitions		
ReferenceTimeDifferenceToCell	ReferenceTimeDifferenceToCell	Class−definitions		
RemovedInterFreqCellList	RemovedInterFreqCellList	Class−definitions		
RemovedInterRATCellList	RemovedInterRATCellList	Class−definitions		
RemovedIntraFreqCellList	RemovedIntraFreqCellList	Class−definitions		
ReplacementActivationThreshold	ReplacementActivationThreshold	Class−definitions		
ReportDeactivationThreshold	ReportDeactivationThreshold	Class−definitions		
ReportingAmount	ReportingAmount	Class−definitions		
ReportingCellStatus	ReportingCellStatus	Class−definitions		
ReportingCellStatusOpt	ReportingCellStatusOpt	Class−definitions		
ReportingInfoForCellDCH	ReportingInfoForCellDCH	Class−definitions		
ReportingInfoForCellDCH_LCR_r4	ReportingInfoForCellDCH−LCR−r4	Class−definitions		
ReportingInterval	ReportingInterval	Class−definitions		
ReportingIntervalLong	ReportingIntervalLong	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ReportingRange	ReportingRange	Class−definitions		
RL_AdditionInfoList	RL−AdditionInfoList	Class−definitions		
RL_InformationLists	RL−InformationLists	Class−definitions		
RLC_BuffersPayload	RLC−BuffersPayload	Class−definitions		
RRC	RRC	Class−definitions		
SatData	SatData	Class−definitions		
SatDataList	SatDataList	Class−definitions		
SatelliteStatus	SatelliteStatus	Class−definitions		
SatID	SatID	Class−definitions		
SFN_Offset_Validity	SFN−Offset−Validity	Class−definitions		
SFN_SFN_Drift	SFN−SFN−Drift	Class−definitions		
SFN_SFN_ObsTimeDifference	SFN−SFN−ObsTimeDifference	Class−definitions		
SFN_SFN_ObsTimeDifference1	SFN−SFN−ObsTimeDifference1	Class−definitions		
SFN_SFN_ObsTimeDifference2	SFN−SFN−ObsTimeDifference2	Class−definitions		
SFN_SFN_OTD_Type	SFN−SFN−OTD−Type	Class−definitions		
SFN_SFN_RelTimeDifference1	SFN−SFN−RelTimeDifference1	Class−definitions		
SFN_TOW_Uncertainty	SFN−TOW−Uncertainty	Class−definitions		
SIR	SIR	Class−definitions		
SIR_MeasurementList	SIR−MeasurementList	Class−definitions		
SIR_MeasurementResults	SIR−MeasurementResults	Class−definitions		
SIR_TFCS	SIR−TFCS	Class−definitions		
SIR_TFCS_List	SIR−TFCS−List	Class−definitions		
SIR_TimeslotList	SIR−TimeslotList	Class−definitions		
SubFrame1Reserved	SubFrame1Reserved	Class−definitions		
T_ADVinfo	T−ADVinfo	Class−definitions		
T_CRMax	T−CRMax	Class−definitions		
T_CRMaxHyst	T−CRMaxHyst	Class−definitions		
TemporaryOffset1	TemporaryOffset1	Class−definitions		
TemporaryOffset2	TemporaryOffset2	Class−definitions		
TemporaryOffsetList	TemporaryOffsetList	Class−definitions		
Threshold	Threshold	Class−definitions		
ThreholdNonUsedFrequency_deltaList	ThreholdNonUsedFrequency−deltaList	Class−definitions		
ThresholdPositionChange	ThresholdPositionChange	Class−definitions		
ThresholdSFN_GPS_TOW	ThresholdSFN−GPS−TOW	Class−definitions		
ThresholdSFN_SFN_Change	ThresholdSFN−SFN−Change	Class−definitions		
ThresholdUsedFrequency	ThresholdUsedFrequency	Class−definitions		
TimeInterval	TimeInterval	Class−definitions		
TimeslotInfo	TimeslotInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
TimeslotInfo_LCR_r4	TimeslotInfo−LCR−r4	Class−definitions		
TimeslotInfoList	TimeslotInfoList	Class−definitions		
TimeslotInfoList_LCR_r4	TimeslotInfoList−LCR−r4	Class−definitions		
TimeslotInfoList_r4	TimeslotInfoList−r4	Class−definitions		
TimeslotISCP	TimeslotISCP	Class−definitions		
TimeslotISCP_List	TimeslotISCP−List	Class−definitions		
TimeslotListWithISCP	TimeslotListWithISCP	Class−definitions		
TimeslotWithISCP	TimeslotWithISCP	Class−definitions		
TimeToTrigger	TimeToTrigger	Class−definitions		
TrafficVolumeEventParam	TrafficVolumeEventParam	Class−definitions		
TrafficVolumeEventResults	TrafficVolumeEventResults	Class−definitions		
TrafficVolumeEventType	TrafficVolumeEventType	Class−definitions		
TrafficVolumeMeasQuantity	TrafficVolumeMeasQuantity	Class−definitions		
TrafficVolumeMeasSysInfo	TrafficVolumeMeasSysInfo	Class−definitions		
TrafficVolumeMeasuredResults	TrafficVolumeMeasuredResults	Class−definitions		
TrafficVolumeMeasuredResultsList	TrafficVolumeMeasuredResultsList	Class−definitions		
TrafficVolumeMeasurement	TrafficVolumeMeasurement	Class−definitions		
TrafficVolumeMeasurementObjectList	TrafficVolumeMeasurementObjectList	Class−definitions		
TrafficVolumeReportCriteria	TrafficVolumeReportCriteria	Class−definitions		
TrafficVolumeReportCriteriaSysInfo	TrafficVolumeReportCriteriaSysInfo	Class−definitions		
TrafficVolumeReportingCriteria	TrafficVolumeReportingCriteria	Class−definitions		
TrafficVolumeReportingQuantity	TrafficVolumeReportingQuantity	Class−definitions		
TrafficVolumeThreshold	TrafficVolumeThreshold	Class−definitions		
TransChCriteria	TransChCriteria	Class−definitions		
TransChCriteriaList	TransChCriteriaList	Class−definitions		
TransferMode	TransferMode	Class−definitions		
TransmittedPowerThreshold	TransmittedPowerThreshold	Class−definitions		
TriggeringCondition1	TriggeringCondition1	Class−definitions		
TriggeringCondition2	TriggeringCondition2	Class−definitions		
TX_InterruptionAfterTrigger	TX−InterruptionAfterTrigger	Class−definitions		
UDRE	UDRE	Class−definitions		
UE_6AB_Event	UE−6AB−Event	Class−definitions		
UE_6FG_Event	UE−6FG−Event	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_AutonomousUpdateMode	UE−AutonomousUpdateMode	Class−definitions		
UE_InternalEventParam	UE−InternalEventParam	Class−definitions		
UE_InternalEventParamList	UE−InternalEventParamList	Class−definitions		
UE_InternalEventResults	UE−InternalEventResults	Class−definitions		
UE_InternalMeasQuantity	UE−InternalMeasQuantity	Class−definitions		
UE_InternalMeasuredResults	UE−InternalMeasuredResults	Class−definitions		
UE_InternalMeasuredResults_LCR_r4	UE−InternalMeasuredResults−LCR−r4	Class−definitions		
UE_InternalMeasurement	UE−InternalMeasurement	Class−definitions		
UE_InternalMeasurement_r4	UE−InternalMeasurement−r4	Class−definitions		
UE_InternalMeasurementSysInfo	UE−InternalMeasurementSysInfo	Class−definitions		
UE_InternalReportCriteria	UE−InternalReportCriteria	Class−definitions		
UE_InternalReportingCriteria	UE−InternalReportingCriteria	Class−definitions		
UE_InternalReportingQuantity	UE−InternalReportingQuantity	Class−definitions		
UE_InternalReportingQuantity_r4	UE−InternalReportingQuantity−r4	Class−definitions		
UE_MeasurementQuantity	UE−MeasurementQuantity	Class−definitions		
UE_RX_TX_ReportEntry	UE−RX−TX−ReportEntry	Class−definitions		
UE_RX_TX_ReportEntryList	UE−RX−TX−ReportEntryList	Class−definitions		
UE_RX_TX_TimeDifferenceType1	UE−RX−TX−TimeDifferenceType1	Class−definitions		
UE_RX_TX_TimeDifferenceType2	UE−RX−TX−TimeDifferenceType2	Class−definitions		
UE_RX_TX_TimeDifferenceType2Info	UE−RX−TX−TimeDifferenceType2Info	Class−definitions		
UE_RX_TX_TimeDifferenceThreshold	UE−RX−TX−TimeDifferenceThreshold	Class−definitions		
UE_TransmittedPower	UE−TransmittedPower	Class−definitions		
UE_TransmittedPowerTDD_List	UE−TransmittedPowerTDD−List	Class−definitions		
UL_TrCH_Identity	UL−TrCH−Identity	Class−definitions		
UE_Positioning_Accuracy	UE−Positioning−Accuracy	Class−definitions		
UE_Positioning_CipherParameters	UE−Positioning−CipherParameters	Class−definitions		
UE_Positioning_Error	UE−Positioning−Error	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_Positioning_ErrorCause	UE−Positioning−ErrorCause	Class−definitions		
UE_Positioning_EventParam	UE−Positioning−EventParam	Class−definitions		
UE_Positioning_EventParamList	UE−Positioning−EventParamList	Class−definitions		
UE_Positioning_EventSpecificInfo	UE−Positioning−EventSpecificInfo	Class−definitions		
UE_Positioning_GPS_AcquisitionAssistance	UE−Positioning−GPS−AcquisitionAssistance	Class−definitions		
UE_Positioning_GPS_AdditionalAssistanceDataRequest	UE−Positioning−GPS−AdditionalAssistanceDataRequest	Class−definitions		
UE_Positioning_GPS_Almanac	UE−Positioning−GPS−Almanac	Class−definitions		
UE_Positioning_GPS_AssistanceData	UE−Positioning−GPS−AssistanceData	Class−definitions		
UE_Positioning_GPS_DGPS_Corrections	UE−Positioning−GPS−DGPS−Corrections	Class−definitions		
UE_Positioning_GPS_IonosphericModel	UE−Positioning−GPS−IonosphericModel	Class−definitions		
UE_Positioning_GPS_MeasurementResults	UE−Positioning−GPS−MeasurementResults	Class−definitions		
UE_Positioning_GPS_NavigationModel	UE−Positioning−GPS−NavigationModel	Class−definitions		
UE_Positioning_GPS_NavModelAddDataReq	UE−Positioning−GPS−NavModelAddDataReq	Class−definitions		
UE_Positioning_GPS_ReferenceCellInfo	UE−Positioning−GPS−ReferenceCellInfo	Class−definitions		
UE_Positioning_GPS_ReferenceTime	UE−Positioning−GPS−ReferenceTime	Class−definitions		
UE_Positioning_GPS_UTC_Model	UE−Positioning−GPS−UTC−Model	Class−definitions		
UE_Positioning_IPDL_Parameters	UE−Positioning−IPDL−Parameters	Class−definitions		
UE_Positioning_IPDL_Parameters_r4	UE−Positioning−IPDL−Parameters−r4	Class−definitions		
UE_Positioning_IPDL_Parameters_TDD_r4_ext	UE−Positioning−IPDL−Parameters−TDD−r4−ext	Class−definitions		
UE_Positioning_MeasuredResults	UE−Positioning−MeasuredResults	Class−definitions		
UE_Positioning_MeasuredResults_v390ext	UE−Positioning−MeasuredResults−v390ext	Class−definitions		
UE_Positioning_Measurement	UE−Positioning−Measurement	Class−definitions		
UE_Positioning_Measurement_v390ext	UE−Positioning−Measurement−v390ext	Class−definitions		
UE_Positioning_Measurement_r4	UE−Positioning−Measurement−r4	Class−definitions		
UE_Positioning_MeasurementEventResults	UE−Positioning−MeasurementEventResults	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_Positioning_MeasurementInterval	UE−Positioning−MeasurementInterval	Class−definitions		
UE_Positioning_MethodType	UE−Positioning−MethodType	Class−definitions		
UE_Positioning_OTDOA_AssistanceData	UE−Positioning−OTDOA−AssistanceData	Class−definitions		
UE_Positioning_OTDOA_AssistanceData_r4	UE−Positioning−OTDOA−AssistanceData−r4	Class−definitions		
UE_Positioning_OTDOA_AssistanceData_r4ext	UE−Positioning−OTDOA−AssistanceData−r4ext	Class−definitions		
UE_Positioning_OTDOA_AssistanceData_UEB	UE−Positioning−OTDOA−AssistanceData−UEB	Class−definitions		
UE_Positioning_IPDL_Parameters_TDDList_r4_ext	UE−Positioning−IPDL−Parameters−TDDList−r4−ext	Class−definitions		
UE_Positioning_OTDOA_Measurement	UE−Positioning−OTDOA−Measurement	Class−definitions		
UE_Positioning_OTDOA_Measurement_v390ext	UE−Positioning−OTDOA−Measurement−v390ext	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellInfo	UE−Positioning−OTDOA−NeighbourCellInfo	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellInfo_r4	UE−Positioning−OTDOA−NeighbourCellInfo−r4	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellInfo_UEB	UE−Positioning−OTDOA−NeighbourCellInfo−UEB	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellList	UE−Positioning−OTDOA−NeighbourCellList	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellList_r4	UE−Positioning−OTDOA−NeighbourCellList−r4	Class−definitions		
UE_Positioning_OTDOA_NeighbourCellList_UEB	UE−Positioning−OTDOA−NeighbourCellList−UEB	Class−definitions		
UE_Positioning_OTDOA_Quality	UE−Positioning−OTDOA−Quality	Class−definitions		
UE_Positioning_OTDOA_ReferenceCellInfo	UE−Positioning−OTDOA−ReferenceCellInfo	Class−definitions		
UE_Positioning_OTDOA_ReferenceCellInfo_r4	UE−Positioning−OTDOA−ReferenceCellInfo−r4	Class−definitions		
UE_Positioning_OTDOA_ReferenceCellInfo_UEB	UE−Positioning−OTDOA−ReferenceCellInfo−UEB	Class−definitions		
UE_Positioning_PositionEstimateInfo	UE−Positioning−PositionEstimateInfo	Class−definitions		
UE_Positioning_ReportCriteria	UE−Positioning−ReportCriteria	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_Positioning_ReportingQuantity	UE−Positioning−ReportingQuantity	Class−definitions		
UE_Positioning_ReportingQuantity_v390ext	UE−Positioning−ReportingQuantity−v390ext	Class−definitions		
UE_Positioning_ReportingQuantity_r4	UE−Positioning−ReportingQuantity−r4	Class−definitions		
UE_Positioning_ResponseTime	UE−Positioning−ResponseTime	Class−definitions		
UTRA_CarrierRSSI	UTRA−CarrierRSSI	Class−definitions		
UTRAN_GPS_DriftRate	UTRAN−GPS−DriftRate	Class−definitions		
UTRAN_GPSReferenceTime	UTRAN−GPSReferenceTime	Class−definitions		
UTRAN_GPSReferenceTimeResult	UTRAN−GPSReferenceTimeResult	Class−definitions		
VarianceOfRLC_BufferPayload	VarianceOfRLC−BufferPayload	Class−definitions		
W	W	Class−definitions		
BCC	BCC	Class−definitions		
BCCH_ModificationInfo	BCCH−ModificationInfo	Class−definitions		
BCCH_ModificationTime	BCCH−ModificationTime	Class−definitions		
BSIC	BSIC	Class−definitions		
CBS_DRX_Level1Information	CBS−DRX−Level1Information	Class−definitions		
CDMA2000_Message	CDMA2000−Message	Class−definitions		
CDMA2000_MessageList	CDMA2000−MessageList	Class−definitions		
CDMA2000_UMTS_Frequency_List	CDMA2000−UMTS−Frequency−List	Class−definitions		
CellValueTag	CellValueTag	Class−definitions		
ExpirationTimeFactor	ExpirationTimeFactor	Class−definitions		
FDD_UMTS_Frequency_List	FDD−UMTS−Frequency−List	Class−definitions		
FrequencyInfoCDMA2000	FrequencyInfoCDMA2000	Class−definitions		
GERAN_SystemInfoBlock	GERAN−SystemInfoBlock	Class−definitions		
GERAN_SystemInformation	GERAN−SystemInformation	Class−definitions		
GSM_BA_Range	GSM−BA−Range	Class−definitions		
GSM_BA_Range_List	GSM−BA−Range−List	Class−definitions		
GSM_Classmark2	GSM−Classmark2	Class−definitions		
GSM_Classmark3	GSM−Classmark3	Class−definitions		
GSM_MessageList	GSM−MessageList	Class−definitions		
GsmSecurityCapability	GsmSecurityCapability	Class−definitions		
IdentificationOfReceivedMessage	IdentificationOfReceivedMessage	Class−definitions		
InterRAT_ChangeFailureCause	InterRAT−ChangeFailureCause	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
GERANIu_MessageList	GERANIu−MessageList	Class−definitions		
GERANIu_RadioAccessCapability	GERANIu−RadioAccessCapability	Class−definitions		
InterRAT_UE_RadioAccessCapability	InterRAT−UE−RadioAccessCapability	Class−definitions		
InterRAT_UE_RadioAccessCapabilityList	InterRAT−UE−RadioAccessCapabilityList	Class−definitions		
InterRAT_UE_RadioAccessCapability_v590ext	InterRAT−UE−RadioAccessCapability−v590ext	Class−definitions		
InterRAT_UE_SecurityCapability	InterRAT−UE−SecurityCapability	Class−definitions		
InterRAT_UE_SecurityCapList	InterRAT−UE−SecurityCapList	Class−definitions		
InterRAT_HO_FailureCause	InterRAT−HO−FailureCause	Class−definitions		
MasterInformationBlock	MasterInformationBlock	Class−definitions		
MIB_ValueTag	MIB−ValueTag	Class−definitions		
NCC	NCC	Class−definitions		
PLMN_ValueTag	PLMN−ValueTag	Class−definitions		
PredefinedConfigIdentityAndValueTag	PredefinedConfigIdentityAndValueTag	Class−definitions		
ProtocolErrorInformation	ProtocolErrorInformation	Class−definitions		
ReceivedMessageType	ReceivedMessageType	Class−definitions		
Rplmn_Information	Rplmn−Information	Class−definitions		
Rplmn_Information_r4	Rplmn−Information−r4	Class−definitions		
SchedulingInformation	SchedulingInformation	Class−definitions		
SchedulingInformationSIB	SchedulingInformationSIB	Class−definitions		
SchedulingInformationSIBSb	SchedulingInformationSIBSb	Class−definitions		
SegCount	SegCount	Class−definitions		
SegmentIndex	SegmentIndex	Class−definitions		
SFN_Prime	SFN−Prime	Class−definitions		
SIB_Data_fixed	SIB−Data−fixed	Class−definitions		
SIB_Data_variable	SIB−Data−variable	Class−definitions		
SIBOccurIdentity	SIBOccurIdentity	Class−definitions		
SIBOccurrenceIdentityAndValueTag	SIBOccurrenceIdentityAndValueTag	Class−definitions		
SIBOccurValueTag	SIBOccurValueTag	Class−definitions		
SIB_ReferenceList	SIB−ReferenceList	Class−definitions		
SIBSb_ReferenceList	SIBSb−ReferenceList	Class−definitions		
SIB_ReferenceListFACH	SIB−ReferenceListFACH	Class−definitions		
SIB_Type	SIB−Type	Class−definitions		
SIB_TypeAndTag	SIB−TypeAndTag	Class−definitions		
SIBSb_TypeAndTag	SIBSb−TypeAndTag	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SibOFF	SibOFF	Class−definitions		
SibOFF_List	SibOFF−List	Class−definitions		
SysInfoType1	SysInfoType1	Class−definitions		
SysInfoType1_v3a0ext_IEs	SysInfoType1−v3a0ext−IEs	Class−definitions		
SysInfoType2	SysInfoType2	Class−definitions		
SysInfoType3	SysInfoType3	Class−definitions		
SysInfoType3_v4b0ext_IEs	SysInfoType3−v4b0ext−IEs	Class−definitions		
SysInfoType3_v590ext	SysInfoType3−v590ext	Class−definitions		
SysInfoType4	SysInfoType4	Class−definitions		
SysInfoType4_v4b0ext_IEs	SysInfoType4−v4b0ext−IEs	Class−definitions		
SysInfoType4_v590ext	SysInfoType4−v590ext	Class−definitions		
SysInfoType4_v5b0ext_IEs	SysInfoType4−v5b0ext−IEs	Class−definitions		
SysInfoType5	SysInfoType5	Class−definitions		
SysInfoType5_v4b0ext_IEs	SysInfoType5−v4b0ext−IEs	Class−definitions		
SysInfoType5_v590ext_IEs	SysInfoType5−v590ext−IEs	Class−definitions		
SysInfoType6	SysInfoType6	Class−definitions		
SysInfoType6_v4b0ext_IEs	SysInfoType6−v4b0ext−IEs	Class−definitions		
SysInfoType6_v590ext_IEs	SysInfoType6−v590ext−IEs	Class−definitions		
SysInfoType7	SysInfoType7	Class−definitions		
SysInfoType8	SysInfoType8	Class−definitions		
SysInfoType9	SysInfoType9	Class−definitions		
SysInfoType10	SysInfoType10	Class−definitions		
SysInfoType11	SysInfoType11	Class−definitions		
SysInfoType11_v4b0ext_IEs	SysInfoType11−v4b0ext−IEs	Class−definitions		
SysInfoType11_v590ext_IEs	SysInfoType11−v590ext−IEs	Class−definitions		
SysInfoType12	SysInfoType12	Class−definitions		
SysInfoType12_v4b0ext_IEs	SysInfoType12−v4b0ext−IEs	Class−definitions		
SysInfoType12_v590ext_IEs	SysInfoType12−v590ext−IEs	Class−definitions		
SysInfoType13	SysInfoType13	Class−definitions		
SysInfoType13_v3a0ext_IEs	SysInfoType13−v3a0ext−IEs	Class−definitions		
SysInfoType13_v4b0ext_IEs	SysInfoType13−v4b0ext−IEs	Class−definitions		
SysInfoType13_1	SysInfoType13−1	Class−definitions		
SysInfoType13_2	SysInfoType13−2	Class−definitions		
SysInfoType13_3	SysInfoType13−3	Class−definitions		
SysInfoType13_4	SysInfoType13−4	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SysInfoType14	SysInfoType14	Class−definitions		
SysInfoType15	SysInfoType15	Class−definitions		
SysInfoType15_v4b0ext_IEs	SysInfoType15−v4b0ext−IEs	Class−definitions		
SysInfoType15_1	SysInfoType15−1	Class−definitions		
SysInfoType15_2	SysInfoType15−2	Class−definitions		
SysInfoType15_3	SysInfoType15−3	Class−definitions		
SysInfoType16	SysInfoType16	Class−definitions		
SysInfoType17	SysInfoType17	Class−definitions		
SysInfoType17_v4b0ext_IEs	SysInfoType17−v4b0ext−IEs	Class−definitions		
SysInfoType17_v590ext_IEs	SysInfoType17−v590ext−IEs	Class−definitions		
SysInfoType18	SysInfoType18	Class−definitions		
SysInfoTypeSB1	SysInfoTypeSB1	Class−definitions		
SysInfoTypeSB2	SysInfoTypeSB2	Class−definitions		
TDD_UMTS_Frequency_List	TDD−UMTS−Frequency−List	Class−definitions		
ANSI_41_GlobalServiceRedirectInfo	ANSI−41−GlobalServiceRedirectInfo	Class−definitions		
ANSI_41_PrivateNeighbourListInfo	ANSI−41−PrivateNeighbourListInfo	Class−definitions		
ANSI_41_RAND_Information	ANSI−41−RAND−Information	Class−definitions		
ANSI_41_UserZoneID_Information	ANSI−41−UserZoneID−Information	Class−definitions		
ANSI_41_NAS_Parameter	ANSI−41−NAS−Parameter	Class−definitions		
Min_P_REV	Min−P−REV	Class−definitions		
NAS_SystemInformationANSI_41	NAS−SystemInformationANSI−41	Class−definitions		
NID	NID	Class−definitions		
P_REV	P−REV	Class−definitions		
SID	SID	Class−definitions		
Detailed Comments :				

Encoding Definitions			
Encoding Rule Name	**Reference**	**Default**	**Comments**
GPRSPadding_Rule1	34.123−3 clause 6.10.2.9.1		To add 'padding bits' (null | 0 < spare padding >) to the end of GPRS RLC/MAC Control messages to pad to RLC block size
GSMSparePadding_Rule2	34.123−3 clause 6.10.2.9.2		To add 'spare padding' (<spare L>) to the end of specific GSM DL messages to pad to RLC a fixed message length of 23 octets
SACCHSysInfoSparePadding_Rule4	34.123−3 clause 6.10.2.9.5		To add 'spare padding' (<spare L>) to the end of System Information messages sent on SACCH to a fixed message length of 19 octets
MeasInfoSparePadding_Rule5	34.123−3 clause 6.10.2.9.6		To add 'spare padding' (<spare L>) to the end of Measurement Information messages sent on SACCH to a fixed message length of 21 octets
PER_Unaligned	X.691		Packet encoding rules (X.691) unaligned and with adapted padding
Detailed Comments :			

Encoding Variations			
Encoding Rule Name : GSMSparePadding_Rule2			
Type List :			
Comments :			
Encoding Variation	**Reference**	**Default**	**Comments**
LowHigh_Rule3	34.123−3 clause 6.10.2.9.3		A specific field of 1 or more bits that occurs only in Rest Octets of certain GSM DL messages. This field shall be encoded according to its position in the 'spare padding' mask
Detailed Comments :			

Test Suite Operation Definition	
Operation Name	: o_GSM_ToUTRANHO_PER_Encoding (p_Msg : HandoverToUTRANCommand ; p_Len : O1)
Result Type	: OCTETSTRING
Comments	: generate the 8−bit aligned PER codes with "Encoder added (0−7) bits padding" from the input downlink message
Description	
The function of the o_GSM_ToUTRANHO_PER_Encoding is as the follows: it returns the aligned PER encoding of the input downlink message p_Msg (with "Encoder added (1−7) bits padding") of p_Len octets	
Detailed Comments :	

Test Suite Operation Definition	
Operation Name	: o_LengthofHO_Cmd (p_Msg : HandoverToUTRANCommand)
Result Type	: O1
Comments	: generate the length of the input HO To UTRAN Cmd
Description	
The function of the o_LengthofHO_Cmd is as the follows: it returns the no. of octets of the input downlink message p_Msg	
Detailed Comments :	

Test Suite Operation Definition

Operation Name : o_CheckUtranClassmark(p_InterRATHOInfo : OCTETSTRING; p_RACap : UE_RadioAccessCapability)

Result Type : ResAndStartValue

Comments : Checks the UE_CapabilityContainer of InterRATHandoverInfo, input as an octetstring, against the other input: p_RACap. Returns Res of TRUE if this matches. Also returns the Start Value from p_InterRATHOInfo

Description

This function decodes the InterRATHandoverInfo IE, received from an incoming UtranClassmarkChange message as an octetstring, as the ASN.1 definition InterRATHandoverInfo.

It then compares the contents of the input parameter p_RACap against the field p_InterRATHOInfo.ue_CapabilityContainer.present and returns the boolean result in ResAndStartValue.res

It also extracts the field START_Value from p_InterRATHOInfo.uE_SecurityInformation.present.start_CS and returns this in ResAndStartValue.start

Other fields in the InterRATHandoverInfo IE are not checked.

This function is required in order to decode the PER encoded element of the tabular structured UtranClassmarkChange message.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_P_CheckClassmark3(p_FromUE : MSCLSMK3; p_FDD, p_TDD, p_P_GSM_900_BAND, p_E_GSM_900_BAND, p_R_GSM_900_BAND, p_DCS_1800_BAND, p_PCS_1900_BAND, p_GSM_450_BAND, p_GSM_480_BAND, p_GSM_700_BAND, p_GSM_850_BAND, p_TypeGSMClass2, p_TypeGSMClass3, p_TypeGSMClass4, p_TypeGSMClass5, p_TypeDCSClass1, p_TypeDCSClass2, p_TypeDCSClass3, p_TypePCSClass1, p_TypePCSClass2, p_TypePCSClass3, p_TypeGSM850Class2, p_TypeGSM850Class3, p_TypeGSM850Class4, p_TypeGSM850Class5, p_DTM_Multislotclass5, p_DTM_Multislotclass9, p_DTM_SingleSlotAllocation, p_EOTD_Assist, p_A_GPS_Assist, p_A_GPS_Based, p_Conv_GPS, p_EOTD_Based, p_GERANFeatPackage1, p_GERANFeatPackage2, p_GERANIuMode : BOOLEAN; p_MultiSlotClass, p_EGPRS_MultiSlotClass : B5; p_SMS_Value, p_SM_Value, p_GSM400_RadioCapability : B4; p_RGSM_RadioCapability : B3; p_DTM_EGPRS_MultiSlotSubClass, p_EDGEPwrCap1, p_EDGEPwrCap2, p_ExtDTM_MultiSlotClass, p_ExtDTM_EGPRS_MultiSlotClass, p_HighMultiSlotCap, p_GMSKPowerProfile, p_8PSKPowerProfile :B2; p_MS_ClsmkA5_4, p_MS_ClsmkA5_5, p_MS_ClsmkA5_6, p_MS_ClsmkA5_7, p_CDMA2000, p_ExtMeasCap, p_ModulationCapability, p_UCS2Treatment :B1)

Result Type : BOOLEAN

Comments : This is exactly the same as o_O_CheckClassmark3 except the first parameter is different. This version is used when UE sends the MSCLSMK3 PDU in CLASSMARK CHANGE @sic R5s050095 sic@

Description

<Classmark 3 Value part> ::=
< spare bit >
{ < Multiband supported : { 000 } >
< A5 bits >
| < Multiband supported : { 101 | 110 } >
< A5 bits >
< Associated Radio Capability 2 : bit(4) >
< Associated Radio Capability 1 : bit(4) >
| < Multiband supported : { 001 | 010 | 100 } >
< A5 bits >
< spare bit >(4)
< Associated Radio Capability 1 : bit(4) > }
{ 0 | 1 < R Support > }
{ 0 | 1 < HSCSD Multi Slot Capability > }
< UCS2 treatment: bit >
< Extended Measurement Capability : bit >
{ 0 | 1 < MS measurement capability > }
{ 0 | 1 < MS Positioning Method Capability > }
{ 0 | 1 < ECSD Multi Slot Capability > }
{ 0 | 1 < ECSD Struct > }
{ 0 | 1 < GSM 400 Bands Supported : { 01 | 10 | 11 } >
< GSM 400 Associated Radio Capability: bit(4) > }

{ 0 | 1 <GSM 850 Associated Radio Capability : bit(4) > }
{ 0 | 1 <GSM 1900 Associated Radio Capability : bit(4) > }
< UMTS FDD Radio Access Technology Capability : bit >
< UMTS 3.84 Mcps TDD Radio Access Technology Capability : bit >
< CDMA 2000 Radio Access Technology Capability : bit >

{ 0 | 1 < DTM GPRS Multi Slot Class : bit(2) >
< Single Slot DTM: bit >
{0 | 1< DTM EGPRS Multi Slot Class : bit(2) > } }
{ 0 | 1 < Single Band Support > } −− Release 4 starts here:
{ 0 | 1 <GSM 700 Associated Radio Capability : bit(4)>}

< UMTS 1.28 Mcps TDD Radio Access Technology Capability : bit >
< GERAN Feature Package 1 : bit >

{ 0 | 1 < Extended DTM GPRS Multi Slot Class : bit(2) >
< Extended DTM EGPRS Multi Slot Class : bit(2) > }

{ 0 | 1 < High Multislot Capability : bit(2) > }−−−Release 5 starts here.

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Test Suite Operation Definition

Description

```
        { 0 | 1 < GERAN Iu Mode Capabilities > }          −− '1' also means support of GERAN Iu mode

        < GERAN Feature Package 2 : bit >

        < GMSK Multislot Power Profile : bit (2) >
        < 8−PSK Multislot Power Profile : bit (2) >
        < spare bit > ;

< A5 bits > ::=
        < A5/7 : bit > < A5/6 : bit > < A5/5 : bit > < A5/4 : bit >  ;

<R Support>::=
        < R−GSM band Associated Radio Capability : bit(3) > ;

< HSCSD Multi Slot Capability > ::=
        < HSCSD Multi Slot Class : bit(5) >  ;

< MS Measurement capability > ::=
        < SMS_VALUE : bit (4) >
        < SM_VALUE : bit (4) > ;

< MS Positioning Method Capability > ::=
        < MS Positioning Method : bit(5) > ;

< ECSD Multi Slot Capability > ::=
        < ECSD Multi Slot Class : bit(5) > ;

 < ECSD Struct> : :=
        < Modulation Capability : bit >
        { 0 | 1 < EDGE RF Power Capability 1: bit(2) > }
        { 0 | 1 < EDGE RF Power Capability 2: bit(2) > }

< Single Band Support > ::=
        < GSM Band : bit (4) > ;

< GERAN Iu Mode Capabilities > ::=
        < Length : bit (4) >        −− Length in bits of Iu mode only capabilities and spare bits
        < spare bits > **;                  −− expands to the indicated length
                                                −− may be used for future enhancements
```

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_PagingGroupCalculate(p_IMSI : HEXSTRING;p_CCCH_Conf : B3; p_N : INTEGER)

Result Type : INTEGER

Comments : returns the calculated Paging Group

Description

PAGING_GROUP (0 .. N−1) = ((IMSI mod 1000) mod (BS_CC_CHANS x N)) mod N
where
N = number of paging blocks "available" on one CCCH = (number of paging blocks "available" in a 51−multiframe on one CCCH) x BS_PA_MFRMS.
IMSI = International Mobile Subscriber Identity, as defined in GSM 03.03.
mod = Modulo.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_PacketPagingGroupCalculate(IMSI : HEXSTRING;KC_Conf, M, N : INTEGER; SplitPGCycle : B8)

Result Type : INTEGER

Comments : returns the calculated Packet Paging Group

Description

PAGING_GROUP (0 ... M−1) = (((IMSI mod 1000) div (KC*N)) * N + (IMSI mod 1000) mod N + Max((m * M) div SPLIT_PG_CYCLE, m)) mod M

for m = 0, ... , Min(M, SPLIT_PG_CYCLE) −1
where
KC = number of (P)CCCH in the cell = BS_PCC_CHANS for PCCCH or BS_CC_CHANS for CCCH

M = number of paging blocks "available" on one (P)CCCH =
(12 − BS_PAG_BLKS_RES − BS_PBCCH_BLKS) * 64 for PCCCH
(9 − BS_AG_BLKS_RES) * 64 for CCCH not combined
(3 − BS_AG_BLKS_RES) * 64 for CCCH + SDCCH combined

N=
1 for PCCCH
(9 − BS_AG_BLKS_RES)*BS_PA_MFRMS for CCCH not combined
(3 − BS_AG_BLKS_RES)*BS_PA_MFRMS for CCCH/SDCCH combined

SPLIT_PG_CYCLE is an MS specific parameter negotiated at GPRS attach (see 3GPP TS 04.60)

IMSI = International Mobile Subscriber Identity, as defined in 3GPP TS 03.03.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_OctToInt(p_oct : OCTETSTRING)

Result Type : INTEGER

Comments :

Description

Transform an OCTETSTRING of length 1 to 4 into an unsigned 32 bits IINTEGER value.
If the input octet string is larger than 4, then only the first 4 octets shall be considered.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_ConcatStrg (p_String1, p_String2 : IA5String)
Result Type : IA5String
Comments :

Description

o_ConcatString concatenates p_String1 and p_String2 and returns the resulting string.

For example:
o_ConcatString ("AT+CBST=0" , ",0") = "AT+CBST=0,0"

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_IntToOct(p_N : INTEGER; p_L: INTEGER)
Result Type : OCTETSTRING
Comments :

Description

o_IntToOct converts the INTEGER p_N into OCTETSTRING with length = p_L.

for example:

o_IntToOct(14,1) = '0E'O;
o_IntToOct(18,1) = '12'O;
o_IntToOct(18,2) = '0012'O.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_OtherDigits(p_BCDdigits : HEXSTRING)

Result Type : OCTETSTRING

Comments : The input parameter ‘bcddigits‘ is a BCD string (subset of HEXSTRING), the result is an even string of BCD digits, with eventually a filler ’F’H used.

Description

The function of the o_OtherDigits is as the follows:

1. If the number of the p_BCDdigits is odd, the operation removes the most significant digit, and then reverses the order of each pair of digits;
2. If the number of the p_BCDdigits is even, first the operation suffixes the p_BCDdigits with ’F’H, then removes the most significant digit, and then reverses the order of each pair of digits.

for example:

o_OtherDigi(’12345’) = ’3254’O,
o_OtherDigi(’12345678’) =’325476F8’O.

See o_FirstDigit for the handling of the first digit.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_FirstDigit(p_BCDdigits : HEXSTRING)

Result Type : B4

Comments :

Description

The input parameter bcddigits shall be a BCD string (subset of HEXSTRING), the resut is a BITSTRING[4] of a binary representation of one BCD digit.
The function of the o_FirstDigit is to return the first (most significant) digit of the input parameter p_BCDdigits.

for example:

o_FirstDigit(’12345’) = ’0001’B,
o_FirstDigit(’012345678’) = ’0000’B.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_OeBit(p_BCDdigits : HEXSTRING)

Result Type : BITSTRING

Comments : The input parameter ‘bcddigits‘ is a BCD string (subset of HEXSTRING), the result is BITSTRING[1].

Description

The function of the o_OeBit is as the follows:

1. it returns ’1’B, if the length of the p_BCDdigits is odd,
2. it returns ’0’B, if the length of the p_BCDdigits is even.

for example:

o_OeBit(’12583’) = ’1’B,
o_OeBit(’87259957’) =’0’B.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_AuthRspChk(p_AuthRsp: AuthRsp; p_AuthRspExt: AuthRspExt; p_K:BITSTRING; p_RAND: BITSTRING; p_Ext: BOOLEAN)

Result Type : BOOLEAN

Comments :

Description

Checks the input parameter p_AuthRsp and p_AuthRspExt, both received in an Authentication Response, according to the authentication algorithm defined in the following procedure.
The extension, p_AuthRspExt, is optional. Its presence is indicated by p_Ext.
Returns TRUE if the Authentication Response contained in parameters p_AuthRsp and eventually p_AuthRspExt is correct, FALSE otherwise.
The value of tcv_AuthN indicates whether the AuthRspExt has been provided by the UE or not (n=31, or 31 < n < 128).
See 3G TS 34.108 cl. 8.1.2.
If not the parameter p_AuthRspExt is not to be used.

Algorithm (without the knowledge of tcv_AuthN):
==========

if NOT p_Ext EvaluateAuthRsp else EvaluateAuthRspAndAuthRspExt

EvaluateAuthRsp:
==========

resultbitstring = o_BitstringXOR(XRES, AuthRsp)
if resultbitstring is all 0s then there is a match.

EvaluateAuthRspAndAuthRspExt:
==========

XREShigh = o_BitstringXtract(XRES, 32, 32, 0)
/* XRES divides into 2 parts: the higher part of 32 bits related to AuthRsp and the lower part related to AuthRspExt */
/* SourceLength of 32 is only to ensure usage of the procedure */
resultbitstring = o_BitstringXOR(XREShigh, AuthRsp)
if resultbitstring is all 0s then there is a match for the first 32 bits:EvaluateAuthRspExt else Authentication failed.

EvaluateAuthRspExt:
==========

/* As AuthRespExt may not be octet aligned the last octet indicated in AuthRspExt is not used for checking */

if (AuthRspExt.iel = 1) then Authentication passed
/* there was only 1 possibly incomplete octet which is not used */
else
{
AuthRspExthigh = o_BitstringXtract(AuthRspExt.authRsp, ((AuthRspExt.iel −1)* 8), (AuthRspExt.iel −1)* 8, 0)
/* extract (AuthRspExt.iel −1)* 8 bits starting from bit 0 */
XRESlow = o_BitstringXtract(XRES, ((AuthRspExt.iel −1)* 8 + 32), (AuthRspExt.iel −1)* 8, 32)
/* extract (AuthRspExt.iel −1)* 8 bits starting from bit 32 */
resultbitstring = o_BitstringXOR(XRESlow, AuthRspExthigh, (AuthRspExt.iel −1)* 8)
if resultbitstring is all 0s then there is a match for the bits following the first 32 bits else Authentication failed
}

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_BitstringConcat(p_Str1, p_Str2: BITSTRING; p_Len1, p_Len2: INTEGER)
Result Type : BITSTRING
Comments :

Description

Performs the concatenation of 2 bitstrings of possibly different lengths.
The bit significance is from left to right, ie the MSB is at the lefthand side.

Returns a resulting bitstring p_Str1 || p_Str2 of length p_ Len1 + p_Len.

Example:
o_BitstringConcat('010101'B,'11'B) produces '01010111'B of length 6 + 2 = 8..

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_BitstringXOR(p_Str1, p_Str2: BITSTRING; p_Len: INTEGER)
Result Type : BITSTRING
Comments :

Description

Performs an XOR operation using 2 bitstrings of the same length (p_Len).

Returns a resulting Bitstring of length p_Len.

Example:
o_BitstringXOR('0011'B, '0101'B, 4) produces '0110'B

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_BitstringXtract(p_Str: BITSTRING; p_SrcLen, p_TargetLen, p_Offset: INTEGER)

Result Type : BITSTRING

Comments :

Description

Performs the wrap around extract of a bitstring. The length of the string
from
which extraction is to be made is specified in p_SrcLen. The length of the
bitstring to be extracted is indicated as p_TargetLen, the offset in the
original
string is indicated in p_Offset.
The bit position 0 is at the left.
Returns a resulting bitstring of length p_TargetLen.

Examples:

o_BitstringXtract('101010'B, 6, 2, 1) produces '01'B.
o_BitstringXtract('101010'B, 6, 4, 3) produces '0101'B, wrapping around.
o_BitstringXtract('111000'B, 6, 4, 5) produces '0111'B, wrapping around.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_ConvertIMSI(p_Imsi : HEXSTRING)

Result Type : IMSI_GSM_MAP

Comments : The input parameter 'imsi' is a BCD string (subset of HEXSTRING), the result is of type IMSI_GSM_MAP.

Description

The input parameter p_Imsi is a BCD string (subset of HEXSTRING), the result is of type IMSI_GSM_MAP.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_ConvtPLMN(p_MCC, p_MNC : HEXSTRING)

Result Type : OCTETSTRING

Comments :

Description

the functions of o_ConvtPLMN are as following:

1. The least significant HEX of p_MNC is removed from p_MNC and inserted into p_MCC in the position left to the third HEX to form a new p_MCC of 4 HEXs, then swap the first HEX (left most, most siginificant Hex) with the second HEX of the new p_MCC.
2. Swap the first Hex with the second HEX of the remaining part of p_MNC and append it to the new p_MCC formed in Step1 above.

For example:
o_ConvtPLMN('123'H, '456'H) = '216354'O
o_ConvtPLMN ('234'H, '01F'H) = '32F410'O

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_HexToDigitsMCC(p_BCDdigits : HEXSTRING)

Result Type : MCC

Comments :

Description

The input parameter p_BCDdigits shall be a BCD string (subset of HEXSTRING), the result is a SEQUENCE (SIZE(3)) OF digit (MCC).

NOTE: The length of p_BCDdigits shall be 3. User shall take the responsibility of fulfilling this requirement.

for example:

o_HexToDigitsMCC('111'H) = {1, 1, 1}
o_HexToDigitsMCC('123'H) = {1, 2, 3}.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_HexToDigitsMNC(p_BCDdigits : HEXSTRING)
Result Type : MNC
Comments :

Description

The length of the input parameter p_BCDdigits shall be 3 HEX DIGITS, the first two shall be BCDdigit (subset of HEXSTRING) the result is a SEQUENCE (SIZE(2..3)) OF Digit (MNC).

The function of this operation is:
1. the least significant HEX is removed if it is 'F' and the operation returns SEQUENCE (SIZE(2)) OF Digit.
2. the operation returns SEQUENCE (SIZE(3)) OF Digit if all 3 HEX digits in p_BCDdigits are BCD Digit.

for example:

o_HexToDigitsMNC('123'H) = {1, 2, 3}
o_HexToDigitsMNC('13F'H) = {1, 3}.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_OctetstringConcat(p_Str1, p_Str2: OCTETSTRING)
Result Type : OCTETSTRING
Comments :

Description

o_OctetstringConcat Performs the concatenation of 2 octetstrings of possibly different lengths.
The octet significance is from left to right, i.e. the MSB is at the lefthand side.

Returns a resulting octetstring p_Str1 || p_Str2 .

Example:
o_OctetstringConcat('135'O, '9A38'O) = '1359A38'O.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_OctToBit (p_OctetStr: OCTETSTRING)
Result Type : BITSTRING
Comments : Converts an OCTETSTRING into a BITSTRING

Description

The size of the resulting BITSTRING is 8 times the size of the input OCTETSTRING

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_SIB_PER_Encoding(p_SIB : SIB)

Result Type : BITSTRING

Comments : generate the unaligned PER codes without "Encoder added (0−7) bits padding" from the input system information block

Description

The function of the o_SIB_PER_Encoding is as the follows:

it returns the unaligned PER encoding (BIT STRING) of the input system information block p_SIB (without "Encoder added (1−7) bits padding"). The bits corresponding to the encoding of the CHOICE of the SIB type shall be removed.

Example:

```
for  the following SIBType1 value:
   SysInfoType1 ::=
                      {
 cn_CommonGSM_MAP_NAS_SysInfo      '0080'O,
 cn_DomainSysInfoList                        {{cn_DomainIdentity    ps_domain,
                                               cn_Type                gsm_MAP: '0000'O,
                                              cn_DRX_CycleLengthCoeff    p_CellInfo.dRX_CycleLength
                                              },
                                              {cn_DomainIdentity    cs_domain,
                                              cn_Type                gsm_MAP:  o_OctetstringConcat(p_T3212,
o_IntToOct(p_ATTFlag, 1)),
                                              cn_DRX_CycleLengthCoeff   p_CellInfo.dRX_CycleLength
                                              }
                                              },
 ue_ConnTimersAndConstants     {
                                 t_301     ms2000,
                                 n_301   2,
                                  t_302    ms4000,
                                  n_302   3,
                                  t_304    ms1000,
                                  n_304   3,
                                  t_305    m60,
                                  t_307    s50,
                                  t_308    ms320,
                                  t_309    8,
                                  t_310    ms320,
                                  n_310   5,
                                  t_311    ms500,
                                  t_312    5,
                                  n_312   s200,
                                  t_313    10,
                                  n_313   s20,
                                  t_314   s20,
                                  t_315   s30,
                                  n_315  s200,
                                  t_316   s50,
                                  t_317   s1800
                                 },
 ue_IdleTimersAndConstants                   {
                                               t_300   ms400,
                                              n_300   7,
                                              t_312    10,
                                              n_312   s200
                                              },
 nonCriticalExtensions                       {}
}
```

The operation returns
BITSTRING:"1110010000000010000000011000100000000000000000100001000000000000000000011111111111111111111111101001011000110110111001101111111110100101010111010100111010011101111001011110100 11"

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Test Suite Operation Definition
Detailed Comments : 3GPP TS 25.331 clause 12.1

Test Suite Operation Definition	
Operation Name	**:** o_SIB_Segmentation(p_SIBBitString : BITSTRING)
Result Type	**:** SegmentsOfSysInfoBlock
Comments	**:** The returned result is a structured type.

Description

The function of the o_SIB_Segmentation is as following:

1. If the p_SIBBitString is less than or equal to 226 bits,the bit string is fit into one segment. If the bit string is less than 226 bits but more than 214 bits, the segment shall be padded to 226 bits long with padding bits set to '0'B.

2. If the input operand p_SIBBitString is longer than 226 bits it is segmented from left to right into segments, each segment except the last one is 222 bits . The last segment may be 222 bits or shorter. If the length of last segment is greater than 214 bits pad it to 222 bits
with padding bits set to '0'B.

3. The number of segments is assigned to segCount field of the result.

4. The first segment is assigned to seg1 field of the result, the second segment is assigned to the seg2 field of the result, the third segment is assigned to the seg3 field of the result, and so on till the last segment.

Detailed Comments :

Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_GSM_Data	BOOLEAN	51.010 A.25/4	At least one data service
pc_RAB_A_18c_4	BOOLEAN	PICS, Table A.18c/4	RAB for TC_14_2_4
pc_RAB_A_18c_15	BOOLEAN	PICS, Table A.18c/15	UE supports UTRAN Streaming/unknown/uplink:14.4 DL:14.4 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_RAB_A_18c_16	BOOLEAN	PICS, Table A.18c/16	UE supports UTRAN Streaming/unknown/uplink:28.8 DL:28.8 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_RAB_A_18c_17	BOOLEAN	PICS, Table A.18c/17	UE supports UTRAN Streaming/unknown/uplink:57.6 DL:57.6 kbps/CS RAB + uplink:3.4 DL:3.4 kbps SRBs
pc_TDD	BOOLEAN	PICS, Table A.1/2	Dual Mode FDD(DS)/TDD
pc_FDD	BOOLEAN	PICS, Table A.1/1	FDD(DS)
pc_LosslessSRNS_Reloc	BOOLEAN	PICS, Table A.19/2	Lossless SRNS Relocation is supported
pc_RFC2507	BOOLEAN	PICS, Table A.19/1	IP header compression protocol RFC 2507 is supported
pc_SimultaneousSCCPCH_DPCH_DPDCH_Reception	BOOLEAN	PICS, Table A.18b/6	Part of SimultaneousSCCPCH_DPCH_Reception.
pc_SimultaneousSCCPCH_DPCH_Reception	BOOLEAN	PICS, Table A.18b/5	Downlink support. Part of DL_PhysChCapabilityFDD.
px_DL_MaxTC_TB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant. Default value: b163840
pc_DL_TC	BOOLEAN		Support for turbo decoding for downlink. Default value: TRUE
px_MaxHcContextSpace	MaxHcContextSpace	PIXIT, Table B.5	MaxHcContextSpace if RFC 2507 is supported. Default value: by512
px_MaxNoSCCPCH_RL	MaxNoSCCPCH_RL	PIXIT, Table B.5	Part of SimultaneousSCCPCH_DPCH_Reception. Default value: rl1
px_UL_MaxTC_TB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all turbo coded transport blocks being transmitted at an arbitrary time instant. Default value: b163840
pc_UL_TC	BOOLEAN	PICs	Support for turbo encoding for uplink. Default value: TRUE @sic ER1668 sic@

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_GSM_BandUnderTest	INTEGER		indicates which band is under test: 1 −> GSM450; 2 −> GSM480; 3 −> GSM700; 4 −> GSM850; 5 −> GSM−P−900; 6−> GSM−E−900; 7−> DCS1800; 8 −> PCS1900. 9 −> 450 & 900 MultiBand test 10 −> 450 & 1800 MultiBand test 11 −> 480 & 900 MultiBand test 12 −> 480 & 1800 MultiBand test 13 −> 900 & 1800 MultiBand test other values are not defined currently.
px_GSM_CipherAlg	B3	PIXIT B.11	GSM Cipher algorithm. Default value: (A5/1) ’000’B
px_GPRS_CipherAlg	B3	PIXIT B.11	GPRS Cipher algorithm. Default value: (GEA/1) ’001’B
px_GSM_CipheringOnOff	B1	PIXIT B.8	GSM Ciphering to be started or not Default value: 1 i.e Ciphering to be started
px_CipherKey	B64	PIXIT B.8	Cipher Key (64 bits). Default value: ’0101111001001010101100110101011000100100010010111011010111010010101010’B
px_MS_TXPWR_MAX_CCH	B5	PIXIT B.8	MS_TXPWR_MAX_CCH. Default value: ’01010’B
px_RXLEV_ACCESS_MIN	B6	PIXIT B.8	minimum received signal level at MS. Default value: ’000000’B
px_SplitOnCCCH	B1	PIXIT B.8	Split pg cycle on CCCH supported indication (1 bit) Default value: ’0’B not supported ?? shall be a PICS question
px_TSC	B3	PIXIT B.8	Training sequence code for traffic channels. Default value: ’011’B
px_PowerLevel	B5		power level value for L1 header Default value:

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_TimingAdvance	B7		Timing advance value for L1 header. Default value: '0000000'B
px_CDMA2000	B1	Used in Classmark3	UE support of CDMA2000
px_EDGEPwrCap1	B2	Used in Classmark3	EDGE power class
px_EDGEPwrCap2	B2	Used in Classmark3	EDGE power class
px_EOTD_Based	BOOLEAN	Used in Classmark3	Support of MS based EOTD
px_ExtMeasCap	B1	Used in Classmark3	UE support of Extended Measurements
px_GSM400_RadioCapability	B4	Used in classmark3	
px_RGSM_RadioCapability	B3	Used in classmark3	
pc_RLPSupported	BOOLEAN		
px_ModulationCapability	B1	Used in Classmark3 to specify supported modulation schemes other than GMSK	0 = 8PSK supported for downlink only 1 = 8PSK supported for uplink and downlink
px_MultiSlotClass	B5	51.010−2 A.1/22−50	Used in Classmark3 to define multislotclass supported by the UE
px_EGPRS_MultiSlotClass	B5	51.010−2 A.1/96−124	Used in Classmark3 to define EGPRS multislotclass supported by the UE
px_DTM_EGPRS_MultiSlotSubClass	B2	Used in Classmark3	indicates DTM EGPRS capabilities of the UE
px_SM_Value	B4	Used in Classmark3 − Switch−Measure Value	Indicates the time needed for the UE to switch from one radio channel to another and perform a neighbour cell power measurement
px_SMS_Value	B4	Used in Classmark3 − Switch−Measure−Switch Value	Indicates the time needed for the UE to switch from one radio channel to another, perform a neighbour cell power measurement and then switch from that radio channel to another radio channel
pc_GSM_14_4	BOOLEAN	PICS	UE supports GSM 14.4 kbps data (HSCSD or full rate traffic channel for 14.4 kbit/s user data (TCH/F14.4))
pc_GSM_AMR	BOOLEAN		IF GSM AMR is Supported by the Mobile
pc_GSM_EFR	BOOLEAN		IF GSM EFR is Supported by the Mobile
pc_GSM_FR	BOOLEAN		IF GSM FR is Supported by the Mobile
pc_GSM_HR	BOOLEAN		IF GSM HR is Supported by the Mobile
pc_G_HSCSD	BOOLEAN		IF GSM High speed Circuit switched data is supported.

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_PCS_1900_BAND	BOOLEAN		IF GSM band of 1900 is supported
pc_GSM_480_BAND	BOOLEAN		IF GSM band of 480 is supported
pc_GSM_450_BAND	BOOLEAN		IF GSM band of 450 is supported
pc_GSM_700_BAND	BOOLEAN		IF GSM band of 700 is supported
pc_GSM_850_BAND	BOOLEAN		IF GSM band of 850 is supported
pc_DCS_1800_BAND	BOOLEAN		IF GSM band of 1800 is supported
pc_E_GSM_900_BAND	BOOLEAN		IF GSM band of E−900 is supported
pc_P_GSM_900_BAND	BOOLEAN		IF GSM band of 900 is supported
pc_R_GSM_900_BAND	BOOLEAN		IF GSM band of 900 is supported
pc_GPRS	BOOLEAN	51.010 − 2 Table A.2/41	
pc_G_operation_mode_C	BOOLEAN	51.010 A.2/49	GERAN UE Operation Mode C
pc_DTM_Multislotclass5	BOOLEAN	51.010−2 A.1/60	
pc_DTM_Multislotclass9	BOOLEAN	51.010−2 A.1/61	
pc_DTM_SingleSlotAllocation	BOOLEAN	51.010−2 A.1/62	
pc_EOTD_Assist	BOOLEAN	51.010−2 A.2/57	Support of MS assisted EOTD
pc_A_GPS_Assist	BOOLEAN	51.010−2 A.2/60	Support of MS assisted GPS
pc_A_GPS_Based	BOOLEAN	51.010−2 A.2/59	Support of MS based GPS
pc_Conv_GPS	BOOLEAN	51.010−2 A.1/65	Support of conventional GPS
pc_TypeGSMClass2	BOOLEAN	51.010−2 A.1/8	UE supports GSM power class 2
pc_TypeGSMClass3	BOOLEAN	51.010−2 A.1/9	UE supports GSM power class 3
pc_TypeGSMClass4	BOOLEAN	51.010−2 A.1/10	UE supports GSM power class 4
pc_TypeGSMClass5	BOOLEAN	51.010−2 A.1/11	UE supports GSM power class 5
pc_TypeGSM850Class2	BOOLEAN	51.010−2 A.1/125	UE supports GSM 850 power class 2
pc_TypeGSM850Class3	BOOLEAN	51.010−2 A.1/126	UE supports GSM 850 power class 3
pc_TypeGSM850Class4	BOOLEAN	51.010−2 A.1/127	UE supports GSM 850 power class 4
pc_TypeGSM850Class5	BOOLEAN	51.010−2 A.1/128	UE supports GSM 850 power class 5
pc_TypeDCSClass1	BOOLEAN	51.010−2 A.1/12	UE supports DCS power class 1
pc_TypeDCSClass2	BOOLEAN	51.010−2 A.1/13	UE supports DCS power class 2

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_TypeDCSClass3	BOOLEAN	51.010−2 A.1/14	UE supports DCS power class 3
pc_TypePCSClass1	BOOLEAN	51.010−2 A.1/19	UE supports PCS power class 1
pc_TypePCSClass2	BOOLEAN	51.010−2 A.1/20	UE supports PCS power class 2
pc_TypePCSClass3	BOOLEAN	51.010−2 A.1/21	UE supports PCS power class 3
pc_GERANFeaturePackage1	BOOLEAN	PICS	Used in Classmark 3
pc_GERANFeaturePackage2	BOOLEAN	PICS	Used in Classmark 3
pc_GERANIuMode	BOOLEAN	PICS	Used in Classmark3
px_HighMultiSlotCap	B2	PIXIT	Used in Classmark 3
px_ExtDTM_MultiSlotClass	B2	PIXIT	Used in Classmark 3
px_ExtDTM_EGPRS_MultiSlotClass	B2	PIXIT	Used in Classmark 3
px_8PSKPowerProfile	B2	PIXIT	Used in Classmark 3
px_GMSKPowerProfile	B2	PIXIT	Used in Classmark 3
pc_SS_Phase2Supp	B1	Table A.20/64	Set to ’1’B if Supplementary Service Phase 2 is supported, set to ’0’B if not supported. Default value: ’1’B (The MS supports SS phase 2)
pc_AltSpeechFax_TS61	BOOLEAN	PICS, Table A.10/2	Teleservice 61: alternate speech/fax supported
pc_Async31kHz_14400	BOOLEAN	PICS, Table A.4/2	Asynchronous 3.1 kHz audio with FNUR 14400bit/s general bearer service supported
pc_Async31kHz_19200	BOOLEAN	PICS, Table A.4/3	Asynchronous 3.1 kHz audio with FNUR 19200 bit/s general bearer service supported
pc_Async31kHz_28800	BOOLEAN	PICS, Table A.4/4	Asynchronous 3.1 kHz audio with FNUR 28800 bit/s general bearer service supported
pc_Async31kHz_9600	BOOLEAN	PICS, Table A.4/1	Asynchronous 3.1 kHz audio with FNUR 9600 bit/s general bearer service supported
pc_Async31kHz_AutoBanding1	BOOLEAN	PICS, Table A.4/5	Asynchronous 3.1 kHz audio with modem AutoBauding 1 general bearer service supported
pc_AsyncFTM_56000	BOOLEAN	PICS, Table A.4/20	Asynchronous Frame Tunneling Mode (FTM) 56000bit/s general bearer service supported
pc_AsyncFTM_64000	BOOLEAN	PICS, Table A.4/21	Asynchronous Frame Tunneling Mode (FTM) 64000bit/s general bearer service supported

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_AsyncPIAFS_32000	BOOLEAN	PICS, Table A.4/18	Asynchronous PIAFS 32000bit/s general bearer service supported
pc_AsyncPIAFS_64000	BOOLEAN	PICS, Table A.4/19	Asynchronous PIAFS 64000bit/s general bearer service supported
pc_AsyncV110_14400	BOOLEAN	PICS, Table A.4/7	Asynchronous V110 UDI 14400bit/s general bearer service supported
pc_AsyncV110_19200	BOOLEAN	PICS, Table A.4/8	Asynchronous V110 UDI 19200bit/s general bearer service supported
pc_AsyncV110_28800	BOOLEAN	PICS, Table A.4/9	Asynchronous V110 UDI 28800bit/s general bearer service supported
pc_AsyncV110_38400	BOOLEAN	PICS, Table A.4/10	Asynchronous V110 UDI 38400bit/s general bearer service supported
pc_AsyncV110_9600	BOOLEAN	PICS, Table A.4/6	Asynchronous V110 UDI 9600bit/s general bearer service supported
pc_AsyncV120_14400	BOOLEAN	PICS, Table A.4/12	Asynchronous V120 14400bit/s general bearer service supported
pc_AsyncV120_19200	BOOLEAN	PICS, Table A.4/13	Asynchronous V120 19200bit/s general bearer service supported
pc_AsyncV120_28800	BOOLEAN	PICS, Table A.4/14	Asynchronous V120 28800bit/s general bearer service supported
pc_AsyncV120_38400	BOOLEAN	PICS, Table A.4/15	Asynchronous V120 38400bit/s general bearer service supported
pc_AsyncV120_48000	BOOLEAN	PICS, Table A.4/16	Asynchronous V120 48000bit/s general bearer service supported
pc_AsyncV120_56000	BOOLEAN	PICS, Table A.4/17	Asynchronous V120 56000bit/s general bearer service supported
pc_AsyncV120_9600	BOOLEAN	PICS, Table A.4/11	Asynchronous V120 9600bit/s general bearer service supported
pc_DetachOnPwrDn	BOOLEAN	PICS, Table A.20/33	detach on power down supported
pc_DetachOnUSIM_Rmv	BOOLEAN	PICS, Table A.20/34	detach on USIM remove supported
pc_EmergSpeech	BOOLEAN	PICS, Table A.2/2	Emergency speech call teleservice supported
pc_MS_ClsmkCM3	B1	PICS Table A.20/52	default Classmark 3 Indicator. Default value: '0'B(The MS does not support any options that are indicated in CM3)

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_MS_ClsmkCMSP	B1	PICS Table A.20/55	default CM Service Prompt Support. Default value: '0'B ("Network initiated MO CM connection request" not supported.)
pc_MS_ClsmkFreqCap	B1	PICS Table A.20/53	default Frequency Capability. Default value: '0'B (The MS does not support the E−GSM or R−GSM band)
pc_MS_ClsmkLCSVA_Cap	B1	PICS Table A.20/54	default LCSVA Capabilities Support. Default value: '0'B(LCS value added location request notification capability not supported)
pc_MS_ClsmkPS_Cap	B1	PICS Table A.20/56	default Pseudo Synchronisation Capability. Default value: '0'B(PS capability not present)
pc_MS_ClsmkSM_Cap	B1	PICS Table A.20/57	default Short Message Capability. Default value: '1'B(Mobile station supports mobile terminated point to point SMS)
pc_MS_ClsmkSoLSA	B1	PICS Table A.20/58	default SoLSA Support. Default value: '0'B (The ME does not support SoLSA.)
pc_MS_ClsmkUCS2	B1	PICS Table A.20/59	default UCS2 Encoding Support. Default value: '0'B (the ME has a preference for the default alphabet (defined in 3GPP TS 23.038 [8b]) over UCS2)
pc_MS_ClsmkVBS	B1	PICS Table A.20/60	default VBS Capability. Default value: '0'B (no VBS capability or no notifications wanted)
pc_MS_ClsmkVGCS	B1	PICS Table A.20/61	default VGCS Capability. Default value: '0'B (no VGCS capability or no notifications wanted)
pc_Speech	BOOLEAN	PICS, Table A.2/1	Speech (narrow band speech AMR) teleservice supported
pc_Sync31kHzA_14400	BOOLEAN	PICS, Table A.5/2	Synchronous 3.1kHz Audio 14400bit/s general bearer service supported
pc_Sync31kHzA_19200	BOOLEAN	PICS, Table A.5/3	Synchronous 3.1kHz Audio 19200bit/s general bearer service supported
pc_Sync31kHzA_28800	BOOLEAN	PICS, Table A.5/4	Synchronous 3.1kHz Audio 28800bit/s general bearer service supported

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_Sync31kHzA_9600	BOOLEAN	PICS, Table A.5/1	Synchronous 3.1kHz Audio 9600bit/s general bearer service supported
pc_SyncBTM_56000	BOOLEAN	PICS, Table A.5/22	Synchronous Bit TransparentMode (BTM) 56000bit/s general bearer service supported
pc_SyncBTM_64000	BOOLEAN	PICS, Table A.5/23	Synchronous Bit TransparentMode (BTM) 64000bit/s general bearer service supported
pc_SyncMmediaCall_28800	BOOLEAN	PICS, Table A.5/24	Synchronous Multimedia Call 28000bit/s general bearer service supported
pc_SyncMmediaCall_32000	BOOLEAN	PICS, Table A.5/25	Synchronous Multimedia Call 32000bit/s general bearer service supported
pc_SyncMmediaCall_33600	BOOLEAN	PICS, Table A.5/26	Synchronous Multimedia Call 33600bit/s general bearer service supported
pc_SyncMmediaCall_56000	BOOLEAN	PICS, Table A.5/27	Synchronous Multimedia Call 56000bit/s general bearer service supported
pc_SyncMmediaCall_64000	BOOLEAN	PICS, Table A.5/28	Synchronous Multimedia Call 64000bit/s general bearer service supported
pc_SyncV110_28800	BOOLEAN	PICS, Table A.5/5	Synchronous V110 28800bit/s general bearer service supported
pc_SyncV110_48000	BOOLEAN	PICS, Table A.5/6	Synchronous V110 48000bit/s general bearer service supported
pc_SyncV110_56000	BOOLEAN	PICS, Table A.5/7	Synchronous V110 56000bit/s general bearer service supported
pc_SyncV120_14400	BOOLEAN	PICS, Table A.5/16	Synchronous V120 14400bit/s general bearer service supported
pc_SyncV120_19200	BOOLEAN	PICS, Table A.5/17	Synchronous V120 19200bit/s general bearer service supported
pc_SyncV120_28800	BOOLEAN	PICS, Table A.5/18	Synchronous V120 28800bit/s general bearer service supported
pc_SyncV120_38400	BOOLEAN	PICS, Table A.5/19	Synchronous V120 38400bit/s general bearer service supported
pc_SyncV120_48000	BOOLEAN	PICS, Table A.5/20	Synchronous V120 48000bit/s general bearer service supported
pc_SyncV120_56000	BOOLEAN	PICS, Table A.5/21	Synchronous V120 56000bit/s general bearer service supported
pc_SyncV120_9600	BOOLEAN	PICS, Table A.5/15	Synchronous V120 9600bit/s general bearer service supported

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_SyncX31_14400	BOOLEAN	PICS, Table A.5/9	Synchronous X.31 flag stuffing UDI 14400bit/s general bearer service supported
pc_SyncX31_19200	BOOLEAN	PICS, Table A.5/10	Synchronous X.31 flag stuffing UDI 19200bit/s general bearer service supported
pc_SyncX31_28800	BOOLEAN	PICS, Table A.5/11	Synchronous X.31 flag stuffing UDI 28800bit/s general bearer service supported
pc_SyncX31_38400	BOOLEAN	PICS, Table A.5/12	Synchronous X.31 flag stuffing UDI 38400bit/s general bearer service supported
pc_SyncX31_48000	BOOLEAN	PICS, Table A.5/13	Synchronous X.31 flag stuffing UDI 48000bit/s general bearer service supported
pc_SyncX31_56000	BOOLEAN	PICS, Table A.5/14	Synchronous X.31 flag stuffing UDI 56000bit/s general bearer service supported
pc_SyncX31_9600	BOOLEAN	PICS, Table A.5/8	Synchronous X.31 flag stuffing UDI 9600bit/s general bearer service supported
px_BcapDataCompression	B1	PIXIT Table B.2	Data compression supported(used in the Bearer Capability). Default value: ’0’B
px_BcapFNUR	B5	PIXIT Table B.2	Fixed Network User rate supported: ’00001’B: FNUR 9.6 kbit/s ’00010’B: FNUR 14.4 kbit/s ’00011’B: FNUR 19.2 kbit/s ’00100’B: FNUR 28.8 kbit/s ’00101’B: FNUR 38.4 kbit/s ’00110’B: FNUR 48.0 kbit/s ’00111’B: FNUR 56.0 kbit/s ’01000’B: FNUR 64.0 kbit/s ’01001’B: FNUR 33.6 kbit/s ’01010’B: FNUR 32.0 kbit/s. Default value: ’00001’B
px_BcapITC	ITC_Int	PIXIT Table B.2	Information transfer capability supported (used for the generation of the Bearer Capability) 0 − UDI 1 − RDI 2 − 31 kHz Audio 3 − Other. Default value: 2
px_BcapModemType	B5	PIXIT Table B.2	Modem type supported(used in the Bearer Capability). Default value: ’00110’B

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_BcapNumberDataBits	B1	PIXIT Table B.2	Number of data bits supported(used in the Bearer Capability). Default value: ’1’B
px_BcapNumberStopBits	B1	PIXIT Table B.2	Number of Stops bits supported(used in the Bearer Capability). Default value: ’1’B
px_BcapOtherModemType	B2	PIXIT Table B.2	Other modem type supported (used in the Bearer Capability). Default value: ’10’B
px_BcapParity	B3	PIXIT Table B.2	Parity supported(used in the Bearer Capability). Default value: ’011’B
px_BcapSACP	B3	PIXIT Table B.2	Signalling access protocol supported (used in the Bearer Capability). Default value: ’001’B
px_BcapSyncAsync	B1	PIXIT Table B.2	Synchronous ’0’B or Asynchronous ’1’B mode supported by IUT. Default value: ’1’B
px_BcapUeFlowControl	FlowControl	PIXIT Table B.2	UE flow control. 0−outband, 1−inband, 2−no flow control. 3− X.25 4− X.75 default : 0, outband flow control. Default value: 0
px_CC_CallDiallingDigits	IA5String	PIXIT Table B.2	Dialling digits used to initiate a CC MO call (used with the AT dial D command). Default value: "0123456902"
px_CC_Serv	Services	PIXIT Table B.2	Service selected for Mobile Originated calls and Mobile Terminated calls. The possible values are ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Fascimile"). Default value: "31kHz"
pc_UE_PositioningBasedOTDOA_Sup	BOOLEAN		UE positioning capability: the Based OTDOA is supporting by UE Default value TRUE
pc_UE_PositioningGPS_TimingOfCellFramesSup	BOOLEAN		UE positioning capability: the UE supports the GPS timing of cell frames Default value TRUE
pc_UE_PositioningIPDL_Sup	BOOLEAN		UE positioning capability: support for IPDL Default value TRUE

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_UE_PositioningNetworkAssistedGPS_Sup	NetworkAssistedGPS_Supported		UE positioning capability: supports the network assisted GPS. Default value: networkBased
pc_UE_PositioningStandaloneLocMethodsSup	BOOLEAN		UE positioning capability: the standalone location method is supporting by UE Default value TRUE
pc_SupportOfMulticarrier	BOOLEAN		Part of MultiRAT_Capability. Default value: TRUE
pc_SupportOfGSM	BOOLEAN		GSM supported by UE Default value: TRUE
pc_SupportOfPCPCH	BOOLEAN	PICS, Table A.18b/7	Downlink support. Part of UL_PhysChCapabilityFDD.
px_MaxNoDPDCH_BitsTransmitted	MaxNoDPDCH_BitsTransmitted	PIXIT, Table B.5	Part of UL_PhysChCapabilityFDD. Default value: b57600
pc_SupportOfPDSCH	BOOLEAN	PICS, Table A.18b/4	Downlink support. Part of DL_PhysChCapabilityFDD.
pc_SupportForSF_512	BOOLEAN	PICS, Table A.18b/3	Downlink support. Part of DL_PhysChCapabilityFDD.
px_MaxNoPhysChBitsReceived	MaxNoPhysChBitsReceived	PIXIT, Table B.5	Part of DL_PhysChCapabilityFDD. Default value: b76800
px_MaxNoDPCH_PDSCH_Codes	INTEGER	PIXIT, Table B.5	Part of DL_PhysChCapabilityFDD. INTEGER (1..8). Default value: 8
px_UE_PowerClass	UE_PowerClass	PIXIT, Table B.5	UE_PowerClass value. Default value: 1
px_UL_MaxTTI_TB	MaxTransportBlocksUL	PIXIT, Table B.5	Maximum total number of transport blocks transmitted within TTIs that start at the same time. Default value: tb512
px_UL_MaxTF	MaxNumberOfTF	PIXIT, Table B.5	Maximum number of TF for uplink. Default value: tf1024
px_UL_MaxTFS	MaxNumberOfTFC_UL	PIXIT, Table B.5	Maximum number of TFC in the TFCS for uplink. Default value: tfc1024
px_UL_MaxTrCHs	MaxSimultaneousTransChsUL	PIXIT, Table B.5	Maximum number of simultaneous transport channels for uplink. Default value: e32
px_UL_MaxCC_TB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all convolutionally coded transport blocks being transmitted at an arbitrary time instant. Default value: b163840
px_UL_MaxTB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all transport blocks being transmitted at an arbitrary time instant. Default value: b163840

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_DL_MaxTF	MaxNumberOfTF	PIXIT, Table B.5	Maximum number of TF for downlink Default value: tf1024
px_DL_MaxTFS	MaxNumberOfTFC_DL	PIXIT, Table B.5	Maximum number of TFC in the TFCS for downlink Default value: tfc1024
px_DL_MaxCCTrCH	MaxSimultaneousCCTrCH_Count	PIXIT, Table B.5	Maximum number of Simultaneous CCTrCH for downlink Default value: 8
px_DL_MaxTTI_TB	MaxTransportBlocksDL	PIXIT, Table B.5	Maximum total number of transport blocks received within TTIs that end within the same 10 ms interval. Default value: tb512
px_DL_MaxTrCHs	MaxSimultaneousTransChsDL	PIXIT, Table B.5	Maximum number of simultaneous transport channels for downlink. Default value: e32
px_DL_MaxCC_TB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all convolutionally coded transport blocks being received at an arbitrary time instant. Default value: b163840
px_DL_MaxTB_Bits	MaxNoBits	PIXIT, Table B.5	Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant. Default value: b163840
px_MaxAM_EntityNumberRLC_Cap	MaximumAM_EntityNumberRLC_Cap	PIXIT, Table B.5	Maximum AM Entity Number for RLC. Default value: am30
px_MaxRLC_WindowSize	MaximumRLC_WindowSize	PIXIT, Table B.5	Maximum RLC window size. Default value: mws4095
px_TotalRLC_AM_BufferSize	TotalRLC_AM_BufferSize	PIXIT, Table B.5	Total RLC AM buffer size. Default value: kb1000
px_CipherAlg	B3	PIXIT B.8	Cipher algorithm. Default value: (A5/1) ’000’B
px_MS_ClsmkESIND	B1	PICS Table B.1	default Early Sending Indication. Default value: ’0’B("Controlled Early Classmark Sending" option is not implemented in the MS")
px_MS_ClsmkRevLvl	B2	PIXIT Table B.1	default Revision Level. Default value: ’10’B
px_MS_ClsmkRF_PwrCap	B3	PIXIT Table B.1	default RF Power Capability. Default value: ’000’B
pc_Streaming	BOOLEAN	PICS, Table A.6/2	Streaming supported
pc_AutomaticAttachSwitchON	BOOLEAN	PICS, Table A	Paramter is TRUE if UE supports automatic triggering of GMM Attach procedure when switched on

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
pc_Background	BOOLEAN	PICS, Table A.6/4	Background QoS/traffic class supported
pc_Conversational	BOOLEAN	PICS, Table A.6/1	Converational supported
pc_CS	BOOLEAN	PICS, Table A.3/1	Circuit Switched
pc_Interactive	BOOLEAN	PICS, Table A.6/3	Interactive QoS/traffic class supported
pc_MS_ClsmkA5_1	B1	PICS Table A.20/44	default Algorithm A5/1 supported. Default value: ’0’B(i.e. A5/1 is supported)
pc_MS_ClsmkA5_2	B1	PICS Table A.20/46	default Algorithm A5/2 supported. Default value: ’0’B (encryption algorithm A5/2 not available)
pc_MS_ClsmkA5_3	B1	PICS Table A.20/47	default Algorithm A5/3 supported. Default value: ’0’B(encryption algorithm A5/3 not available)
pc_MS_ClsmkA5_4	B1	PICS Table A.20/48	default Algorithm A5/3 supported. Default value: ’0’B(encryption algorithm A5/4 not available)
pc_MS_ClsmkA5_5	B1	PICS Table A.20/49	default Algorithm A5/3 supported. Default value: ’0’B(encryption algorithm A5/5 not available)
pc_MS_ClsmkA5_6	B1	PICS Table A.20/50	default Algorithm A5/3 supported. Default value: ’0’B(encryption algorithm A5/6 not available)
pc_MS_ClsmkA5_7	B1	PICS Table A.20/51	default Algorithm A5/7 supported. Default value: ’0’B(encryption algorithm A5/7 not available)
pc_PS	BOOLEAN	PICS, Table A.3/2	Packet Switched
pc_SwitchOnOff	BOOLEAN	PICS, Table A.20/35	switch on/off supported
pc_UEA1_Supp	BOOLEAN	PICS, Table A.20/27	Support of UMTS encryption algorithm UEA1
pc_UMTS_GSM	BOOLEAN	PICS, Table A.3	To check if the UE supports both UMTS as well as GSM. If the variable is set as TRUE, means that both UMTS and GSM is supported. If the variable is set as FALSE, means that UE supports only UMTS
pc_USIM_Rmv	BOOLEAN	PICS, Table A.20/36	USIM removable without power down supported

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_AuthAMF	BITSTRING	PIXIT Table B.1	Authentication Management Field (16 bits). The value shall be different from '1111 1111 1111 111'B (AMFresynch). Default value: no default value can be proposed
px_AuthK	BITSTRING	PIXIT Table B.1	Authentication Key (128 bits). Default value: '00000000000000000100000 01000000011000001000000 00101000001100000011100 00010000000100100001010 00000101100001100000011 01000001110000011111'B
px_AuthN	INTEGER	PIXIT Table B.1	value of n to initialize tcv_AuthN (length of extended response) min 31, max 127 (TS 34.108 cl. 8.1.2). Default value: 127
px_AuthRAND	BITSTRING	PIXIT Table B.1	Random Challenge (128 bits). Default value: '010101..01'B The value shall not be repeatable with 3 bits i.e. something like '001001001001...001'B not allowed.
px_CipheringOnOff	BOOLEAN	PIXIT Table B.1	Security mode − TRUE if ciphering is applicable. Default value: TRUE
px_CN_DomainTested	CN_DomainIdentity	PIXIT Table B.1	CN domain to be tested. This parameter is used in test cases that handle both PS and CS domains. Default value: cs_domain
px_FDD_OperationBand	INTEGER	PIXIT Table B.1	The operation band under test, as defined in 34.108 clause 5.1.1. Value 1 means Band 1, 2 means Band 2, 3 means Band 3, 6 means Band 6. Rest of the values are not defined. This pixit shall be set in synchronisation with the values that are being set to 6 other Pixits viz: px_UARFCN_D_High,px_UARFCN_U_High, px_UARFCN_D_Mid,px_UARFCN_L_Mid, px_UARFCN_D_Low, px_UARFCN_U_Low
px_FRESH	Fresh	PIXIT Table B.1	FRESH. Default value: no default value can be proposed

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_IMSI_Def	HEXSTRING	PIXIT Table B.1	default IMSI. Default value: '001010123456063'H
px_PriScrmCode	PrimaryScramblingCode	PIXIT Table B.1	Primary scrambling code. Default value: 100
px_PTMSI_Def	OCTETSTRING	PIXIT Table B.1	default PTMSI . Default value: '12345678'O
px_PTMSI_SigDef	OCTETSTRING	PIXIT Table B.1	default PTMSI signature (3 octets, 3GPP 24.008 / 10.5.5.8). Default value: 'AB1234'O
px_RAT	RatType	PIXIT Table B.1	This parameter is used to specify which radio access technology is being used for the current test execution. Valid values: fdd and tdd. Default value: fdd
px_RRC_CS_ServTested	RRC_ServTested	PIXIT, Table B.5	CS service to be tested for RRC test cases. Default value: Speech
px_RRC_PS_ServTested	RRC_ServTested	PIXIT, Table B.5	PS service to be tested for RRC test cases. Default value: Speech
px_SRNC_Id	SRNC_Identity	PIXIT Table B.1	SRNC Id. Default value: '000000000001'B
px_SRNTI	S_RNTI	PIXIT Table B.1	S RNTI. Default value: '00000000000000000001'B
px_TCellA	Tcell	PIXIT Table B.1	TCell value for cell A. Default value: 0
px_TCellB	Tcell	PIXIT Table B.1	TCell value for cell B. Default value: 512
px_TCellC	Tcell	PIXIT Table B.1	TCell value for cell C. Default value: 1536
px_TCellD	Tcell	PIXIT Table B.1	TCell value for cell D. Default value: 321
px_TCellE	Tcell	PIXIT Table B.1	TCell value for cell E. Default value: 833
px_TCellF	Tcell	PIXIT Table B.1	TCell value for cell F. Default value: 6577
px_TCellG	Tcell	PIXIT Table B.1	TCell value for cell G. Default value: 7253
px_TCellH	Tcell	PIXIT Table B.1	TCell value for cell H. Default value: 4351
px_TMSI_Def	OCTETSTRING	PIXIT Table B.1	default TMSI. Default value: '12345678'O
px_UARFCN_D_High	INTEGER	PIXIT Table B.1	High Range downlink UARFCN value. Default value: 10837
px_UARFCN_D_Low	INTEGER		Low Range downlink UARFCN value Default value: 10563

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_UARFCN_D_Mid	INTEGER	PIXIT Table B.1	Mid Range downlink UARFCN value Default value: 10700
px_UARFCN_U_High	INTEGER	PIXIT Table B.1	High Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9887
px_UARFCN_U_Low	INTEGER		Low Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9613
px_UARFCN_U_Mid	INTEGER	PIXIT Table B.1	Mid Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9750
px_UE_OpModeDef	UE_OperationMode	PIXIT Table B.1	Default UE operation mode (either opModeA or opModeC). (For most UEs thiscorresponds class−A or class−C, and can not be changed by the user). Default value: opModeA
px_UL_ScramblingCode	UL_ScramblingCode	PIXIT Table B.2	UL scrambling code value to be used by UE. Default value : 0
px_UTRAN_GERAN	UTRAN_GERAN	PIXIT Table B.1	This parameter is used to specify for which region the system information blocks are broadcast in the test execution. Valid values: "UTRAN only" and "UTRAN and GERAN". Default value: "UTRAN and GERAN"
Detailed Comments :			

Test Case Selection Expression Definitions		
Expression Name	**Selection Expression**	**Comments**
GERAN_C286	pc_FDD AND pc_RAB_A_18c_15 AND ((pc_GSM_FR OR pc_G_HSCSD) AND pc_GSM_14_4) OR (pc_RAB_A_18c_16 AND (pc_G_HSCSD OR pc_GSM_FR)) OR (pc_RAB_A_18c_17 AND pc_GSM_Data) AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND)	C286
GERAN_Band_SpeechAllBands	pc_FDD AND pc_RAB_A_18c_4 AND pc_GSM_FR AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND OR pc_GSM_700_BAND OR pc_GSM_850_BAND)	C289
GERAN_Band_SpeechAnyRate	pc_FDD AND pc_RAB_A_18c_4 AND (pc_GSM_FR OR pc_GSM_HR OR pc_GSM_EFR OR pc_GSM_AMR) AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND)	C285
GERAN_Band_SpeechFR	pc_FDD AND pc_RAB_A_18c_4 AND pc_GSM_FR AND (pc_P_GSM_900_BAND OR pc_E_GSM_900_BAND OR pc_DCS_1800_BAND OR pc_GSM_450_BAND OR pc_GSM_480_BAND)	C288
Detailed Comments :		

Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_S_RNTI_2	INTEGER	1	The value of S_RNTI 2 to be used in IR_G test cases
tsc_ECMSHigh	B1	'1'B	Beware: this is a L | H value
tsc_3GECMSHigh	B1	'1'B	Beware: this is a L | H value
tsc_ChPwrLvl_60dBm	TX_Power	53	113 − (Mod) (−60) dBm = 53 dBuVemf
tsc_ChPwrLvl_77dBm	TX_Power	36	113 − (Mod) (−77) dBm = 36 dBuVemf
tsc_G_TimeSlot	B3	'011'B	time slot GSM 04.08, 10.5.2.5 BITSTRING [3] suitable for Single slot operation, Value Arbitrartily taken @sic RASH T1−031723 sic@
tsc_Sf64	SpreadingFactor	sf64	
tsc_Sfd128_8	SF512_AndPilot	sfd128: pb8	
tsc_GSM_PCS1900Band_Test	INTEGER	8	indicates GSM PCS 1900 Band is under test
tsc_GSM_DCS1800Band_Test	INTEGER	7	indicates GSM DCS 1800 Band is under test
tsc_GSM_E_900Band_Test	INTEGER	6	indicates GSM E 900 Band is under test
tsc_GSM_P_900Band_Test	INTEGER	5	indicates GSM P 900 Band is under test
tsc_GSM_850Band_Test	INTEGER	4	indicates GSM 850 Band is under test
tsc_GSM_700Band_Test	INTEGER	3	indicates GSM 700 Band is under test
tsc_GSM_480Band_Test	INTEGER	2	indicates GSM 480 Band is under test
tsc_GSM_450Band_Test	INTEGER	1	indicates GSM 450 Band is under test
tsc_AGCH	G_LogicChType	3	GERAN AGCH channel type
tsc_BCCH	G_LogicChType	0	GERAN BCCH channel type
tsc_BasicPhyChCombType1	ChannelCombination	1	
tsc_BasicPhyChCombType10	ChannelCombination	10	
tsc_BasicPhyChCombType11	ChannelCombination	11	
tsc_BasicPhyChCombType13	ChannelCombination	13	
tsc_BasicPhyChCombType18	ChannelCombination	18	
tsc_BasicPhyChCombType19	ChannelCombination	19	
tsc_BasicPhyChCombType2	ChannelCombination	2	
tsc_BasicPhyChCombType20	ChannelCombination	20	
tsc_BasicPhyChCombType21	ChannelCombination	21	
tsc_BasicPhyChCombType5	ChannelCombination	5	
tsc_BasicPhyChCombType8	ChannelCombination	8	

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_BasicPhyChCombType9	ChannelCombination	9	
tsc_CS1	INTEGER	1	CS−1 coding for GPRS
tsc_CipheringModeCommand_Msg_Type	O1	'35'O	@sic T1s040347 sic@
tsc_CipheringModeComplete_Msg_Type	O1	'32'O	@sic T1s040347 sic@
tsc_GSM_CellA	CellId	1	
tsc_GSM_CellB	CellId	2	
tsc_GSM_CellC	CellId	3	
tsc_Gen_SkipIndicator	B4	'0000'B	Skip Indicator field consists of latter half byte after Protocol discriminator field. Its value is '0000'B in all the messages.
tsc_ImmediateAssignmentMsg_Type	O1	'3F'O	Message type for Immediate assignment
tsc_LocationUpdatingAccept_Msg_Type	B8	'00000010'B	'02'H Message type for Location Update Accept
tsc_MM_Msgs_Proto_Disc	B4	'0101'B	Protocol discriminator for all the MM messages for non−GPRS is '0101'B
tsc_NormalPaging	INTEGER	0	
tsc_PACCH_F	G_LogicChType	19	GERAN PACCH/F channel type
tsc_PRACH	G_LogicChType	15	GERAN PRACH channel type
tsc_PhyCh0	PhysicalChId	0	this physical channel identity is always used for channel combination 4 or 5.
tsc_PhyCh1	PhysicalChId	1	
tsc_RR_HopOff	B1	'0'B	hopping off
tsc_RR_Msgs_Proto_Disc	B4	'0110'B	Protocol discriminator for all the RR messages is '0110'B.
tsc_RR_PagingNormal	B2	'00'B	Normal paging type
tsc_SAPI_0	INTEGER	0	
tsc_SignallingOnly	B8	'00000000'B	
tsc_SysInfoType1	SysInfoType	25	
tsc_SysInfoType13	SysInfoType	0	
tsc_SysInfoType2	SysInfoType	26	
tsc_SysInfoType2bis	SysInfoType	2	
tsc_SysInfoType2quater	SysInfoType	7	
tsc_SysInfoType3	SysInfoType	27	
tsc_SysInfoType4	SysInfoType	28	
tsc_SysInfoType5	SysInfoType	29	
tsc_SysInfoType6	SysInfoType	30	
tsc_TN0	TN	'000'B	
tsc_LR_Category	PSI_Category	2	2−−low repetition category.
tsc_HR_Category	PSI_Category	1	1−−high repetition category
tsc_Position0	PositionInList	0	
tsc_Position1	PositionInList	1	

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_Position2	PositionInList	2	
tsc_Position3	PositionInList	3	
tsc_RlcMacEntity1	INTEGER	1	
tsc_USF1	B3	'001'B	
tsc_CCCHConf_Combined	B3	'001'B	
tsc_ChPwrLvl_75dBm	TX_Power	38	113 − (Mod) (−75) dBm = 38 dBuVemf
tsc_DefUSF	B3	'000'B	
tsc_downlinkTFI	B5	'00001'B	
tsc_G_HSN	INTEGER	2	Hopping sequence number value range: 0 − 63. 0=cyclic hopping. Refer to GSM 11.10 for the value to be used in a particular test case
tsc_G_MAIO	INTEGER	5	mobile allocation index offset, value range: 0 − 63
tsc_G_TCH_H_SubA	B1	'0'B	TDMA offset of half rate subchannel
tsc_G_TrchId1	PhysicalChId	2	Now use Phy Ch 2, to avoid conflict with GPRS channel
tsc_G_TS0	B3	'000'B	time slot 0
tsc_LLEEntity	INTEGER	1	
tsc_PAGCH_LogicalType	INTEGER	17	
tsc_PBCCH_LogicalType	INTEGER	14	
tsc_RlcMode_Ack	B1	'0'B	
tsc_TLLI_Initial	O4	'FFFFFFFF'O	
tsc_uplinkTFI	B5	'00000'B	
tsc_PPCH_LogicalType	INTEGER	16	
tsc_LLC_NoCiph	B1	'0'B	
tsc_LLC_PM	B1	'1'B	
tsc_LLCSapi_GMM	INTEGER	1	
tsc_RFLContentsLen_3	B4	'0011'B	
tsc_RFLContentsLen_6	B4	'0110'B	
tsc_MALen_3	B6	'000011'B	
tsc_MALen_5	B6	'000101'B	
tsc_MALen_7	B6	'000111'B	
tsc_StartFreq_5	B10	'0000000101'B	5
tsc_StartFreq_90	B10	'0001011010'B	Used in PSI3bis Instance 1
tsc_StartFreq_100	B10	'0001100100'B	Used in PSI3Bis instance 2
tsc_StartFreq_122	B10	'0001111010'B	Used in PSI3bis Instance 3
tsc_StartFreq_137	B10	'0010001001'B	137
tsc_StartFreq_177	B10	'0010110001'B	177
tsc_StartFreq_207	B10	'0011001111'B	207
tsc_StartFreq_217	B10	'0011011001'B	217
tsc_StartFreq_437	B10	'0110110101'B	437
tsc_StartFreq_467	B10	'0111010011'B	467
tsc_StartFreq_477	B10	'0111011101'B	477
tsc_StartFreq_502	B10	'0111110110'B	502

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_StartFreq_515	B10	'1000000011'B	515
tsc_StartFreq_655	B10	'1010001111'B	655
tsc_StartFreq_700	B10	'1010111100'B	700
tsc_StartFreq_780	B10	'1100001100'B	780
tsc_StartFreq_875	B10	'1101101011'B	875
tsc_FreqDiffLen_2bits	B3	'001'B	2 bits
tsc_FreqDiffLen_3bits	B3	'010'B	3 bits
tsc_FreqDiffLen_4bits	B3	'011'B	4 bits
tsc_FreqDiffLen_5bits	B3	'100'B	5 bits
tsc_FreqDiffLen_7bits	B3	'110'B	
tsc_FreqDiffLen_8bits	B3	'111'B	8 bits
tsc_FreqDiff_2	BITSTRING	'10'B	diff 2
tsc_FreqDiff_5	BITSTRING	'101'B	Diff 5
tsc_FreqDiff_10	BITSTRING	'1010'B	Diff 10
tsc_FreqDiff_20	BITSTRING	'10100'B	Diff 20
tsc_FreqDiff_30	BITSTRING	'11110'B	Diff 30
tsc_FreqDiff_75	BITSTRING	'1001011'B	Diff 75
tsc_FreqDiff_80	BITSTRING	'1010000'B	diff 80
tsc_FreqDiff_85	BITSTRING	'1010101'B	diff 85
tsc_FreqDiff_155	BITSTRING	'10011011'B	diff 155
tsc_FreqDiff_170	BITSTRING	'10101010'B	diff 170
tsc_PSI2_INST2_RFL_Contents_GSM	OCTETSTRING	'8C0528D9E630'O	
tsc_PSI2_INST2_RFL_Contents_GSM700	OCTETSTRING	'8CDFA8D96650'O	
tsc_PSI2_INST2_RFL_Contents_GSM850	OCTETSTRING	'8C44A8D9E630'O	
tsc_PSI2_INST2_RFL_Contents_DCSPCS	OCTETSTRING	'8904053D8280'O	
tsc_PSI2_INST3_RFL_Contents_GSM	OCTETSTRING	'8C0A1ED94B58'O	
tsc_PSI2_INST3_RFL_Contents_DCSPCS	OCTETSTRING	'892C0A3B053B761428'O	
tsc_PSI2_INST3_RFL_Contents_GSM700	OCTETSTRING	'8CE49ED94B58'O	
tsc_PSI2_INST3_RFL_Contents_GSM850	OCTETSTRING	'8C499ED94B58'O	
tsc_PSI2_MABitmap_GSM	BITSTRING	'001111'B	
tsc_PSI2_MABitmap2_DCSPCS	BITSTRING	'10101010'B	
tsc_PSI2_MABitmap3_DCSPCS	BITSTRING	'1111'B	
tsc_G_TMSI_Def	OCTETSTRING	'34567812'O	different from the TMSI used in the UTRAN cell
tsc_AttenuationCellOFF	INTEGER	123	Value of attenuator to be used when setting a Cell OFF (3GPP 34.108 / Table 6.1.3)
tsc_Bcap14400	B5	'00010'B	FNUR 14.4 kbit/s
tsc_Bcap19200	B5	'00011'B	FNUR 19.2 kbit/s

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_Bcap28800	B5	’00100’B	FNUR 28.8 kbit/s
tsc_Bcap32000	B5	’01010’B	FNUR 32.0 kbit/s
tsc_Bcap33600	B5	’01001’B	FNUR 33.6 kbit/s
tsc_Bcap38400	B5	’00101’B	FNUR 38.4 kbit/s
tsc_Bcap48000	B5	’00110’B	FNUR 48.0 kbit/s
tsc_Bcap56000	B5	’00111’B	FNUR 56.0 kbit/s
tsc_Bcap64000	B5	’01000’B	FNUR 64.0 kbit/s
tsc_Bcap9600	B5	’00001’B	FNUR 9.6 kbit/s
tsc_BcapASync	B1	’1’B	Synchronous
tsc_BcapCE_NT	B2	’01’B	Connection element NT − used for the generation of the Bcap
tsc_BcapCE_T	B2	’00’B	Connection element Transparent − used for the generation of the Bcap
tsc_BcapDataB8	B1	’1’B	Number of data bits: 8 bits
tsc_BcapDataBitSpare	B1	’0’B	Number of data bits: spare (7 bits)
tsc_BcapFlowInband	FlowControl	1	1−inband
tsc_BcapFlowNoFlowCtrl	FlowControl	2	2−no flow control
tsc_BcapFlowNoX25	FlowControl	3	3−X25
tsc_BcapFlowNoX75	FlowControl	4	4−X75
tsc_BcapFlowOutband	FlowControl	0	0−outband
tsc_BcapITC_31kHz	B3	’010’B	ITC 3.1 kHz audio
tsc_BcapITC_Fax3	B3	’011’B	ITC facsimile group 3
tsc_BcapITC_Int31kHzA	ITC_Int	2	ITC : 3.1 kHzA (integer value)
tsc_BcapITC_IntRDI	ITC_Int	1	ITC : RDI (integer value)
tsc_BcapITC_IntUDI	ITC_Int	0	ITC : UDI (integer value)
tsc_BcapITC_Other	B3	’101’B	ITC: other ITC
tsc_BcapITC_UDI	B3	’001’B	ITC : UDI
tsc_BcapMT_Autobaud1	B5	’01000’B	Modem type : autobauding type 1
tsc_BcapMT_None	B5	’00000’B	Modem type : none
tsc_BcapMT_V32	B5	’00110’B	ModemType: V32
tsc_BcapOtherITC_RDI	B2	’00’B	Other ITC : RDI
tsc_BcapOtherITC_Spare	B2	’00’B	Other ITC : spare
tsc_BcapOtherMT_None	B2	’00’B	Other modem type: none
tsc_BcapOtherMT_V34	B2	’10’B	Other modem type: V34
tsc_BcapOtherRA_H223	B2	’01’B	Other rate adaptation: H.223&H.245
tsc_BcapOtherRA_PIAFS	B2	’10’B	Other rate adaptation: PIAFS
tsc_BcapOtherRA_Spare	B2	’00’B	Other rate adaptation: spare
tsc_BcapOtherRA_V120	B2	’00’B	Other rate adaptation: V120
tsc_BcapParityNone	B3	’011’B	parity: none
tsc_BcapRA_No	B2	’00’B	rate Adaptation: No rate adaptation

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_BcapRA_Other	B2	'11'B	rate Adaptation: Other rate adaptation
tsc_BcapRA_V110	B2	'01'B	rate adaptation : V.110
tsc_BcapRA_X31	B2	'10'B	rate adaptation : X.31 flag
tsc_BcapSACP_I440450	B3	'001'B	SACP I.440/I.450
tsc_BcapSACP_X32	B3	'110'B	SACP X.32
tsc_BcapStopBitSpare	B1	'0'B	Number of stops bits: spare
tsc_BcapSync	B1	'0'B	Asynchronous
tsc_BcapU2_CopNoFlct	B5	'01100'B	User info layer 2 protocol: No flow control
tsc_BcapU2_Iso6429	B5	'01000'B	User info layer 2 protocol: Inband flow control
tsc_BcapU2_X25	B5	'00110'B	User info layer 2 protocol: X.25
tsc_BcapU2_X75	B5	'01101'B	User info layer 2 protocol: X.75
tsc_DL_DCH2	INTEGER	7	identity for transport channel DCH2 (downlink), in AMR speech this transport channel is used for RAB subflow#2
tsc_DL_DCH3	INTEGER	8	identity for transport channel DCH4 (downlink), in AMR speech this transport channel is used for RAB subflow#3
tsc_DL_DPCH1_ChC_Speech	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_SFP_Speech	SF512_AndPilot	sfd128 : pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_SFP_Streaming	SF512_AndPilot	sfd32 : NULL	Spreading factor and pilot bits for tsc_DL_DPCH1 for a Streaming 57.6 kbps configuration
tsc_DL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (downlink)
tsc_DL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (downlink)
tsc_Sf32	SpreadingFactor	sf32	
tsc_Sfc64	SF512_AndCodeNumber	sf64: 63	
tsc_Sfd64	SF512_AndPilot	sfd64:NULL	
tsc_Srv31kHz	Services	"31kHz"	Service: 3.1kHz Audio
tsc_SrvAltSpeechFax	Services	"Alternate Speech/Facsimile"	TeleService: Alternate Speech/Fascimile (TS61)
tsc_SrvBTM	Services	"BTM"	Service: Bit Transfer Mode
tsc_SrvEmgCall	Services	"EmergencyCall"	Service: Emergency Call
tsc_SrvFTM	Services	"FTM"	Service: Frame Tunneling Mode
tsc_SrvMmediaCall	Services	"MmediaCall"	Service: Multimedia Call
tsc_SrvPIAFS	Services	"PIAFS"	Service: PIAFS
tsc_SrvTelephony	Services	"Telephony"	Service: Telephony

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_SrvV110	Services	"V110"	Service: V.110 UDI
tsc_SrvV120	Services	"V120"	Service: V.120
tsc_SrvX31	Services	"X31"	Service: X.31 flag stuffing UDI
tsc_UL_DCH3	INTEGER	3	identity for transport channel DCH3 (uplink), in AMR speech this transport channel is used for RAB subflow#3
tsc_UL_DPDCH_SF_Speech	SpreadingFactor	sf64	Channelization code for UL DPDCH for a speech configuration
tsc_UL_DPDCH_SF_Streaming	SpreadingFactor	sf16	Channelization code for UL DPDCH for a Streaming 57.6 kbps configuration
tsc_UL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (uplink)
tsc_UL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (uplink)
tsc_WaitDetach	INTEGER	2000	Wait for an RRC CONNECTION REQUEST message including a 'detach' cause.
maxLogCHperTrCH	INTEGER	15	This constant is from MCI ASP proposal, but there is no value for it in the proposal. value 8 is for temporary use
maxdlTrCH	INTEGER	16	
maxulTrCH	INTEGER	16	
tsc_AICH1	INTEGER	7	Physical channel identity for AICH channel associated with first PRACH
tsc_AICH1_ChC	ChannelisationCode256	3	Channelization code for tsc_AICH1
tsc_AICH2	INTEGER	12	Physical channel identity for AICH2 channel associated with second PRACH
tsc_AT_ResultOK	IA5String	"<CR><LF>OK<CR><LF>"	
tsc_AttOn	INTEGER	1	Attach flag value On
tsc_AttenuationServingCell	INTEGER	0	Value of attenuator to be used when setting a Serving Cell.
tsc_BCCH1	INTEGER	1	Logical channel identity for logical channel BCCH mapped on BCH
tsc_BCCH6	INTEGER	6	Logical channel identity for logical channel BCCH mapped on FACH
tsc_BCH1	INTEGER	11	Identity for transport channel BCH
tsc_CRNTI	C_RNTI	'0000000000000001'B	C RNTI. Default value: '0000 0000 0000 0001'B
tsc_CS_Domain	CN_DomainIdentity	cs_domain	

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_CellA	INTEGER	0	Identity of Cell A
tsc_CellB	INTEGER	1	Identity of Cell B
tsc_CellC	INTEGER	2	Identity of Cell C
tsc_CellD	INTEGER	3	Identity of Cell D
tsc_CellDedicated	INTEGER	−1	Identity of the dedicated cell.
tsc_CellE	INTEGER	4	Identity of Cell E
tsc_CellF	INTEGER	5	Identity of Cell F
tsc_CellG	INTEGER	6	Identity of Cell G
tsc_CellH	INTEGER	7	Identity of Cell H
tsc_CellIdCellA	BITSTRING	'00000000000000000000 0000000'B	
tsc_CellIdCellB	BITSTRING	'00000000000000000000 0000001'B	
tsc_CellIdCellC	BITSTRING	'00000000000000000000 0000010'B	
tsc_CellIdCellD	BITSTRING	'00000000000000000000 0000011'B	
tsc_CellIdCellE	BITSTRING	'00000000000000000000 0000100'B	
tsc_CellIdCellF	BITSTRING	'00000000000000000000 0000101'B	
tsc_CellIdCellG	BITSTRING	'00000000000000000000 0000110'B	
tsc_CellIdCellH	BITSTRING	'00000000000000000000 0000111'B	
tsc_DC_ControlPDU	DC_Field	'0'B	Value for D/C field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.1
tsc_DL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped on FACH (downlink)
tsc_DL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (downlink), used by signalling radio bearer 1
tsc_DL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (downlink), used by signalling radio bearer 2
tsc_DL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (downlink), used by signalling radio bearer 3
tsc_DL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (downlink), used by signalling radio bearer 4
tsc_DL_DCH1	INTEGER	6	identity for transport channel DCH1 (downlink), in AMR speech this transport channel is used for RAB subflow#1
tsc_DL_DCH5	INTEGER	10	identity for transport channel DCH5 (downlink), in most case this transport channel is used for signalling bearers.

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_DL_DPCH1	INTEGER	26	physical channel identity for DPCH1(downlink)
tsc_DL_DPCH1_2ndScrC	SecondaryScramblingCode	1	secondary scrambling code for DL DPCH1
tsc_DL_DPCH1_ChC_64k_CS	SF512_AndCodeNumber	sf32:0	Channelization code for tsc_DL_DPCH1 for a 64 kbps CS configuration
tsc_DL_DPCH1_ChC_SRB	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a SRB connection with a RAB established
tsc_DL_DPCH1_SFP_SRB	SF512_AndPilot	sfd128:pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for an SRB connection with a RAB established
tsc_DL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (downlink)
tsc_DL_PDSCH1	INTEGER	16	Physical channel identity for primaryPDSCH channel
tsc_DL_TxPower_DPCH	DL_TxPower	−5	down link transmit power level of DPCH used for CS RABS. Default value is −5 dBm
tsc_DPCCH_PowerOffset	DPCCH_PowerOffset	−40	DPCCH power offset value. Defalut value: −80 (IE Value *2),
tsc_DPCH_PowerOffsetPILOT	INTEGER	0	Power offsett value of PILOT on DPCH
tsc_DPCH_PowerOffsetTFCI	INTEGER	0	Power offsett value of TFCI on DPCH
tsc_DPCH_PowerOffsetTPC	INTEGER	0	Power offsett value of TPC on DPCH
tsc_DefaultDPCH_OffsetValue	DefaultDPCH_OffsetValueFDD	459	Default DPCH offset value. Actual value DefaultDPCH−OffsetValueFDD = IE value * 512 Default value : 459
tsc_DelayAfterRRC_ConnRel	INTEGER	1000	Delay before sending after receiving RRC CONNECTION RELEASE complete in AM Mode (value in ms), so as to allow SS RLC layer to send ACK to UE.
tsc_DelayBeforeRRC_ConnRel	INTEGER	1000	Delay before sending RRC CONNECTION RELEASE (value in ms)
tsc_FACH1	INTEGER	13	transport channel identity for FACH
tsc_FACH2	INTEGER	14	transport channel identity for second FACH when it is connected to a secondary CCPCH together with PCH (transport channel identity = 14)

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_GMM_PD	ProtocolDiscriminator	’1000’B	GMM protocol discriminator 3GPP 24.008 clause 10.4
tsc_GainFactorBetaC_Below64k	INTEGER	11	Gain factor Beta C value to be used for RAB UL below 64kbps
tsc_GainFactorBetaC_Higher64k	INTEGER	9	Gain factor Beta C value to be used for RAB UL higher than 64kbps
tsc_GainFactorBetaD	INTEGER	15	
tsc_IntegrProtAlgCap	B16	’0000000000000010’B	Integrity Protection Algorithm Capability
tsc_KeySeqDef	KeySeq	’111’B	default Key Sequence. Default value: ’111’B
tsc_LAC_Def	OCTETSTRING	’0001’O	
tsc_MCC_Def	HEXSTRING	’001’H	
tsc_MNC_Def	HEXSTRING	’01F’H	
tsc_MSN	INTEGER	0	
tsc_MessAuthCode	BITSTRING	’00000000000000000000000000000000’B	
tsc_N300	INTEGER	3	
tsc_NMO_I	OCTETSTRING	’00’O	Network Mode of Operation I (3GPP 24.008 / 10.5.1.12.3)
tsc_NMO_II	OCTETSTRING	’01’O	Network Mode of Operation II (3GPP 24.008 / 10.5.1.12.3)
tsc_Now	INTEGER	512	To indicate the system information change starts immediately.
tsc_PCCH1	INTEGER	1	Logical channel identity for logical channel PCCH
tsc_PCH1	INTEGER	12	identity for transport channel PCH1
tsc_PDU_TypeStatus	CtrlPDU_Type	’000’B	Value for PDU type field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.2
tsc_PICH1	INTEGER	6	Physical channel identity for PICH channel associated with first secondary CCPCH
tsc_PICH1_ChC	ChannelisationCode256	2	Channelization code for tsc_PICH1
tsc_PICH2	INTEGER	11	Physical channel identity for PICH2 channel associated with second secondary CCPCH
tsc_PRACH1	INTEGER	8	Physical channel identity for first PRACH channel
tsc_PRACH1_SF	SF_PRACH	sfpr64	Channelization code for UL DPDCH for PRACH1
tsc_PRACH1_ScrC	PreambleScramblingCodeWordNumber	0	Scrambling code for preamble of PRACH1

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_PRACH1_Signatures	AvailableSignatures	’0000000011111111’B	available signatures for PRACH. (from 34.108 cl. 6.1 (SIB5))
tsc_PRACH2	INTEGER	9	Physical channel identity for second PRACH channel
tsc_PS_Domain	CN_DomainIdentity	ps_domain	
tsc_P_CCPCH	INTEGER	4	Physical channel identity for primary CCPCH channel
tsc_P_CPICH	INTEGER	0	Physical channel identity for primary CPICH channel
tsc_P_SCH	INTEGER	1	Physical channel identity for primary SCH channel
tsc_PowerAICH	AICH_PowerOffset	−5	relative transmission power level of AICH. The power level is specified relatively to power leve of CPICH in terms of AICH_Ec. Default is −5 dBm/3.84MHz
tsc_PowerPICH	PICH_PowerOffset	−5	relative transmission power level of PICH. The power level is specified relatively to power level of CPICH in terms of PICH_Ec. Default is −5 dBm/3.84MHz
tsc_PowerpCCPCH	DL_TxPower	−2	transmission power level of primary CCPCH relative to CPICH. Default is −2 dBm.
tsc_PowerpCPICH	DL_TxPower_PCPICH	−60	transmission power level of primary CPICH. The power level is specified in terms of CPICH_Ec. Default is −60 dBm.
tsc_PowerpSCH	DL_TxPower	−5	transmission power level of primary SCH relative to CPICH. Default is −5 dBm.
tsc_PowersCCPCH1	DL_TxPower	−2	transmission power level of secondary CCPCH1 relative to CPICH. Default is −2 dBm
tsc_PowersSCH	DL_TxPower	−5	transmission power level of secondary SCH relative to CPICH. Default is −5 dBm
tsc_PuncLimit	PuncturingLimit	pl1	puncturing limit for PRACH. default value is 1. Default value: Pl1
tsc_RAB_DefCS	B8	’00000001’B	Default AB Id for the CS domain
tsc_RAB_DefPS	B8	’00000101’B	Default AB Id for the PS domain
tsc_RACH1	INTEGER	15	transport channel identity for RACH

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_RAC_Def	OCTETSTRING	'05'O	Routing Area Code, 1 octet, 3GPP 24.008 clause 10.5.1.12.3
tsc_RB0	INTEGER	0	signalling radio bearer on TM + CCCH
tsc_RB1	INTEGER	1	sibnalling radio bearer on UM + DCCH
tsc_RB10	INTEGER	10	radio access bearer identity, in AMR speech this RB is RAB subflow#1, in other cases this is a radio access bearer
tsc_RB11	INTEGER	11	radio access bearer identity, in AMR speech this RB is RAB subflow#2, in some other cases this is the signalling radio bearer for TM + BCCH_FACH.
tsc_RB12	INTEGER	12	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH
tsc_RB13	INTEGER	13	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH
tsc_RB2	INTEGER	2	signalling radio bearer on AM + DCCH
tsc_RB20	INTEGER	20	radio access bearer for PS RAB
tsc_RB21	INTEGER	21	radio access bearer for PS RAB
tsc_RB22	INTEGER	22	Second AM radio access bearer for PS
tsc_RB24	INTEGER	24	Second AM radio access bearer for PS
tsc_RB25	INTEGER	25	PS Radio Bearer associated with a DTCH on HS−DSCH
tsc_RB29	INTEGER	29	RB Id for Radio bearer that carries the 2nd CCCH in the DL
tsc_RB3	INTEGER	3	signalling radio bearer on AM + DCCH for high priority NAS_DT
tsc_RB30	INTEGER	30	radio access bearer for CBS RAB
tsc_RB31	INTEGER	31	
tsc_RB4	INTEGER	4	signalling radio bearer on AM + DCCH for low priority NAS_DT
tsc_RB_2ndCCCH	INTEGER	−5	uplink signalling radio bearer on TM + second CCCH

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_RB_2ndPCCH	INTEGER	−4	radio bearer idenity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.
tsc_RB_AM_15_RLC	SS_RB_Identity	−13	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_AM_7_RLC	SS_RB_Identity	−12	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_BCCH	INTEGER	−1	radio bearer idenity for bearer on TM + BCCH + BCH used for broadcasting system information blocks
tsc_RB_BCCH_FACH	INTEGER	−3	signalling radio bearer on TM + BCCH + FACH + sCCPCH1
tsc_RB_BCCH_FACH_RAB	INTEGER	−19	RB Id for Radio bearer that carries the 2nd BCCH
tsc_RB_CCCH_FACH_MAC	SS_RB_Identity	−18	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the CCCH mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_RB_DCCH_DCH_MAC	SS_RB_Identity	−15	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to DCH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_DCCH_FACH_MAC	SS_RB_Identity	−14	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_PCCH	INTEGER	−2	radio bearer idenity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.
tsc_RB_PCCH2	INTEGER	−4	@sic T1s−040768 sic@
tsc_RB_UM_15_RLC	SS_RB_Identity	−11	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_RB_UM_7_RLC	SS_RB_Identity	−10	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated. A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_SFN_OffsetA	INTEGER	0	SFN offset values for cell A Default value: 0
tsc_SFN_OffsetB	INTEGER	0	SFN offset values for cell B Default value: 0
tsc_SFN_OffsetC	INTEGER	0	SFN offset values for cell C Default value: 0
tsc_SFN_OffsetD	INTEGER	3000	SFN offset values for cell D Default value: 3000
tsc_SFN_OffsetE	INTEGER	3000	SFN offset values for cell E Default value: 3000
tsc_SFN_OffsetF	INTEGER	678	SFN offset values for cell F Default value: 678
tsc_SFN_OffsetG	INTEGER	1356	SFN offset values for cell G Default value: 1356
tsc_SFN_OffsetH	INTEGER	2034	SFN offset values for cell H Default value: 2034
tsc_SMPD	ProtocolDiscriminator	’1010’B	SM protocol discriminator
tsc_SS_CS_Domain	SS_CN_DomainIdentity	0	
tsc_SS_PS_Domain	SS_CN_DomainIdentity	1	
tsc_S_CCPCH1	INTEGER	5	Physical channel identity for first secondary CCPCH channel
tsc_S_CCPCH1_ChC	SF256_AndCodeNumber	sf64:1	Channelization code for tsc_S_CCPCH1
tsc_S_CCPCH2	INTEGER	10	Physical channel identity for second secondary CCPCH channel
tsc_S_CCPCH3	INTEGER	13	Physical channel identity forThird secondary CCPCH channel
tsc_S_CCPCH_2ndScrCode	INTEGER	0	Secondary scrambling code for S−CCPCH channels
tsc_S_SCH	INTEGER	2	Physical channel identity for secondary SCH channel

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_SlotFormatsCCPCH1	SCCPCHSlotFormat	8	channelization code for secondary CCPCH1 when spreading factor = 64, default value is 8. Default value: 8
tsc_T3212_Def	OCTETSTRING	'1E'O	infinite
tsc_TPC_CombinationIndex	TPC_CombinationIndex	0	
tsc_TimingsCCPCH1	INTEGER	0	timing offset for secondary CCPCH1. default is 0. Default value: 0
tsc_TpcStepSize	TPC_StepSizeFDD	0	@sic RASH T1S040468 sic@ Value 0 corresponds to 1 dB
tsc_UL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped RACH (uplink)
tsc_UL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (uplink), used by signalling radio bearer 1
tsc_UL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (uplink), used by signalling radio bearer 2
tsc_UL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (uplink), used by signalling radio bearer 3
tsc_UL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (uplink), used by signalling radio bearer 4
tsc_UL_DCH1	INTEGER	1	identity for transport channel DCH1 (uplink), in AMR speech this transport channel is used for RAB subflow#1
tsc_UL_DCH2	INTEGER	2	identity for transport channel DCH2 (uplink), in AMR speech this transport channel is used for RAB subflow#2
tsc_UL_DCH5	INTEGER	5	identity for transport channel DCH5 (uplink), in most case this transport channel is used for signalling bearers.
tsc_UL_DPCH1	INTEGER	20	physical channel identity for DPCH1(uplink)
tsc_UL_DPDCH_SF_SRB	SpreadingFactor	sf64	Channelization code for UL DPDCH for an SRB connection with a RAB established
tsc_UL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (uplink)
tsc_UL_MAC_Prt1	MAC_LogicalChannelPriority	1	
tsc_UL_MAC_Prt2	MAC_LogicalChannelPriority	2	

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_UL_MAC_Prt3	MAC_LogicalChannelPriority	3	
tsc_UL_MAC_Prt4	MAC_LogicalChannelPriority	4	
tsc_URA_IdCellA	BITSTRING	’0000000000000001’B	
tsc_URA_IdCellB	BITSTRING	’0000000000000001’B	
tsc_URA_IdCellC	BITSTRING	’0000000000000010’B	
tsc_URA_IdCellD	BITSTRING	’0000000000000010’B	
tsc_URA_IdCellE	BITSTRING	’0000000000000011’B	
tsc_URA_IdCellF	BITSTRING	’0000000000000011’B	
tsc_URA_IdCellG	BITSTRING	’0000000000000100’B	
tsc_URA_IdCellH	BITSTRING	’0000000000000100’B	
tsc_USIM_NeedRmv	BOOLEAN	TRUE	Removal of USIM is needed in a test case (USIM is not always inserted)
tsc_sCCPCH_PowerOffsetPILOT	INTEGER	6	Power offsett value of PILOT on sCCPCH
tsc_sCCPCH_PowerOffsetTFCI	INTEGER	6	Power offsett value of TFCI on sCCPCH
Detailed Comments :			

Test Suite Constant Declarations By Reference				
Constant Name	**Type**	**Value Reference**	**Module Identifier**	**Comments**
hiPDSCHidentities	INTEGER	hiPDSCHidentities	Class−definitions	
hiPUSCHidentities	INTEGER	hiPUSCHidentities	Class−definitions	
hiRM	INTEGER	hiRM	Class−definitions	
maxAC	INTEGER	maxAC	Class−definitions	
maxAdditionalMeas	INTEGER	maxAdditionalMeas	Class−definitions	
maxASC	INTEGER	maxASC	Class−definitions	
maxASCmap	INTEGER	maxASCmap	Class−definitions	
maxASCpersist	INTEGER	maxASCpersist	Class−definitions	
maxCCTrCH	INTEGER	maxCCTrCH	Class−definitions	
maxCellMeas	INTEGER	maxCellMeas	Class−definitions	
maxCellMeas_1	INTEGER	maxCellMeas−1	Class−definitions	
maxCNdomains	INTEGER	maxCNdomains	Class−definitions	
maxCPCHsets	INTEGER	maxCPCHsets	Class−definitions	
maxDPCH_DLchan	INTEGER	maxDPCH−DLchan	Class−definitions	
maxDPDCH_UL	INTEGER	maxDPDCH−UL	Class−definitions	
maxDRACclasses	INTEGER	maxDRACclasses	Class−definitions	
maxFACHPCH	INTEGER	maxFACHPCH	Class−definitions	
maxFreq	INTEGER	maxFreq	Class−definitions	
maxFreqBandsFDD	INTEGER	maxFreqBandsFDD	Class−definitions	
maxFreqBandsTDD	INTEGER	maxFreqBandsTDD	Class−definitions	
maxFreqBandsGSM	INTEGER	maxFreqBandsGSM	Class−definitions	
maxGERAN_SI	INTEGER	maxGERAN−SI	Class−definitions	
maxHProcesses	INTEGER	maxHProcesses	Class−definitions	
maxHSSCCHs	INTEGER	maxHSSCCHs	Class−definitions	
maxInterSysMessages	INTEGER	maxInterSysMessages	Class−definitions	
maxLoCHperRLC	INTEGER	maxLoCHperRLC	Class−definitions	
maxMAC_d_PDUsizes	INTEGER	maxMAC−d−PDUsizes	Class−definitions	
maxMeasEvent	INTEGER	maxMeasEvent	Class−definitions	
maxMeasIntervals	INTEGER	maxMeasIntervals	Class−definitions	
maxMeasParEvent	INTEGER	maxMeasParEvent	Class−definitions	
maxNumCDMA2000Freqs	INTEGER	maxNumCDMA2000Freqs	Class−definitions	
maxNumGSMFreqRanges	INTEGER	maxNumGSMFreqRanges	Class−definitions	
maxNumFDDFreqs	INTEGER	maxNumFDDFreqs	Class−definitions	
maxNumTDDFreqs	INTEGER	maxNumTDDFreqs	Class−definitions	
maxOtherRAT	INTEGER	maxOtherRAT	Class−definitions	
maxOtherRAT_16	INTEGER	maxOtherRAT−16	Class−definitions	
maxPage1	INTEGER	maxPage1	Class−definitions	
maxPCPCH_APsig	INTEGER	maxPCPCH−APsig	Class−definitions	
maxPCPCH_APsubCh	INTEGER	maxPCPCH−APsubCh	Class−definitions	
maxPCPCH_CDsig	INTEGER	maxPCPCH−CDsig	Class−definitions	
maxPCPCH_CDsubCh	INTEGER	maxPCPCH−CDsubCh	Class−definitions	
maxPCPCH_SF	INTEGER	maxPCPCH−SF	Class−definitions	
maxPCPCHs	INTEGER	maxPCPCHs	Class−definitions	
maxPDCPAlgoType	INTEGER	maxPDCPAlgoType	Class−definitions	

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Test Suite Constant Declarations By Reference				
Constant Name	**Type**	**Value Reference**	**Module Identifier**	**Comments**
maxPDSCH	INTEGER	maxPDSCH	Class−definitions	
maxPDSCH_TFCIgroups	INTEGER	maxPDSCH−TFCIgroups	Class−definitions	
maxPRACH	INTEGER	maxPRACH	Class−definitions	
maxPRACH_FPACH	INTEGER	maxPRACH−FPACH	Class−definitions	
maxPUSCH	INTEGER	maxPUSCH	Class−definitions	
maxQueueIDs	INTEGER	maxQueueIDs	Class−definitions	
maxRABsetup	INTEGER	maxRABsetup	Class−definitions	
maxRAT	INTEGER	maxRAT	Class−definitions	
maxRB	INTEGER	maxRB	Class−definitions	
maxRBallRABs	INTEGER	maxRBallRABs	Class−definitions	
maxRBMuxOptions	INTEGER	maxRBMuxOptions	Class−definitions	
maxRBperRAB	INTEGER	maxRBperRAB	Class−definitions	
maxReportedGSMCells	INTEGER	maxReportedGSMCells	Class−definitions	
maxRL	INTEGER	maxRL	Class−definitions	
maxRL_1	INTEGER	maxRL−1	Class−definitions	
maxROHC_PacketSizes_r4	INTEGER	maxROHC−PacketSizes−r4	Class−definitions	
maxROHC_Profile_r4	INTEGER	maxROHC−Profile−r4	Class−definitions	
maxSat	INTEGER	maxSat	Class−definitions	
maxSCCPCH	INTEGER	maxSCCPCH	Class−definitions	
maxSIB	INTEGER	maxSIB	Class−definitions	
maxSIB_FACH	INTEGER	maxSIB−FACH	Class−definitions	
maxSIBperMsg	INTEGER	maxSIBperMsg	Class−definitions	
maxSRBsetup	INTEGER	maxSRBsetup	Class−definitions	
maxSystemCapability	INTEGER	maxSystemCapability	Class−definitions	
maxTF	INTEGER	maxTF	Class−definitions	
maxTF_CPCH	INTEGER	maxTF−CPCH	Class−definitions	
maxTFC	INTEGER	maxTFC	Class−definitions	
maxTFCsub	INTEGER	maxTFCsub	Class−definitions	
maxTFCI_2_Combs	INTEGER	maxTFCI−2−Combs	Class−definitions	
maxTGPS	INTEGER	maxTGPS	Class−definitions	
maxTrCH	INTEGER	maxTrCH	Class−definitions	
maxTrCHpreconf	INTEGER	maxTrCHpreconf	Class−definitions	
maxTS	INTEGER	maxTS	Class−definitions	
maxTS_1	INTEGER	maxTS−1	Class−definitions	
maxTS_2	INTEGER	maxTS−2	Class−definitions	
maxTS_LCR	INTEGER	maxTS−LCR	Class−definitions	
maxTS_LCR_1	INTEGER	maxTS−LCR−1	Class−definitions	
maxURA	INTEGER	maxURA	Class−definitions	
maxURNTI_Group	INTEGER	maxURNTI−Group	Class−definitions	
Detailed Comments :				

Test Suite Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tsv_AuthSQN	BITSTRING	'000000000000000000000000000000000000000000000000'B	48 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2) used and updated whenever an authentication is performed
Detailed Comments :			

Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_G_ClassmarkChange	CLASSMARKCHANGE		
tcv_GSM_ToUTRAN_HO_Cmd	HandoverToUTRANCommand		To hold the HOToUTRAN Cmd
tcv_LengthOfHO_Cmd	O1		To store the no. of octets in the HO To UTRAN message
tcv_UE_PowerClassExt	UE_PowerClassExt	class1	
tcv_DL_TurboSupport	TurboSupport	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_PDCP_Capability	PDCP_Capability	{ losslessSRNS_RelocationSupport FALSE, supportForRfc2507 notSupported: NULL }	
tcv_SimultaneousSCCPCH_DPCH_Reception	SimultaneousSCCPCH_DPCH_Reception	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_UL_TurboSupport	TurboSupport	notSupported: NULL	Temporary variable for initializing capability constraints
tcv_AssignmentCommand	ASSIGNMENTCOMMAND		To hold the assignment command
tcv_ChRequest	CHANNELREQUEST		To store the received channel request msg. during the RACH access
tcv_Ch_Mode	ChMode		To store the channel mode to be sent in the assignment command
tcv_P_Classmark3	MSCLSMK3		To store contents of classmark3 IE sent from UE in MSCLSMK3
tcv_G_CellConfigInfo	G_CellConfigInfo	c_G_CellConfigInfoGSM900	
tcv_G_CellInfoA	G_CellConfigInfo	c_G_CellConfigInfoGSM900_CellA	To store the Default CellConfigInfo of GSM CELL A c_G_CellConfigInfo(20,tsc_G_DLPwrLvl,tsc_G_CellA, tsc_G_MCC_Def, tsc_G_MNC_Def, tsc_G_LAC_Def)
tcv_G_CellInfoB	G_CellConfigInfo	c_G_CellConfigInfoGSM900_CellB	To store the Default CellConfigInfo of GSM CELL B c_G_CellConfigInfo(40,tsc_G_DLPwrLvl,tsc_G_CellB, tsc_G_MCC_Def, tsc_G_MNC_Def, tsc_G_LAC_Def)
tcv_G_CellInfoC	G_CellConfigInfo	c_G_CellConfigInfoGSM900_CellC	To store the Default CellConfigInfo of GSM CELL C c_G_CellConfigInfo(40,tsc_G_DLPwrLvl,tsc_G_CellB, tsc_G_MCC_Def, tsc_G_MNC_Def, tsc_G_LAC_Def)

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_RR_ChannelType	G_LogicChType		To store the received channel type
tcv_RR_ChannelType2	G_LogicChType		To store the received channel type
tcv_FN1	INTEGER		framenumber
tcv_FN2	INTEGER		framenumber
tcv_RR_RA	INTEGER		To store the received Random Access
tcv_RR_RFN	RFN		To store the received RFN
tcv_RFN2	RFN		To store the reduced frame number
tcv_RR_Subchannel	SubChannelNumber		To store the received subchannel
tcv_RR_Subchannel2	SubChannelNumber		To store the received subchannel
tcv_ISHO_SubtestCounter	INTEGER	0	The TCV will be used as an SubTest Counter
tcv_RAC	O1	'05'O	Default value 5
tcv_oldTLLI	TLLI	tsc_TLLI_Initial	To store the old TLLI
tcv_TLLI	TLLI	tsc_TLLI_Initial	To store the received TLLI
tcv_USFRate	INTEGER	1	Used to slow down data block transmission rate in GPRS
tcv_PacketChRequest	PACKETCHANNELREQUEST		
tcv_PCCCHParams	PCCCH_OrganisationParameters	c_PCCCHParams	
tcv_TmpPktCtrlAckPdu	PACKETCONTROLACKNOWLEDGEMENT		
tcv_GPRS_CipherAlg	GPRS_CipherAlg	'000'B	off
tcv_Gamma	B5	'00100'B	
tcv_M	INTEGER		
tcv_NMO	B2	'00'B	Defaul GERAN value NMO 1
tcv_ResAndStartValue	ResAndStartValue		Used as the return value for o_CheckUtranClassmark. Contains 2 fields: Res = Boolean and StartValue
tcv_SplitPGCycle	DRXparamter	c_SplitPGCycleInitial	This tcv should be overwritten by what is sent by the UE @sic T1s040633 sic@
tcv_StartingTime	RFN		
tcv_ARFCN	B10	INT_TO_BIT(30, 10)	
tcv_PSI2_Instance2	PSI2Info	c_PSI2_Instance2_GSM	
tcv_PSI2_Instance3	PSI2Info		
tcv_PSI3_Instance1	PSI3Info		
tcv_PSI3_Instance2	PSI3Info		
tcv_PSI3_Instance3	PSI3Info		
tcv_PSI3_Instance4	PSI3Info		
tcv_PBCCHFreqInfo	FreqInfo		

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_SI2quaterRO	SI2quaterRO		Contains details of UTRAN cells
tcv_SetupExpected	BOOLEAN	FALSE	used in 8.3.7.13 to handle the SETUP message during the RAU
tcv_PSI_LowRate	B6	’000011’B	normally 3, unless PSI3quater or PSI5 sent
tcv_AddPSIMsgs	BOOLEAN	FALSE	
tcv_G_UtranClassmarkChange	UTRANCLASSMARKCHANGE		
tcv_UE_Id_IMSI	BOOLEAN	FALSE	If this variable is set to TRUE, UE ID used will be IMSI
tcv_ActiveService	Services	"31kHz"	Service that is currently used in a test case
tcv_AT_Cmd	IA5String	""	To hold acommandline to be sent to the UT
tcv_BcapCE	B2	’00’B	To hold the connection element value that shall be used in setup MO pdu.
tcv_CC_RB_ConfigType	RB_ConfigType	cell_DCH_Speech	To hold the CC RAB to be used. This variable is used by CC test steps and test cases only.
tcv_EstCause	EstablishmentCause	terminatingConversationalCall	Establishment cause used to setup the RRC connection. This variable is assigned in the steps: ts_CC_BasicServiceMO or ts_CC_BasicServiceMT
tcv_PagingCau	PagingCause	terminatingConversationalCall	To hold the paging cause corresponding to the CC service − this tcv is assigned in ts_CC_InitTCVMT
tcv_SetupMOr	SETUPul		to hold the setup message received from UE
tcv_SetupMT	SETUPdl	cs_SetupMT(cs_BcapSpeechMT)	to hold the SETUP MT pdu prepared in the ts_BasicSrvMT step
tcv_TI_R	TI	cs_TI_MT	Transaction Identifier value used to receive CC PDU
tcv_TI_S	TI	cs_TI_MT	Transaction Identifier value used to send CC PDU
tcv_ActTime	ActivationTime	0	Activation Time
tcv_Assigned_PTMSI_Sig	O3	px_PTMSI_SigDef	Current assigned PTMSI signature
tcv_AssignedPTMSI	OCTETSTRING	px_PTMSI_Def	Current assigned PTMSI
tcv_AssignedTMSI	OCTETSTRING	px_TMSI_Def	Current assigned TMSI
tcv_AuthAK	BITSTRING	INT_TO_BIT (0, 48)	Anonymity Key 48 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthAMF	BITSTRING	px_AuthAMF	Authentication Management Field 16 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_AuthAUTN	B128	INT_TO_BIT (0, 128)	to hold complete calculated AUTN 128 bits (TS24.008 cl 10.5.3.1.1)
tcv_AuthAUTN_1	B48	INT_TO_BIT (0, 48)	to hold first part of calculated AUTN 64 bits
tcv_AuthAUTN_2	B80	INT_TO_BIT (0, 80)	to hold second part of calculated AUTN 64 bits
tcv_AuthCDOUT	BITSTRING	INT_TO_BIT (0, 64)	CDOUT 64 bits (TS 34.108 cl. 8.1.2)
tcv_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthCK_1	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st part (bits 0−63) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthCK_2	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 2nd part (bits 64−127) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthCK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthIK_1	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st part (bits 0−63) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK_2	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 2nd part (bits 64−127) 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthIK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthK	BITSTRING	px_AuthK	Authentication Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthKcGSM	BITSTRING	INT_TO_BIT (0, 64)	GSM Cipher Key 64 bits (TS 33.102 cl. 6.8.1.2)
tcv_AuthMAC	BITSTRING	INT_TO_BIT (0, 64)	Message Authentication Code 64 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_AuthN	INTEGER	px_AuthN	min 31, max 127 (TS 34.108 cl. 8.1.2)
tcv_AuthRAND	BITSTRING	px_AuthRAND	Random Challenge 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_AuthRsp	AuthRsp	INT_TO_BIT (0,32)	to hold a Authentication Response parameter value received from the UE 32 bits (TS 24.008 cl 10.5.3.2)
tcv_AuthRspExt	AuthRspExt		to hold a Authentication Response Extension parameter value received from the UE 96 bits (TS24.008 cl 10.5.3.2.1)
tcv_AuthRspPDU	AUTHENTICATIONRESPONSE		to hold a Authentication Response PDU
tcv_AuthXDOUT	BITSTRING	INT_TO_BIT (0, 128)	XDOUT 128 bits (TS 34.108 cl. 8.1.2)
tcv_AuthXDOUT_Half	BITSTRING	INT_TO_BIT (0, 64)	lower half of XDOUT 64 bits (TS 34.108 cl. 8.1.2)
tcv_AuthXRES	BITSTRING	INT_TO_BIT (0, 32)	XRES min 32, max 128 bits (TS 34.108 cl. 8.1.2)
tcv_BCCH_ModifyTime	INTEGER	512	To hold the BCCH modification time to be used by PAGING TYPE1 or SYSTEM INFORMATION CHANGE INDICATION. The initial value indicates changing now.
tcv_CellIndInfo	CellIndependantInfo	c_CellIndInfoDef	
tcv_CellInfoA	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode)	
tcv_CellInfoB	CellInfoCfg	c_CellInfoDef (tsc_CellB, px_PriScrmCode, tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 1000) MOD 16777216))	
tcv_CellInfoC	CellInfoCfg	c_CellInfoDef (tsc_CellC, px_PriScrmCode, tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 2000) MOD 16777216))	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_CellInfoD	CellInfoCfg	c_CellInfoDef (tsc_CellD, px_PriScrmCode, tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 3000) MOD 16777216))	
tcv_CellInfoE	CellInfoCfg	c_CellInfoDef (tsc_CellE, px_PriScrmCode, tsc_URA_IdCellE, px_TCellE, tsc_SFN_OffsetE, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 4000) MOD 16777216))	
tcv_CellInfoF	CellInfoCfg	c_CellInfoDef (tsc_CellF, px_PriScrmCode, tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 5000) MOD 16777216))	
tcv_CellInfoG	CellInfoCfg	c_CellInfoDef (tsc_CellG, px_PriScrmCode, tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 6000) MOD 16777216))	
tcv_CellInfoH	CellInfoCfg	c_CellInfoDef (tsc_CellH, px_PriScrmCode, tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 7000) MOD 16777216))	
tcv_CipherActTime	ActivationTime	0	Activation Time
tcv_CN_Domain	CN_DomainIdentity	cs_domain	
tcv_Count	INTEGER	0	To hold a temporary counter value.

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_CS_KeySeq	KeySeq	tsc_KeySeqDef	
tcv_DefaultRadioCnf	BOOLEAN	TRUE	To be used in test cases that require a non deault radio configuration. TRUE: a default radio configuration is to be used FALSE: a non default radio configuration is to be used.
tcv_FrameNumber	INTEGER	0	Values 0..4095
tcv_FreqInfoHigh	FrequencyInfo	c_FreqInfo (px_UARFCN_D_High − 950 , px_UARFCN_D_High)	
tcv_FreqInfoLow	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Low − 950 , px_UARFCN_D_Low)	
tcv_FreqInfoMid	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid)	
tcv_GMM_AttachExpect	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile
tcv_GMM_AttachRec	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile
tcv_GMM_DetachExpect	BOOLEAN	FALSE	This TCV is to be used in the Detach Handling @sic EW T1s040243 and T1s040244 sic@
tcv_GMM_RAU_Expect	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler @sic EW T1s040041 sic@
tcv_GMM_RAU_Rec	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler @sic EW T1s040041 sic@
tcv_HFN	B20	’00000000000000000000’B	Hyper Frame Number for CS or PS domain − to be used in security steps
tcv_InitialUE_Id	InitialUE_Identity	c_UE_IdDefIMSI	Used to store the UE Identity
tcv_Int_ModifyFlag	BOOLEAN	FALSE	This Flag will be used in Security related steps. If it is set to True, it means that A Integrity Modification is being done at that stage.
tcv_K	INTEGER	0	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_MIB	MasterInformationBlock	c_MIB_Def (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_MIB_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_MIB shall be re−initialized to c_MIB_Def_UTRAN.
tcv_MIB_ValueTagChanged	BOOLEAN	TRUE	initial value = TRUE, set to TRUE after MIBValueTag changed, set to FALSE after MIB delivered to SS. @sic CR T1−031777 sic@
tcv_MM_TestExecution	BOOLEAN	FALSE	Indication of MM test execution, set to TRUE once NMO II is set, used to properly handle ATTACH and DETACH procedures in MM tests
tcv_N308	INTEGER	2	
tcv_NumCfgCell	INTEGER	0	Number of cells configured
tcv_PollSDU	Poll_SDU	sdu1	number of SDU's between pollings, this initial value is for ts_SS_CreateCellFACH. (from 34.123−1). used in RB2, RB3, RB4.
tcv_PollWindow	PollWindow	pw99	percentage of transmission window,threshold for polling, this initial value is for ts_SS_CreateCellFACH. (from 34.123−1). used in RB2, RB3, RB4.
tcv_PS_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_PS_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
tcv_PS_KeySeq	KeySeq	tsc_KeySeqDef	Ciphering key sequence number for PS domain
tcv_RAB_Id	B8	'00000000'B	to hold the RABId received in a SETUP or a CALL CONFIRMED message
tcv_RB_ActivationTimeInfoList	RB_ActivationTimeInfoList	cs_RB_ActTimeInfoListSRBs (0,0,0,0)	
tcv_RB_SigResumed	BOOLEAN	FALSE	
tcv_ReceivePS_ServiceReq	BOOLEAN	FALSE	This Type tcv by default will be set to False. It will be set to TRUE, when MO Service request has been rejected, and hence Ue can retransmit Service Request which should be handled in Default handlers.

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_Res	BOOLEAN	FALSE	to hold the BOOLEAN result of a test suite operation or a test Step
tcv_RLC_IgnoreStatus	BOOLEAN	FALSE	This variable is used to indicate that an RLC STATUS PDU may be received and should be ignored .
tcv_RLC_SeqNumDL_RB1	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB1
tcv_RLC_SeqNumDL_RB2	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB2
tcv_RLC_SeqNumDL_RB20	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB20
tcv_RLC_SeqNumDL_RB21	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB21
tcv_RLC_SeqNumDL_RB22	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB22
tcv_RLC_SeqNumDL_RB24	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB24
tcv_RLC_SeqNumDL_RB3	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB3
tcv_RLC_SeqNumDL_RB4	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB4
tcv_RRC_EstCauMO	EstablishmentCause	originatingConversationalCall	To hold the establishment cause for MO call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_EstCauMT	EstablishmentCause	terminatingConversationalCall	To hold the establishment cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_MSN_RB0	RRC_SequenceNumber	0	Used to store the MSN of RB0
tcv_RRC_MSN_RB1	RRC_SequenceNumber	0	Used to store the MSN of RB1
tcv_RRC_MSN_RB2	RRC_SequenceNumber	0	Used to store the MSN of RB2
tcv_RRC_MSN_RB2_UL	RRC_SequenceNumber	0	Used to store the UL MSN of RB2
tcv_RRC_MSN_RB3	RRC_SequenceNumber	0	Used to store the MSN of RB3
tcv_RRC_MSN_RB4	RRC_SequenceNumber	0	Used to store the MSN of RB4
tcv_RRC_PagingCau	PagingCause	terminatingConversationalCall	To hold the paging cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_RAB_Type	RB_ConfigType	cell_DCH_64kCS_RAB_SRB	To hold the RAB config type that is supported by the UE. Assigned in ts_RRC_InitVariables.
tcv_RRC_RelStatus	RRC_Rel_Status	cell_Dch	
tcv_RRC_Ti	RRC_TransactionIdentifier	0	To hold the RRC Transaction Identifier.

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_SB1	SysInfoTypeSB1	c_SB1_Def	the initial value c_SB1_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB1 shall be re−initialized to c_SB1_DefUTRAN.
tcv_SB1_ValueTag	INTEGER	1	To hold current SB1_ValueTag, value range is 1 to 4.
tcv_SB1_ValueTagChanged	BOOLEAN	FALSE	initial value = FALSE, set to TRUE after SB1ValueTag changed, set to FALSE after SB1 delivered to SS.
tcv_Segs	SegmentsOfSysInfoBlock		Variable buffering the result of SIBSegmentation
tcv_SIB3	SysInfoType3	cb_SIB3_DefUTRAN_GERAN(c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_SB3_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB3 shall be re−initialized to c_SB3_DefUTRAN.
tcv_SIB4	SysInfoType4	cb_SIB4_DefUTRAN_GERAN (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA,tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_SB4_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB4 shall be re−initialized to c_SB4_DefUTRAN.
tcv_Start	START_Value	’00000000000000000000’B	To hold the START value received in the INITIAL DIRECT TRANSFER message
tcv_StartList	STARTList	c_StartListCS	To hold the START list sent by UE
tcv_SubChNum	AvailableSubChannelNumbers	’111111111111’B	Available subchannel numbers for PRACH, this initial value is for ts_SS_CreateCellFACH. (from 34.108 cl. 6.1 (SIB5))
tcv_TestBody	BOOLEAN	FALSE	to indicate if the test body is currently being executed
tcv_TGCFN	TGCFN	0	
tcv_TimeoutInDefault	BOOLEAN	FALSE	Indication of a TimeoutInDefault having occurred

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_TimerPoll	TimerPoll	tp400	value for polling timer, this initial value is for ts_SS_CreateCellFACH. (from 34.123−1). used in RB2, RB3, RB4
tcv_TimerPollProhibit	TimerPollProhibit	tpp200	minimum time between polls, this initial value is for ts_SS_CreateCellFACH. (from 34.123−1). used in RB2, RB3, RB4
tcv_TmpAttachReqPDU	ATTACHREQUEST		Temporary variable
tcv_TmpAuthAndCiphRspPDU	AUTHENTICATIONANDCIPHERINGRESPONSE		Temporary variable
tcv_TmpB3	B3	’000’B	Temporary variable
tcv_TmpCellInfo	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid − 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode)	To temporary store CellInfo data
tcv_TmpRAU_ReqPDU	ROUTINGAREAUPDATEREQUEST		Temporary variable @sic EW T1s040041 sic@
tcv_UE_OpMode	UE_OperationMode	px_UE_OpModeDef	Indicates the current UE operation mode (either A or C).
tcv_UE_SwitchedOn	BOOLEAN	TRUE	This value is to represent the state of the UE. TRUE means UE is Switched/Powered On, and hence only Switch/Power OFF operation can be done, and no Switch/Power On operation. False Means, UE is off, and only Switch/Power On Operation can be done. This Variable is introduced to help automation of test cases. The dafault value of ON, is consistent with present Test Sequence, where MMI command to switch/Power off is called before creation of the first cell on SS Side. @sic RASH ER1915 sic@
tcv_UE_SystemSpecificCap	INTEGER	0	use to represent the integer equivalent of 7 bit UE system specific Capability. The Valid range is 0 to 127
Detailed Comments :			

PCO Type Declarations		
PCO Type	**Role**	**Comments**
G_CSAP	LT	
G_DSAP	LT	
DSAP	LT	
CSAP	LT	
Dc_SAP	LT	
MMI	UT	
Detailed Comments :		

PCO Declarations			
PCO Name	**PCO Type**	**Role**	**Comments**
G_CL1	G_CSAP	LT	Control GERAN Physical Layer (L1)
G_CL2	G_CSAP	LT	Control GERAN L2
G_CLLC	G_CSAP	LT	Control GPRS LLC layer
G_CRLC	G_CSAP	LT	Control GPRS RLC/MAC layer
G_L2	G_DSAP	LT	Control and observation point of GERAN L3 messages and user data
G_LLC	G_DSAP	LT	Control and observation point of GPRS GMM signalling messages
G_RLC	G_DSAP	LT	Control and observation point of GPRS GRR signalling messages
AM	DSAP	LT	PCO above AM SAP of RLC
CMAC	CSAP	LT	Control and observation point between RRC and MAC
CPHY	CSAP	LT	Control and observation point between RRC and PHY
CRLC	CSAP	LT	Control and observation point between RRC and RLC
Dc	Dc_SAP	LT	Carry transmission and reception of NAS messages
TM	DSAP	LT	PCO above TM SAP of RLC
UM	DSAP	LT	PCO above UM SAP of RLC
Ut	MMI	UT	The PCO used for the upper tester
Detailed Comments :			

Timer Declarations			
Timer Name	**Duration**	**Unit**	**Comments**
t_CampResponseTimer		s	
t_ReceiveMessageTimer	10	s	
t_Release	11	s	Release timer
t_T3101	30	s	
t_TimeoutInDefault	300	ms	Used to catch timeouts in the Defaults
t_Dly	5000	ms	general purpose delay timer
t_Guard	300	s	test case guard timer
t_T312	1	s	Timer to check physical channel establishment criteria
t_WaitMS	13500	ms	general wait timer
t_WaitS	15	s	general watch timer
Detailed Comments :			

ASP Type Definition

ASP Name : G_CL1_ChangePowerLevel_CNF

PCO Type : G_CSAP

Comments : The ASP is used to get confirmation of a G_CL1_ChangePowerLevel_REQ

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier

Detailed Comments :

ASP Type Definition

ASP Name : G_CL1_ChangePowerLevel_REQ

PCO Type : G_CSAP

Comments : The ASP is used to change the transmission power level of a physical channel

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
txPower	TX_Power	the new transmission power level. in dBuVemf()

Detailed Comments :

ASP Type Definition

ASP Name : G_CL1_CipheringControl_REQ

PCO Type : G_CSAP

Comments : The ASP is used to set the ciphering mode of the physical channel in the receiving direction, the kc and ciphering algorithm were set by the G_CL1CreateBasicPhyCh_REQ for the physical channel before calling the ASP.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel Identifier
rcvCipherMode	BITSTRING[1]	Ciphering Mode in SS receiving direction: 0 −> not ciphered 1 −> ciphered

Detailed Comments : For GSM dedicated physical channels, the ciphering mode of the SS shall be changed in three steps: (3GPP TS 44.018, clause 3.4.7)
Before the SS sends CIPHERING MODE COMMAND the SS is transmitting and receiving in the old ciphering mode (e.g. not ciphered), after the SS sends the CIPHERING MODE COMMAND the SS changes its receiving ciphering mode to the new ciphering mode (e.g. ciphered) and keeps transmitting in the old ciphering mode; then after receiving the CIPHERING MODE COMPLETE, or any correct L2 frame in the new ciphering mode, the SS changes the transmitting ciphering mode to the new mode.
The TTCN writer shall use the ASP before sending the CIPHERING MODE COMMAND to ensure the ciphering mode of the physical channel is changed in sufficient time, according to the 3 step procedure outlined above.

ASP Type Definition		
ASP Name : G_CL1_CipheringControl_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm that the G−CL1_CipheringControl_REQ is executed correctly		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel Identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CipherModeModify_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to get confirmation of a G_CL1_CipherModeModify_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_CipherModeModify_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to modify the cipherl mode of a dedicated channel		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
cipherMode	CipherModeSetting	the new cipher mode. definition see 3GPP TS 44.018 section 10.5.2.9
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_ComingFN_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to receive the result of G_CL1_ComingFN_REQ.		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15
rfn	RFN	the reduced frame number (FN modulo 42432) which is about 5 seconds later than current frame number and is able to carry L3 message on the channel specified by "physicalChId"+"G_LogicChType"+"sub Channel"
Detailed Comments :		

ASP Type Definition

ASP Name : G_CL1_ComingFN_REQ

PCO Type : G_CSAP

Comments : The ASP is used to request lower layer return the reduced frame number (FN modulo 42432) which is far enough in the future from current frame number and is able to carry L3 message on the specified channel. The requirement of "far enough" is that there is enough time left for TTCN to prepare a L3 message to send before that frame.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15

Detailed Comments :

ASP Type Definition

ASP Name : G_CL1_CreateBasicPhyCh_CNF

PCO Type : G_CSAP

Comments : the ASP is used to get confirmation of G_CL1_CreateBasicPhyCh_REQ

Parameter Name	Parameter Type	Comments
cellId	CellId	The cell which the created channel belongs to
physicalChId	PhysicalChId	identifier of the physical channel created

Detailed Comments :

ASP Type Definition

ASP Name : G_CL1_CreateBasicPhyCh_REQ

PCO Type : G_CSAP

Comments : the ASP is used to create a basic physical channel in GERAN

Parameter Name	Parameter Type	Comments
cellId	CellId	the cell which the channel to be created belongs to
physicalChId	PhysicalChId	identifier of the physical channel in the SS
channelCombination	ChannelCombination	logical channels combined onto the basic physical channel
freqInfo	FreqInfo	parameters for description of the physical channel in frequency domain
timeSlot	TN	the time slot number of the physical channel
tSC	TSC	training sequence code. for common control and broadcast channels the value of tsc must be equal to BCC (base station coulour code)
channelSpecificPara	ChannelSpecificInfo	specific parameters related to individual channel
txPower	TX_Power	transmisstion power level of the channel
bandIndicator	BITSTRING[1]	Parameter for DCS or PCS frequency band selection. A value 0 for frqInfo.arfcn interpreted as DCS1800. A value 1 for frqInfo.arfcn interpreted as PCS1900. If omitted, the value in frqInfo.arfcn interpreted as DCS1800.

Detailed Comments : The value of channel Combination permitted currently:
1 TCH/F + FACCH/F + SACCH/TF
2 TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1)
3 TCH/H(0,0) + FACCH/H(0,1) + SACCH/TH(0,1) + TCH/H(1,1)
4 FCCH + SCH + BCCH + CCCH
5 FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)
6 BCCH + CCCH
7 SDCCH/8(0..7) + SACCH/C8(0.. 7)
8 TCH/F + FACCH/F + SACCH/M
9 TCH/F + SACCH/M
10 TCH/FD + SACCH/MD
11 PBCCH+PCCCH+PDTCH/F+PACCH/F+PTCCH/F
12 PCCCH+PDTCH/F+PACCH/F+PTCCH/F
13 PDTCH/F+PACCH/F+PTCCH/F
18 E−TCH/F + E−IACCH/F + E−FACCH/F + SACCH/TF
19 E−TCH/F + E−IACCH/F + E−FACCH/F + SACCH/M
20 E−TCH/F + E−IACCH/F + SACCH/M
21 E−TCH/FD + E−IACCH/F + SACCH/MD

ASP Type Definition

ASP Name : G_CL1_CreateCell_CNF

PCO Type : G_CSAP

Comments : the ASP is used to get confirmation of G_CL1_CreateCell_REQ

Parameter Name	Parameter Type	Comments
cellId	CellId	

Detailed Comments :

ASP Type Definition		
ASP Name : G_CL1_CreateCell_REQ **PCO Type :** G_CSAP **Comments :** the ASP is used to create a cell in GERAN		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
baseId	BITSTRING[6]	Base tranceiver station identiy code = NCC+BCC 3GPP TS 23.003 clause 4.3.2.
timingAdvance	BITSTRING[8]	The SS sets the timing advance of downlink direction timing by this value
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteCell_CNF **PCO Type :** G_CSAP **Comments :** the ASP is used to get confirmation of G_CL1_DeleteCell_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteCell_REQ **PCO Type :** G_CSAP **Comments :** the ASP is used to delete a cell in GERAN		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteChannel_CNF **PCO Type :** G_CSAP **Comments :** the ASP is used to get confirmation of G_CL1_DeleteChannel_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The cell which the deleted channel belongs to
physicalChId	PhysicalChId	identifier of the channel or multi−slot configuration deleted
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL1_DeleteChannel_REQ **PCO Type :** G_CSAP **Comments :** the ASP is used to delete a basic physical channel or multi−slot configuration		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The cell which the channel to be deleted belongs to
physicalChId	PhysicalChId	identifier of the physical channel or the multi−slot configuration to be deleted
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_MeasRptControl_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm that the G_CL2_MeasRptControl_REQ was executed correctly		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_MeasRptControl_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to enable or disable the reporting of received Measurement Reports to the TTCN		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	Valid only for lofical channel types: SACCH/TF, SACCH/TH, SACCH/C8 and SACCH/C4
subChannel	SubChannelNumber	For SACCH/TH value is (0..1), for SACCH/C8 value is (0..7) and for SACCH/C4 value is (0..3)
sendMeasRpts	BOOLEAN	Whether or not to report received Measurement Reports to the TTCN
Detailed Comments : Per default, this will be set to FALSE		

ASP Type Definition		
ASP Name : G_CL2_Release_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm that the G_CL2_Release_REQ was executed correctly		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CL2_Release_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to request the SS stop L2 transmission on a channel		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_Assign_CNF **PCO Type :** G_CSAP **Comments :** the ASP is used to get confirmation of G_CLLC_Assign_REQ		
Parameter Name	**Parameter Type**	**Comments**
lLMEId	LLMEId	Logical Layer Management Entity Id
Detailed Comments :		

ASP Type Definition

ASP Name : G_CLLC_Assign_REQ

PCO Type : G_CSAP

Comments : the ASP is used to assign, change or unassign the TLLI, the cipher key (Kc) and the cipher algorithm of GERAN LLC emulator module.

Parameter Name	Parameter Type	Comments
cellId	CellId	
oldTLLI	TLLI	OCTETSTRING[4]
newTLLI	TLLI	
cipherKey	BITSTRING[64]	
cipherAlgorithm	GPRS_CipherAlg	BITSTRING[3], 3GPP TS 24.008 section 10.5.5.3

Detailed Comments : This ASP is used to assign, change, or unassign the TLLI, the ciphering key (Kc) and the ciphering algorithm. 1. The oldTLLI and newTLLI parameters shall be interpreted as follows:− If oldTLLI = all 1's and newTLLI ¹ all 1's then newTLLI is assigned and used when (re?)transmitting LLC frames. If an oldTLLI ¹ all 1's was assigned to the LLME, then oldTLLI is unassigned. Only newTLLI is accepted when received from the peer. It shall be treated as a TLLI change. If oldTLLI = all 1's was assigned to the LLME, then this shall be treated as a TLLI assignment, and this ASP shall be the first ASP sent to the SS in order to enable LLC to process requests from layer 3.− If oldTLLI ¹ all 1's and newTLLI ¹ all 1's then oldTLLI and newTLLI are assigned, and newTLLI shall be used when (re?)transmitting LLC frames. Both oldTLLI and newTLLI shall be accepted when received from the peer. It shall be treated as a TLLI change.− If oldTLLI ¹ all 1's and newTLLI = all 1's then oldTLLI shall be unassigned. It shall be treated as a TLLI unassignment, and this ASP shall be the last ASP sent to the SS in order to disable LLC to not process requests from layer 3 any longer.2. Kc and Ciphering Algorithm are associated with newTLLI (and with oldTLLI if assigned):− If Ciphering Algorithm indicates no ciphering, then the ciphering function shall be disabled.− Otherwise, the ciphering function shall be enabled. If a Ciphering Algorithm was already associated with newTLLI or oldTLLI, then the new Kc shall replace the previous Kc, and Ciphering Algorithm shall replace the previous algorithm selection. All I frames, and UI frames with the E bit set to 1, shall use the new Kc and algorithm for ciphering. All unacknowledged I frames shall be ciphered using the new Kc and algorithm before retransmission. As an implementation option, the previous Kc and algorithm may be used to decipher received frames.

ASP Type Definition

ASP Name : G_CRLC_DL_TBF_Config_CNF

PCO Type : G_CSAP

Comments : the ASP is used to get confirmation of G_CRLC_DL_TBF_Config_REQ

Parameter Name	Parameter Type	Comments
cellId	CellId	
tFI	TFI	

Detailed Comments :

ASP Type Definition		
ASP Name : G_CRLC_DL_TBF_Config_REQ **PCO Type :** G_CSAP **Comments :** the ASP is used to configure a TBF used for down link data transfer		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
tFI	TFI	
tBF_Mode	BITSTRING[1]	0 − GPRS; 1 − EGPRS
channelCoding	ChannelCoding	
rLC_Mode	BITSTRING[1]	0 − acknowledged mode; 1 − unacknowledged mode
timeSlotAllocation	TimeSlotAllocation	Downlink TBF time slot allocation
startingTime	RFN	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
dataBlockRate	INTEGER	This parameter controls the speed of the DL TBF transferring data blocks by controlling the USF rate: 1−−−> implementation dependent. TTCN does not specify the USF generating rate; 2−−−> 10 data blocks per second; 3−−−> 5 data blocks per second; 4−−−> 1 data block per second; 5−−−> 1 data block 2 seconds; 6−−−> 1 data block 3 seconds; 7−−−> 1 data block 4 seconds
Detailed Comments : For GPRS channel coding can be: CS−1, CS−2, CS−3 and CS−4;For EGPRS channel coding can be : MCS−1, MCS−2, MCS−3, MCS−4, MCS−5, MCS−6, MCS−7, MCS−8, MCS−9, MCS−5−7 and MCS−6−9.		

ASP Type Definition		
ASP Name : G_CRLC_UL_TBF_Config_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to get confirmation of G_CRLC_UL_TBF_Config_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
tFI	TFI	
Detailed Comments :		

ASP Type Definition

ASP Name : G_CRLC_UL_TBF_Config_REQ

PCO Type : G_CSAP

Comments : the ASP is used to configure a TBF used for uplink data transfer

Parameter Name	Parameter Type	Comments
cellId	CellId	
tFI	TFI	
tBF_Mode	BITSTRING[1]	0 − GPRS; 1 − EGPRS
channelCoding	ChannelCoding	
tLLI_BlockChannelCoding	BITSTRING[1]	0 − CS−1 or MCS−1(EGPRS); 1 − same as channelCoding
rLC_Mode	BITSTRING[1]	0 − acknowledged mode; 1 − unacknowledged mode
startingTime	RFN	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as ’11111’B.
uSF_Rate	INTEGER	This parameter controls the speed of the UL TBF transferring data blocks by controlling the USF rate: 1−−−> implementation dependent. TTCN does not specify the USF generating rate; 2−−−> 10 USF’s per second; 3−−−> 5 USF’s per second; 4−−−> 1 USF per second; 5−−−> 1 USF per 2 seconds; 6−−−> 1 USF per 3 seconds; 7−−−> 1 USF per 4 seconds
dynamicAllocation	DynamicAllocation	dynamic allocation and other parameters.

Detailed Comments : For GPRS channel coding can be: CS−1, CS−2, CS−3 and CS−4;For EGPRS channel coding can be : MCS−1, MCS−2, MCS−3, MCS−4, MCS−5, MCS−6, MCS−7, MCS−8, MCS−9, MCS−5−7 and MCS−6−9.
Due to one cell currently has only one RLC/MAC emulation module, this ASP does not contain RLC/MAC identity parameter to indicate which RLC/MAC emulation module this TBF is established for, instead, the parameter cellId implicitly indicates the RLC/MAC module, which is created by G_CRLC_CreateRLC_MAC_REQ and has identifier RlcMacEntityId in the cell.
The higher layer (LLC emulation module) uses rLC/MAC_MappingInfo (with type of CellId) to address the RLC/MAC emulation module to which it connects

ASP Type Definition

ASP Name : G_L2_ACCESS_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive a random access or handover access burst on the specified channel.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	RACH, FACCH, SDCCH/8, SDCCH/4. RACH is used for random access burst; others are used for handover access burst
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8, SDCCH/4.
rfn	RFN	The reduced frame number of the frame carrying the burst
burst	PDU	random access burst or handover access burst

Detailed Comments :

ASP Type Definition

ASP Name : G_L2_DATA_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). It shall be ignored if this is coded as 15
rfn	RFN	The reduced frame number of the first frame on which this message is received
msg	PDU	Signalling message or user data received

Detailed Comments :

ASP Type Definition

ASP Name : G_L2_DATA_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send L3 signalling message on the signalling channels or user data on the traffic channels to the UE/MS in acknowledged mode.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	PDU	Signalling message or user data to be sent

Detailed Comments : Parameter rfn is only used in the test cases which requires specific L3 message to be sent on specified frame number

ASP Type Definition

ASP Name : G_L2_L2Estab_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive an indication of that L2 multiple frame operation on the specified channel has been established.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4,This field shall be coded as 15 if it is not applicable.
sAPI	SAPI	0, 3
establish_mode	EstMode	Norm
rfn	RFN	The reduced frame number of the first frame carries the L2 SABM frame
msg	PDU	this field is present only when the establish mode is CoRes (collision resolution)

Detailed Comments : see 3GPP TS 44.006 clause 7.1.1 and 7.1.3

ASP Type Definition

ASP Name : G_L2_Paging_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send a paging message on the specified paging group of the specified paging channel to the UE/MS, when the UE/MS is in idle mode or the UE/MS not supporting SPLIT_PG_CYCLE on CCCH is in GPRS attached mode and PCCCH is absent.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier of the right CCCH_GROUP
g_LogicChType	G_LogicChType	PCH
pAGING_GROUP	PAGING_GROUP	INTEGER
pagingMode	PagingMode	0 −− normal paging; 1−− exteded paging; 3 −− paging reorganization
msg	PDU	paging message to be sent

Detailed Comments : The SS is required to send valid layer 3 messages continuously on all paging subchannels on CCCH where paging can appear.For "normal paging" the SS send the paging message in the specified pagingGroup;For "extended paging" " the SS send the paging message in the specified pagingGroup and in the "next but one" position on the PCH, following the block corresponding to pagingGroup;For "paging reorganization" the SS send the paging message in all paging subchannels.The required 51−multiframe occurs when:pagingGroup div (N div BS_PA_MFRMS) = (FN div 51) mod (BS_PA_MFRMS)The index to the required paging block in the 51−multiframe determined above:Paging block index = pagingGroup mod (N div BS_PA_MFRMS) N = (9−BS_AG_BLKS_RES) * BS_PA_MFRMS CCCH not combined orN = (3−BS_AG_BLKS_RES) * BS_PA_MFRMS CCCH + SDCCH combined

ASP Type Definition

ASP Name : G_L2_Release_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt. @sic T1−041010 sic@

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
release_Mode	BITSTRING[1]	0 = normal release; 1 = local end release @sic T1−041010 sic@
outstanding_Indicator	BOOLEAN	whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.

Detailed Comments :

ASP Type Definition

ASP Name : G_L2_SYSINFO_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send system information messages to the lower layer emulatior.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	BCCH or SACCH
instanceIndex	INTEGER	To indicate the instance of the system information messages.For SYSTEM INFORMATION Type 2ter, 18, 19, 20 the value is (0..7); for type 14, 15 the value is (0..3); for type 2quater the value is (0..15); for all other type the value is 0.
sysInfoType	SysInfoType	SYSTEM INFORMATION Type 5, 5bis, 5ter, and 6 are sent on SACCH, the other SYSTEM INFORMATION 's are sent on BCCH.
bCCHExt	B1	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	PDU	This field contains SYSTEM INFORMATION message. See 3GPP TS 44.018 section 9.1.31 to section 9.1.43h for SYSTEM INFORMATION message definitions.

Detailed Comments : The lower layer emulator shall store the SYSTEM INFORMATION's, and transmit them periodically according to the rules specified in section 6.3.1.3 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator.
SYSTEM INFORMATION scheduling assumption: all SI's except SI7, SI8, SI16 and SI17 are scheduled on BCCH Norm. Consequently, SI13, SI2bis and SI2quater are scheduled in TC=4 on BCCH norm not on BCCH Ext

ASP Type Definition

ASP Name : G_L2_UNITDATA_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in unacknowledged mode.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	RFN	The reduced frame number of the first frame carrying the message
msg	PDU	Signalling message or user data received

Detailed Comments :

ASP Type Definition

ASP Name : G_L2_UNITDATA_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send L3 signalling message on the signalling channels or send user data on the traffic channels to the UE/MS in unacknowledged mode.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	PDU	Signalling message or user data to be sent

Detailed Comments : Parameter rfn is only used in the test cases which requires specific L3 message to be sent on specified frame number

ASP Type Definition

ASP Name : G_LLC_UNITDATA_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive an L3 PDU from the UE/MS in LLC unconfirmed transmission.

Parameter Name	Parameter Type	Comments
lLMEId	LLMEID	
tLLI	TLLI	temporary logical link identifier
sAPI	SAPI	
msg	PDU	L3 PDU

Detailed Comments : 3GPP TS 44.064 clause 8.4.2

ASP Type Definition

ASP Name : G_LLC_UNITDATA_REQ

PCO Type : G_DSAP

Comments : The ASP is used to transmit an L3 PDU to the UE/MS in LLC unconfirmed transmission.

Parameter Name	Parameter Type	Comments
lLMEId	LLMEID	
tLLI	TLLI	temporary logical link identifier
sAPI	SAPI	
protectMode	BITSTRING[1]	0 −− unprotected; 1 −− protected
cipherMode	BITSTRING[1]	0 −−− sent without no encryption;1 −−− sent with encryptionencrypted
msg	PDU	L3 PDU

Detailed Comments : 3GPP TS 44.064 clause 8.4.1
After the ciphering function is started in the SS by G_CLLC_Assign_REQ, the SS shall encrypt the "msg" when cipherMode = ’1’, and the SS shall not encrypt the "msg" if cipherMode = ’0’.

ASP Type Definition

ASP Name : G_RLC_ACCESS_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive an access burst sent by the UE/MS on the specified channel.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	PRACH or PACCH or PTCCH
rfn	RFN	The reduced frame number of the frame carrying the burst
retryBit	BITSTRING[1]	For access bursts on PRACH, RACH. For PACCH, this field is no meaning
burst	PDU	8−bit or 11−bit access burst

Detailed Comments : PACKET CHANNEL REQUEST, EGPRS PACKET CHANNEL REQUEST and burst format of PACKET CONTROL ACKNOWLEDGEMENT are access bursts.

ASP Type Definition

ASP Name : G_RLC_ControlMsg_IND

PCO Type : G_DSAP

Comments : The ASP is used to receive an uplink RLC/MAC control block sent by the UE/MS on the specified channel.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	PCCCH or PACCH or PTCCH
tBF_Direction	INTEGER	0 −− downlink; 1 −− uplink
tFI	TFI	temporary flow identity
rfn	RFN	the reduced frame number of the frame carrying this message
msg	PDU	uplink RLC/MAC control message

Detailed Comments : Logical channel type PDTCH is valid for PACKET ENHANCED MEARSUREMENT REPORT message only.
The ASP is not used to receive PACKET CHANNEL REQUEST, EGPRS PACKET CHANNEL REQUEST and burst format of PACKET CONTROL ACKNOWLEDGEMENT which are received by G_RLC_ACCESS_IND.

ASP Type Definition

ASP Name : G_RLC_ControlMsg_REQ

PCO Type : G_DSAP

Comments : The ASP is used to transmit a down link RLC/MAC control message to the UE/MS on the specified channel.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	PCCCH or PACCH or PTCCH
tBF_Direction	INTEGER	0 −− downlink; 1 −− uplink
tFI	TFI	temporary flow identity
rRBP	RRBP	relative reserved block period
s_P_Bit	S_P_Bit	supplementary/polling bit
rfn	RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	PAGING_GROUP	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	PagingMode	0 −− normal paging;1−− exteded paging;3 −− paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	PDU	Down link RLC/MAC control message

Detailed Comments : This ASP provides values for "RRBP" and "S/P" fields in MAC header for TTCN controlling the response from the UE, the value for "PayloadType" and "USF" fields in MAC header shall be filled by the SS.If a RLC/MAC control message can not be fitted into one RLC/MAC control block, the SS RLC/MAC entity shall take the responsibility of segmentation of the message, and set the correct "PayloadType" and optional octet1 (and optional octet2).PTCCH is valid for PACKET TIMING ADVANCE/POWER CONTROL message if sending PACKET PAGING REQUEST.The required 52−multiframe occurs when:pagingGroup div (M div 64) = (FN div 52) mod 64The index to the required paging block in the 51−multiframe determined above:Paging block index = pagingGroup mod (M div 64)M = (12 − BS_PAG_BLKS_RES − BS_PBCCH_BLKS) × 64

ASP Type Definition

ASP Name : G_RLC_PSI_REQ

PCO Type : G_DSAP

Comments : The ASP is used to send packet system information messages to the lower layer emulatior.

Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	PBCCH or PACCH or PCCCH
packetSysInfoCategory	PSI_Category	PSI1 or high repetition rate or low repetition rate
positionInList	PositionInList	Position in the high repetition rate list or the low repetition rate list, for PSI1 this field has no meaning.
msg	PDU	This field contains PACKET SYSTEM INFORMATION message. See 3GPP TS 44.060 section 11.2.18 to section 11.2.25 for PACKET SYSTEM INFORMATION message definitions.

Detailed Comments : On BCCH, the lower layer emulator shall store the PACKET SYSTEM INFORMATION's, and transmit them according to the rules specified in section 6.3.2.4 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator.

Multiple instances of a PSI shall be put in the same list and in ascending order of the message instance number.

ASP Type Definition

ASP Name : G_L2_Release_CNF

PCO Type : G_DSAP

Comments : The ASP from L2, indicates that the multiple frame operation release was successful. This means that the UA message was received in response to L2 DISC command.

Parameter Name	Parameter Type	Comments
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	BITSTRING[1]	0−normal release, 1−local release

Detailed Comments :

ASP Type Definition		
ASP Name : G_L2_Release_REQ **PCO Type :** G_DSAP **Comments :** This ASP requests L2 to send Layer 2 DISC command on the indicated SAPI.		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	BITSTRING[1]	0−normal release, 1−local release
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CRLC_DeleteRLC_MAC_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to delete a RLC/MAC entity in GERAN emulation module.		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The identifier of the cell
Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.		

ASP Type Definition		
ASP Name : G_CRLC_DeleteRLC_MAC_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm the G_CRLC_DeleateRLC_MAC_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The identifier of the cell
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CRLC_CreateRLC_MAC_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to create a RLC/MAC entity in GERAN RLC/MAC emulation module.		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The identifier of the cell
Detailed Comments : One RLC/MAC entity per cell can exist, cellId will be used for couping LLC layer module to the RLC/MAC emulation module.. The packet channel description given in the ChannelSpecificInfo of G_CL1_CreateBasicPhyCh_REQ shall be used to configure this layer. This ASP shall be called after the G_CL1_CreateBasicPhyCh_REQ ASP.		

ASP Type Definition		
ASP Name : G_CRLC_CreateRLC_MAC_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ		
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	The identifier of the cell
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_CreateLLE_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to create an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	**Parameter Type**	**Comments**
lLMEId	LLMEId	Logical Layer Management Entity Id @sic R5s050089 sic@
rLC_MAC_MappingInfo	CellId	This parameter indicates the RLC/MAC emulation module in the cell, not the cell itself.
Detailed Comments : The RLC/MAC emulation module needs to be created prior to this ASP by G_CRLC_CreateRLC_MAC_REQ ASP.		

ASP Type Definition		
ASP Name : G_CLLC_CreateLLE_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm the G_CLLC_CreateLLE_REQ		
Parameter Name	**Parameter Type**	**Comments**
lLMEId	LLMEId	The identifier of the cell Logical Layer Management Entity Id @sic R5s050089 sic@
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_DeleteLLE_REQ **PCO Type :** G_CSAP **Comments :** The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.		
Parameter Name	**Parameter Type**	**Comments**
lLMEId	LLMEId	Logical Layer Management Entity Id @sic R5s050089 sic@
Detailed Comments :		

ASP Type Definition		
ASP Name : G_CLLC_DeleteLLE_CNF **PCO Type :** G_CSAP **Comments :** The ASP is used to confirm the G_CLLC_DeleteLLE_REQ		
Parameter Name	**Parameter Type**	**Comments**
lLMEId	LLMEId	The identifier of the cell Logical Layer Management Entity Id @sic R5s050089 sic@
Detailed Comments :		

ASP Type Definition		
ASP Name : AT_CmdCnf **PCO Type :** MMI **Comments :** The ASP is used get the result of a requested AT command previously sent to the UT (UT −>LT).		
Parameter Name	**Parameter Type**	**Comments**
result	BOOLEAN	OPTIONAL
resultString	IA5String	OPTIONAL
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS
Detailed Comments :		

ASP Type Definition		
ASP Name : AT_CmdReq **PCO Type :** MMI **Comments :** The ASP is used to request a AT command to the UT (LT −>UT).		
Parameter Name	**Parameter Type**	**Comments**
cmd	IA5String	command line
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS
Detailed Comments :		

ASP Type Definition		
ASP Name : MMI_CmdCnf **PCO Type :** MMI **Comments :** The ASP is used get the result of a requested command previously sent to the UT (UT −>LT).		
Parameter Name	**Parameter Type**	**Comments**
result	BOOLEAN	
resultString	IA5String	OPTIONAL
Detailed Comments :		

ASP Type Definition		
ASP Name : MMI_CmdReq **PCO Type :** MMI **Comments :** The ASP is used to request an MMI command to the UT (LT −>UT).		
Parameter Name	**Parameter Type**	**Comments**
cmd	IA5String	command line
Detailed Comments :		

ASP Type Definition		
ASP Name : RLC_TR_TestDataInd **PCO Type :** DSAP **Comments :** To indicate the reception of unstructered data using transparent mode in the uplink direction		
Parameter Name	**Parameter Type**	**Comments**
cellId	INTEGER	
rB_Id	SS_RB_Identity	RB identity (RB3 or RB4)
data	PDU	
Detailed Comments :		

ASP Type Definition		
ASP Name : RRC_DataInd (RRC−DATA−IND) **PCO Type :** Dc_SAP **Comments :** The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <− RRC).		
Parameter Name	**Parameter Type**	**Comments**
cellId	INTEGER	Cell Id
rB_Id	SS_RB_Identity	RB identity (RB3 or RB4)
ch	LogicChGERAN	Logical channel (used for interworking with GERAN)
sapId	SapId	RRC SAP identifier (SAP0)
cN_Domain	SS_CN_DomainIdentity	CN domain identity
start	START_Value	Mandatory in INITIAL DIRECT TRANSFER
msg	PDU	NAS PDU
Detailed Comments :		

ASP Type Definition		
ASP Name : RRC_DataReq **PCO Type :** Dc_SAP **Comments :** The ASP is used to request the transmission of the NAS PDU message using acknowledged operation (NAS −> RRC).		
Parameter Name	**Parameter Type**	**Comments**
cellId	INTEGER	
rB_Id	SS_RB_Identity	RB identity (RB3 or RB4)
ch	LogicChGERAN	Logical channel (used for interworking with GERAN)
sapId	SapId	RRC SAP identifier (SAP0)
cN_Domain	SS_CN_DomainIdentity	CN domain identity
msg	PDU	NAS PDU
Detailed Comments :		

ASN.1 ASP Type Definition
ASP Name : CRLC_SetRRC_MessageSN_REQ **PCO Type :** CSAP **Comments :** To request the SS to set the RRC message sequence number in COUNT−I to the value specified in this ASP. The ASP is used to initialise SS RRC
Type Definition

SEQUENCE
{
cellId INTEGER(−1..63),
routingInfo RoutingInfo,
count_I_LSB_UL RRC_SequenceNumber OPTIONAL,
count_I_LSB_DL RRC_SequenceNumber OPTIONAL
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SetRRC_MessageSN_CNF **PCO Type :** CSAP **Comments :** To confirm the RRC message sequence number setting request
Type Definition

SEQUENCE
{
cellId INTEGER(−1..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_RRC_MessageSN_REQ **PCO Type :** CSAP **Comments :** To request the SS to return the values in COUNT−I for sending the next DL RRC message or for receiving the next UL RRC message on the concerned SRB.
Type Definition

SEQUENCE
{
cellId INTEGER(−1..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_RRC_MessageSN_CNF **PCO Type :** CSAP **Comments :** To return the counter I value (HFN and RRC message sequence number) for sending the next DL RRC message or for receiving the next UL RRC message on the concerned SRB. COUNT_I_MSB is the 28 MSB of the COUNT−I (HFN)
Type Definition

SEQUENCE
{
cellId INTEGER(−1..63),
routingInfo RoutingInfo,
count_I_MSB_UL COUNT_I_MSB,
count_I_LSB_UL RRC_SequenceNumber,
count_I_MSB_DL COUNT_I_MSB,
count_I_LSB_DL RRC_SequenceNumber
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_Ciphering_Activate_CNF
PCO Type : CSAP
Comments : To confirm to activate or inactivate the ciphering
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_Ciphering_Activate_REQ
PCO Type : CSAP
Comments : To request to start or, restart or stop downlink ciphering or uplink deciphering. The physicalChannelIdentity of DPCH applies to routingInfo.Do not increment HFN part of COUNT−C if the value of incrementCOUNT_C_Ind is "NotIncr".
Type Definition

SEQUENCE
{
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  ratType RatType,
  cn_DomainIdentity CN_DomainIdentity,
  cipheringModeInfo CipheringModeInfo,
  incHFN Increment_Mode
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_Config_CNF
PCO Type : CSAP
Comments : For MAC emulator to report that a previous attempt to setup, reconfigure or release a logical channel is successful.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CMAC_Config_REQ
PCO Type :	CSAP
Comments :	To request to configure MAC entity. Setup is used for creation of the MAC instances or the MAC resources. Release is used for free the all MAC resources. The reconfiguration is to change the MAC parameters, it is not the MAC modification.

Type Definition

```
SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo,
  ratType RatType,
  configMessage CHOICE {
    setup CmacConfigReq,
    reconfigure CmacConfigReq,
    release NULL
  }
}
```

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CMAC_SYSINFO_Config_CNF
PCO Type :	CSAP
Comments :	To confirm to setup the BCCH message to MAC layer

Type Definition

```
SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}
```

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CMAC_SYSINFO_Config_REQ
PCO Type :	CSAP
Comments :	To request MAC layer to send the BCCH message on the specified configuration.

Type Definition

```
SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo,
  ratType RatType,
  configMessage CmacSysinfoConfigReq
}
```

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SecurityMode_Config_CNF **PCO Type :** CSAP **Comments :** To confirm to configure the MAC security mode
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_SecurityMode_Config_REQ **PCO Type :** CSAP **Comments :** To request to configure the MAC security mode If there are several CMAC_Ciphering_Activate_REQ follow this ASP, the SS shall take a serial of specified actions on the same contents in this ASP at the activation time indicated in each CMAC_Ciphering_Activate_REQ.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  macCipheringInfo SecurityInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_Config_CNF **PCO Type :** CSAP **Comments :** To confirm to setup the cell parameter
Type Definition

SEQUENCE {
  cellId INTEGER (0..63)
}

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CPHY_Cell_Config_REQ
PCO Type :	CSAP
Comments :	To request to setup the cell parameter. The unit of tcell is chip; the unit of sfnOffset is frame number; the primary scambling code number of the cell is 16*primaryScramblingCode_SS; the unit of dLTxAttenuationLevel is dB.

Type Definition

```
SEQUENCE {
  cellId INTEGER (0..63),
  tcell INTEGER(0..38399),
  sfnOffset INTEGER (0 .. 4095 ),
  frequencyInfo FrequencyInfo,
  primaryScramblingCode_SS INTEGER (0..511),
  cellTxPowerLevel CellTxPowerLevel,
  dLTxAttenuationLevel INTEGER(0..30)

}
```

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CPHY_Cell_Release_CNF
PCO Type :	CSAP
Comments :	The confirmation to the CPHY_Cell_Release_Req

Type Definition

```
SEQUENCE {
  soft_Reset BOOLEAN,
  cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) -- cell IDs
}
```

Detailed Comments :

ASN.1 ASP Type Definition	
ASP Name :	CPHY_Cell_Release_REQ
PCO Type :	CSAP
Comments :	1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE. 2. Releases the associated Memory Buffers (if any). 3. Cancels all active timers (if any) With "Soft_Reset" flag OFF: 1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any) 2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List 3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Type Definition

```
SEQUENCE {
  soft_Reset BOOLEAN,
  cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) -- cell IDs
}
```

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_TxPower_Modify_CNF **PCO Type :** CSAP **Comments :** To confirm to change the DL power
Type Definition

SEQUENCE {
  cellId INTEGER (0..63)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Cell_TxPower_Modify_REQ **PCO Type :** CSAP **Comments :** To request to change the DL power
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  dLTxAttenuationLevel INTEGER(0..40|123) −−@sic T1−040940, T1−041410 sic@
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Frame_Number_CNF **PCO Type :** CSAP **Comments :** To return the requested connection frame number. The routingInfo indicates a physical channel.
Type Definition

SEQUENCE{
  cellId INTEGER(0..63),
  routingInfo RoutingInfo,
  frameNumber INTEGER (0..255)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Frame_Number_REQ
PCO Type : CSAP
Comments : To request the physical layer to return a connection frame number on which the next message can be sent at the specified PCO on the specified logical channel. The return frame number shall leave time from current frame number in order to leave some execution time for TTCN preparing next message. The routingInfo indicates a physical channel
Type Definition

SEQUENCE{
cellId INTEGER(0..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Ini_CNF
PCO Type : CSAP
Comments : Confirm the test initialisation
Type Definition

SEQUENCE
{
confirmation NULL
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Ini_REQ
PCO Type : CSAP
Comments : Request to initialise the test
Type Definition

ENUMERATED {
defaultRadioEnvironment(0),
nonDefaultMultiCell(1)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Out_of_Sync_IND
PCO Type : CSAP
Comments : To report that the physical channel synchronization (in FDD mode, sync with uplink DPCCH) was lost as detected by the SS receiver.
Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Modify_CNF
PCO Type : CSAP
Comments : To confirm to modify the Radio Link
Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Modify_REQ
PCO Type : CSAP
Comments : To request to modify the Radio Link HardHandover (PhysicalChannelReconfig) ChannelisationCodeChange FrequencyChange PhysicalChannelModifyForTrCHReconfig CompressedMode(PhysicalChannelReconfig) Re_Synchronized HardHandover Softhandover
Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo,
ratType RatType,
modifyMessage CphyRlModifyReq
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Release_CNF **PCO Type :** CSAP **Comments :** PHY emulator confirms that a specified physical channel has been released.
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Release_REQ **PCO Type :** CSAP **Comments :** To request to release the Radio Link
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Setup_CNF **PCO Type :** CSAP **Comments :** To confirm to setup the Radio Link
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_RL_Setup_REQ **PCO Type :** CSAP **Comments :** To request to setup the associated transport channels and the Radio Link itself.
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo,
  ratType RatType,
  setupMessage CphyRlSetupReq
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_Sync_IND **PCO Type :** CSAP **Comments :** To indicate that physical channel synchronization (in FDD mode, sync with DPCCH) has been achieved.
Type Definition

SEQUENCE{
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Config_CNF **PCO Type :** CSAP **Comments :** To confirm to configure the transport channel
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Config_REQ **PCO Type :** CSAP **Comments :** To request to configure the transport channel
Type Definition

SEQUENCE {
  cellId INTEGER(0..63),
  routingInfo RoutingInfo,
  ratType RatType,
  trchConfigType TrChConfigType,
  configMessage CphyTrchConfigReq
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Release_CNF **PCO Type :** CSAP **Comments :** To confirm to release tthe Radio Link
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CPHY_TrCH_Release_REQ **PCO Type :** CSAP **Comments :** To request to release tthe Radio Link
Type Definition

SEQUENCE {
  cellId INTEGER (0..63),
  routingInfo RoutingInfo,
  trchConfigType TrChConfigType
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Ciphering_Activate_CNF **PCO Type :** CSAP **Comments :** To confirm to activate or inactivate the ciphering
Type Definition
SEQUENCE {   cellId INTEGER (−1..63)}
Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : CRLC_Ciphering_Activate_REQ

PCO Type : CSAP

Comments : To request to start, restart or stop downlink ciphering or uplink deciphering. The RB−identity applied to routingInfo indicates the SRB being not suspended during the execution of the ciphering mode command. Each call of the ASP includes one RLC SN in rb_DL_CiphActivationTimeInfo for the corresponding rb−identity.

Type Definition

```
SEQUENCE {
  cellId INTEGER (−1..63),
  ratType RatType,
  cn_DomainIdentity CN_DomainIdentity,
  ciphActivationInfo CiphActivationInfo,
  incHFN RLC_IncMode −−@sic T1−031732 sic@
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : CRLC_Config_CNF

PCO Type : CSAP

Comments : For RLC emulator to comfirm that a previous attempt to establish, reconfigure or release a radio bearer has been successful

Type Definition

```
SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}
```

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : CRLC_Config_REQ

PCO Type : CSAP

Comments : To request to setup, reconfigure or release RLC entity

Type Definition

```
SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo,
  ratType RatType,
  configMessage CrlcConfigReq
}
```

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Activate_CNF **PCO Type :** CSAP **Comments :** To confirm to activate or inactivate the integrity protection
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Activate_REQ **PCO Type :** CSAP **Comments :** To request to start or to modify the downlink or uplink integrity protection. The ASP shall be called before the sending of SECURITY MODE COMMAND. It activates the integrity on all SRBs in DL. The ASP shall not be called if the integrity shall be switched off in the test case.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  cn_DomainIdentity CN_DomainIdentity,
  integrityActivationInfo IntegrityActivationInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Integrity_Failure_IND **PCO Type :** CSAP **Comments :** RLC emulator reports the occurrences of a failure in integrity protection, i.e. reception of an integrity−protected RLC AM/UM SDU containing a non−matching X−MAC value compared to the desired.
Type Definition

SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  failureCause ENUMERATED { codeNotMatched(0) }
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Resume_CNF **PCO Type :** CSAP **Comments :** To confirm the resume request
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Resume_REQ **PCO Type :** CSAP **Comments :**
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SecurityMode_Config_CNF **PCO Type :** CSAP **Comments :** To confirm to configure the ciphering
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63)
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SecurityMode_Config_REQ **PCO Type :** CSAP **Comments :** To request to configure the RLC security mode If several subsequent CRLC_Integrity_Activate_REQ or CRLC_Ciphering_Activate_REQ follow this ASP, the SS shall take a serial of specified actions on the same contents in this ASP at the activation time indicated in each CRLC_ Integrity (or Ciphering)_Activate_REQ.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  rlcSecurityInfo SecurityInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SequenceNumber_CNF
PCO Type : CSAP
Comments : To return the requested counter sequence number to which the next DL PDU to be sent or the expected UL PDU to be received.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo,
  count_C_MSB_UL COUNT_C_MSB ,
  count_C_LSB_UL RLC_SequenceNumber,
  count_C_MSB_DL COUNT_C_MSB ,
  count_C_LSB_DL RLC_SequenceNumber
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_SequenceNumber_REQ
PCO Type : CSAP
Comments : To request the RLC layer to return current counter sequence numbers to which the next DL PDU to be sent or the expected UL PDU to be received.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Suspend_CNF
PCO Type : CSAP
Comments : To confirm the suspension of data transmission. The parameter vt indicates either the value of the Send State Variable VT(S) for AM, or the value of Data State Varialble VT(US) for UM.
Type Definition

SEQUENCE {
  cellId INTEGER (−1..63),
  routingInfo RoutingInfo,
  vt RLC_SequenceNumber
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CRLC_Suspend_REQ **PCO Type :** CSAP **Comments :** To request the suspension of data transmission. The parameter n indicates that an RLC entity will not send a PDU with "Sequence Number">=VT(S)+N for AM and "Sequence Number">=VT(US)+N for UM, where N is a non−negative integer
Type Definition

SEQUENCE {
cellId INTEGER (−1..63),
routingInfo RoutingInfo,
n RLC_SequenceNumber
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_AM_DATA_CNF **PCO Type :** DSAP **Comments :**
Type Definition

SEQUENCE {
cellId INTEGER(−1..63),
routingInfo RoutingInfo,
mui Mui
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_AM_DATA_IND **PCO Type :** DSAP **Comments :** To indicate to receive DATA using ackowledged mode
Type Definition

SEQUENCE {
cellId INTEGER(−1..63),
routingInfo RoutingInfo,
integrityResult IntegrityResult ,
aM_message CHOICE {
uL_DCCH_Message UL_DCCH_Message,
uL_CCCH_Message UL_CCCH_Message,
uL_SHCCH_Message UL_SHCCH_Message
 	
}
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_AM_DATA_REQ
PCO Type : DSAP
Comments : To request to transmit DATA using ackowledged mode
Type Definition

SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  confirmationRequest AmConfirmationRequest,
  aM_message CHOICE {
  dL_DCCH_Message DL_DCCH_Message,
  dL_CCCH_Message DL_CCCH_Message,
  pCCH_Message PCCH_Message,
  dL_SHCCH_Message DL_SHCCH_Message,
  bCCH_FACH_Message BCCH_FACH_Message,
  bCCH_BCH_Message BCCH_BCH_Message,
  invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
  invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
  invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  }
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_TR_DATA_IND
PCO Type : DSAP
Comments : To indicate to receivet DATA using transparent mode
Type Definition

SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  tM_message CHOICE {
  uL_DCCH_Message UL_DCCH_Message,
  uL_CCCH_Message UL_CCCH_Message,
  uL_SHCCH_Message UL_SHCCH_Message
  }
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_TR_DATA_REQ
PCO Type : DSAP
Comments : To request to transmit DATA using transparent mode
Type Definition

SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  tM_message CHOICE {
  dL_DCCH_Message DL_DCCH_Message,
  dL_CCCH_Message DL_CCCH_Message,
  pCCH_Message PCCH_Message,
  dL_SHCCH_Message DL_SHCCH_Message,
  bCCH_FACH_Message BCCH_FACH_Message,
  bCCH_BCH_Message BCCH_BCH_Message,
  invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
  invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
  invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  }
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : RLC_UM_DATA_IND
PCO Type : DSAP
Comments : To indicate to receivet DATA using unacknowledged mode
Type Definition

SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  integrityResult IntegrityResult,
  uM_message CHOICE {
  uL_DCCH_Message UL_DCCH_Message,
  uL_CCCH_Message UL_CCCH_Message,
  uL_SHCCH_Message UL_SHCCH_Message
  }
}

Detailed Comments :

ASN.1 ASP Type Definition

ASP Name : RLC_UM_DATA_REQ

PCO Type : DSAP

Comments : To request to transmit DATA using unacknowledged mode

Type Definition

```
SEQUENCE {
  cellId INTEGER(−1..63),
  routingInfo RoutingInfo,
  uM_message CHOICE {
    dL_DCCH_Message DL_DCCH_Message,
    dL_CCCH_Message DL_CCCH_Message,
    pCCH_Message PCCH_Message,
    dL_SHCCH_Message DL_SHCCH_Message,
    bCCH_FACH_Message BCCH_FACH_Message,
    bCCH_BCH_Message BCCH_BCH_Message,
    invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
    invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
    invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
  },
  specialLI BOOLEAN
}
```

Detailed Comments :

PDU Type Definition

PDU Name : ASSIGNMENTCOMMAND
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMMAND ntw −> ue/ms
3GPP TS 44.018 claus 9.1.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
ch1Descr_at	ChannelDescr2		description of the 1st channel, after time M OCTETSTRING [3]
powerCmd	PowerCommand		power command M OCTETSTRING [1] without IEI
freqList_at	FreqList		frequency list, after time C OCTETSTRING [4..132]
cellChDescr	CellChDescr		cell channel description O OCTETSTRING [17]
multiSlotConfig	MultislotAlloc		multislot allocation C OCTETSTRING [3..12]
ch1Mode	ChMode		mode of the 1st channel (channel set 1) O OCTETSTRING [2]
channelSet2Mode	ChMode		mode of channel set 2 O OCTETSTRING [2]
channelSet3Mode	ChMode		mode of channel set 3 O OCTETSTRING [2]
channelSet4mode	ChMode		mode of channel set 4 O OCTETSTRING [2]
channelSet5mode	ChMode		mode of channel set 5 O OCTETSTRING [2]
channelSet6mode	ChMode		mode of channel set 6 O OCTETSTRING [2]
channelSet7mode	ChMode		mode of channel set 7 O OCTETSTRING [2]
channelSet8mode	ChMode		mode of channel set 8 O OCTETSTRING [2]
ch2Descr_at	ChannelDescr		description of the 2nd channel, after time O OCTETSTRING [4]

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PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
ch2Mode	ChMode2		mode 2 of the 2nd channel O OCTETSTRING [2]
mobileAlloc_at	MobileAlloc		mobile allocation after time C OCTETSTRING [3..10]
startingTime	StartingTime		starting time O OCTETSTRING [3]
freqList_bt	FreqList		frequency list, before time C OCTETSTRING [4..132]
ch1Descr_bt	ChannelDescr2		description of the 1st channel, before time O OCTETSTRING [4]
ch2Descr_bt	ChannelDescr		description of the 2nd channel, before time O OCTETSTRING [4]
frqchs_bt	FreqChannelSeq		frequency channel sequence before time C OCTETSTRING [10]
mobileAlloc_bt	MobileAlloc		mobile allocation before time C OCTETSTRING [3..10]
cphms	CipherModeSetting		cipher mode setting O OCTETSTRING [1]
vGCS_TargetMode	VGCS_TargetMode		VGCS target mode Indication O OCTETSTRING [3]
mltiRateConfig	MultiRateConfig		multiRate configuration O OCTETSTRING [4..8]
Detailed Comments :			

PDU Type Definition

PDU Name : ASSIGNMENTCOMPLETE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMPLETE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.3

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cuase M BITSTRING [8] without IEI

Detailed Comments :

PDU Type Definition			
PDU Name : CHANNELRELEASE **PCO Type** : G_DSAP **Encoding Rule Name** : **Encoding Variation** : **Comments** : RR CHANNEL RELEASE ntw −> ue/ms 3GPP TS 44.018 clause 9.1.7			
Field Name	**Field Type**	**Field Encoding**	**Comments**
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cuase M BITSTRING [8]
bA_Range	BA_Range		BA range O OCTETSTRING minimum 6 octets no up limit
groupChannelDescr	GroupChannelDescr		group channel description O OCTETSTRING[4..13]
groupCipherKey	GroupCipherKey		group cipher key number C OCTETSTRING[1]
gPRS_Resumption	GPRS_Resumption		GPRS resumptioon O OCTETSTRING[1]
bA_ListPref	BA_ListPref		BA list pref O OCTETSTRING at least 3 octets no up limit
uTRAN_FreqList	UTRAN_FreqList		UTRAN frequency list O OCTETSTRING[3..
Detailed Comments :			

PDU Type Definition			
PDU Name : CHANNELREQUEST **PCO Type** : G_DSAP **Encoding Rule Name** : **Encoding Variation** : **Comments** : RR CHANNEL REQUEST ue/ms −> ntw 3GPP TS 44.08 clause 9.1.8			
Field Name	**Field Type**	**Field Encoding**	**Comments**
estCauRandomRef	B8		establishment cause / random reference M
Detailed Comments :			

PDU Type Definition

PDU Name : CIPHERINGMODECOMMAND
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR CIPHERING MODE COMMAND ntw −> ue/ms
3GPP TS 44.018 clause 9.1.9

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
cipherResponse	CipherResponse		cipher response M BITSTRING [4]
cipherModeSetting	CipherModeSetting		cipher mode setting M BITSTRING [4]

Detailed Comments :

PDU Type Definition

PDU Name : CIPHERINGMODECOMPLETE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR CIPHERING MODE COMPLETE ue/ms −> ntw/ue
3GPP TS 44.018 clause 9.1.10

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
mobileEquipId	MM_MS_Identity		mobile equipment identity O OCTETSTRING [10], 15 digits, BCD

Detailed Comments :

PDU Type Definition

PDU Name : CLASSMARKCHANGE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK CHANGE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.11

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
msclsmk	MS_Clsmk2_lv		mobile station classmark M OCTETSTRING [4]
additionalMsclsmk	MSCLSMK3		addtional mobile station classmark information C OCTETSTRING [14]

Detailed Comments :

PDU Type Definition

PDU Name : CLASSMARKENQUIRY
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK ENQUIRY ntw −> ue/ms
3GPP TS 44.018 clause 9.1.12

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
mask	ClassmarkEnquiryMask		Classmark Enquiry Mask

Detailed Comments :

PDU Type Definition

PDU Name : HANDOVERFAILURE
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR HANDOVER FAILURE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.17

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
rRCau	RR_Cause		RR cuase M OCTETSTRING [1] without IEI

Detailed Comments :

PDU Type Definition

PDU Name : IMMEDIATEASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR IMMEDIATE ASSIGNMENT ntw −> ue/ms
3GPP TS 44.018 clause 9.1.18

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
dedicatedModeOrTBF	DedicatedModeOrTBF		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	ChannelDescr		channel description C OCTETSTRING [3]
packetChDescr	PacketChDescr		packet channel description C OCTETSTRING [3]
reqRef	ReqRef		request reference M OCTETSTRING [3]
ta	TA		timing advance M OCTETSTRING [1]
mobileAlloc	MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	StartingTime		starting time O OCTETSTRING [3]
iaroct	IARO		IA rest octets / frequency parameter, before time M

Detailed Comments : The message has a fixed length of 23 octets.

PDU Type Definition

PDU Name : INTERSYSTEMTOUTRANHANDOVERCOMMAND
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR INTER SYSTEM TO UTRAN HANDOVER COMMAND ntw −> ue/ms
3GPP TS 44.018 clause 9.1.15a

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
handoverToUTRANCommand	HandoverToUTRANCmd		

Detailed Comments :

PDU Type Definition

PDU Name : MEASUREMENTINFORMATION
PCO Type : G_DSAP
Encoding Rule Name : MeasInfoSparePadding_Rule5
Encoding Variation :
Comments : RR MEASUREMENT INFORMATION ntw −> ue/ms
3GPP TS 44.018 clause 9.1.54 @sic T1−050282 sic@

Field Name	Field Type	Field Encoding	Comments
rR_ShortPD	B1		see 3GPP TS 24.007
msgType	B5		message type.
shortL2Header	B2		short layer 2 header
bA_IND	B1		BCCH allocation sequence number indication
bA_IND3G	B1		3G sequence number
mP_CHANGE_MARK	B1		measurement parameters change mark
mI_INDEX	B4		MEASUREMENT INFORMATION index
mI_COUNT	B4		MEASUREMENT INFORMATION count
pWRC	B1		power control indicator
rEPORT_TYPE	B1		
rEPORT_RATE	B1		
iNVALID_BSIC_REPORTING	B1		
maskBit1	B1		
realTimeDiff	RealTimeDiffDescr_MI		not present if maskBit1 = 0
maskBit2	B1		
bSIC_Descr	BSIC_Descr		not present if maskBit2 = 0
maskBit3	B1		
reportPriorityDescr	ReportPriorityDescr		not present if maskBit3 = 0
maskBit4	B1		
measParamDescr	MeasParamDescrMI		not present if maskBit4 = 0
maskBit5	B1		
extensionLength	ExtLengthDescr		not present if maskBit5 = 0
maskBit6	B1		
neighCellDescr3G	NeighCellDescr3G_MI		not present if maskBit6 = 0
MaskBit7	B1		
measParamDescr3G	MeasParamDescr3GMI		not present if maskBit7 = 0

Detailed Comments :

PDU Type Definition

PDU Name : MEASUREMENTREPORT
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR MEASUREMENT REPORT ue/ms −> ntw
3GPP TS 44.018 clause 9.1.21

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
measResults	MeasResults		measurement results M OCTETSTRING [16]

Detailed Comments :

PDU Type Definition

PDU Name : PACKETENHANCEDMEASUREMENTREPORT
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : ref: 44.060 v5a0 clause 11.2.9d

Field Name	Field Type	Field Encoding	Comments
msgType	B6		Message type
tLLI	O4		
nCMeasRep	NC_MeasRpt		
r5Mask	B1		
grntiXMask	B1		not present if r5Mask = 0
gRNTIExtension	B4		not present if r5Mask = 0 or grntiXMask = 0

Detailed Comments :

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE1
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pageMode	B2		
pBCCH_CHANGE_MARK	B3		
pSI_CHANGE_FIELD	B4		
pSI1_REPEAT_PERIOD	B4		
pSI_COUNT_LR	B6		
pSI_COUNT_HR_Mask	B1		
pSI_COUNT_HR	B4		not present if pSI_COUNT_HR_Mask = 0
MEASUREMENT_ODER	B1		
gPRS_CellOptions	GPRS_CellOptions		
pRACH_ControlParameters	PRACH_ControlParameters		
pCCCH_OrganisationParameters	PCCCH_OrganisationParameters		
globalPowerControlParameters	GlobalPowerControlParameters		
pSI_STATUS_IND	B1		
spareMask	B1		fields below are added in R99
mSCR	B1		present if spareMask = 1
sGSNR	B1		present if spareMask = 1
bandIndicator	B1		present if spareMask = 1

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.18

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE2
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI2_CHANGE_MARK	B2		
pSI2_INDEX	B3		
pSI2_COUNT	B3		
cellIdentificationMask	B1		
cellIdentification	CellIdentification		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	B1		
nonGPRSCellOptions	NonGPRSCellOptions		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	ReferenceFreqLists		
cellAllocation	CellAllocLists		
gPRS_MobileAllocations	GPRS_MobileAllocationLists		
pCCCH_Description	PCCCH_DescriptionList		
spareMask	B1		fields below are added in R99
compactControlMask	B1		not present if spareMask = 0
compactControlInfo	CompactControlInfo		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	B1		not present if spareMask = 0
additionalPSI_Msg	AdditionalPSIMessages		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE3
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI3_CHANGE_MARK	B2		
pSI3_BIS_COUNT	B4		
servingCellParameters	ServingCellParams		
generalCellSelectionParameter	GenCellSel		
neighCellParameters	NeighCellParamsList		
spareMask1	B1		fields below are add in R98
servingCell_LSA_Id_Info	LSA_ID_Info		not present if spareMask1 = 0
lSA_ParameterMask	B1		not present if spareMask1 = 0
lSA_Parameter	LSA_Param		not present if spareMask1 = 0 or lSA_ParameterMask = 0
spareMask2	B1		fields below are added in R99
spareBits	B2		not present if spareMask1 = 0 or spareMask2 = 0. Set these to 00. Earlier definitions allocated these, but not now
compactInfoMask	B1		not present if spareMask1 = 0 or spareMask2 = 0
compactInfo	CompactInfo		not present if spareMask1 = 0 or spareMask2 = 0 or compactInfoMask = 0
spareBit	B1		not present if spareMask1 = 0 or spareMask2 = 0. Set this to 0. Was allocated in earlier definition, but not now
spareMask3	B1		fields below are added in R4
cCN_SupportDescriptionMask	B1		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	CCN_SupportDescr		not present if cCN_SupportDescriptionMask = 0
spareMask4	B1		fields below are added in Release 5
cellBarQualify3	B2		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeNeighCellParams	IuModeNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

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PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
iuModeOnlyNeighCellParams	IuModeOnlyNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20			

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE3bis
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI3_CHANGE_MARK	B2		
pSI3_BIS_INDEX	B4		
pSI3_BIS_COUNT	B4		
neighCellParameters	NeighCellParamsList		
neighCellParameters2	NeighCellParams2List		
spareMask1	B1		fields below are add in R98
lSA_ParameterMask	B1		not present if spareMask1 = 0
lSA_Parameter	LSA_Param		not present if spareMask1 = 0 or lSA_ParameterMask = 0
spareMask2	B1		fields below are added in R99
compactNeighCellParams	CompactNeighCellParams2List		not present if spareMask1 = 0 or spareMask2 = 0
spareBit	B1		not present if spareMask1 = 0 or spareMask2 = 0. Set this to 0. Was allocated in earlier definition, but not now
spareMask3	B1		fields below are added in R4
cCN_SupportDescriptionMask	B1		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	CCN_SupportDescr		not present if cCN_SupportDescriptionMask = 0
spareMask4	B1		fields below are added in R5
iuModeNeighCellParams	IuModeNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	IuModeOnlyNeighbourCellParamsList		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

PDU Type Definition

PDU Name : PACKETSYSTEMINFORMATIONTYPE5
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
pSI5_CHANGE_MARK	B2		
pSI5_INDEX	B3		
pSI5_COUNT	B3		
nC_MeasMask	B1		
pSI5_NC_MeasParameter	NC_MeasParams		not present if nC_MeasMask = 0
extMeasMask	B1		
extMeasParameter	ExtMeasParam		not present if extMeasMask = 0
spareMask	B1		following fields are added in R99
eNH_ReportingParamMask	B1		not present if spareMask = 0
eNH_ReportingParam	ENH_ReportingParam		not present if eNH_ReportingParaMask = 0 or spareMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.23

Table 71: PSI5 information element details
The optional PSI5 message contains broadcast measurement parameters for either Network Control (NC) measurements containing the NC Measurement Parameters, or for Extended measurements containing the EXT Measurement Parameters, or for both.

PAGE_MODE (2 bit field)
This field is defined in clause 12.20.

PSI5_CHANGE_MARK (2 bit field)
The PSI5_CHANGE_MARK field is changed each time information has been updated in any of the individual instances of the PSI5 message. A new value indicates that the mobile station shall re−read the information from all PSI5 messages. The coding of this field is network dependent.

Range: 0 to 3.

PSI5_INDEX (3 bit field) and PSI5_COUNT (3 bit field)
The purpose of the PSI5_INDEX field and the PSI5_COUNT field is to indicate the number of individual messages within the sequence of PSI5 messages and to assign an index to identify each one of them. The PSI5_INDEX field is binary coded, range: 0 to 7, and provides an index to identify the individual PSI5 message. The PSI5_COUNT field is binary coded, range: 0 to 7, and provides the PSI5_INDEX value for the last (highest indexed) message in the sequence of PSI5 messages.

NETWORK_CONTROL_ORDER (2 bit field)
The NETWORK_CONTROL_ORDER field is coded according to the following table (for definition of NCx see
GSM 05.08):
bit
2 1

0 0 NC0
0 1 NC1

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PDU Type Definition

Detailed Comments : ...

1 0 NC2
1 1 Reserved

If the NETWORK_CONTROL_ORDER parameter = NC0, then the other parameters in the NC Measurement parameters struct may be omitted. If the NETWORK_CONTROL_ORDER parameter indicates NC1 or NC2 and the other parameters are omitted, the default value for these parameters shall be assumed.

NC_NON_DRX_PERIOD (3 bit field)
This field indicates the minimum time the mobile station shall stay in non−DRX mode after an NC−measurement report has been sent. The field is coded according to the following table:

bit
3 2 1

0 0 0 No non−DRX mode after a measurement report has been sent (default value).
0 0 1 0,24 sec
0 1 0 0,48 sec
0 1 1 0,72 sec
1 0 0 0,96 sec
1 0 1 1,20 sec
1 1 0 1,44 sec
1 1 1 1,92 sec

NC_REPORTING_PERIOD_I (3 bit field)
NC_REPORTING_PERIOD_T (3 bit field)
These fields indicate the time period for cell reselection measurement reporting for packet idle mode (I) and packet transfer mode (T), respectively. The field is coded according to the following table:

bit
3 2 1
0 0 0 0.48 sec
0 0 1 0.96 sec
0 1 0 1.92 sec
0 1 1 3.84 sec (default value for NC_REPORTING_PERIOD_T)
1 0 0 7.68 sec
1 0 1 15.36 sec
1 1 0 30.72 sec
1 1 1 61.44 sec (default value for NC_REPORTING_PERIOD_I)

EXT_MEASUREMENT_ORDER (2 bit field)
The EXT_MEASUREMENT_ORDER field indicates to the mobile station how to interpret the rest of the extended measurement parameters. This field is coded according to the following table (for definition of EMx see 05.08):

bit
2 1

0 0 EM0
0 1 EM1
1 0 Reserved.
1 1 Reserved and shall be interpreted as EM0 by the receiver.
If the EXT_MEASUREMENT_ORDER parameter = EM0 the other parameters in the EXT Measurement parameters struct may be omitted.

NCC_PERMITTED (8 bit field)
This field is a bitmap of NCCs for which the mobile station is permitted to report measurement; this bitmap relates to NCC part of BSIC (see coding field in 04.08).

EXT_REPORTING_TYPE (2 bit field)

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PDU Type Definition

Detailed Comments : ...

This field indicates the type of extended measurement reporting to which the frequencies on the list are subject. This field is coded according to the following table (see GSM 05.08):

bit
2 1

0 0 Type 1 measurement reporting
0 1 Type 2 measurement reporting
1 0 Type 3 measurement reporting
1 1 Reserved. In this version of the protocol the mobile station shall ignore the entire list containing this field.

EXT_REPORTING_PERIOD (3 bit field)
The EXT_REPORTING_PERIOD field indicates the time interval between extended measurement reports. This field is coded according to the following table:

bit
3 2 1
0 0 0 60 sec
0 0 1 120 sec
0 1 0 240 sec
0 1 1 480 sec
1 0 0 960 sec
1 0 1 1920 sec
1 1 0 3840 sec
1 1 1 7680 sec
INT_FREQUENCY (5 bit field)
This optional field indicates the frequency upon which the interference measurement shall be made. This field is an index into the EXT Frequency List. If the field is not included, no interference measurements shall be done
Range 0 to 31

EXT_FREQUENCY_LIST
Contains the EXT Frequency List description struct. The EXT Frequency Lists description struct may contain multiple

EXT frequency list struct.
START_FREQUENCY (10 bit field)
The START_FREQUENCY defines the ARFCN for the first carrier in the list (F(0)).

FREQ_DIFF_LENGTH (3 bit field)
The FREQ_DIFF_LENGTH field specifies the number of bits to be used for the Frequency diff field in the current frequency group. The field is coded according to the following table
bit
3 2 1
0 0 0 1 bit
0 0 1 2 bits
. . .
1 1 1 8 bits
FREQUENCY_DIFF ('Freq Diff length' bit field)
Each FREQUENCY_DIFF parameter field specifies the difference in frequency to the next carrier to be defined. The Frequency Diff parameter encodes a non negative integer in binary format (W). The length of the field is defined by the Freq Diff length parameter. Each frequency following the start frequency (ARFCN(0)) and belonging to the Frequency List struct is then calculated by the formula ARFCN(n) = ARFCN(n−1) + W(n), n=1, . . ., 'Nr of Frequencies')

PDU Type Definition

PDU Name : PAGINGREQUESTTYPE1
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR PAGING REQUEST_TYPE1 ntw −> ue/ms
3GPP TS 44.018 clause 9.1.22

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
chNeeded_m1_2	ChNeeded		channels needed for mobiles 1 and 2 M BITSTRING [4] without IEI
pageMode	PageModeIE		page mode M BITSTRING [4] without IEI
mobileId1	MS_Identity_lv		mobility identity 1 M OCTETSTRING [2..9] @sic T1s−040534 sic@
mobileId2	MM_MS_Identity		mobility identity 2 O OCTETSTRING [3..10]
p1RO	P1RO		P1 rest octets

Detailed Comments : The message has a fixed length of 23 octets.

PDU Type Definition

PDU Name : GPRS_SUSPENSIONREQ
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RR GPRS Suspension Request ue/ms −> ntw
3GPP TS 44.018 clause 9.1.13b

Field Name	Field Type	Field Encoding	Comments
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
tlli	TLLI		Temporary Logical Link Identity M OCTETSTRING [4]
raIdentification	RAI_v		Routeing Area Identification M OCTETSTRING [6]
cause	O1		SuspensionCause M OctetString [1]

Detailed Comments :

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE1
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE1 ntw −> ue/ms
3 GPP TS 44.018 clause 9.1.31

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
cellChDescr	CellChDescr		cell channel description M OCTETSTRING [16]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
sI1RO	SI1RO		SI1 rest octets M

Detailed Comments : The message has an L2 pseudo length of 21 octets and a total length of 23 octets.

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE13 **PCO Type** : G_DSAP **Encoding Rule Name** : GSMSparePadding_Rule2 **Encoding Variation** : **Comments** : RR SYSTEM INFORMATION TYPE13 ntw −> ue/ms 3GPP TS 44.018 clause 9.1.43a			
Field Name	**Field Type**	**Field Encoding**	**Comments**
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
si13roct	SI13RO		SI3 rest octets M OCTETSTRING [20]
Detailed Comments : The message has an L2 pseudo length of 0 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2 **PCO Type** : G_DSAP **Encoding Rule Name** : **Encoding Variation** : **Comments** : RR SYSTEM INFORMATION TYPE2 ntw −> ue/ms 3GPP TS 44.018 clause 9.1.32			
Field Name	**Field Type**	**Field Encoding**	**Comments**
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
neighBCCHFreqList	NeighCellDescr		bcch frequency list of neighbour cells M OCTETSTRING [16]
nCCPermitted	NCCPermitted		ncc permitted M OCTETSTRING [1]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
Detailed Comments : The message has an L2 pseudo length of 22 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2bis **PCO Type** : G_DSAP **Encoding Rule Name** : GSMSparePadding_Rule2 **Encoding Variation** : **Comments** : RR SYSTEM INFORMATION TYPE2bis ntw −> ue/ms 3GPP TS 44.018 clause 9.1.33 @sic T1s040644 sic@			
Field Name	**Field Type**	**Field Encoding**	**Comments**
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
extNeighBCCHFreqList	NeighCellDescr		extended bcch frequency list of neighbour cells M OCTETSTRING [16]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
Detailed Comments : This PDU type is used both for SYSINFO2bis. The 2bis message has an L2 pseudo length of 21 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE2quater **PCO Type** : G_DSAP **Encoding Rule Name** : GSMSparePadding_Rule2 **Encoding Variation** : **Comments** : RR SYSTEM INFORMATION 2quater ntw −> ue/ms 3GPP TS 44.018 clause 9.1.34a			
Field Name	**Field Type**	**Field Encoding**	**Comments**
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
sI2quaterRO	SI2quaterRO		SI2quater rest octets OCTETSTRING [20]
Detailed Comments : The 2ter message has an L2 pseudo length of 1 octet and a total length of 23 octets.			

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE3
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE3 ntw −> ue/ms
3GPP TS 44.018 clause 9.1.35

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
cellId	O2		cell identity M OCTETSTRING [2]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
controlChDescr	ControlChDescr		control channel description M OCTETSTRING [3]
cellOption	CellOptionBCCH		cell options/BCCH M OCTETSTRING[1]
cellSelParam	CellSelParam		cell selection parameters M OCTETSTRING [2]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
sI3RO	SI3RO		SI3 rest octets M OCTETSTRING [4]

Detailed Comments : The message has an L2 pseudo length of 18 octets and a total length of 23 octets.

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE4
PCO Type : G_DSAP
Encoding Rule Name : GSMSparePadding_Rule2
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE4 ntw −> ue/ms
3GPP TS 44.018 clause 9.1.36

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
cellSelParam	CellSelParam		cell selection parameters M OCTETSTRING [2]
rACHControlParam	RACHControlParam		rach control parameters M OCTETSTRING [3]
cbchd	ChannelDescr		cbch channel description O OCTETSTRING [4]
cbchmobileAlloc	MobileAlloc		mobile allocation C OCTETSTRING [3..6]
si4roct	SI4RO		SI4 rest octets M OCTETSTRING [0..10]

Detailed Comments : The message has a total length of 23 octets. the L2 pseudo length is the sum of all information elements except SI 4 Rest Octets and L2 pseudo length

PDU Type Definition

PDU Name : SYSTEMINFORMATIONTYPE5
PCO Type : G_DSAP
Encoding Rule Name : SACCHSysInfoSparePadding_Rule4
Encoding Variation :
Comments : RR SYSTEM INFORMATION TYPE5 ntw −> ue/ms
3GPP TS 44.018 clause 9.1.37 @sic T1−050282 sic@

Field Name	Field Type	Field Encoding	Comments
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
bCCHFreqList	NeighCellDescr		bcch frequency list M OCTETSTRING [16]

Detailed Comments : The message has an L2 pseudo length of 18 octets

PDU Type Definition			
PDU Name : SYSTEMINFORMATIONTYPE6			
PCO Type : G_DSAP			
Encoding Rule Name : SACCHSysInfoSparePadding_Rule4			
Encoding Variation :			
Comments : RR SYSTEM INFORMATION TYPE6 ntw −> ue/ms 3GPP TS 44.018, 9.1.40 @sic T1−050282 sic@			
Field Name	**Field Type**	**Field Encoding**	**Comments**
l2PseudoLength	O1		L2 pseudo length M OCTETSTRING [1]
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	B8		message type M BITSTRING [8]
ci	O2		cell identity M OCTETSTRING [2]
lai	LocAreaId_v		location area identification M OCTETSTRING [5]
co	CellOptionSACCH		cell options /SACCH M , OCTETSTRING [1]
nCCPermitted	NCCPermitted		ncc permitted M OCTETSTRING [1]
si6roct	SI6RO		SI6 Rest Octets OCTETSTRING [7]
Detailed Comments : The message has an L2 pseudo length of 11 octets and a total length of 23 octets.			

PDU Type Definition			
PDU Name : UTRANCLASSMARKCHANGE			
PCO Type : G_DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : RR UTRAN CLASSMARK CHANGE ue/ms −> ntw 3GPP TS 44.018 clause 9.1.11a			
Field Name	**Field Type**	**Field Encoding**	**Comments**
skipIndicator	B4		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	B4		RR protocol discriminator M BITSTRING [4]
msgType	O1		message type M BITSTRING [8]
uTRANPreConfigInfo	UTRANPreConfigInfo		UTRAN predefined configuration status informatiom M OCTETSTRING [2..n]
Detailed Comments :			

PDU Type Definition

PDU Name : PACKETDOWNLINKASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign downlink resources. TS 3GPP 44.060 clause 11.2.7

SS to add padding bits to RLC block size

Field Name	Field Type	Field Encoding	Comments
msgType	B6		Message type
pAGE_MODE	B2		Normal paging
persistenceLevelMask	B1		
persistenceLevel1	B4		not Present if persistenceLevelMask=0
persistenceLevel2	B4		not Present if persistenceLevelMask=0
persistenceLevel3	B4		not Present if persistenceLevelMask=0
persistenceLevel4	B4		not Present if persistenceLevelMask=0
globalTFImask	B1		
gLOBAL_TFI	GlobalTFI		not present if globalTFImask=1
mask2	B1		not present if globalTFImask=0
tLLI	OCTETSTRING[4]		not present if globalTFImask=0 and mask2=1
spareBit1	B1		set to ’0’B
mACMode	B2		
rLCMode	B1		
controlAck	B1		
timeslotAllocation	B8		
pktTimingAdvance	PacketTimingAdvance		
mask1	B1		
p0	B4		not present if mask1 = 0
spareBit2	B1		not present if mask1 = 0. set to ’0’B if present
pRMode	B1		not present if mask1 = 0
freqParamMask	B1		
freqParams	FreqParam		not present if freqParamMask = 0
tfiMask	B1		
dlTFIAssignment	B5		not present if tfiMask = 0
pcMask	B1		
powerCtrlParams	PowerControlParam		not present if pcMask = 0
startTimeMask	B1		
tbfStartTime	StartingFrameNumberDscr		not present if startTimeMask = 0
spareBit3	B1		set to ’0’B
r99Mask	B1		
egprsMask	B1		not present if r99mask = 0

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PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
egprsWindowSize	EGPRSWindowSize		not present if r99mask = 0 or if egprsMask=0
linkQualMeasMode	B2		not present if r99mask = 0 or if egprsMask=0
bepMask	B1		not present if r99mask = 0 or if egprsMask=0
bepPeriod2	B4		not present if r99mask = 0 or if egprsMask=0 or if bepMask=0
pktXTAMask	B1		not present if r99mask = 0
pktExtendedTA	B2		not present if r99mask = 0 or if pktXTAMask=0
compactMask	B1		not present if r99mask = 0
compactReducedMA	CompactReducedMA		not present if r99mask = 0 or if compactMask=0
r5Mask	B1		not present if r99mask = 0
rBIdMask	B1		not present if r99mask = 0 or if r5Mask=0
rBId	B5		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
grntiXMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
gRNTIExtension	B4		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if grntiXMask=0
ulCtrlMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
ulCtrlTimeslot	B3		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if ulCtrlMask=0
hfnMask	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
hfnLSB	B1		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if hfnMask=0
Detailed Comments :			

PDU Type Definition

PDU Name : PACKETCHANNELREQUEST
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : PACKET CHANNEL REQUEST

3GPP TS 44.046 clause 11.2.5

Field Name	Field Type	Field Encoding	Comments
estCauRandomRef	BITSTRING[8..11]		establishment cause / random reference M BITSTRING

Detailed Comments :

PDU Type Definition

PDU Name : PACKETUPLINKASSIGNMENT
PCO Type : G_DSAP
Encoding Rule Name : GPRSPadding_Rule1
Encoding Variation :
Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign uplink resources. TS 3GPP 44.046 clause 11.2.29

SS to add padding bits to RLC block size @sic R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
pAGE_MODE	B2		
persistenceLevelMask	B1		
persistenceLevel1	B4		not Presenet if persistenceLevelMask=0
persistenceLevel2	B4		not Presenet if persistenceLevelMask=0
persistenceLevel3	B4		not Presenet if persistenceLevelMask=0
persistenceLevel4	B4		not Presenet if persistenceLevelMask=0
referenceAddress	ReferenceAddress		
eGPRPSmask	B1		
channelCodingCommand	B2		not present of EGPRPSmask=1
tLLIBlockChannelCoding	B1		
packetTimingAdvance	PacketTimingAdvance		
freqParamMask	B1		
freqParam	FreqParam		not present if freqParamMask=0
allocationMask	B2		
dynamicAllocation	DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	SingleBlockAllocationPacket		present if allocationMask=10
r99Mask	B1		
packetExtTAmask	B1		not present if r99Mask=0
packetExtendedTA	B2		not present if r99Mask=0 and packetExtTImask=0
r5Mask	B1		
gRNTIMask	B1		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	B4		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBIdMask	B1		not present if r99Mask=0 and r5Mask=0
rBId	B5		not present if r99Mask=0, r5Mask=0 and rBIdMask=0
eGPRSmessage	EGPRSPktUplinkAssigment		not present of EGPRPSmask=0

Detailed Comments :

PDU Type Definition

PDU Name : PACKETCONTROLACKNOWLEDGEMENT
PCO Type : G_DSAP
Encoding Rule Name :
Encoding Variation :
Comments : RLC/MAC Control Block format

Field Name	Field Type	Field Encoding	Comments
msgType	MessageType		Message type
tLLI	OCTETSTRING[4]		
ctrlAck	B2		
mask	B1		
rRBPMask	B1		not present if mask=0
tn_RRBP	B3		not present if mask=0 or if rRBPMask=0
gRNTIMask	B1		not present if mask=0
gRNTIExt	B4		not present if mask=0 or if gRNTIMask=0
paddingBits	BITSTRING		

Detailed Comments :

PDU Type Definition

PDU Name : ALERTINGul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC ALERTING uplink ue −> n
3G TS 24.008 cl. 9.3.1.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : CALLCONFIRMED
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC CALL CONFIRMED ue −> n
3G TS 24.008 cl. 9.3.2
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability O OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
cau	Cau		cause O OCTETSTRING [4..32]
cC_Capabilities	CC_Capabilities		cc capabilities O OCTETSTRING[3]
streamId	StreamId		stream identifier O OCTETSTRING[3]
supportedCodecs	CodecList		supported codecs O OCTETSTRING[5−n]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : CONNECTACKNOWLEDGE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC CONNECT ACKNOWLEDGE ue <−> n
3G TS 24.008 cl. 9.3.6

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : CONNECTul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC CONNECT n <− ue
3G TS 24.008 cl. 9.3.5.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
connectedSubAdrs	ConnectedSubAdrs		connected subaddress O OCTETSTRING [2..23]
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]
streamId	StreamId		stream identifier O OCTETSTRING[3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : DISCONNECTul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC DISCONNECT ue −> n
3G TS 24.008 cl. 9.3.7.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [3..31]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASECOMPLETEul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC or SS RELEASE COMPLETE n <− ue
3G TS 24.008 cl. 9.3.19.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASEdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC RELEASE n −> ue
3G TS 24.008 cl. 9.3.18.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
cau2	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : SETUPdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n –> ue
3G TS 24.008 cl. 9.3.23.1
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability O OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
facility	Facility		facility O
progInd	ProgInd		progress indicator O OCTETSTRING [4]
signal	Signal		signal O OCTETSTRING[2]
cgpn	CGPN		calling party subaddr. O OCTETSTRING [2..14]
cgps	CGPS		calling party subaddr. O OCTETSTRING [2..23]
cdpn	CDPN		called party number O OCTETSTRING[2..43]
cdps	CDPS		called party subaddr. O OCTETSTRING [2..23]
redirectingPN	RedirectingPN		redirecting party BCD number O OCTETSTRING[3..19]
redirectingPSubadrs	RedirectingPS		redirecting party subadress O OCTETSTRING[2..23]
llcRepeatInd	RepeatInd		LLC repeat indicator O OCTETSTRING [1]
llc1	LLC		low layer compatib.1 O OCTETSTRING [2..18]
llc2	LLC		low layer compatib.2 C OCTETSTRING [2..18]
hlcRepeatInd	RepeatInd		HLC repeat indicator O OCTETSTRING [1]

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PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
hlc1	HLC		high layer compat.1 O OCTETSTRING [2..5]
hlc2	HLC		high layer compat. 2 C OCTETSTRING [2..5]
userUser	UserUser		user−user O OCTETSTRING [3..131]
priority	PriorityLvl		priority O OCTETSTRING[1]
alert	AlertPattern		alerting pattern O OCTETSTRING[3]
ntwCCCapabilities	NtwCCCapabilities		Network call control capabilities O OCTETSTRING[3]
cauNoCLI	CauNoCLI		Cause of no CLI O OCTETSTRING[3]
buBcap	BuBcap		Backup Bearer Capability O TLV OCTETSTRING[3−15]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition			
PDU Name : ROUTING_AREA_UPDATE_COMPLETE			
PCO Type : Dc_SAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : 3GPP 24.008 V3.6.0 clause 9.4.16 (GMM message)			
Field Name	**Field Type**	**Field Encoding**	**Comments**
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator ’1000’ M BITSTRING [4]
msgType	MsgType		Message Type ’0000 1010’ M BITSTRING [8]
listNPDUnumbers	ReceiveN_PDU_Numbers_tlv		O, TLV 4−19 octets
Detailed Comments :			

PDU Type Definition

PDU Name : AUTHENTICATION_AND_CIPHERING_FAILURE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.10a (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 1100'B M BITSTRING [8]
gmmCause	RejCau		M 1 octet
authFailurePar	AuthenticationFailureParameter		O TLV, 16 octets

Detailed Comments :

PDU Type Definition

PDU Name : ATTACHACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.2 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
forceToStandby	ForceToStandby		M 1/2 octet
attachResult	AttachResult		M 1/2 octet
periodicRAupdateTimer	GPRS_Timer_v		M 1 octet
radioPrioTOM8	RadioPriority2_v		M 1/2 octet
radioPrioSMS	RadioPriority_v		M 1/2 octet
rai	RAI_v		Routing Area Identification M 6 octets
ptmsiSignature	PTMSI_Signature		O 4 octets
negReadyTimer	GPRS_Timer		O 2 octets
allocatedPTMSI	GMM_MS_IdentityPTMSI		O 7 octets
msIdentity	GMM_MS_Identity		O 7−10 octets
gmmCause	GMM_Cause		O 2 octets
t3302Value	GPRS_Timer2		O TLV 3 octets
cellNotification	CellNotification		O 1 octet
equivalentPLMN	PLMN_List		O 5−17 octets
ntwFeatureSupport	NtwFeatureSupport_tv		O TV 1 octet
emergNumList	EmergNumList		O TLV 5−50 octets

Detailed Comments :

PDU Type Definition

PDU Name : ATTACHCOMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.3 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0000 0011'B M BITSTRING [8]

Detailed Comments :

PDU Type Definition

PDU Name : ATTACHREJECT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.4 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0100' M BITSTRING [8]
gmmCause	RejCau		M 1 octet
t3302Value	GPRS_Timer2		O, TLV 3 octets

Detailed Comments :

PDU Type Definition

PDU Name : ATTACHREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.1 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0001' M BITSTRING [8]
msNetworkCap	MS_NetworkCap_lv		MS network capability M 3−9 octets
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
attachType	AttachType		Attach Type M BITSTRING [4]
drxParameter	DRXparamter		M 2 octets
ptmsiORimsi	MS_Identity_lv		Mobile Identity M 6−9 octets
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6−52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
tmsiStatus	TMSI_Status		O 1 octet
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONANDCIPHERINGREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.9 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 0010'B M BITSTRING [8]
imeisvReq	IMEISVRequest		M BITSTRING[4]
ciphAlgorithm	CiphAlgorithm		Ciphering algorithm M BITSTRING[4]
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
forceToStandby	ForceToStandby		M BITSTRING [4]
authRand	AuthenticationParamterRAND		O, TV 17 octets
gprsCiphKeySeqNo	CiphKeySeqNum_tv		Ciphering key sequence number O, TV, 1
aUTN	GMM_AUTN		Auth. parameter AUTN O, TLV, 18 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONANDCIPHERINGRESPONSE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.10 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 0011'B M BITSTRING [8]
spare4	B4		
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
authRsp	AuthRsp_tv		O, TV 5 octets
imeisv	GMM_MS_Identity		O TLV, 11 octets
authRspExt	AuthRspExt		O TLV, 3−14 octets

Detailed Comments :

PDU Type Definition

PDU Name : AUTHENTICATIONFAILURE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM AUTHENTICATION FAILURE ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.3a

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
rejCau	RejCau		Reject Cause M BITSTRING [8]
authFailParam	AuthenticationFailureParameter		Authentication Failure Paramter O AuthFail (128 bits) @sic EW R5s050095 sic@

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : AUTHENTICATIONREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM AUTHENTICATION REQUEST n −> ms
3G TS 24.008 V3.4.0 cl. 9.2.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
rAND	MM_RAND		Auth. parameter RAND M BITSTRING [128]
aUTN	AUTN		Auth. parameter AUTN O AUTN

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition

PDU Name : AUTHENTICATIONRESPONSE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM AUTHENTICATION RESPONSE ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
authRsp	AuthRsp		Authentication Response M OCTETSTRING [4]
authRspExt	AuthRspExt		Authentication Response Extension O AuthRspExt (3−14 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : CMSERVICEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CM SERVICE REQUEST ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.9

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
cMServType	CMServType		CM Service Type M BITSTRING [4]
mSClsmk2	MS_Clsmk2_lv		Mobile Station Classmark 2 LV M MS_Clsmk2 (4 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2−9 octets)
priorityLvl	PriorityLvl		Priority Level TV O PriorityLvl (1 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : CMSERVICEACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CM SERVICE ACCEPT n −> ue
3G TS 24.008 V3.4.0 cl. 9.2.5

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition

PDU Name : DEACTIVATEPDPCONTEXTREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Deactivate PDP Context Request
n <=> ue
24.008, 9.5.14
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
sM_Cause	SM_Cause_v		SM cause M V OCTETSTRING [1]
tearDwnInd	TearDwnInd_tv		Tear down indicator O TV BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3−253]

Detailed Comments :

PDU Type Definition

PDU Name : DETACHREQUESTMO
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		M 1/2 octet
detachType	DetachType		M 1/2 octet
ptmsi	GMM_MS_IdentityPTMSI		O TLV
ptmsiSignature	PTMSI_Signature_tlv		O

Detailed Comments :

PDU Type Definition

PDU Name : DISCONNECTdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC DISCONNECT ue <− n
3G TS 24.008 cl. 9.3.7.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [3..31]
facility	Facility		facility O
progInd	ProgInd		progress indicator O OCTETSTRING [4]
userUser	UserUser		user−user O OCTETSTRING [3..131]
allowedAction	AllowedAction		Allowed actions (for CCBS) O OCTETSTRING[3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : IMSIDETACHINDICATION
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM IMSI DETACH INDICATION ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.12

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
mSClsmk1	MS_Clsmk1		Mobile Station Classmark 1 M MSClsmk1 (1 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2−10 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : LOCATIONUPDATINGACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM LOCATION UPDATING ACCEPT n −> ms
3G TS 24.008 V3.4.0 cl. 9.2.13
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
locAreaId	LocAreaId_v		Location Area Id. V M LocAreaId_v (5 octets)
mobileId	MM_MS_Identity		Mobile Identity O MobileId (3−11 octets)
followOnProceed	FollowOnProceed		Follow on proceed O BITSTRING [8]
cTSPerm	CTSPerm		CTS Permission O BITSTRING [8]
equivalentPLMN	PLMN_List		O 17 octets
emergNumList	EmergNumList		O TLV 5−50 octets

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Type Definition

PDU Name : LOCATIONUPDATINGREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM LOCATION UPDATING REQUEST ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.15

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
locUpdType	LocUpdType		Location Updating Type M BITSTRING [4]
locAreaId	LocAreaId_v		Location Area Id. V M LocAreaId (5 octets)
mSClsmk1	MS_Clsmk1		Mobile Station Classmark 1 M MSClsmk1 (1 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2−9 octets)
mSClsmk2	MS_Clsmk2		Mobile Station Classmark 2 TLV O MSClsmk2 (5 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

PDU Type Definition

PDU Name : PAGINGRESPONSE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : PAGINGRESPONSE ue −> n
GSM 04.18 cl. 9.1.25

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
rRProtocolDiscriminator	ProtocolDiscriminator		RR Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
mSClsmk2	MS_Clsmk2_lv		Mobile Station Classmark 2 M MSClsmk2 (4 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2−10 octets)

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.
(2) (see 3G TS 24.008 cl. 4.5.1.3.3) The UE shall respond with the PAGING RESPONSE message defined in GSM 04.18, chapter 9.1.25. For reasons of backward compatibility the paging response shall use the RR protocol discriminator.

PDU Type Definition

PDU Name : RELEASECOMPLETEdl
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC or SS RELEASE COMPLETE n −> ue
3G TS 24.008 cl. 9.3.19.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : RELEASEul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC RELEASE n <− ue
3G TS 24.008 cl. 9.3.18.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [4..32]
cau2	Cau		cause O OCTETSTRING [4..32]
facility	Facility		facility O
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [2..3]

Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.
a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : ROUTINGAREAUPDATEACCEPT
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.15 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 1001' M BITSTRING [8]
updateResult	UpdateResult_v		Update result M, 1/2 octet
forceToStandby	ForceToStandby		M 1/2 octet
periodicRAupdateTimer	GPRS_Timer_v		M 1 octet
rai	RAI_v		Routing Area Identification M 6 octets
ptmsiSignature	PTMSI_Signature		O 4 octets
allocatedPTMSI	GMM_MS_IdentityPTMSI		O 7 octets
msIdentity	GMM_MS_Identity		O 7−10 octets
listNPDUnumbers	ReceiveN_PDU_Numbers_tlv		O, TLV 4−19 octets
readyTimer	GPRS_Timer		O 2 octets
gmmCause	GMM_Cause		O 2 octets
t3302Value	GPRS_Timer2		O TLV 3 octets
cellNotification	CellNotification		O, T, 1 octets
equivalentPLMN	PLMN_List		O 5−17 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
ntwFeatureSupport	NtwFeatureSupport_tv		O TV 1 octet
emergNumList	EmergNumList		O TLV 5−50 octets

Detailed Comments :

PDU Type Definition

PDU Name : ROUTINGAREAUPDATEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.14 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 1000' M BITSTRING [8]
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
updateType	UpdateType_v		Update Type M BITSTRING [4]
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6−52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
drxParameter	DRXparamter_tv		O, TV 3 octets
tmsiStatus	TMSI_Status		O 1 octet
ptmsi	GMM_MS_IdentityPTMSI		O, TLV 7 octets
msnetworkcap	MS_NetworkCap_tlv		MS network capability O, TLV 4−10 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets

Detailed Comments :

PDU Type Definition

PDU Name : SERVICEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.20 (GMM message)
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
serviceType	ServiceType_v		Service type M BITSTRING[4]
ciphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
ptmsi	MS_Identity_lv		Mobile Identity M 6 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets

Detailed Comments :

PDU Type Definition

PDU Name : SETUPul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n <− ue
3G TS 24.008 cl. 9.3.23.2
@sic EW R5s050095 sic@

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Bcap		Bearer capability M OCTETSTRING [3..16]
bcap2	Bcap		Bearer capability O OCTETSTRING [3..16]
facility	Facility		facility O
cgps	CGPS		calling party subaddr. O OCTETSTRING [2..23]
cdpn	CDPN		called party number M OCTETSTRING[3..43]
cdps	CDPS		called party subaddr. O OCTETSTRING [2..23]
llcRepeatInd	RepeatInd		LLC repeat indicator O OCTETSTRING [1]
llc1	LLC		low layer compatib.1 O OCTETSTRING [2..18]
llc2	LLC		low layer compatib.2 O OCTETSTRING [2..18]
hlcRepeatInd	RepeatInd		HLC repeat indicator O OCTETSTRING [1]
hlc1	HLC		high layer compat.1 O OCTETSTRING [2..5]
hlc2	HLC		high layer compat. 2 O OCTETSTRING [2..5]
userUser	UserUser		user−user O OCTETSTRING [3..131]
sS_VersionInd	SS_VersionInd		SS version indicator ue −> n O OCTETSTRING [2..3]
cLIR_Suppression	CLIR_Suppression		CLIR suppression C OCTETSTRING[1]

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PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
cLIR_Invocation	CLIR_Invocation		CLIR invocation O OCTETSTRING[1]
cC_Capabilities	CC_Capabilities		cc capabilities O OCTETSTRING[3]
facilityCCBS_AdvRecall	Facility		facility for CCBS (advanced recall alignemet) O
facilityCCBS_RecallAlign	Facility		facility for CCBS (recall alignement not essential) O
streamId	StreamId		stream identifier O OCTETSTRING[3]
supportedCodecs	CodecList		supported codecs O OCTETSTRING[5−n]
Detailed Comments : (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)			

PDU Type Definition			
PDU Name : STATUS_PDU			
PCO Type : DSAP			
Encoding Rule Name :			
Encoding Variation :			
Comments : An AMD STATUS PDU. Ref 3G TS 25.322 clause 9.2.1.5			
Field Name	**Field Type**	**Field Encoding**	**Comments**
dC_Field	DC_Field		1
type	CtrlPDU_Type		2
superFieldsTx	SuperFields		3
superFieldsAndPadRx	HEXSTRING		4
paddingTx	Padding		5
Detailed Comments : 1. Always tsc_DC_ControlPDU for a STATUS PDU. 2. Always tsc_PDU_TypeStatus for a STATUS PDU. 3. The superfields transmitted in the STATUS PDU. 4. The superfields and padding to be received in the STATUS PDU. 5. The padding transmitted must be present to ensure that the total size of this PDU is exactly equal to the current PDU size. It is the callers responsibility to ensure that the superfields are either terminated with a NO_MORE SUFI, or an ACK SUFI.			

PDU Type Definition

PDU Name : TMSIREALLOCATIONCOMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : MM TMSI REALLOCATION COMPLETE ue −> n
3G TS 24.008 V3.4.0 cl. 9.2.18

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]

Detailed Comments : (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,
for core network nodes earlier than R99:
bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;
for core network nodes of R99 or later:
bits 7 and 8 are reserved for the send sequence number.

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_CCCH_Message
PCO Type : DSAP
Encoding Rule Name : PER_Unaligned
Encoding Variation :
Comments :

Type Definition

```
SEQUENCE {
  integrityCheckInfo IntegrityCheckInfo OPTIONAL,
  message Invalid_DL_CCCH_MsgType
}
```

Detailed Comments :

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_DCCH_Message
PCO Type : DSAP
Encoding Rule Name : PER_Unaligned
Encoding Variation :
Comments :

Type Definition

```
SEQUENCE {
  integrityCheckInfo [0] IntegrityCheckInfo OPTIONAL,
  message [1] Invalid_DL_DCCH_MsgType
}
```

Detailed Comments :

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_SHCCH_Message
PCO Type : DSAP
Encoding Rule Name : PER_Unaligned
Encoding Variation :
Comments :

Type Definition

```
SEQUENCE {
  message Invalid_DL_SHCCH_MsgType
}
```

Detailed Comments :

ASN.1 PDU Type Definitions By Reference

PDU Name	PCO Type	Type Reference	Module Identifie	Enc Rule	Enc Variation	Comments
BCCH_BCH_Message	DSAP	BCCH−BCH−Message	Class−definitions	PER_Unaligned		
BCCH_FACH_Message	DSAP	BCCH−FACH−Message	Class−definitions	PER_Unaligned		
DL_CCCH_Message	DSAP	DL−CCCH−Message	Class−definitions	PER_Unaligned		
DL_DCCH_Message	DSAP	DL−DCCH−Message	Class−definitions	PER_Unaligned		
DL_SHCCH_Message	DSAP	DL−SHCCH−Message	Class−definitions	PER_Unaligned		
PCCH_Message	DSAP	PCCH−Message	Class−definitions	PER_Unaligned		
UL_CCCH_Message	DSAP	UL−CCCH−Message	Class−definitions	PER_Unaligned		
UL_DCCH_Message	DSAP	UL−DCCH−Message	Class−definitions	PER_Unaligned		
UL_SHCCH_Message	DSAP	UL−SHCCH−Message	Class−definitions	PER_Unaligned		

Detailed Comments :

Alias Definitions		
Alias Name	**Expansion**	**Comments**
RxStatus	RLC_TR_TestDataInd	This alias is used to receive an AM STATUS PDU. Note that AM PDUs are received using the Tr PCO, so that the RLC PDU can be specified within the TTCN. This is described in detail in 34.123−3, clause 6.5 (RLC test method).
Detailed Comments :		

III

Constraints Part

Structured Type Constraint Declaration

Constraint Name : c_ClassmarkEnquiryMask(p_Value : O1)
Group :
Structured Type : ClassmarkEnquiryMask
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 04.08 / 3GPP TS 44.018 Section 10.5.2.7c

Element Name	Element Value	Element Encoding	Comments
iei	'00010000'B		OCTETSTRING [1]
length	'01'O		OCTETSTRING [1]
value	p_Value		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCmd (p_Len : O1 ; p_HOCmd : HandoverToUTRANCommand)
Group :
Structured Type : HandoverToUTRANCmd
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
lengthOfContents	p_Len		
valuePart	o_GSM_ToUTRANHO_PER _Encoding (p_HOCmd , p_Len)		basic production of Handover to UTRAN command defined in 3GPP TS 25.331 it is 8−bit aligned bitstring resulted from PER encoding

Detailed Comments : used in INTER SYSTEM TO UTRAN HANDOVER COMMAND
3GPP TS 44.018 clause 9.1.15a and 10.5.2.51

Structured Type Constraint Declaration

Constraint Name : c_G_MeasParamDescr3G
Group :
Structured Type : MeasParamDescr3GMI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearsh_C	'0111'B		
sEARSCH_PRIO_3G	'1'B		
fDD_REP_QUANT	'1'B		
multiRatFddMask	'1'B		
fDD_MULTIRAT_REPORTING	'01'B		not present if multiRatFddMask = 0
fDDMask	'0'B		
fDD_REPORTING_OFFSET	–		not present if fDDMask = 0
fDD_REPORTING_THRESHOLD	–		not present if fDDMask = 0
multiRatTddMask	'0'B		
tDD_MULTIRAT_REPORTING	–		not present if multiRatTddMask = 0
tDDMask	'0'B		
tDD_REPORTING_OFFSET	–		not present if tDDMask = 0
tDD_REPORTING_THRESHOLD	–		not present if tDDMask = 0
multiRat2000Mask	'0'B		
cDMA2000MULTIRAT_REPORTING	–		not present if multiRat2000Mask = 0
cdma2000Mask	'0'B		
cDMA2000REPORTING_OFFSET	–		not present if cdma2000Mask = 0
cDMA2000REPORTING_THRESHOLD	–		not present if cdma2000Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MeasResults_1UTRAN
Group :
Structured Type : MeasResults
Derivation Path :
Encoding Variation :
Comments : @sic T1s040695 sic@

Element Name	Element Value	Element Encoding	Comments
iei	–		information element identifier
ba_used	?		bcch allocation used
dtx_used	?		dtx was used
rxlev_fsc	?		received signal strength on the full serving cell
ba3G_used	?		3G bcch allocation used
meas_valid	'0'B		measurement results are valid
rxlev_ssc	?		received signal strength on a subset of the serving cell
spareBit1	?		spare bit
rxqual_fsc	?		received signal quality on the full serving cell
rxqual_ssc	?		received signal quality on a subset of the serving cell
no_neighCells	?		number of neighbouring cells (nc)
rxlev_nc1	?		received signal strength on nc1
bcchfrq_nc1	'11111'B		indicates a 3G cell
bsic_nc1	'000000'B		base station identity code of first UTRAN cell
rxlev_nc2	?		received signal strength on nc2
bcchfrq_nc2	?		bcch frequency position of nc2
bsic_nc2	?		base station identity code of nc2
rxlev_nc3	?		received signal strength on nc3
bcchfrq_nc3	?		bcch frequency position of nc3
bsic_nc3	?		base station identity code of nc3
rxlev_nc4	?		received signal strength on nc4
bcchfrq_nc4	?		bcch frequency position of nc4
bsic_nc4	?		base station identity code of nc4
rxlev_nc5	?		received signal strength on nc5
bcchfrq_nc5	?		bcch frequency position of nc5
bsic_nc5	?		base station identity code nc5

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
rxlev_nc6	?		received signal strength on nc6
bcchfrq_nc6	?		bcch frequency position of nc6
bsic_nc6	?		base station identity code of nc6
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name	: c_G_NeighbourCellDescr3GFDD(p_FDD_Descr : UTRAN_FDD_Descr)		
Group	:		
Structured Type	: NeighCellDescr3G_MI		
Derivation Path	:		
Encoding Variation	:		
Comments	: 3G neighbour cell description in MEASUREMENT INFORMATION message		
Element Name	**Element Value**	**Element Encoding**	**Comments**
waitMask	'0'B		
wait3G	–		not present if waitMask = 0
indexMask	'0'B		
indexStart3G	–		not present if indexMask = 0
absoluteIndexMask	'0'B		
absoluteIndexStartEMR	–		not present if absoluteIndexMask = 0
fDDMask	'1'B		
uTRAN_FDD_Description	p_FDD_Descr		not present if fDDMask = 0
tDDMask	'0'B		
uTRAN_TDD_Description	–		not present if tDDMask = 0
cdma2000Mask	'0'B		
cDMA2000Descr	–		not present if cdma2000Mask = 0
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_SI2quaterMeasParams3G_None
Group :
Structured Type : SI2quaterRO_MeasParamDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearsh_I	'0110'B		
qsearch_C_Initial	'0'B		
fDDMask	'0'B		
fDD_Qoffset	−		not present if fDDMask = 0
fDD_REP_QUANT	−		not present if fDDMask = 0
fDD_MULTIRAT_REPORTING	−		not present if fDDMask = 0
fDD_Qmin	−		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	−		not present if tDDMask = 0
tDD_MULTIRAT_REPORTING	−		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_Classmark (p_EarlyClassMarkSendingControl, p_EarlyClassMarksendingRestriction3G : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 51.010 clause 26.6.14.

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sI2terIndicator	'0'B		no SI 2ter
earlyClassMarkSendingControl	p_EarlyClassMarkSendingControl		Low
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sI13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	p_EarlyClassMarksendingRestriction3G		
mask5	'0'B		mask bit for SI2quaterPosition
sI2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAlloc(p_rFL_NUMBER:B4)
Group :
Structured Type : CellAlloc
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
rFL_NUMBER	p_rFL_NUMBER		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGPRS700_CellA
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for DCS 700 − GPRS cell A . Values are taken from 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8CE88AEC000000000000 000000000000'O		bit map o format, ARFCN = 457,467,462

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGPRS850_CellA
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for DCS 850 − GPRS cell A . Values are taken from 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'858994D80000000000000 00000000000'O		bit map o format, ARFCN = 147, 157, 167

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM1800A
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for cell A in RR testing of DCS1800 with the ARFCN list = {590, 650, 750, 850}..

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'892728271900000000000 00000000000'O		ARFCNs : 590, 650, 750, 850 512 range

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM1800HO_256F
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Cell Channel Description for cell A in RR testing of DCS1800 HO cases with the ARFCN_list={734,741,747,754,759,762,766,767,773,775,779,782,791,798,829,832,844}

using 256 format.

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	'8B6F14F32FC602C59EFFA54999400000'O		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM1900A
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for cell A in RR testing of GSM 1900 with the ARFCN list = {590, 650, 750, 850}..

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'892728271900000000000000000000000'O		ARFCNs : 590, 650, 750, 850 512 range

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM1900HO_256F
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Cell Channel Description for cell A in RR testing frequency list, after time using Range 256 format.

Complete Cell Allocation { 634, 641, 647, 654, 659, 662, 666, 667, 673, 675, 679, 682, 691, 698, 729, 732, 744 }

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	'8B3D14F32FC602C59EFFA54999400000'O		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM450A
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for cell A in RR testing of GSM 450 with the ARFCN list = 263, 267, 275 and 279

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8C838CE0400000000000 000000000000'O		ARFCNs : 263, 267, 275 and 279 128 range

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM450HO_128F
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Cell Channel Description for cell A in RR testing of GSM 450 HO cases with the

Complete Cell Allocation of Cell A in HO cases using 128 format.
ARFCN_list={259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281,283, 285, 287, 289, 291}

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	'8C8192E08E7084EEEE22 22C000000000'O		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM480A
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for cell A in RR testing of GSM 480 with the ARFCN list = {310, 315, 322 and 326}..

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'8C9B0CE4400000000000 000000000000'O		ARFCNs : 310, 315, 322 and 326 128 range

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM480HO_128F
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Cell Channel Description for cell A in RR testing of GSM 480 HO cases with the ARFCN_list={306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338}

using 128 format.

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	'8C9912E08E7084EEEE2222C000000000'O		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM900HO
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Cell Channel Description for any cell in RR testing of GSM 900 HO cases with the ARFCN_list={10,17,20,26,34,42,45,46,52,59,66,73,74,75,76,108,114}.

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	'0002080000000F020408320202090200'O		bit map 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocLists(p_rFL_NUMBER:B4)
Group :
Structured Type : CellAllocLists
Derivation Path :
Encoding Variation :
Comments : The definition in CSN.1 is {1 < Cell Allocation struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more CellAllocation if more than 2 CellAllocation are required in the Constraint.

Refernce : 3GPP TS 44.060 clause 11.2.19

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		
cellAlloc1	c_CellAlloc(p_rFL_NUMBER)		not present if prefix1 = 0
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM900_CellA
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell A

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'00000000000000000000000000000421'O		bit map o format, ARFCN = 1, 6, 11

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM900_CellB
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell B

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'00000000000000000000000000010840'O		bit map o format, ARFCN = 7, 12, 17

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGSM900_CellC			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : for GSM 900 cell C			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	OMIT		
refFreqList	'000000000000000000010 84000000000'O		bit map o format, ARFCN = 39, 44, 49
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS900			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {10, 20, 40, 50, 60, 80} bitmap 0			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	–		
refFreqList	'000000000000800008020 08000080200'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS1800_1900			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {520, 530, 540, 550} range 512			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	–		
refFreqList	'8904053D8280000000000 00000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS700			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {447, 457, 477, 487, 497, 509} range 128			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	–		
refFreqList	'8CDFA8D9665000000000000000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocGPRS850			
Group :			
Structured Type : CellChDescr			
Derivation Path :			
Encoding Variation :			
Comments : As specified in 51.010, clause 40.2.1.1.1 {137, 147, 167, 177, 187, 207}			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	–		
refFreqList	'8C44A8D9E63000000000000000000000'O		reference frequency list, the first octet is length
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_CellAllocListNone			
Group :			
Structured Type : CellAllocLists			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
prefix1	–		
cellAlloc1	–		not present if prefix1 = 0
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellA
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000000001'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 1
tCH_Freq	c_TCH_FreqGSM900_CellA		frequency parameters for traffic channel. no hopping ARFCN = 6, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_ CellA		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 11, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)@sic 1−031771 sic@
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellA		cell allocation, ARFCNs : 1, 6, 11 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGSM900_CellA		neighbour cell BCCH/CCCH ARFCN’s = 7, 39
extNeighBCCHFreqList	c_ExtNeighBCCH_FreqList2bisGSM900A		extended neighbour cell BCCH/CCCH ARFCN’s in SI2bis @sic T1s040615 sic@
extNeighBCCHFreqList2ter	c_ExtNeighBCCH_FreqLIst2terGSM900A		extended neighbour cell BCCH/CCCH ARFCN’s in sysinfotype2ter. @sic T1s−04332 sic@
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pwrc	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellB
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000000111'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 7
tCH_Freq	c_TCH_FreqGSM900_CellB		frequency parameters for traffic channel. no hopping ARFCN = 12, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_CellB		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 17, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0002'O		cell identity = '0002'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal) @sic T1−031771 sic@
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellB		cell allocation, ARFCNs : 7, 12, 17 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGSM900_CellB		neighbour cell BCCH/CCCH ARFCN’s = 1, 39
extNeighBCCHFreqList	−		extended neighbour cell BCCH/CCCH ARFCN’s in SI2bis To be changed while using
extNeighBCCHFreqList2ter	−		extended neighbour cell BCCH/CCCH ARFCN’s in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pwrc	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900_CellC
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 900. values are taken from 3GPP TS 34.123 Table6.5

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000100111'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 39
tCH_Freq	c_TCH_FreqGSM900_CellC		frequency parameters for traffic channel. no hopping ARFCN = 44, as default value not given, the value is assumed as bCCH_Freq+5
sDCCH8_Freq	c_SDCCH8_FreqGSM900_CellC		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 49, as default value not given, the value is assumed as bCCH_Freq+10
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0003'O		cell identity = '0003'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal) @sic T1−031771 sic@
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900_CellC		cell allocation, ARFCNs : 39, 44, 49 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGSM900_CellC		neighbour cell BCCH/CCCH ARFCN’s = 1, 7
extNeighBCCHFreqList	−		extended neighbour cell BCCH/CCCH ARFCN’s in SI2bis To be changed while using
extNeighBCCHFreqList2ter	−		extended neighbour cell BCCH/CCCH ARFCN’s in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pwrc	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGPRS700_CellA(p_cCCH_CONF:B3)
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 700 − GPRS cell. Values are taken from 3GPP TS 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	’0111001001’B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 457
tCH_Freq	OMIT		
sDCCH8_Freq	OMIT		
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	’0001’O		cell identity = ’0001’O
mcc	’001’H		mobile country code = 001 (decimal)
mnc	’01F’H		mobile network code = 01 (desimal)
lac	’0001’O		location area code = ’0001’O
ncc	’001’B		PLMN colour code = ’001’B
bcc	’101’B		BS colour code = ’101’B
dTX	’10’B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	’0’B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	’10’B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	’1’B		IMSI attach/detach allowed
cCCH_CONF	p_cCCH_CONF		1 basic physical channel for CCCH combinaed with SDCCH 0 basic physical channel for CCCH not combinaed with SDCCH
bS_AG_BLKS_RES	’010’B		2 blocks reserved
bS_PA_MFRMS	’100’B		6 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	’0’B		cell not barred for access
cellBarQualify2	’00’B		cell bar qualify 2 inactive
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGPRS700_CellA		cell allocation, ARFCNs : 20,40,60 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGPRS700_CellA		neighbour cell BCCH/CCCH ARFCN's = 515,600,700,780,810,870,875,885
extNeighBCCHFreqList	−		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis To be changed while using
extNeighBCCHFreqList2ter	−		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 nover expire
maxRetrans	'00'B		Maxmum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	'01010'B		MS_TXPWR_MAX_CCH px_MS_TXPWR_MAX_CCH Default value : 10
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pwrc	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGPRS850_CellA(p_cCCH_CONF:B3)
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 850 − GPRS cell. Values are taken from 3GPP TS 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	’0010010011’B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 147
tCH_Freq	OMIT		
sDCCH8_Freq	OMIT		
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	’0001’O		cell identity = ’0001’O
mcc	’001’H		mobile country code = 001 (decimal)
mnc	’01F’H		mobile network code = 01 (desimal)
lac	’0001’O		location area code = ’0001’O
ncc	’001’B		PLMN colour code = ’001’B
bcc	’101’B		BS colour code = ’101’B
dTX	’10’B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	’0’B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	’10’B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	’1’B		IMSI attach/detach allowed
cCCH_CONF	p_cCCH_CONF		1 basic physical channel for CCCH combinaed with SDCCH 0 basic physical channel for CCCH not combinaed with SDCCH
bS_AG_BLKS_RES	’010’B		2 blocks reserved
bS_PA_MFRMS	’100’B		6 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	’0’B		cell not barred for access
cellBarQualify2	’00’B		cell bar qualify 2 inactive
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGPRS850_CellA		cell allocation, ARFCNs : 20,40,60 0 range
neighBCCHFreqList	c_NeighBCCH_FreqListGPRS850_CellA		neighbour cell BCCH/CCCH ARFCN's = 515,600,700,780,810,870,875,885
extNeighBCCHFreqList	−		extended neighbour cell BCCH/CCCH ARFCN's in SI2bis To be changed while using
extNeighBCCHFreqList2ter	−		extended neighbour cell BCCH/CCCH ARFCN's in sysinfotype2ter. To be changed while using
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	'0'B		Emergency call allowed
accessControlClass2	'00000'B		Access control class 11..15 allowed
accessControlClass1	'0000000000'B		Access control class 0..9 allowed
radioLinkTimeout	'0001'B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	'00'O		T3212 nover expire
maxRetrans	'00'B		Maxmum number of retransmission = 1
txInteger	'0010'B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	'110'B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	'01010'B		MS_TXPWR_MAX_CCH px_MS_TXPWR_MAX_CCH Default value : 10
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	'0'B		New establishment causes not supported
aCS	'0'B		no additional parameters in SI 7 and 8.
bandIndicator	'0'B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		ARFCN band using teh asn.1 type. This value shall be consistent with bandIndicator
nccPermitted	'02'O		NCC permitted = 0000 0010
dN_Ind	'0'B		dynamic ARFCN mapping not used

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pwrc	'0'B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM1800
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 1800. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.15, if there is a discrepancy between these two clause the value in clause 26.6.15 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	’1001001110’B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 590
tCH_Freq	c_TCH_FreqGSM1800		frequency parameters for traffic channel. no hopping ARFCN =650
sDCCH8_Freq	c_SDCCH8_FreqGSM1800		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 750
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	’0001’O		cell identity = ’0001’O
mcc	’001’H		mobile country code = 001 (decimal)
mnc	’01F’H		mobile network code = 01 (desimal) @sic T1−031771 sic@
lac	’0001’O		location area code = ’0001’O
ncc	’001’B		PLMN colour code = ’001’B
bcc	’101’B		BS colour code = ’101’B
dTX	’10’B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	’0’B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	’10’B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	’1’B		IMSI attach/detach not allowed
cCCH_CONF	’001’B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	’000’B		0 block reserved
bS_PA_MFRMS	’011’B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	’0’B		cell not barred for access
cellBarQualify2	’00’B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM1800A		cell allocation, 590, 650, 750, 850 512 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM 1800A		neighbour cell BCCH/CCCH for GSM 1800 cell A. ARFCN = 520, 590, 600, 700, 747, 764, 780, 810, 870
extNeighBCCHFreqList	−		To Be filled?
extNeighBCCHFreqList2ter	−		To Be filled?
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM1 800A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTER ESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CC H		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used
pwrc	’0’B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM1900
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 00. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.14, if there is a discrepancy between these two clause the value in clause 26.6.14 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	’1001001110’B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 590
tCH_Freq	c_TCH_FreqGSM1900		frequency parameters for traffic channel. no hopping ARFCN =650
sDCCH8_Freq	c_SDCCH8_FreqGSM1900		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 750
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	’0001’O		cell identity = ’0001’O
mcc	’001’H		mobile country code = 001 (decimal)
mnc	’01F’H		mobile network code = 01 (desimal)@sic T1−031771 sic@
lac	’0001’O		location area code = ’0001’O
ncc	’001’B		PLMN colour code = ’001’B
bcc	’101’B		BS colour code = ’101’B
dTX	’10’B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	’0’B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	’10’B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	’1’B		IMSI attach/detach not allowed
cCCH_CONF	’001’B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	’000’B		0 block reserved
bS_PA_MFRMS	’011’B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	’0’B		cell not barred for access
cellBarQualify2	’00’B		cell bar qualify 2 inactive
callReestab	’1’B		Call re−establishment not allowed

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM1900A		ARFCNs : 590, 650, 750, 850 512 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM 1900A		neighbour cell BCCH/CCCH ARFCN: 520, 590, 600, 647, 664, 700, 720, 760, 780.
extNeighBCCHFreqList	−		
extNeighBCCHFreqList2ter	−		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM9 00A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTER ESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CC H		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’1’B		ARFCN band = 1900 band
bandIndicatorAsn1	pcs1900BandUsed		DCS1800 band
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used
pwrc	’0’B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM450
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 450. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.16, if there is a discrepancy between these two clause the value in clause 26.6.16 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0100000111'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 263
tCH_Freq	c_TCH_FreqGSM450		frequency parameters for traffic channel. no hopping ARFCN =267
sDCCH8_Freq	c_SDCCH8_FreqGSM450		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 275
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal) @sic T1−031771 sic@
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM450A		cell allocation, ARFCNs : 263, 267, 275 and 279 128 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM450A		neighbour cell BCCH/CCCH ARFCN’s = 262, 263, 274, 282, 284, 287, 290 and 293
extNeighBCCHFreqList	−		
extNeighBCCHFreqList2ter	−		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM450A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used
pwrc	’0’B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM480
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 480. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.17, if there is a discrepancy between these two clause the value in clause 26.6.17 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0100110110'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 310
tCH_Freq	c_TCH_FreqGSM480		frequency parameters for traffic channel. no hopping ARFCN =314
sDCCH8_Freq	c_SDCCH8_FreqGSM480		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 322
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)@sic T1−031771 sic@
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach not allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
callReestab	’1’B		Call re−establishment not allowed
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM480A		cell allocation, ARFCN 310, 315, 322 and 326 128 range
neighBCCHFreqList	c_NeighBCCHFreqListGSM480A		neighbour cell BCCH/CCCH ARFCN’s = 308, 310, 321, 329, 331, 334, 337 and 340.
extNeighBCCHFreqList	−		
extNeighBCCHFreqList2ter	−		
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM480A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used
pwrc	’0’B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_CellConfigInfoGSM900
Group :
Structured Type : G_CellConfigInfo
Derivation Path :
Encoding Variation :
Comments : default configuration parameters for GSM 900. values are taken from 3GPP TS 51.010 clause 26.1.1 and 26.6.14, if there is a discrepancy between these two clause the value in clause 26.6.14 is taken.

Element Name	Element Value	Element Encoding	Comments
bCCH_Freq	'0000010100'B		BCCH/CCCH corrier frequency (ARFCN) for current cell. None hopping Serving cell: 20
tCH_Freq	c_TCH_FreqGSM900		frequency parameters for traffic channel. no hopping ARFCN =30
sDCCH8_Freq	c_SDCCH8_FreqGSM900		frequency parameters for stand alone dedicated control channel. no hopping ARFCN = 50
downlinkPowerLevel	63		Downlink transmission power level = 63 dB uVemf().
cellIdentity	'0001'O		cell identity = '0001'O
mcc	'001'H		mobile country code = 001 (decimal)
mnc	'01F'H		mobile network code = 01 (desimal)
lac	'0001'O		location area code = '0001'O
ncc	'001'B		PLMN colour code = '001'B
bcc	'101'B		BS colour code = '101'B
dTX	'10'B		Uplink discontinuous transmission not used. (indecation in BCCH)
dtx8	'0'B		Uplink discontinuous transmission not used. (indecation in SACHH)
dtx65	'10'B		Uplink discontinuous transmission not used. (indecation in SACHH)
attFlag	'1'B		IMSI attach/detach allowed
cCCH_CONF	'001'B		1 basic physical channel for CCCH combinaed with SDCCH
bS_AG_BLKS_RES	'000'B		0 block reserved
bS_PA_MFRMS	'011'B		5 paging subgroups
splitOnCCCH	px_SplitOnCCCH		no split pg cycle on CCCH. value taken from PIXIT. (shall be PICS qustion?)
cell_BAR_ACCESS	'0'B		cell not barred for access
cellBarQualify2	'00'B		cell bar qualify 2 inactive
callReestab	'1'B		Call re−establishment not allowed

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
timingAdvance	’1F’O		timing advance value = 30 * 48/13 us
tSC	px_TSC		training sequence code for dedicated channels.
cellAllocation	c_CellAllocGSM900A		cell allocation, bit map 0, ARFCN = 20, 30, 50, 70.
neighBCCHFreqList	c_NeighBCCH_FreqListGSM900A		neighbour cell BCCH/CCCH ARFCN’s = 10, 20, 40, 80, 90, 100, 110, 120
extNeighBCCHFreqList	c_ExtNeighBCCH_FreqList2bisGSM900A		extended neighbour cell BCCH/CCCH ARFCN’s in SI2bis, ARFCN = 985, 989, 995, 1010, 1014
extNeighBCCHFreqList2ter	c_ExtNeighBCCH_FreqLIst2terGSM900A		extended neighbour cell BCCH/CCCH ARFCN’s in sysinfotype2ter, ARFCN = 520, 590, 600, 700, 780, 810, 870
cipherKey	px_CipherKey		cipher key
cipherMode	c_CipherModeSettingGSM900A		ciphering algorithm and cipher starting flag, 3GPP TS 44.018 clause 10.5.2.9
emergencyCall	’0’B		Emergency call allowed
accessControlClass2	’00000’B		Access control class 11..15 allowed
accessControlClass1	’0000000000’B		Access control class 0..9 allowed
radioLinkTimeout	’0001’B		RADIO−LINK−TIMEOUT = 8 SACCH blocks
t3212	’00’O		T3212 nover expire
maxRetrans	’00’B		Maxmum number of retransmission = 1
txInteger	’0010’B		Number of slots to spread transmissiont = 5
cELL_RESELECT_HYSTERESIS	’110’B		cell rerselect hysteresis = 12 dB,
mS_TXPWR_MAX_CCH	px_MS_TXPWR_MAX_CCH		MS_TXPWR_MAX_CCH
rXLEV_ACCESS_MIN	px_RXLEV_ACCESS_MIN		minimum received signal level at MS
nECI	’0’B		New establishment causes not supported
aCS	’0’B		no additional parameters in SI 7 and 8.
bandIndicator	’0’B		ARFCN band = DCS1800 band
bandIndicatorAsn1	dcs1800BandUsed		DCS1800 band
nccPermitted	’02’O		NCC permitted = 0000 0010
dN_Ind	’0’B		dynamic ARFCN mapping not used
pwrc	’0’B		power control not set.
cellConfiguration	cell_AMR		current configuration of the cell, cell_AMR used as place holder

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Structured Type Constraint Declaration
Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_1800_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence with the List_ARFCN=Use Range 256 to encode the following 9 frequencies: (747, 775, 779, 782, 791, 798, 829, 832, 844).			
Element Name	**Element Value**	**Element Encoding**	**Comments**
length	'09'O		OCTETSTRING [1]
fl	'8B7599F045EFA499C0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqList_GSM_1900_26_6_5_1_2			
Group :			
Structured Type : FreqListNoIEI			
Derivation Path :			
Encoding Variation :			
Comments : Frequency channel sequence Use Range 256 to encode the following 9 frequencies: (647, 675, 679, 682, 691, 698, 729, 732, 744).			
Element Name	**Element Value**	**Element Encoding**	**Comments**
length	'09'O		OCTETSTRING [1]
fl	'8B4399F045EFA499C0'O		list of the absolute radio frequency channel numbers
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_G_FreqList_GSM_450_26_6_5_1_2
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments : Use Range 128 to encode the following 12 frequencies (259, 261, 263, 265, 277, 279, 281, 283, 285, 287, 289, 291).

Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8C8196C06F79C4EEEE0000'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_FreqList_GSM_480_26_6_5_1_2
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments : Frequency channel sequence Use Range 128 to encode the following 12 frequencies (306, 308, 310, 312, 324, 326, 328, 330, 332, 334, 336, 338).

Element Name	Element Value	Element Encoding	Comments
length	'0B'O		OCTETSTRING [1]
fl	'8C9916C06F79C4EEEE0000'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_FreqList_GSM_900_26_6_5_1_2
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments : Frequency channel sequence Allocates the following 12 frequencies (10, 17, 20, 26, 59, 66, 73, 74, 75, 76,108, 114). BITMAP0 IS ASSUMED

Element Name	Element Value	Element Encoding	Comments
length	'10'O		OCTETSTRING [1]
fl	'0002080000000F020400000002090200'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_FreqListOmit			
Group :			
Structured Type : FreqList			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	−		
iel	−		
frequencyList	−		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_ExtNeighBCCH_FreqLIst2terGSM900A			
Group :			
Structured Type : NeighCellDescr2			
Derivation Path :			
Encoding Variation :			
Comments : range 512, ARFCN = 520, 590, 600, 700, 780, 810, 870			
Element Name	**Element Value**	**Element Encoding**	**Comments**
b128	’1’B		Bit 128, format−ID @sic T1s−04332 sic@
mbrpt	’00’B		Multiband reporting
baind	’0’B		bcch allocation sequence number indication
b121_124	’1001’B		Bit 124 − 121, format ID next @sic T1−040084 sic@
rfl	’04411316BB44C80000000 000000000’O		remaining reference frequency list
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_ExtNeighBCCH_FreqList2bisGSM900A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : range 256, ARFCN = 985, 989, 995, 1010, 1014

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		bits 128−127
extind	'1'B		extension indication
baind	'0'B		bcch allocation sequence number indication
rfl4	'1011'B		bits 124−121
rfl	'EC8CF109D00000000000 0000000000'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGSM900_CellA
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell A. ARFCN = 7, 39

Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124−121
rfl	'000000000000000000004 000000040'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGSM900_CellB
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell B. ARFCN = 1, 39

Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124−121
rfl	'00000000000000000004 000000001'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGSM900_CellC
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell C. ARFCN = 1,7

Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124−121
rfl	'00000000000000000000 000000041'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS700_CellA
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 700 cell A. ARFCN =437,447,477,487,497,502,507 Values are taken from 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'DABC38A4E5A0000000000000000000'O		ARFCN: 437,447,477,487,497,502,507

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS850_CellA
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 850 cell A. ARFCN =137,177,197,207,217,227,237 Values are taken from 51.010 Table 40.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'88D0B1863980000000000000000000'O		ARFCN: 137,177,197,207,217,227,237

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCHFreqListGSM1800A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 1800 cell A. ARFCN = 520, 590, 600, 700, 747, 764, 780, 810, 870

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'043D170B8A62C8F23000 0000000000'O		ARFCN: 520, 590, 600, 700, 747, 764, 780, 810, 870

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCHFreqListGSM1900A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 1800 cell A. ARFCN = 520, 590, 600, 647, 664, 700, 720, 760, 780.

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	–		ARFCN: 520, 590, 600, 647, 664, 700, 720, 760, 780.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCHFreqListGSM450A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 450 cell A. ARFCN = 262, 263, 274, 282, 284, 287, 290 and 293

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	–		ARFCN: 262, 263, 274, 282, 284, 287, 290 and 293

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCHFreqListGSM480A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 480 cell A. ARFCN = 308, 310, 321, 329, 331, 334, 337 and 340.

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	–		ARFCN: 308, 310, 321, 329, 331, 334, 337 and 340.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGSM900A
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell A. ARFCN = 10, 20, 40, 80, 90, 100, 110, 120

Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'1'B		incomplete BA @sicT1s040701 sic@
baind	'0'B		bcch allocation sequence number indication
rfl4	'0000'B		bits 124−121
rfl	'802008020080000000080 00080200'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS900
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 GPRS cell A. ARFCN = 5,20, 80,90,100, 110,120,122,124. Values are taken from 51.010 Table 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'00'B		bit map 0 format
extind	'1'B		incomplete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1010'B		bits 124−121
rfl	'802008020080000000000 00080010'O		bits 120−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS1800
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 1800 cell. ARFCN = 515, 590, 600, 700, 780, 810 870, 875, 885. Values are taken from 51.010 Table 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'0195452D3DB0147A8000 0000000000'O		ARFCN = 515, 590, 600, 700, 780, 810 870, 875, 885

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS1900
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 1900 cell. ARFCN = 515, 590, 600, 655, 700, 710, 740, 780, 810. Values are taken from 51.010 Table 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 512 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1001'B		
rfl	'01B0F251A4D85A7B6000 0000000000'O		ARFCN = 515, 590, 600, 655, 700, 710, 740, 780, 810.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS700
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 700 cell. ARFCN = 437,447,457,467,477,487,497,502,507. Values are taken from 51.010 Table 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'DAB2B0FB6D4560000000 0000000000'O		ARFCN: 437,447,457,467,477,487,497,502,507

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS850
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for DCS 1800 cell A. ARFCN = 137,147,157,177,197,207,217,227,237. Values are taken from 51.010 Table 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'44C6394B5A8A30000000 0000000000'O		ARFCN: 137,147,157,177,197,207,217,227,237

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS450
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 450 cell A. ARFCN = 259, 263, 269, 275, 279, 283, 287 and 292

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'8194D88D70C5000000000000000000'O		ARFCN: 259, 263, 269, 275, 279, 283, 287 and 292

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighBCCH_FreqListGPRS480
Group :
Structured Type : NeighCellDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 450 cell A. ARFCN = 306, 310, 316, 322, 326, 330, 334 and 339

Element Name	Element Value	Element Encoding	Comments
rfl2	'10'B		range 128 format
extind	'0'B		complete BA
baind	'0'B		bcch allocation sequence number indication
rfl4	'1100'B		
rfl	'9914D88D70C5000000000000000000'O		ARFCN: 306, 310, 316, 322, 326, 330, 334 and 339

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCHHoppingFreqList_GSM900
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8C051EB0A0'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCHHoppingFreqList_DCSPCS
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8D0414D8A0'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCHHoppingFreqList_GSM700
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8CDF9EB0A0'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCHHoppingFreqList_GSM850
Group :
Structured Type : FreqListNoIEI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
length	'05'O		OCTETSTRING [1]
fl	'8C449EB0A0'O		list of the absolute radio frequency channel numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM900_CellA
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 11

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000001011'B		absolute RF channel number = 11
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM900_CellB
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 17

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000010001'B		absolute RF channel number = 17
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM900_CellC
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 49

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000110001'B		absolute RF channel number = 49
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM1800
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =750

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1011101110'B		absolute RF channel number = 750
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM1900
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =750

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'1011101110'B		absolute RF channel number = 750
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM450
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =275

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’0100010011’B		absolute RF channel number =275
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM480
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =322

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’0101000010’B		absolute RF channel number = 322
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM900_CellA
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 6

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000000110'B		absolute RF channel number = 6
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM900_CellB
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 12

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000001100'B		absolute RF channel number = 12
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM900_CellC
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 44

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’0000101100’B		absolute RF channel number = 44
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM1800
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =650

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’1010001010’B		absolute RF channel number = 650
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM1900
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =650

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’1010001010’B		absolute RF channel number = 650
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM450
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =267

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’0100001011’B		absolute RF channel number = 267
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM480
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =314

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0100111010'B		absolute RF channel number = 314
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_AddPSI3quater
Group :
Structured Type : AdditionalPSIMessages
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
nON_GSM_INFORMATION	'00'B		
pSI8_BROADCAST	'0'B		
pSI3ter_BROADCAST	'0'B		
pSI3quater_BROADCAST	'1'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CCCH_Info(p_BS_PA_MFRMS, p_BS_AG_BLKS_RES: BITSTRING)
Group :
Structured Type : CCCH_Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
bS_PA_MFRMS	p_BS_PA_MFRMS		
bS_AG_BLKS_RES	p_BS_AG_BLKS_RES		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellAllocGSM900A
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : for GSM 900 cell A

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
refFreqList	'00000000000000020000200020080000'O		bit map o format, ARFCN = 20, 30, 50, 70

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_CellChDesOmit
Group :
Structured Type : CellChDescr
Derivation Path :
Encoding Variation :
Comments : Omit descriptor

Element Name	Element Value	Element Encoding	Comments
iei	–		
refFreqList	–		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellIdentification(p_MCC, p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_RAC : O1)
Group :
Structured Type : CellIdentification
Derivation Path :
Encoding Variation :
Comments : CellIdentification

Element Name	Element Value	Element Encoding	Comments
locationAreaIdentificationIE	c_LocAreaId_v(p_MCC, p_MNC, p_LAC)		3GPP TS 44.018
rAC	p_RAC		3GPP TS 23.003
cellIdentityIE	'0001'O		3GPP TS 44.018

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellOptionBCCH(p_DN_Ind, p_Pwrc: B1;p_DTX :B2; p_RadioLinkTimeout : B4)
Group :
Structured Type : CellOptionBCCH
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information lelement identifier
dN_Ind	p_DN_Ind		dynamic ARFCN mapping indicator
pwrc	p_Pwrc		power control indicator
dtx	p_DTX		discontinuous transmission indicator
radioLinkTimeout	p_RadioLinkTimeout		radio link timeout

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellOptionSACCH(p_DTX8, p_Pwrc: B1;p_DTX65 :B2; p_RadioLinkTimeout : B4)
Group :
Structured Type : CellOptionSACCH
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information lelement identifier
dtx8	p_DTX8		discontinuous transmission indicator, most signifigent bit
pwrc	p_Pwrc		power control indicator
dtx65	p_DTX65		discontinuous transmission indicator
radioLinkTimeout	p_RadioLinkTimeout		radio link timeout

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell1
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'011111'B		not present if gPRS_PwrMask = 0 −80 dBm
gPRS_MS_TXPWR_MAX_CCH	'01010'B		not present if gPRS_PwrMask = 0
gPRS_SelectMask	'1'B		GPRS_TEMPORARY_OFFSET present
gPRS_TEMPORARY_OFFSET	'000'B		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	'00000'B		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'1'B		HCS params present
hCS_Params	c_HCS('001'B,'10100'B)		not present if hCS_Mask = 0
sI13_Mask	'1'B		
sI13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sI13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell2
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'010111'B		not present if gPRS_PwrMask = 0 −88 dBm
gPRS_MS_TXPWR_MAX_CCH	'01010'B		not present if gPRS_PwrMask = 0
gPRS_SelectMask	'0'B		GPRS_TEMPORARY_OFFSET not present
gPRS_TEMPORARY_OFFSET	OMIT		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	OMIT		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'0'B		HCS params not present
hCS_Params	OMIT		not present if hCS_Mask = 0
sI13_Mask	'1'B		
sI13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sI13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelection_Cell3
Group :
Structured Type : CellSelection
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 11.2.20

Element Name	Element Value	Element Encoding	Comments
bSIC	'001101'B		
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
sAME_RA_AS_SERVING_CELL	'1'B		same routing area
gPRS_PwrMask	'1'B		GPRS_RXLEV_ACCESS_MIN present
gPRS_RXLEV_ACCESS_MIN	'010110'B		not present if gPRS_PwrMask = 0 −89 dBm
gPRS_MS_TXPWR_MAX_CCH	'01010'B		not present if gPRS_PwrMask = 0
gPRS_SelectMask	'1'B		GPRS_TEMPORARY_OFFSET present
gPRS_TEMPORARY_OFFSET	'000'B		not present if gPRS_SelectMask = 0
gPRS_PENALTY_TIME	'00000'B		not present if gPRS_SelectMask = 0
gPRS_ReselectMask	'1'B		GPRS_RESELECT_OFFSET present
gPRS_RESELECT_OFFSET	'10000'B		not present if gPRS_ReselectMask = 0
hCS_Mask	'1'B		HCS params present
hCS_Params	c_HCS('001'B,'10100'B)		not present if hCS_Mask = 0
sI13_Mask	'1'B		
sI13_PBCCH_LOCATION	c_SI13PBCCH_Location_SI13		not present if sI13_Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellSelParam(p_CellReselHysteresis: B3; p_MS_TXPWR_MAX_CCH: B5; p_aCS : B1; p_nECI : B1; p_RXLEV_ACCESS_MIN:B6)
Group :
Structured Type : CellSelParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
cellReselHysteresis	p_CellReselHysteresis		cell reselected hysteresis
mS_TXPWR_MAX_CCH	p_MS_TXPWR_MAX_CCH		MS maximum TX power for CCH
acs	p_aCS		additional reselect parameter indicator
neci	p_nECI		half rate support
rXLEV_ACCESS_MIN	p_RXLEV_ACCESS_MIN		MS minimum received signal level

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_ChannelDescr (p_ARFCN : B10; p_TSC : B3)
Group :
Structured Type : ChannelDescr
Derivation Path :
Encoding Variation :
Comments : Channel description
3GPP TS 44.018 clause 10.5.2.5

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’01100100’B
cht_schn	’00101’B		channel type and TDMA offset
tn	’000’B		timeslot number
tsc	p_TSC		training sequence code
hch	tsc_RR_HopOff		hch = 1 indicating hopping channel
maio	OMIT		mobile allocation index offset − hopping
hsn	OMIT		hopping sequence number − hopping
spr	’00’B		’00’B − non hopping
arfcn	p_ARFCN		absolute RF channel number − non hopping

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ChannelDescr2_FH (p_Cht_Schn : B5 ; p_TN : B3 ; p_TSC : B3 ; p_Maio : B6 ; p_HSN : B6)
Group :
Structured Type : ChannelDescr2
Derivation Path :
Encoding Variation :
Comments : Channel description 2
3GPP TS 44.018 clause 10.5.2.5a

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’01100110’B
cht_schn	p_Cht_Schn		channel type and TDMA offset
tn	p_TN		timeslot number
tsc	p_TSC		training sequence code
hch	’1’B		hch = 1 indicating hopping channel
maio	p_Maio		mobile allocation index offset − hopping
hsn	p_HSN		hopping sequence number − hopping
spr	OMIT		’00’B − non hopping
arfcn	OMIT		absolute RF channel number − non hopping

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ChMode(p_Mode : B8)
Group :
Structured Type : ChMode
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’01100011’B
mode	p_Mode		

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeDataRI_14_5			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	'01100011'B		
mode	'00001111'B		data, 14.5 kbit/s radio interface rate
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV1			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	'01100011'B		
mode	'00000001'B		speech full rate or half rate version 1
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV2			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	'01100011'B		
mode	'00100001'B		speech full rate or half rate version 2
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChModeSpeechFROrHRV3			
Group :			
Structured Type : ChMode			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	’01100011’B		
mode	’01000001’B		speech full rate or half rate version 3
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_G_ChneededAny			
Group :			
Structured Type : ChNeeded			
Derivation Path :			
Encoding Variation :			
Comments : any channel			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	–		information element identity
ch2	’00’B		
ch1	’00’B		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_ChSpecificPara(p_DedChInfo:DedCH_Info;p_CCCH_Info: CCCH_Info;p_PCCCH_Info: PCCCH_Info; p_PBCCH_Info: PBCCH_Info)
Group :
Structured Type : ChannelSpecificInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
dedCH_Info	p_DedChInfo		parameters for dedicated channel. valid for combinations: 1, 2, 3, 5, 7, 8, 9, 10
cCCH_Info	p_CCCH_Info		parameters for common control channels: PCH, SCH, ... valid for combinations: 4, 5, 6
pCCCH_Info	p_PCCCH_Info		parameters for packet common control channels: PCCCH, PPCH, ... valid for combinations: 11, 12
pBCCH_Info	p_PBCCH_Info		parameters for packet broadcast channel: PBCCH. valid for combination: 11

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSetting(p_StartCiph : B1)
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher mode setting
3GPP TS 44.018 clause 10.5.2.9

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’1001’B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	p_StartCiph		starting ciphering, 1 = start

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSettingGSM
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher is on, cipher algorithm is specified by PIXIT.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	px_GSM_CipheringOnOff		starting ciphering

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSettingGSM900A
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher is on, cipher algorithm is specified by PIXIT.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	px_GSM_CipheringOnOff		starting ciphering

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSettingGSM1800A
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher is on, cipher algorithm is specified by PIXIT.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	px_GSM_CipheringOnOff		starting ciphering

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSettingGSM450A
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher is on, cipher algorithm is specified by PIXIT.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	px_GSM_CipheringOnOff		starting ciphering

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherModeSettingGSM480A
Group :
Structured Type : CipherModeSetting
Derivation Path :
Encoding Variation :
Comments : Cipher is on, cipher algorithm is specified by PIXIT.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
algId	px_GSM_CipherAlg		algorithm identifier @sic G3t050015 sic@
startingCiph	px_GSM_CipheringOnOff		starting ciphering

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CipherResponse
Group :
Structured Type : CipherResponse
Derivation Path :
Encoding Variation :
Comments : Cipher response
3GPP TS 44.018 clause 10.5.2.10

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		'1010'B
spareBits	'000'B		spare bits
cipherResponse	'0'B		cipher response bit

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CompactNeighCellParams2List_OMIT
Group :
Structured Type : CompactNeighCellParams2List
Derivation Path :
Encoding Variation :
Comments : this type definition is
{1 < COMPACT Neighbour Cell params 2 struct>}**0
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.

Element Name	Element Value	Element Encoding	Comments
prefix1	OMIT		
compactNeighCellParam2	OMIT		not present if prefix1 = 0
endingRepetition	'0'B		not present if prefix1 = 0. If present, always = 0 indicating the end of the repetition

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.21

Structured Type Constraint Declaration

Constraint Name : c_ControlChDescr(p_ATT : B1; p_BS_AG_BLKS_RES, p_CCCH_CONF, p_BS_PA_MFRMS: B3; p_CBQ2 : B2; p_T3212:O1)
Group :
Structured Type : ControlChDescr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
mSCRelease	'1'B		release 99 onwards
att	p_ATT		attach−detach allowed
bS_AG_BLKS_RES	p_BS_AG_BLKS_RES		base station access grant blocks reservation
cCCH_CONF	p_CCCH_CONF		CCCH configuration
spareBits	'000'B		spare bits
cBQ2	p_CBQ2		cell bar qualify 2
bS_PA_MFRMS	p_BS_PA_MFRMS		number of multiframes for paging request
t3212	p_T3212		t3212 value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_DedCh(p_ChannelMode:ChMode; p_CipherMode: CipherModeSetting; p_CiphyKey : B64; p_PowerLevel : B5; p_TimingAdvance : B7)
Group :
Structured Type : DedCH_Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
chMode	p_ChannelMode		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	p_CipherMode		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	p_CiphyKey		
powerLevel	p_PowerLevel		power level value used in L1 header
timingAdvance	p_TimingAdvance		timing advance value used in L1 header

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_DedicatedModeOrTBF
Group :
Structured Type : DedicatedModeOrTBF
Derivation Path :
Encoding Variation :
Comments : Reference : 3GPP TS 44.018 clause 10.5.2.25b

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
spareBit	'0'B		always = 0
twoMsgAssig	'0'B		two message assignment
downlink	'0'B		down link assignement
tBForDedicated	'0'B		TBF or dedicated mode

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_DynamicAllocation
Group :
Structured Type : DynamicAllocation
Derivation Path :
Encoding Variation :
Comments : It defines all the necessary parameters for dynamic allocation for the TBF.

Element Name	Element Value	Element Encoding	Comments
extendedAlloc	'0'B		0 − dynamic allocation; 1 − extended dynamic allocation
uSFGranularity	'0'B		0 − one block; 1 − four blocks
physicalChId	tsc_PhyCh1		
tN0	FALSE		TRUE − time slot 0 is allocated; FALSE −− not allocated
uSF_TN0	−		USF value for slot 0
tN1	FALSE		TRUE − time slot 1 is allocated; FALSE −− not allocated
uSF_TN1	−		USF value for slot 1
tN2	FALSE		TRUE − time slot 2 is allocated; FALSE −− not allocated
uSF_TN2	−		USF value for slot 2
tN3	FALSE		TRUE − time slot 3 is allocated; FALSE −− not allocated
uSF_TN3	−		USF value for slot 3
tN4	TRUE		TRUE − time slot 4 is allocated; FALSE −− not allocated
uSF_TN4	tsc_DefUSF		USF value for slot 4
tN5	FALSE		TRUE − time slot 5 is allocated; FALSE −− not allocated
uSF_TN5	−		USF value for slot 5
tN6	FALSE		TRUE − time slot 6 is allocated; FALSE −− not allocated
uSF_TN6	−		USF value for slot 6
tN7	FALSE		TRUE − time slot 7 is allocated; FALSE −− not allocated
uSF_TN7	−		USF value for slot 7

Detailed Comments : The uSF_TNx field is not applicable when tNx = FALSE.

Structured Type Constraint Declaration

Constraint Name : c_DynamicAllocationPacket
Group :
Structured Type : DynamicAllocationPacket
Derivation Path :
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
extendedAllocMask	'0'B		0 − dynamic allocation; 1 − extended dynamic allocation
mask	'0'B		
p0	OMIT		not present if mask=0
pR_Mode	OMIT		not present if mask=0
uSFGranularity	'0'B		0 − one block; 1 − four blocks one block
uplinkTFImask	'1'B		
uplinkTFI	'00000'B		not present if uplinkTFImask=0
spareBit	'0'B		
tBFStartingTimeMask	'0'B		no starting time
tBFStartingTime	OMIT		not present if tBFStartingTimeMask=0
timeSlotAllocMask	'1'B		
timeSlotAlloc	c_TimeSlotAllocation_UA_TN4(tsc_USF1)		not present if timeSlotAllocMask=1
timeSlotAllocPowerControl	OMIT		not present if timeSlotAllocMask=0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_EDGE_Struct_Any
Group :
Structured Type : EDGE_Struct
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
modulationCapability	?		
pwrMask1	?		
eDGE_RF_PowerCapability1	*		not present if pwrMask1 = 0
pwrMask2	?		
eDGE_RF_PowerCapability2	*		not present if pwrMask2 = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ExtInfo
Group :
Structured Type : ExtInfo_NonGPRSCellOptions
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extLength	'000001'B		
eCSC	'1'B		
ECSR3G	'1'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ExtMeasParams
Group :
Structured Type : ExtMeasParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extMeasurmentOrder	'00'B		
eM1	OMIT		present if extMeasurementOrder = '01'B

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_FreqParam_PBBCH
Group :
Structured Type : FreqParam
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.8
Values are taken from 51010 clause 40.2.3.4

Element Name	Element Value	Element Encoding	Comments
tSC	'101'B		
encodingMask	'01'B		
aRFCN	OMIT		present if encodingMask = '00'B
indirectEncoding	c_IndirectEncoding		present if encodingMask = '01'B
directEncoding1	OMIT		present if encodingMask = '10'B
directEncoding2	OMIT		present if encodingMask = '11'B

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_FDD_Descr(p_ARFCN: B14; p_ScrmCode : BITSTRING)
Group :
Structured Type : UTRAN_FDD_Descr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
bandwidthMask	'0'B		
bandwidthFDD	–		not present if bandwidthMask = 0
prefix1	'1'B		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells1	c_G_FDD_NeighCell1(p_ARFCN, p_ScrmCode)		
prefix2	–		value = 1 if present
repeatedUTRAN_FDD_NeighbourCells2	–		
endingRepetition	'0'B		always = '0'B indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_FDD_NeighCell1(p_ARFCN: B14; p_ScrmCode : BITSTRING)
Group :
Structured Type : RepeatedUTRAN_FDD_NeighCells
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
arfcnIndexMask	'0'B		
fDD_ARFCN	p_ARFCN		
fDD_Indic0	'0'B		
nR_OF_FDD_CELLS	'00001'B		
fDD_CELL_INFORMATION	p_ScrmCode		length of this bitstring = p(nR_OF_FDD_CELLS)

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_FreqInfoBCCH(p_ARFCN : B10)
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
h	'0'B		h='1'B: hopping channel; h='0'B: non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B, if h = '0'B, otherwise OMIT
maio	OMIT		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	OMIT		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	p_ARFCN		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	OMIT		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GenCellSel
Group :
Structured Type : GenCellSel
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
gPRS_CELL_RESELECT_HYSTERESIS	’000’B		0 dB
c31_HYST	’0’B		Not used in C31
c32_QUAL	’0’B		
rANDOM_ACCESS_RETRY	’0’B		No access to other cells
t_ReselMask	’1’B		
t_RESEL	’001’B		not present if t_ReselMask = 0 10 seconds
rA_ReselectHysteresisMask	’1’B		
rA_RESELECT_HYTERESIS	’000’B		not present if rA_ReselectHysteresisMask = 0 0 dB

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GlobalPowerCtrlParams
Group :
Structured Type : GlobalPowerControlParameters
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
aLPHA	’0000’B		
t_AVG_W	’00000’B		
t_AVG_T	’00000’B		
pb	’0110’B		
pC_MEAS_CHAN	’0’B		
iNT_MEAS_CHANNEL_LIST_AVAIL	’0’B		
n_AVG_I	’0110’B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsPSI1(p_NMO : B2)
Group :
Structured Type : GPRS_CellOptions
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
nMO	p_NMO		network operation mode 2
t3168	'011'B		2 second
t3192	'010'B		1.5 second
dRX_TIMER_MAX	'000'B		non−DRX not supported, 0 second
aCCESS_BURST_TYPE	'1'B		11 bits
cONTROL_ACK_TYPE	'1'B		RLC/MAC control block
bS_CV_MAX	'0111'B		7
pAN_Mask	'1'B		
pAN_DEC	'001'B		
pAN_INC	'001'B		
pAN_MAX	'000'B		
optionalExtMask	'1'B		for R99
extensionLength	'000011'B		
extensionInfo	c_GPRS_CellOptionsExtension		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsSI13(p_NMO : B2)
Group :
Structured Type : GPRS_CellOptions
Derivation Path :
Encoding Variation :
Comments : values from TS 51.010−1 v.5.5.0 subclause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
nMO	p_NMO		network operation mode I
t3168	’011’B		2 second
t3192	’010’B		1.5 second
dRX_TIMER_MAX	’000’B		non−DRX not supported, 0 second
aCCESS_BURST_TYPE	’1’B		11 bits
cONTROL_ACK_TYPE	’1’B		RLC/MAC control block
bS_CV_MAX	’0111’B		7
pAN_Mask	’1’B		
pAN_DEC	’011’B		3
pAN_INC	’011’B		3
pAN_MAX	’010’B		N3102=12
optionalExtMask	’1’B		for R99
extensionLength	’000011’B		
extensionInfo	c_GPRS_CellOptionsExtension		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_CellOptionsExtension
Group :
Structured Type : ExtensionInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extensionMask	’0’B		EGPRS not supported
eGPRS_PACKET_CHANNEL_REQUEST	OMIT		EGPRS not supported
bEP_PERIOD	OMIT		EGPRS not supported
pFC_FEATURE_MODE	’0’B		packet context procedure not suppoprted
dTM_SUPPORT	’0’B		DTM not supported
bSS_PAGING_COORDINATION	’0’B		CS paging coordination not supported
cCN_ACTIVE	OMIT		R4 extension
nW_EXT_UTBF	OMIT		
spareBit	OMIT		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_MobileAllocationLists(p_mA_NUM:B4;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)
Group :
Structured Type : GPRS_MobileAllocationLists
Derivation Path :
Encoding Variation :
Comments : The definition in CSN.1 is {1 < GPRS Mobile Allocations struct >}**0, so the prefix bit and following structure may repeat infinite times, this struct definition shall be changed if more than 5 GPRSMobileAllocation are required in the Constraint.
Reference : 3GPP TS 44.060 clause 11.2.19

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		always = 1
gPRS_MobileAllocation1	c_GPRSMobileAllocations(p_mA_NUM,p_mA_LENGTH, p_mA_BITMAP)		
prefix2	OMIT		always = 1
gPRS_MobileAllocation2	OMIT		
prefix3	OMIT		always = 1
gPRS_MobileAllocation3	OMIT		
prefix4	OMIT		always = 1
gPRS_MobileAllocation4	OMIT		
prefix5	OMIT		always = 1
gPRS_MobileAllocation5	OMIT		
endingRepetiton	'0'B		Its value is always zero and indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRSMobileAlloc(p_mA_LENGTH : B6; p_mA_BITMAP : BITSTRING)
Group :
Structured Type : GPRSMobileAlloc
Derivation Path :
Encoding Variation :
Comments : Reference: 3GPP TS 44.060 clause 12.10a
Values are taken from TS 51010 Section 40 defaults.

Element Name	Element Value	Element Encoding	Comments
hSN	'000000'B		3GPP TS 45.002
rFL_Mask	'0'B		
rFL_NumberList	−		not present if rFL_Mask = 0
mA_ARFCN_Mask	'0'B		
mA_LENGTH	p_mA_LENGTH		not present if mA_ARFCN_Mask = 1
mA_BITMAP	p_mA_BITMAP		not present if mA_ARFCN_Mask = 1
aRFCN_IndexMask	−		not present if mA_ARFCN_Mask = 0
aRFCN_IndexList	−		not present if mA_ARFCN_Mask = 0 or aRFCN_IndexMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRSMobileAllocations(p_mA_NUM:B4;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)
Group :
Structured Type : GPRSMobileAllocations
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
mA_NUMBER	p_mA_NUM		
GPRSMobileAllocation	c_GPRSMobileAlloc(p_mA_LENGTH,p_mA_BITMAP)		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRSMobAllocListNone
Group :
Structured Type : GPRS_MobileAllocationLists
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
prefix1	–		always = 1
gPRS_MobileAllocation1	–		
prefix2	–		always = 1
gPRS_MobileAllocation2	–		
prefix3	–		always = 1
gPRS_MobileAllocation3	–		
prefix4	–		always = 1
gPRS_MobileAllocation4	–		
prefix5	–		always = 1
gPRS_MobileAllocation5	–		
endingRepetiton	’0’B		Its value is always zero and indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_PowerControlParam
Group :
Structured Type : GPRS_PowerControlParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
aLPHA	’0000’B		
t_AVG_W	’01100’B		
t_AVG_T	’01100’B		
pC_MEAS_CHAN	’0’B		BCCH
n_AVG_I	’0111’B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_Timer_tlv(p_unit : B3; p_value : B5)
Group :
Structured Type : GPRS_Timer
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	p_unit		Unit
value	p_value		Timer value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_HCS(p_priorityClass:B3;p_hCS_THR:B5)
Group :
Structured Type : HCS
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
priorityClass	p_priorityClass		
hCS_THR	p_hCS_THR		−110 dBm

Detailed Comments : 3GPP TS 44.060 clause 11.2.20

Structured Type Constraint Declaration

Constraint Name : c_HoppingPCCCHCarrierList(p_mAIO:B6;p_TS_Allocation:B8)
Group :
Structured Type : HoppingPCCCHCarrierList
Derivation Path :
Encoding Variation :
Comments : The definition of this type is
<Hopping PCCCH Carriers Lists struct> ::=
{1<Hopping PCCCH Carriers struct>}**0.
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more hoppingPCCCHCarriers if more 3 hoppingPCCCHCarriers are required in the constraint.

Element Name	Element Value	Element Encoding	Comments
prefixBit1	'1'B		
hoppingPCCCHCarriers1	c_HoppingPCCCHCarriers(p_mAIO,p_TS_Allocation)		not present if prefixBit1 = 0
prefixBit2	OMIT		
hoppingPCCCHCarriers2	OMIT		not present if prefixBit2 = 0
prefixBit3	OMIT		
hoppingPCCCHCarriers3	OMIT		not present if prefixBit3 = 0
endingBit	'0'B		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Constraint Declaration

Constraint Name : c_HoppingPCCCHCarriers(p_mAIO:B6;p_TS_Allocation:B8)
Group :
Structured Type : HoppingPCCCHCarriers
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
mAIO	p_mAIO		
timeslotAllocation	p_TS_Allocation		

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Constraint Declaration

Constraint Name : c_G_IARO
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.16 @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
constructMask	OMIT		
compressInterRATHO	OMIT		present if constructMask = LL
reservMask1	OMIT		present if constructMask = LH
reservMask2	OMIT		present if reservMask1 = 0
eGPRS_UplinkAssign	OMIT		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	OMIT		present if constructMask = HL
freqParam_bt	OMIT		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	OMIT		present if constructMask = HL
mask1	OMIT		present if constructMask = HH
mask2	OMIT		
packetUplinkAssign	OMIT		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	OMIT		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_IARO_PDA(p_TLLI :O4; p_Gamma : B5)
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
constructMask	'11'B		
compressInterRATHO	−		present if constructMask = LL
reservMask1	−		present if constructMask = LH
reservMask2	−		present if reservMask1 = 0
eGPRS_UplinkAssign	−		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	−		present if constructMask = HL
freqParam_bt	−		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	−		present if constructMask = HL
mask1	'0'B		present if constructMask = HH
mask2	'1'B		
packetUplinkAssign	OMIT		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	c_PktDownlinkAss_IARO(p_TLLI, p_Gamma)		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH @sic T1s 040615 sic@
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_IARO_PUA(p_Gamma : B5; p_StartTime : B16)
Group :
Structured Type : IARO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
constructMask	'11'B		
compressInterRATHO	–		present if constructMask = LL
reservMask1	–		present if constructMask = LH
reservMask2	–		present if reservMask1 = 0
eGPRS_UplinkAssign	–		not present if reservMask2 = 1 or reservMask1 = 1 or constructMask <> LH
lengthOfFreqParam	–		present if constructMask = HL
freqParam_bt	–		frequency parameters before time not present if lengthOfFreqParam = 0
compressInterRATHO1	–		present if constructMask = HL
mask1	'0'B		present if constructMask = HH
mask2	'0'B		
packetUplinkAssign	c_PktUplinkAss_IARO(p_Gamma, p_StartTime)		not present if mask1 = 1 or mask2 = 1 or constructMask <> HH
packetDownlinkAssign	OMIT		not present if mask1 = 1 or mask2 = 0 or constructMask <> HH
secondPacketAssign	OMIT		present if mask1 = 1 and constructMask = HH

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_IndirectEncoding
Group :
Structured Type : IndirectEncoding
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.8
Values are taken from 51010 clause 40.2.3.4

Element Name	Element Value	Element Encoding	Comments
mAIO	'000010'B		MAIO
mA_NUMBER	'0010'B		MA_NUMBER List 2
changeMark1Mask	'0'B		
mA_ChangeMark1	OMIT		not present if changeMark1Mask = 0
changeMark2Mask	OMIT		not present if changeMark1Mask = 0
mA_ChangeMark2	OMIT		not present if changeMark1Mask = 0 or changeMark2Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LAI(p_PLMN:O3; p_LAC: O2)
Group :
Structured Type : LocAreaId_v
Derivation Path :
Encoding Variation :
Comments : without IEI

Element Name	Element Value	Element Encoding	Comments
plmn	p_PLMN		MCC + MNC
lac	p_LAC		location area code

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocAreaId_v_UdateAccept (p_G_CellConfigInfo : G_CellConfigInfo)
Group :
Structured Type : LocAreaId_v
Derivation Path :
Encoding Variation :
Comments : Location Area Identification Value
3G TS 24.008 cl. 10.5.1.3

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN (p_G_CellConfigInfo.mcc, p_G_CellConfigInfo.mnc)		MCC + MNC 3 digits each
lac	p_G_CellConfigInfo.lac		LAC

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LSA_ID_Info_OMIT
Group :
Structured Type : LSA_ID_Info
Derivation Path :
Encoding Variation :
Comments : The definition is < LSA ID Information stsruct> ::=
{1 {0 <LSA_ID : bit(24)>
| 1 <ShortLSA_ID : (10)>}}**0, so the TTCN definition shall be modified to include more lSA_ID if the constaint requires more than 5 lSA_ID.
Reference : 3GPP TS 44.060 clause 12.28

Element Name	Element Value	Element Encoding	Comments
prefixBit1	OMIT		value always equal to "1"
lSA_ID_Mask1	OMIT		
lSA_ID1	OMIT		not present if lSA_ID_Mask1 = 1
ShortLSA_ID1	OMIT		not present if lSA_ID_Mask1 = 0
prefixBit2	OMIT		value always equal to "1"
lSA_ID_Mask2	OMIT		
lSA_ID2	OMIT		not present if lSA_ID_Mask2 = 1
ShortLSA_ID2	OMIT		not present if lSA_ID_Mask2 = 0
prefixBit3	OMIT		value always equal to "1"
lSA_ID_Mask3	OMIT		
lSA_ID3	OMIT		not present if lSA_ID_Mask3 = 1
ShortLSA_ID3	OMIT		not present if lSA_ID_Mask3 = 0
prefixBit4	OMIT		value always equal to "1"
lSA_ID_Mask4	OMIT		
lSA_ID4	OMIT		not present if lSA_ID_Mask4 = 1
ShortLSA_ID4	OMIT		not present if lSA_ID_Mask4 = 0
prefixBit5	OMIT		value always equal to "1"
lSA_ID_Mask5	OMIT		
lSA_ID5	OMIT		not present if lSA_ID_Mask4 = 1
ShortLSA_ID5	OMIT		not present if lSA_ID_Mask4 = 0
endBit	’0’B		value always equal to "0" to indicate the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MeasResults_Any
Group :
Structured Type : MeasResults
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
ba_used	?		bcch allocation used
dtx_used	?		dtx was used
rxlev_fsc	?		received signal strength on the full serving cell
ba3G_used	?		3G bcch allocation used
meas_valid	?		measurement results valid
rxlev_ssc	?		received signal strength on a subset of the serving cell
spareBit1	?		spare bit
rxqual_fsc	?		received signal quality on the full serving cell
rxqual_ssc	?		received signal quality on a subset of the serving cell
no_neighCells	?		number of neighbouring cells (nc)
rxlev_nc1	?		received signal strength on nc1
bcchfrq_nc1	?		bcch frequency position of nc1
bsic_nc1	?		base station identity code of nc1
rxlev_nc2	?		received signal strength on nc2
bcchfrq_nc2	?		bcch frequency position of nc2
bsic_nc2	?		base station identity code of nc2
rxlev_nc3	?		received signal strength on nc3
bcchfrq_nc3	?		bcch frequency position of nc3
bsic_nc3	?		base station identity code of nc3
rxlev_nc4	?		received signal strength on nc4
bcchfrq_nc4	?		bcch frequency position of nc4
bsic_nc4	?		base station identity code of nc4
rxlev_nc5	?		received signal strength on nc5
bcchfrq_nc5	?		bcch frequency position of nc5
bsic_nc5	?		base station identity code nc5

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
rxlev_nc6	?		received signal strength on nc6
bcchfrq_nc6	?		bcch frequency position of nc6
bsic_nc6	?		base station identity code of nc6
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_MM_MS_Identity			
Group :			
Structured Type : MM_MS_Identity			
Derivation Path :			
Encoding Variation :			
Comments : Mobile Identity 3G TS 24.008 cl. 10.5.1.4			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	’00010111’B		’00010111’B
iel	’05’O		
iDigit1	’1111’B		1st identitity digit
oddEvenInd	’0’B		Odd/even indicator
typeOfId	’100’B		Type of identity
otherDigits	tsc_G_TMSI_Def		Other identity digits @sic T1s050054 sic@
Detailed Comments : Maximum number of digits is 16 (IMEISV). Filler may be used.			

Structured Type Constraint Declaration

Constraint Name : cr_MSCLSMK3_Any
Group :
Structured Type : MSCLSMK3
Derivation Path :
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
iei	'00100000'B		'00100000'B
iel	?		OCTETSTRING [1]
spareBit	'0'B		spare bit
multibandSupported	?		
a5_7	?		a5/7 algorithm supported
a5_6	?		a5/6 algorithm supported
a5_5	?		a5/5 algorithm supported
a5_4	?		a5/4 algorithm supported
associatedRadioCapabilty2	*		present if multibandSupported = 101 or 110
spareBits1	*		present if multibandSupported = 001 or 010 or 100
associatedRadioCapabilty1	*		present if multibandSupported = 001 or 010 or 100 or 101 or 110
maskBit1	?		
rGSM_RadioCapability	*		R−GSM band associated radio capability. not present if maskBit1 = 0
maskBit2	?		
multiSlotClass	*		multi slot class. not present if multiSlotClass = 0
uCS2Treatment	?		
extMeasurementCapability	?		extended measurement capability
maskBit3	?		
msMeasurementCapability	cr_MS_MeasCapability_Any IF_PRESENT		MS measurement capability not present if maskBit3 = 0
maskBit4	?		
msPositioningMethod	*		MS positioning method capability not present if maskBit4 = 0
maskBit5	?		
eDGE_MultiSlot	*		EDGE multi slot capability not present if maskBit5 = 0
maskBit6	?		
eDGE_Struct	cr_EDGE_Struct_Any IF_PRESENT		EDGE struct not present if maskBit6 = 0 @sic G3t050013 sic@
maskBit7	?		
gSM400BandsSupported	*		not present if maskBIt7 = 0

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
gSM400AssociatedRadioCapability	*		not present if gSM400BandsSupported = 00 or maskBit7 = 0
maskBIt8	?		
gSM850AssociatedRadiioCapability	*		not present if maskBIt8 = 0
maskBIt9	?		
pCS1900AssociatedRadiioCapability	*		not present if maskBIt9 = 0
uMTS_FDD_RAT_Capability	?		
uMTS384TDD_RAT_Capability	?		
cDMA2000_RAT_Capability	?		
maskBit10	?		
dTM_GPRS_MultiSlotSubclass	*		not present if maskBit10 = 0
singleSlotDTM	*		not present if maskBit10 = 0
maskBit11	*		not present if maskBit10 = 0
dTM_EGPRS_MultiSlorSubclass	*		not present if maskBit10 = 0 or maskBit11 = 0
maskBit12	?		
singleBandSupport	*		not present if maskBit12 = 0
maskBit13	*		@sic G3t050026 sic@
gSM700AssociatedRadioCapability	*		not present if maskBit13 = 0
uMTS128TDD_RAT_Capability	*		@sic G3t050026 sic@
gERANFeatPack1	*		@sic G3t050026 sic@
mask14	*		@sic G3t050026 sic@
extDTM_GPRS_MultiSlotSubclass	*		not present if maskBit14 = 0
etxDTM_EGPRS_MultiSlotSubclass	*		not present if maskBit14 = 0
mask15	*		@sic G3t050026 sic@
highMultislotCap	*		not present if mask15 = 0
mask16	*		@sic G3t050026 sic@
gERANIuModeLength	*		not present if maskBit16 = 0
gERANIuModeSpareBits	*		not present if maskBit16 = 0
gERANFeatPack2	*		@sic G3t050026 sic@
gMSKMultislotPowerProfile	*		@sic G3t050026 sic@
pSKMultislotPowerProfile	*		@sic G3t050026 sic@
spareBits2	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_MS_MeasCapability_Any
Group :
Structured Type : MS_MeasCapability
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
sMS_VALUE	?		
sM_VALUE	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MobileAlloc
Group :
Structured Type : MobileAlloc
Derivation Path :
Encoding Variation :
Comments : Mobile allocation
3GPP TS 44.018 clause 10.5.2.21

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’01110010’B
iel	’00’O		’00’O for non hopping
mac_8n	OMIT		mac64 − mac57
mac_7n	OMIT		mac56 − mac49
mac_6n	OMIT		mac48 − mac41
mac_5n	OMIT		mac40 − mac33
mac_4n	OMIT		mac32 − mac25
mac_3n	OMIT		mac24 − mac17
mac_2n	OMIT		mac16 − mac9
mac_1n	OMIT		mac8 − mac1

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MobileAlloc_12
Group :
Structured Type : MobileAlloc
Derivation Path :
Encoding Variation :
Comments : Indicates12 freqs from the CA (as specified in 26_6_5_1)

Element Name	Element Value	Element Encoding	Comments
iei	'01110010'B		
iel	'03'O		
mac_8n	–		
mac_7n	–		
mac_6n	–		
mac_5n	–		
mac_4n	–		
mac_3n	'00000001'B		
mac_2n	'11111110'B		
mac_1n	'00001111'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MobileAlloc_9
Group :
Structured Type : MobileAlloc
Derivation Path :
Encoding Variation :
Comments : Indicates 9 freqs from the CA (as specified in 26_6_5_1)

Element Name	Element Value	Element Encoding	Comments
iei	'01110010'B		
iel	'03'O		
mac_8n	–		
mac_7n	–		
mac_6n	–		
mac_5n	–		
mac_4n	–		
mac_3n	'00000001'B		
mac_2n	'11111110'B		
mac_1n	'00000100'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MobileIdTMSI_lv
Group :
Structured Type : MS_Identity_lv
Derivation Path :
Encoding Variation :
Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI
otherDigits	tsc_G_TMSI_Def		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MultiRateConfig
Group :
Structured Type : MultiRateConfig
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00000011'B		
iel	'02'O		
mrVersion	'001'B		multirate speech version
nSCB	'0'B		noise suppression control bit
iCMI	'0'B		initial codec mode indicator
spareBit	'0'B		0
startMode	'00'B		start mode
mrSpeechPara	'01'O		parameters for multirate speech

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_MultislotAlloc_Omit
Group :
Structured Type : MultislotAlloc
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	–		IEI
iel	–		OCTETSTRING [1]
ext1	–		
da7	–		down link time slot allocation bit
da6	–		down link time slot allocation bit
da5	–		down link time slot allocation bit
da4	–		down link time slot allocation bit
da3	–		down link time slot allocation bit
da2	–		down link time slot allocation bit
da1	–		down link time slot allocation bit
ext2	–		always = 1
ua7	–		uplink link time slot allocation bit
ua6	–		uplink link time slot allocation bit
ua5	–		uplink link time slot allocation bit
ua4	–		uplink link time slot allocation bit
ua3	–		uplink link time slot allocation bit
ua2	–		uplink link time slot allocation bit
ua1	–		uplink link time slot allocation bit
channelset1	–		channel set 1
channelset2	–		channel set 2
channelset3	–		channel set 3
channelset4	–		channel set 4
channelset5	–		channel set 5
channelset6	–		channel set 6
channelset7	–		channel set 7
channelset8	–		channel set 8

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NC_MeasParams
Group :
Structured Type : NC_MeasParams
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
nETWORK_CONTROL_ORDER	'00'B		
mask	'1'B		
nC_NON_DRX_PERIOD	'111'B		not present if mask = 0
nC_REPORTING_PERIOD_I	'111'B		not present if mask = 0
nC_Reporting_PERIOD_T	'011'B		not present if mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighCellParam(p_StartFreq:B10;p_CellSelection_Cell1:CellSelection;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING;p_CellSelection_Cell2:CellSelection)
Group :
Structured Type : NeighCellParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
sTART_FREQUNCY	p_StartFreq		
cellSelectionParams	p_CellSelection_Cell1		
nR_OF_REMAINING_CELLS	'0001'B		
fREQ_DIFF_LENGTH	p_FreqDiffLen		
fREQUENCY_DIFF1	p_FreqDiff		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
cellSelectionParams1	p_CellSelection_Cell2		
fREQUENCY_DIFF2	OMIT		the length of this field is 1 + Val(fREQUENCY_DIFF_LENGTH)
cellSelectionParams2	OMIT		

Detailed Comments : Reference: 3GPP TS 44.060 clause 11.2.20.
More fREQUENCY_DIFF + cellSelectionParams shall be added into this type definition if nR_OF_REMAINING_CELLS is greater than 2. In a constraint the value of nR_OF_REMAINING_CELLS indicates the number of repetitions of fREQUENCY_DIFF and cellSelectionParams

Structured Type Constraint Declaration

Constraint Name : c_NeighCellParams2List_OMIT
Group :
Structured Type : NeighCellParams2List
Derivation Path :
Encoding Variation :
Comments : this type definition is
{1 < Neighbour Cell params 2 struct>}**0
The prefix bit and following structure may repeat infinite times, so this TTCN definition shall be modified to include more neighbourCellParam if more than 1 neighbourCellParam are required in the constaint.

Element Name	Element Value	Element Encoding	Comments
prefix1	OMIT		value = 1 if present
neighCellParam2_1	OMIT		
endingRepetition	'0'B		always = 0 indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NeighCellParamsList(p_StartFreq:B10;p_CellSelection_Cell1:CellSelection;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING;p_CellSelection_Cell2:CellSelection)
Group :
Structured Type : NeighCellParamsList
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		always = 1 indicating the start of Neighbour Cell params struct
neighCellParam1	c_NeighCellParam(p_StartFreq,p_CellSelection_Cell1,p_FreqDiffLen,p_FreqDiff,p_CellSelection_Cell2)		
endingBit	'0'B		always = 0 indicating the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_NonGPRSCellOptions
Group :
Structured Type : NonGPRSCellOptions
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.27

Element Name	Element Value	Element Encoding	Comments
aTT	’1’B		MS shall apply IMSI attach and detach procedures
t3212Mask	’1’B		
t3212	’00000000’B		not present if t3212Mask = 0 Timeout value
nECI	’1’B		New establishment causes supported
pWRC	’0’B		Power control indicator
dTX	’10’B		
rADIO_LINK_TIMEOUT	’0001’B		value 8
bS_AG_BLKS_RES	’010’B		2 reserved
cCCH_CONF	’001’B		
bS_PA_MFRMS	’100’B		6 multiframes
mAX_RETRANS	’00’B		1 retransmission allowed
tX_INTEGER	’0010’B		5 slots used for spread transmission
eC	’0’B		emergency call allowed
mS_TXPWR_MAX_CCCH	’01010’B		
extensionBitsMask	’1’B		
extensionBits	c_ExtInfo		not present if extensionBitsMask = 0. 3GPP TS 44.060 clause 12.26

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PacketChDescr(p_ARFCN : B10)
Group :
Structured Type : PacketChDescr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
chType	'00001'B		channel type
tN	'100'B		time slot
tSC	'101'B		training sequence code
maskBit1	'0'B		
maskBit2	'0'B		not present if maskBit1 = 1.
spareBit1	'0'B		not present if maskBit1 = 1 or maskBit2 = 1
aRFCN	p_ARFCN		not present if maskBit1 = 1 or maskBit2 = 1
spareBit	–		not present if maskBit1 = 1 or maskBit2 = 0
mAIO	–		not present if maskBit1 = 1 or maskBit2 = 0
mA_NumberInd	–		
maskBit3	–		
spareBits	–		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 1
cHANGE_MARK_1	–		not present if maskBit1 = 1 or maskBit2 = 0 or maskBit3 = 0
mIAO	–		not present if maskBit1 = 0
hSN	–		not present if maskBit1 = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PacketRequestReference(p_randomAccessInfo: INTEGER;p_frameNumber : RFN)
Group :
Structured Type : PacketRequestReference
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.046 clause 12.11

Element Name	Element Value	Element Encoding	Comments
randomAccessInfo	INT_TO_BIT(p_randomAccessInfo,11)		
frameNumber	p_frameNumber		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PacketTimingAdvance
Group :
Structured Type : PacketTimingAdvance
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.060 clause 12.12

Values are taken from 51010 clause 40.2.3.4

Element Name	Element Value	Element Encoding	Comments
taValueMask	'1'B		
timingAdvanceValue	'111110'B		not present if taValueMask = 0 30 bit periods
taIndexMask	'0'B		
timingAdvanceIndex	OMIT		not present if taIndexMask = 0
timingAdvanceSlotNumber	OMIT		not present if taIndexMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_PagModeNormal
Group :
Structured Type : PageModeIE
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	–		
sprb	'00'B		spare bits
pgm	'00'B		page mode

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_PageModeIE
Group :
Structured Type : PageModeIE
Derivation Path :
Encoding Variation :
Comments : Page mode
3GPP TS 44.018 clause 10.5.2.26

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
sprb	'00'B		spare bits
pgm	tsc_RR_PagingNormal		page mode

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCH_Descr_Def
Group :
Structured Type : PBCCH_Descr
Derivation Path :
Encoding Variation :
Comments : values from TS 51.010−1 v.5.5.0 subclause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
pb	'0110'B		−12 dB
tSC	'101'B		
tN	'100'B		Timeslot 4
carrierMask1	'1'B		
carrierMask2	OMIT		not BCCH carrier
aRFCN	OMIT		ARFCN not present
mAIO	'000010'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCHFreqInfo(p_FreqList : FreqListNoIEI)
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
h	'1'B		h='1'B: hopping channel; h='0'B: non−hopping channel
spr	'000'B		'000'B
spr1	OMIT		'00'B, if h = '0'B, otherwise OMIT
maio	'000010'B		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	'000000'B		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	OMIT		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	p_FreqList		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PBCCH_Info_Def(p_LowRate : B6)
Group :
Structured Type : PBCCH_Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
pSI1_REPEAT_PERIOD	'0010'B		The repeat period of packet system information Type 1
pSI_COUNT_HR	'0011'B		The number of PSI message instances sent with high repetition rate. See 3GPP TS 44.060 section 11.2.18
pSI_COUNT_LR	p_LowRate		The number of PSI message instances sent with low repetition rate. See 3GPP TS 44.060 section 11.2.18

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PCCCH_DescrListNone
Group :
Structured Type : PCCCH_DescriptionList
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
prefix1	–		value = 1 if present
pCCCHDescription1	–		
endingRepetition	'0'B		the value of this bit is always zero to indicate the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PCCCH_DescriptionList_Hopping(p_MA_Number:B4;p_mAIO:B6;p_TS_Allocation:B8)
Group :
Structured Type : PCCCH_DescriptionList
Derivation Path :
Encoding Variation :
Comments : The definition of this type is
<PCCCH Description Lists struct> ::= {1 <PCCCH Description struct>}**0, so
the prefix bit and following structure may repeat infinite times. This TTCN definition shall be modified to include more pCCCHDescription if more than 1 pCCCHDescription are required in the constraint.

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		value = 1 if present
pCCCHDescription1	c_PCCCHDescription_Hopping(p_MA_Number,p_mAIO,p_TS_Allocation)		
endingRepetition	'0'B		the value of this bit is always zero to indicate the end of the structure

Detailed Comments : 3GPP TS 44.060 clause 11.2.19

Structured Type Constraint Declaration

Constraint Name : c_PCCCHDescription_Hopping(p_MA_Number:B4;p_mAIO:B6;p_TS_Allocation:B8)
Group :
Structured Type : PCCCHDescription
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tSC	'101'B		
nonHoppingPCCCHCarriersMask	'1'B		
nonHoppingPCCCHCarriers	OMIT		not present if nonHoppingPCCCH_Carriers = 1
mA_NUNBER	p_MA_Number		not present if nonHoppingPCCCH_Carriers = 0
hoppingPCCCHCarriers	c_HoppingPCCCHCarrierList(p_mAIO,p_TS_Allocation)		not present if nonHoppingPCCCH_Carriers = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PCCCH_Info(p_BS_PBCCH_BLKS : B2; p_BS_PAG_BLKS_RES: B4; p_BS_PRACH_BLKS : B4)
Group :
Structured Type : PCCCH_Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
bS_PBCCH_BLKS	p_BS_PBCCH_BLKS		
bS_PAG_BLKS_RES	p_BS_PAG_BLKS_RES		
bS_PRACH_BLKS	p_BS_PRACH_BLKS		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PCCCHParams
Group :
Structured Type : PCCCH_OrganisationParameters
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
bS_PCC_REL	'0'B		
bS_PBCCH_BLKS	'10'B		
bS_PAG_BLKS_RES	'0010'B		
bS_PRACH_BLKS	'0001'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PktDownlinkAss_IARO(p_TLLI :O4; p_Gamma : B5)
Group :
Structured Type : PacketDownlinkAssign
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tLLI	p_TLLI		TLLI
mask	'1'B		
tFI_Assignment	tsc_downlinkTFI		temporary flow identifier not present if mask = 0
rLC_Mode	'0'B		RLC mode not present if mask = 0
alphaMask	'1'B		not present if mask = 0.
aLPHA	'0101'B		not present if mask = 0 or alphaMask = 0
gAMMA	p_Gamma		not present if mask = 0
pOLLING	'0'B		not present if mask = 0 @sic T1s 040615 sic@
tA_VALID	'1'B		not present if mask = 0 @sic T1s 040615 sic@
taIndexMask	'0'B		
tIMING_ADVANCE_INDEX	–		not present if mask = 0 or taIndexMask = 0
startingTimeMask	'0'B		not present if mask = 0 @sic T1s 040615 sic@
tBF_STARTING_TIME	OMIT		not present if mask = 0 or startingTimeMask = 0 @sic T1s 040615 sic@
pwrCtrlMask	'0'B		not present if mask = 0
p0	–		not present if mask = 0 or pwrCtrlMask = 0
spareBit	–		not present if mask = 0 or pwrCtrlMask = 0 @sic R5s050095 sic@
pR_MODE	–		not present if mask = 0 or pwrCtrlMask = 0
egprsMask	'0'B		L
eGPRSWindowSize	–		not present if egprsMask = L
linkQualityMeasMode	–		not present if egprsMask = L
bepPriod2Mask	–		not present if egprsMask = L
BepPeriod2	–		not present if egprsMask = L or bepPriod2Mask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PktUplinkAss_IARO(p_Gamma : B5; p_StartTime : B16)
Group :
Structured Type : PacketUplinkAssign
Derivation Path :
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
allocMask	'1'B		0 −> indicating single block allocation
tFI_Assignment	tsc_uplinkTFI		temporary flow identifier not present if allocMask = 0
pOLLING	'1'B		not present if allocMask = 0
spareBit	'0'B		not present if allocMask = 0
uSF	tsc_DefUSF		not present if allocMask = 0 or fixedAllocMask = 1
uSFGranularity	'0'B		not present if allocMask = 0 or fixedAllocMask = 1
p0Mask	'0'B		not present if allocMask = 0 or fixedAllocMask = 1
p0	−		not present if allocMask = 0 or fixedAllocMask = 1 or p0Mask = 0
pR_MODE	−		not present if allocMask = 0 or fixedAllocMask = 1 or p0Mask = 0
ChannelCodingCommand	'00'B		not present if allocMask = 0
tLLI_BlockChannelCodeing	'1'B		not present if allocMask = 0
alphaMask	'1'B		not present if allocMask = 0
aLPHA	'0101'B		not present if allocMask = 0 or alphaMask = 0
gMMA	p_Gamma		not present if allocMask = 0
taMask	'0'B		not present if allocMask = 0
tIMING_ADVANCE_INDEX	−		not present if allocMask = 0 or taMask = 0
startingTimeMask	'1'B		not present if allocMask = 0
tBF_STARTING_TIME	p_StartTime		not present if allocMask = 0 or startingTimeMask = 0
alpha1Mask	−		present if allocMask = 0 single block allocation
aLPHA1	−		not present if allocMask = 1 or alpha1Mask = 0
gMMA1	−		not present if allocMask = 1
prefixBits	−		not present if allocMask = 1 the value is 01 if present
tBF_STARTING_TIME1	−		not present if allocMask = 1
p02Mask	−		not present if allocMask = 1
p02	−		not present if allocMask = 1 or p02Mask = L
spareBit2	−		not present if allocMask = 1 or p02Mask = L

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
pR_MODE2	−		not present if allocMask = 1 or p02Mask = L
r99Mask	'0'B		
extRAMask	−		not present if r99Mask = L
extRA	−		not present if r99Mask = L or extRAMask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_PowerCommand			
Group :			
Structured Type : PowerCommand			
Derivation Path :			
Encoding Variation :			
Comments : Power command 3GPP TS 44.018 clause 10.5.2.28			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	OMIT		information element identifier
spareBits	'00'B		spare bits
fpc	'0'B		fast measurement reporting and power control
powerLevel	'01010'B		power level (0−31) @sic G3t050032 sic@
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_PowerControlParams(p_Gamma : B5)
Group :
Structured Type : PowerControlParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
aLPHA	'0101'B		
gmmaMask0	'0'B		
gMMA_TN0	–		not present if maskTN0 = 0
gmmaMask1	'0'B		
gMMA_TN1	–		not present if maskTN1 = 0
gmmaMask2	'0'B		
gMMA_TN2	–		not present if maskTN2 = 0
gmmaMask3	'0'B		
gMMA_TN3	–		not present if maskTN3 = 0
gmmaMask4	'1'B		
gMMA_TN4	p_Gamma		not present if maskTN4 = 0
gmmaMask5	'0'B		
gMMA_TN5	–		not present if maskTN5 = 0
gmmaMask6	'0'B		
gMMA_TN6	–		not present if maskTN6 = 0
gmmaMask7	'0'B		
gMMA_TN7	–		not present if maskTN7 = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PRACHCntrlParams
Group :
Structured Type : PRACH_ControlParameters
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
aCC_CONTR_CLASS	'0000000000000000'B		
mAX_RETRANS1	'00'B		
mAX_RETRANS2	'00'B		
mAX_RETRANS3	'00'B		
mAX_RETRANS4	'00'B		
sParameter	'0001'B		
tX_INT	'0010'B		
persistenceLevelMask	'0'B		
pERSISTENCE_LEVEL1	–		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL2	–		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL3	–		not present if persistenceLevelMask = 0
pERSISTENCE_LEVEL4	–		not present if persistenceLevelMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PSI2_Instance2_GSM
Group :
Structured Type : PSI2Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
rFL_Contents_Len	tsc_RFLContentsLen_3		Length of RFL contents Reference : 3GPP TS 44.060 clause 11.2.19
rFL_Contents	tsc_PSI2_INST2_RFL_Contents_GSM		RFL contents
mALen	tsc_MALen_5		Length of GPRS MA contents Reference: 3GPP TS 44.060 clause 12.10a
mABitmap	tsc_PSI2_MABitmap_GSM		GPRS MA bitmap

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RACH_ControlParam(p_MaxRetx: B2; p_TxInteger: B4; p_CellBarAccess: B1; p_Re: B1; p_Acc2: B5;p_EmergCall: B1; p_Acc1:B10)
Group :
Structured Type : RACHControlParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
maxretx	p_MaxRetx		maximum retransmissions
txInteger	p_TxInteger		Tx integer, number of slots to spread transmission
cellBarAccess	p_CellBarAccess		cell barred for access
re	p_Re		call reestablishment allowed
acc_2	p_Acc2		access control class 15−11
ec	p_EmergCall		emergency call allowed
acc_1	p_Acc1		access control class 9−0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ReferenceAddress_PRR(p_packetRequestReference : PacketRequestReference)
Group :
Structured Type : ReferenceAddress
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
globalTFImask	'1'B		
gLOBAL_TFI	OMIT		not present if globalTFImask=1
mask2	'1'B		not present if globalTFImask=0
tLLI	OMIT		not present if globalTFImask=0 and mask2=1
mask3	'1'B		not present if globalTFImask=0 and mask2=0
tQI	OMIT		not present if globalTFImask=0 and mask2=0 and mask3=1
packetRequestRef	p_packetRequestReference		not present if globalTFImask=0 and mask2=0 and mask3=0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ReferenceFreq(p_rFL_NUMBER:B4;p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING)
Group :
Structured Type : ReferenceFreq
Derivation Path :
Encoding Variation :
Comments : Reference : 3GPP TS 44.060 clause 11.2.19
rFL_Contents is the value part of "Frequency List" information element, the allowed formats are bit map 0, 1024 range, 512 range, 256 range, 128 range and variable bit map

Element Name	Element Value	Element Encoding	Comments
rFL_NUMBER	p_rFL_NUMBER		identification of the RFL
lengthOfRFLContents	p_rFL_Contents_Len		IE length = 3
rFL_Contents	p_rFL_Contents		the value part of "Frequency List" information element defined in 3GPP TS 44.018 clause 10.5.2.13

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ReferenceFreqLists(p_rFL_NUMBER:B4;p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING)
Group :
Structured Type : ReferenceFreqLists
Derivation Path :
Encoding Variation :
Comments : The definition in CSN.1 is {1 < Reference Frequency struct >}**0, so the prefix bit and following structure may repeat infinite times, this TTCN definition shall be modified to include more ReferenceFreq if more than 5 ReferenceFreq are required in the Constraint.

Reference : 3GPP TS 44.060 clause 11.2.19

Element Name	Element Value	Element Encoding	Comments
prefix1	'1'B		value = 1 if present
referenceFreq1	c_ReferenceFreq(p_rFL_NUMBER,p_rFL_Contents_Len,p_rFL_Contents)		
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RefFreqListNone
Group :
Structured Type : ReferenceFreqLists
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
prefix1	–		value = 1 if present
referenceFreq1	–		
endingRepetition	'0'B		Value always ZERO, indicates the end of the structure

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RFN_0
Group :
Structured Type : RFN
Derivation Path :
Encoding Variation :
Comments : Assign some arbitrary values to the RFN.

Element Name	Element Value	Element Encoding	Comments
t1_	'00000'B		(FN div 1326) mod 32
t3	'000000'B		FN mod 26
t2	'00000'B		FN mod 51

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_RFN_Omit
Group :
Structured Type : RFN
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
t1_	'11111'B		(FN div 1326) mod 32
t3	'111111'B		FN mod 51
t2	'11111'B		Results in ignoring of RFN by the lower Layer.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_RR_CauNormalevent
Group :
Structured Type : RR_Cause
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	–		
cause	'00000000'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_ReqRef (p_RR_RA : INTEGER ; p_RR_RFN : RFN)
Group :
Structured Type : ReqRef
Derivation Path :
Encoding Variation :
Comments : Request reference
3GPP TS 44.018 clause 10.5.2.30

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
radoAccessInfo	INT_TO_BIT (p_RR_RA , 8)		
fn	p_RR_RFN		ER1978

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_RR_Cause
Group :
Structured Type : RR_Cause
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	–		
cause	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH4_Ch(p_CipherMode: CipherModeSetting; p_CipherKey : B64; p_PowerLevel : B5; p_TimingAdvance : B7)
Group :
Structured Type : DedCH_Info
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
chMode	c_ChMode(tsc_SignallingOnly)		channel mode see 3GPP TS 44.018 section 10.5.2.6
cipherMode	p_CipherMode		cipher mode setting see 3GPP TS 44.018 section 10.5.2.9
cipherKey	p_CipherKey		
powerLevel	p_PowerLevel		power level value used in L1 header
timingAdvance	p_TimingAdvance		timing advance value used in L1 header

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SDCCH8_FreqGSM900
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN =50

Element Name	Element Value	Element Encoding	Comments
h	’0’B		non−hopping channel
spr	’000’B		’000’B
spr1	’00’B		’00’B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	’0000110010’B		absolute RF channel number = 50
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ServingCellParams
Group :
Structured Type : ServingCellParams
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cELL_BAR_ACCESS_2	'0'B		Normal reselection
eXC_ACC	'0'B		
gPRS_RXLEV_ACCESS_MIN	'011111'B		−80 dBm
gPRS_MS_TXPWR_MAX_CCH	'01010'B		
hCS_ServingCellParametersMask	'1'B		
hCS_ServingCellParameters	c_HCS('001'B,'00000'B)		not present if hCS_ServingCellParametersMask = 0
mULTIBAND_REPORTING	'00'B		Normal Reporting of six strongest cells

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.20

Structured Type Constraint Declaration

Constraint Name : c_SI1_RO(p_BandInd : B1)
Group :
Structured Type : SI1RO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
mask	'0'B		
nCH_Position	OMIT		not present if mask = L
bandIndicator	p_BandInd		L= DCS1800; H=PCS1900

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quater_GPRS_3G_MeasParams(p_QSearch_P : B4; p_SearchPrio : B1)
Group :
Structured Type : SI2quaterRO_GPRS_3G_MeasParamDescr
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearch_P	p_QSearch_P		
sEARCH_PRIO_3G	p_SearchPrio		
fDD_REP_QUANT_Mask	'0'B		
fDD_REP_QUANT	−		not present if fDD_REP_QUANT_Mask = 0
fDD_MULTIRAT_REPORTING	−		not present if fDD_REP_QUANT_Mask = 0
fDD_ReportingMask	'0'B		
fDD_REPORTING_OFFSET	−		not present if fDD_ReportingMask = 0
fDD_REPORTING_THRESHOLD	−		not present if fDD_ReportingMask = 0
tDD_MultiratReportingMask	'0'B		
tDD_MULTIRAT_REPORTING	−		not present if tDD_MultiratReportingMask = 0
tDD_ReportingMask	'0'B		
tDD_REPORTING_OFFSET	−		not present if tDD_ReportingMask = 0
tDD_REPORTING_THRESHOLD	−		not present if tDD_ReportingMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quaterMeasParams3G_Meas(p_Qsearch_I, p_Qoffset : B4; p_Qmin : B3)
Group :
Structured Type : SI2quaterRO_MeasParamDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearsh_I	p_Qsearch_I		
qsearch_C_Initial	'0'B		
fDDMask	'1'B		
fDD_Qoffset	p_Qoffset		not present if fDDMask = 0
fDD_REP_QUANT	'0'B		not present if fDDMask = 0
fDD_MULTIRAT_REPORTING	'01'B		not present if fDDMask = 0
fDD_Qmin	p_Qmin		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	–		not present if tDDMask = 0
tDD_MULTIRAT_REPORTING	–		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quaterMeasParams3G_ISHO
Group :
Structured Type : SI2quaterRO_MeasParamDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
qsearsh_I	'0111'B		
qsearch_C_Initial	'0'B		
fDDMask	'1'B		
fDD_Qoffset	'1000'B		not present if fDDMask = 0 @sic T1s050001, R5s050088 sic@
fDD_REP_QUANT	'0'B		not present if fDDMask = 0
fDD_MULTIRAT_REPORTING	'01'B		not present if fDDMask = 0 @sic T1s050001 sic@
fDD_Qmin	'000'B		not present if fDDMask = 0
tDDMask	'0'B		
tDD_Qoffset	–		not present if tDDMask = 0
tDD_MULTIRAT_REPORTING	–		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quater_3G_1NCell(p_ARFCN: B14; p_ScrmCode : BITSTRING)
Group :
Structured Type : NeighCellDescr3G
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
indexMask	'0'B		
indexStart3G	–		not present if indexMask = 0
absoluteIndexMask	'0'B		
absoluteIndexStartEMR	–		not present if absoluteIndexMask = 0
fDDMask	'1'B		
uTRAN_FDD_Description	c_G_FDD_Descr(p_ARFCN, p_ScrmCode)		not present if fDDMask = 0
tDDMask	'0'B		
uTRAN_TDD_Description	–		not present if tDDMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI2quaterRO(p_NeighCellMask : B1; p_NeighCellDescr3G : NeighCellDescr3G; p_MeasParamMask : B1; p_MeasParamDescr3G : SI2quaterRO_MeasParamDescr3G; p_GPRS3GMeasParamMask : B1; p_GPRS3GMeasParamDescr : SI2quaterRO_GPRS_3G_MeasParamDescr)

Group :

Structured Type : SI2quaterRO

Derivation Path :

Encoding Variation :

Comments : @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
bA_IND	'0'B		
bA_IND_3G	'0'B		
mP_CHANGE_MARK	'0'B		
sI2quater_INDEX	'0000'B		
sI2quater_COUNT	'0000'B		
measParamMask	'0'B		
measParamDescription	–		not present if measParamMask = 0
gprsRTDMask	'0'B		
gPRS_RealTimeDiffDescr	–		not present if gprsRTDMask = 0
gprsBSICMask	'0'B		
gPRS_BSIC_Description	–		not present if gprsBSICMask = 0
gprsRepPrioMask	'0'B		
gPRS_REP_PRIORITY_Descr	–		not present if gprsRepPrioMask = 0
gprsMeasParamMask	'0'B		
gPRS_MeasParamsDescr	–		not present if gprsMeasParamMask = 0
ncMeasParamMask	'0'B		
NC_Measurement_Parameters	–		not present if ncMeasParamMask = 0
extnLengthMask	'0'B		
extensionLength	–		
neighCellMask	p_NeighCellMask		
neighCellDes3G	p_NeighCellDescr3G		not present if neighCellMask = 0
measParam3GMask	p_MeasParamMask		
measurementParams3G	p_MeasParamDescr3G		not present if measParam3GMask = 0
gprsMeasParam3GMask	p_GPRS3GMeasParamMask		
gPRS_3G_MeasParamDescr	p_GPRS3GMeasParamDescr		not present if gprsMeasParam3GMask = 0
rel5Mask	'0'B		@R5s0500239 sic@
addMeasMask	OMIT		not present if mask = L or rel5Mask = L
addMeasParam3G	OMIT		not present if mask = L, rel5Mask = L or addMeasMask = 0
addMeasMask2	OMIT		not present if mask = L or rel5Mask = L

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
fddRepThres2Mask	OMIT		not present if mask = L, rel5Mask = L or addMeasMask2 = 0
fddRepThreshold2	OMIT		not present if mask = L, rel5Mask = L, addMeasMask2 = 0 or fddRepThres2Mask = 0
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_SI13_RO_GPRS(p_RAC : O1; p_NMO : B2)			
Group :			
Structured Type : SI13RO			
Derivation Path :			
Encoding Variation :			
Comments : ref: 51.010 clause 40.2.1			
Element Name	**Element Value**	**Element Encoding**	**Comments**
mask	'1'B		the rest fields except spareBits are all not present if mask = L
bCCH_CHANGE_MARK	'000'B		
sI_CHANGE_FIELD	'0000'B		
sI3ChangeMask	'0'B		
sI13_CHANGE_MARK	OMIT		not present if sI3ChangeMask = 0
gPRS_MobileAllocation	OMIT		not present if sI3ChangeMask = 0
pbcchMask	'0'B		'0' −> no PBCCH
rAC	p_RAC		present if pbcchMask = 0
sPGC_CCCH_SUP	'1'B		present if pbcchMask = 0
pRIORITY_ACCESS_THR	'110'B		present if pbcchMask = 0
nETWORK_CONTROLI_ORDER	'00'B		present if pbcchMask = 0
gPRS_CellOptions	c_GPRS_CellOptionsSI13(p_NMO)		present if pbcchMask = 0
gPRS_PowerControlParameters	c_GPRS_PowerControlParam		present if pbcchMask = 0
pSI1_REPEAT_PERIOD	OMIT		present if pbcchMask = 1
pBCCH_Description	OMIT		present if pbcchMask = 1
r99Mask	'1'B		
sGSNR	'1'B		present if r99Mask = H
r4Mask	OMIT		
sI_STATUS_IND	OMIT		present if r4Mask = H
Detailed Comments : The info element has a fixed length of 20 octets.			

Structured Type Constraint Declaration

Constraint Name : c_SI13PBCCH_Location_SI13
Group :
Structured Type : SI13PBCCH_Location
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.37b

Element Name	Element Value	Element Encoding	Comments
sI13LocationMask	'0'B		SI13 Location
sI13_LOCATION	'0'B		SI13 on BCCH Norm
			not present if sI13LocationMask = 1
PBCCH_LOCATION	OMIT		not present if sI13LocationMask = 0
pSI1_REPEAT_PERIOD	OMIT		not present if sI13LocationMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2quater(p_SI2ter : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : Indicates SI2quater sent on BCCH Norm

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sI2terIndicator	p_SI2ter		no SI 2ter
earlyClassMarkSendingControl	'0'B		
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sI13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'1'B		mask bit for SI2quaterPosition
sI2quaterPosition	'0'B		not present if mask5 = L
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2ter
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : all bits are spare, except SI2ter

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sI2terIndicator	'1'B		SI 2ter
earlyClassMarkSendingControl	'0'B		no ECMS
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sI13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'0'B		mask bit for SI2quaterPosition
sI2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_GPRS
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : indicating SI13 is broadcasted. 3GPP TS 51.010 clause 40.2.1.1.1 GPRS supported

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional selection parameters (L= no opetional parameter)
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no ooptional power offset (L= no power offset)
powerOffset	OMIT		not present
sI2terIndicator	'0'B		no SI 2ter (L=no SI2ter)
earlyClassMarkSendingControl	'1'B		perform early classmark sending (H=allowed)
mask3	'0'B		no system information type 9 (L=no SI9)
schedulingWhere	OMIT		not present
mask4	'1'B		GPRS supported (H=support GPRS)
rA_Colour	'001'B		RA colour
sI13Position	'0'B		SI13 is on BCCH Norm
earlyClassMarksendingRestriction3G	'1'B		UTRAN classmark change message shall be sent with the Early classmark sending (L= no)
mask5	'0'B		L=no SI2ter
sI2quaterPosition	OMIT		
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_Spare
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : all bits are spare, 3GPP TS 51.010 clause 26.6.14.

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sI2terIndicator	'0'B		no SI 2ter
earlyClassMarkSendingControl	'0'B		no ECMS
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sI13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'0'B		mask bit for SI2quaterPosition
sI2quaterPosition	OMIT		not present if mask5 = 0
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI4_RO_GPRS
Group :
Structured Type : SI4RO
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 51.010 clause 40.2.1.1.1

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional Cell selection parameter
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset
powerOffset	OMIT		not present if powerOffsetMask = 0
raColourMask	'1'B		GPRS indicator (H)
rA_Colour	'001'B		
sI13Position	'0'B		on BCCH Norm
breakMask	'0'B		L
breakIndicator	'0'B		present if breakMask = L, SI4 Rest Octets_S, is not sent in SYSTEM INFORMATION TYPE 7 and 8
lsaParamMask	OMIT		not present
pRIO_THR	OMIT		not present
lSA_OFFSET	OMIT		not present
mccMask	OMIT		not present
mCC	OMIT		not present
nMC	OMIT		not present
cellIDMask	OMIT		not present
cellIdentity	OMIT		not present
lsaMask	OMIT		not present
sI4RO_LSA_ID_Info	OMIT		not present
cBQ3Mask	OMIT		not present if breakMask = L
cBQ3	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altMask	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altPosition	OMIT		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI4_RO_Spare
Group :
Structured Type : SI4RO
Derivation Path :
Encoding Variation :
Comments : all bits are set to spare, 3GPP TS 51.010 clause 26.6.14

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional Cell selection parameter
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no optional power offset
powerOffset	OMIT		not present
raColourMask	'0'B		no GPRS indicator
rA_Colour	OMIT		not present
sI13Position	OMIT		not present
breakMask	'0'B		break
breakIndicator	'0'B		SI4 Rest Octets_S, is not sent in SYSTEM INFORMATION TYPE 7 and 8
lsaParamMask	OMIT		not present
pRIO_THR	OMIT		not present
lSA_OFFSET	OMIT		not present
mccMask	OMIT		not present
mCC	OMIT		not present
nMC	OMIT		not present
cellIDMask	OMIT		not present
cellIdentity	OMIT		not present
lsaMask	OMIT		not present
sI4RO_LSA_ID_Info	OMIT		not present
cBQ3Mask	OMIT		not present
cBQ3	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altMask	OMIT		not present if breakMask = L or cBQ3Mask = L
si13altPosition	OMIT		not present if breakMask = L or cBQ3Mask = L or si13altMask = 0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_PBCCH_DCS
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : Used for DCS 1800 and PCS 1900.
Values taken from subclause 40.2.1 of TS 51.101−1 v.5.5.0

Element Name	Element Value	Element Encoding	Comments
mask	’1’B		H, SI13 Rest Octets is not spare
bCCH_CHANGE_MARK	’000’B		
sI_CHANGE_FIELD	’0000’B		update of unspecified SI messages
sI3ChangeMask	’1’B		GPRS Mobile Allocation is present
sI13_CHANGE_MARK	’00’B		
gPRS_MobileAllocation	c_GPRSMobileAlloc(’00001 1’B, ’1111’B)		If the number of bits used here changes, spare padding must also be changed
pbcchMask	’1’B		PBCCH present
rAC	OMIT		’00000101’B
sPGC_CCCH_SUP	OMIT		
pRIORITY_ACCESS_THR	OMIT		
nETWORK_CONTROLI_ORDER	OMIT		
gPRS_CellOptions	OMIT		
gPRS_PowerControlParameters	OMIT		
pSI1_REPEAT_PERIOD	’0010’B		3 frames PSI1repeat period
pBCCH_Description	c_PBCCH_Descr_Def		
r99Mask	’1’B		R99 addtion present
sGSNR	’1’B		R99 onwards SGSN
r4Mask	’0’B		no R4 addition
sI_STATUS_IND	OMIT		present if r4Mask = H

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI13_RO_PBCCH_GSM
Group :
Structured Type : SI13RO
Derivation Path :
Encoding Variation :
Comments : Used for GSM 900, 700 and 850.
Values taken from subclause 40.2.1 of TS 51.101−1 v.5.5.0

Element Name	Element Value	Element Encoding	Comments
mask	’1’B		H, SI13 Rest Octets is not spare
bCCH_CHANGE_MARK	’000’B		
sI_CHANGE_FIELD	’0000’B		update of unspecified SI messages
sI3ChangeMask	’1’B		GPRS Mobile Allocation is present
sI13_CHANGE_MARK	’00’B		
gPRS_MobileAllocation	c_GPRSMobileAlloc(’000101’B, ’001111’B)		If the number of bits used here changes, spare padding must also be changed
pbcchMask	’1’B		PBCCH present
rAC	OMIT		’00000101’B
sPGC_CCCH_SUP	OMIT		
pRIORITY_ACCESS_THR	OMIT		
nETWORK_CONTROLI_ORDER	OMIT		
gPRS_CellOptions	OMIT		
gPRS_PowerControlParameters	OMIT		
pSI1_REPEAT_PERIOD	’0010’B		3 frames PSI1repeat period
pBCCH_Description	c_PBCCH_Descr_Def		
r99Mask	’1’B		R99 addtion present
sGSNR	’1’B		R99 onwards SGSN
r4Mask	’0’B		no R4 addition
sI_STATUS_IND	OMIT		present if r4Mask = H

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3RO_GPRS_SI2quater
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		no optional selection parameters (L= no opetional parameter)
cbq	OMIT		not present
cellReselectOffset	OMIT		not present
temporaryOffset	OMIT		not present
penaltyTime	OMIT		not present
powerOffsetMask	'0'B		no ooptional power offset (L= no power offset)
powerOffset	OMIT		not present
sI2terIndicator	'0'B		no SI 2ter (L=no SI2ter)
earlyClassMarkSendingControl	'1'B		perform early classmark sending (H=allowed)
mask3	'0'B		no system information type 9 (L=no SI9)
schedulingWhere	OMIT		not present
mask4	'1'B		GPRS supported (H=support GPRS)
rA_Colour	'001'B		RA colour
sI13Position	'0'B		SI13 is on BCCH Norm
earlyClassMarksendingRestriction3G	'1'B		UTRAN classmark change message shall be sent with the Early classmark sending (L= no)
mask5	'1'B		SI2quater broadcasted (L=no SI2ter)
sI2quaterPosition	'0'B		
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI3_RO_SI2quaterBCCHExt(p_SI2ter : B1)
Group :
Structured Type : SI3RO
Derivation Path :
Encoding Variation :
Comments : Indicates SI2quater sent on BCCH Ext

Element Name	Element Value	Element Encoding	Comments
cellSelectMask	'0'B		Cell select parameter mask
cbq	OMIT		not present if cellSelectMask = 0, Cell bar qualify
cellReselectOffset	OMIT		not present if cellSelectMask = 0
temporaryOffset	OMIT		not present if cellSelectMask = 0
penaltyTime	OMIT		not present if cellSelectMask = 0
powerOffsetMask	'0'B		Power offset mask
powerOffset	OMIT		not present if powerOffsetMask = 0
sI2terIndicator	p_SI2ter		no SI 2ter
earlyClassMarkSendingControl	'0'B		
mask3	'0'B		mask bit for scheduling info
schedulingWhere	OMIT		not present if mask3 = 0
mask4	'0'B		mask bit for GPRS indicator
rA_Colour	OMIT		not present if mask4 = 0
sI13Position	OMIT		not present if mask4 = 0
earlyClassMarksendingRestriction3G	'0'B		
mask5	'1'B		mask bit for SI2quaterPosition
sI2quaterPosition	'1'B		sent on BCCH Ext
SI13altPosition	OMIT		only present if Iu supported in cell

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SI6_RO_Spare(p_Band : B1)
Group :
Structured Type : SI6RO
Derivation Path :
Encoding Variation :
Comments : @sic R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
pchNchMask	'0'B		PCH, NCH info mask
pagingChRestructuring	−		not present if pchNchMask = 0
nLN_SACCH	−		not present if pchNchMask = 0
prioMask	−		not present if pchNchMask = 0
callPriority	−		not present if pchNchMask = 0 or prioMask = 0
nLN_Status	−		not present if pchNchMask = 0
inbandMask	'0'B		
inbandNotifications	−		not present if inbandMask = 0
inbandPagings	−		not present if inbandMask = 0
dTM_Supported	'0'B		
rAC	−		
mAX_LAPDm	−		
bandIndicator	p_Band		L = 1800 band supported, H = 1900 band supported
txPwrMask	'0'B		@R5s0500239 sic@
gPRS_MS_TXPWT_MAX_CCH	−		not present if txPwrMask = L

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_SplitPGCycleInitial
Group :
Structured Type : DRXparamter
Derivation Path :
Encoding Variation :
Comments : DRX paramter 3GPP 24.008 / 10.5.5.6. This is just to initialise the tcv and should be overwritten by what is received from the UE

Element Name	Element Value	Element Encoding	Comments
splitPGcycleCode	'00000000'B		Split PG cycle code
cnDRXcoef	'0000'B		CN specific DRX cycle length coefficient
splitOnCCCH	'0'B		Split on CCCCH
nonDRXtimer	'000'B		non−DRX timer

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_TA
Group :
Structured Type : TA
Derivation Path :
Encoding Variation :
Comments : Timing advance
GSM 04.08, 10.5.2.40

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		’01111101’B
sprb	’00’B		’00’B
value	’000000’B		Note 1one unit = 48/13 microseconds (in 1 bit periods)

Detailed Comments : Note 1. the value of 0 for Timing advance will be used, until the primitive support to inform SS of Timing advance desired to be simulated. Once this support is available default value of 20 for GSM cell and 30 for GPRS cell shall be used.

Structured Type Constraint Declaration

Constraint Name : c_G_TBFMode(p_downlink : B1)
Group :
Structured Type : DedicatedModeOrTBF
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		information element identifier
spareBit	’0’B		always = 0
twoMsgAssig	’0’B		two message assignment
downlink	p_downlink		down link assignement
tBForDedicated	’1’B		TBF or dedicated mode

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TCH_FreqGSM900
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments : no hopping ARFCN = 30

Element Name	Element Value	Element Encoding	Comments
h	'0'B		non−hopping channel
spr	'000'B		'000'B
spr1	'00'B		'00'B
maio	OMIT		mobile allocation index offset OMIT
hsn	OMIT		hopping sequence number OMIT
arfcn	'0000011110'B		absolute RF channel number = 30
hoppingFreqList	OMIT		hopping frequency list OMIT.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TimeSlotAllocation_TN4(p_PhyChId : PhysicalChId)
Group :
Structured Type : TimeSlotAllocation
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
physicalChId	p_PhyChId		Single PDCH or multi−slot configured PDCHs
tN0	FALSE		TRUE − time slot 0 is allocated; FALSE −− not allocated
tN1	FALSE		TRUE − time slot 1 is allocated; FALSE −− not allocated
tN2	FALSE		TRUE − time slot 2 is allocated; FALSE −− not allocated
tN3	FALSE		TRUE − time slot 3 is allocated; FALSE −− not allocated
tN4	TRUE		TRUE − time slot 4 is allocated; FALSE −− not allocated
tN5	FALSE		TRUE − time slot 5 is allocated; FALSE −− not allocated
tN6	FALSE		TRUE − time slot 6 is allocated; FALSE −− not allocated
tN7	FALSE		TRUE − time slot 7 is allocated; FALSE −− not allocated

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TimeSlotAllocation_UA_TN4(p_USF: B3)
Group :
Structured Type : TimeSlotAllocation_UA
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
tN0mask	'0'B		
uSF_TN0	OMIT		not present if tN0mask=0
tN1mask	'0'B		
uSF_TN1	OMIT		not present if tN1mask=0
tN2mask	'0'B		
uSF_TN2	OMIT		not present if tN2mask=0
tN3mask	'0'B		
uSF_TN3	OMIT		not present if tN3mask=0
tN4mask	'1'B		
uSF_TN4	p_USF		not present if tN4mask=0
tN5mask	'0'B		
uSF_TN5	OMIT		not present if tN5mask=0
tN6mask	'0'B		
uSF_TN6	OMIT		not present if tN6mask=0
tN7mask	'0'B		
uSF_TN7	OMIT		not present if tN7mask=0

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_G_TrCHFreqInfoHop (mod , hsn : INTEGER ; p_FreqListNoIEI : FreqListNoIEI)
Group :
Structured Type : FreqInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
h	'1'B		h='1'B: hopping channel; h='0'B: non−hopping channel
spr	'000'B		'000'B
spr1	−		'00'B, if h = '0'B, otherwise OMIT
maio	INT_TO_BIT((tsc_G_MAIO MOD mod), 6)		mobile allocation index offset if h = '1'B, otherwise OMIT
hsn	INT_TO_BIT(hsn, 6)		hopping sequence number if h = '1'B, otherwise OMIT
arfcn	−		absolute RF channel number if h = '0'B, otherwise OMIT
hoppingFreqList	p_FreqListNoIEI		hopping frequency list if h='1'B, otherwise OMIT. the definition see 3GPP TS 44.018 section 10.5.2.13

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_UtranPreConfigInfo
Group :
Structured Type : UTRANPreConfigInfo
Derivation Path :
Encoding Variation :
Comments : 3GPP TS 44.018 clause 10.5.2.7a

Element Name	Element Value	Element Encoding	Comments
iei	OMIT		
iel	?		
value	?		@sic ER2012 sic@

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdTMSILoc (p_tmsi : OCTETSTRING)
Group :
Structured Type : MM_MS_Identity
Derivation Path :
Encoding Variation :
Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI
otherDigits	p_tmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk2_Def_lv
Group :
Structured Type : MS_Clsmk2_lv
Derivation Path :
Encoding Variation :
Comments : Default as per PIXIT.

Element Name	Element Value	Element Encoding	Comments
iel	'03'O		
spare1_1	'0'B		
revLvl	px_MS_ClsmkRevLvl		
eSIND	px_MS_ClsmkESIND		
a5_1	pc_MS_ClsmkA5_1		
rFPwrCap	px_MS_ClsmkRF_PwrCap		
spare1_2	'0'B		
pSCap	pc_MS_ClsmkPS_Cap		
sSSI	o_BitstringConcat ('0'B, pc_SS_Phase2Supp,1 ,1)		@sic t1−050045 sic@
sMCap	pc_MS_ClsmkSM_Cap		
vBS	pc_MS_ClsmkVBS		
vGCS	pc_MS_ClsmkVGCS		
fC	pc_MS_ClsmkFreqCap		
cM3	pc_MS_ClsmkCM3		
spare1_3	'0'B		
lCSVA	pc_MS_ClsmkLCSVA_Cap		
uCS2	pc_MS_ClsmkUCS2		
soLSA	pc_MS_ClsmkSoLSA		
cMSP	pc_MS_ClsmkCMSP		
a5_3	pc_MS_ClsmkA5_3		
a5_2	pc_MS_ClsmkA5_2		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RepeatInd1
Group :
Structured Type : RepeatInd
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		
repeatInd	'0001'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_5a_SyncT (p_Itc : B3 ; p_Ra : B2; p_Sacp : B3; p_OtherItc, p_OtherRa : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3 ; p_OtherModemType : B2)
Group :
Structured Type : Bcap
Derivation Path : cs_BcapMT_5a_AsyncNT.
Encoding Variation :
Comments : Base Bearer capability with a Synchronous mode and transparent conection element and containing octets 3, 4, 5 , 5a, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_7_SyncNT (p_Itc : B3 ; p_RA: B2 ; p_Sacp : B3 ; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3; p_ModemType : B5; p_OtherModemType : B2; p_UserInfoLayer2 : B5)
Group :
Structured Type : Bcap
Derivation Path : cs_BcapMT_7_AsyncNT .
Encoding Variation :
Comments : Base Bearer capability with a Synchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, 6d and 7.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
syncAsync	'0'B		Synchronous

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_AsyncT (p_Itc:B3; p_RA : B2 ; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path : cs_BcapMT_AsyncNT.

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and a transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
connectElem	'00'B		Transparent

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_SyncT (p_Itc:B3; p_RA : B2 ; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path : cs_BcapMT_AsyncNT.

Encoding Variation :

Comments : Base Bearer capability with a Synchronous mode and a transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : cr_CauAny			
Group :			
Structured Type : Cau			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	'00001000'B		
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : cr_CauAny_lv			
Group :			
Structured Type : Cau_lv			
Derivation Path :			
Encoding Variation :			
Comments : Cause − Any value − Octets 3 and 4 are mandatory			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_ConnectedSubAdrs_Any
Group :
Structured Type : ConnectedSubAdrs
Derivation Path :
Encoding Variation :
Comments : Connected subaddress
3G TS 24.008 cl. 10.5.4.14

Element Name	Element Value	Element Encoding	Comments
iei	'01001101'B		4Didentifier '01001101'B
iel	?		length
subadrs	cr_SubadrsAny		Subaddress

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_FacAny
Group :
Structured Type : Facility
Derivation Path :
Encoding Variation :
Comments : Facility IE with AnyOrOmit values

Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		
iel	?		
comps	*		component: any

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_FacilityRecallAlign
Group :
Structured Type : Facility
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011011'B		information element identifier
iel	?		length
comps	*		Component

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5a_AsyncNT (p_Itc : B3 ; p_Ra : B2; p_Sacp : B3; p_OtherItc, p_OtherRa : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 5a, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	’00000100’B		
iel	’09’O		
extBit3	’1’B		no extension
radioChRequi	’01’B		spare bits for n−> ue
codingStd	’0’B		GSM
transferMode	’0’B		transfer mode octet 3
itc	p_Itc		
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	’1’B		no extension
compress	px_BcapDataCompression		
structure	’00’B		SDU Integrity
duplexMode	’1’B		Full duplex mode
cfg	’0’B		configuration: point−to−point
nirr	’0’B		negotiation of intermediate rate: no meanoing
establish	’0’B		demand
extBit5	’0’B		extension
accessId	’00’B		
rateAdapt	p_Ra		
sacp	p_Sacp		
extBit5a	’1’B		no extension
OherItc	p_OtherItc		
OtherRateAdapt	p_OtherRa		
spare3	’000’B		
extBit5b	−		
rateAdaptHeader	−		
multiFrame	−		
mode	−		
logLinkId	−		
assignorAssignee	−		
inBandOutBand	−		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
spare1	–		
extBit6	’0’B		extension
layer1Id	’01’B		Default
userInfoLayer1	’0000’B		
syncAsync	’1’B		Asynchronous
extBit6a	’0’B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	’0’B		Not possible
numDataBits	p_NumDataBits		
userRate	’0101’B		9.6 kBPS @sic Rash ER1396 sic@
extBit6b	’0’B		extension
intermRate	’11’B		spare @sic T1s−040709 sic@
nicTx	’0’B		spare
nicRx	’0’B		spare
parity	p_Parity		
extBit6c	’0’B		extension
connectElem	’01’B		Non Transparent
modemType	’00000’B		none
extBit6d	’1’B		no extension
OtherModemType	p_OtherModemType		
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5ab7_V120 (p_Itc:B3; p_Sacp : B3; p_OtherItc : B2; p_Sync,p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_UserInfoLayer2 : B5)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability for V.120 and containing octets 3, 4, 5 , 5a, 5b, 6, 6a, 6b, 6c , 6d and 7 .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	’00000100’B		
iel	’0B’O		
extBit3	’1’B		no extension
radioChRequi	’01’B		spare bits for n−> ue
codingStd	’0’B		GSM
transferMode	’0’B		
itc	p_Itc		
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	’1’B		no extension
compress	px_BcapDataCompression		
structure	’00’B		SDU integrity
duplexMode	’1’B		Full duplex mode
cfg	’0’B		configuration: point−to−point
nirr	’0’B		negotiation of intermediate rate: no meanoing
establish	’0’B		demand
extBit5	’0’B		extension
accessId	’00’B		
rateAdapt	’11’B		rate Adaptation: Other rate adaptation
sacp	p_Sacp		
extBit5a	’0’B		extension
OherItc	p_OtherItc		
OtherRateAdapt	’00’B		Other rate adaptation: V120
spare3	’000’B		
extBit5b	’1’B		no extension
rateAdaptHeader	’1’B		Rate adaptation header : included
multiFrame	’1’B		MultiFrame establish: supported
mode	’1’B		mode: protocol sensitive
logLinkId	’0’B		spare
assignorAssignee	’0’B		spare

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
inBandOutBand	’0’B		spare
spare1	’0’B		spare
extBit6	’0’B		extension
layer1Id	’01’B		Default
userInfoLayer1	’0000’B		
syncAsync	p_Sync		
extBit6a	’0’B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	’0’B		Not possible
numDataBits	p_NumDataBits		
userRate	’0101’B		9.6 kBPS @sic Rash ER1396 sic@
extBit6b	’0’B		extension
intermRate	’11’B		spare
nicTx	’0’B		spare
nicRx	’0’B		spare
parity	p_Parity		
extBit6c	’0’B		extension
connectElem	’01’B		Non transparent
modemType	’00000’B		none
extBit6d	’1’B		no extension
OtherModemType	’00’B		no other modem type
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	’1’B		extension
layer2id	’10’B		
userInfoLayer2	p_UserInfoLayer2		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_5ab_AsyncNT (p_itc:B3; p_RA : B2; p_Sacp: B3; p_OtherItc, p_OtherRA : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capabilitywith an Asynchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 5a, 5b, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	’00000100’B		
iel	’0A’O		
extBit3	’1’B		no extension
radioChRequi	’01’B		spare bits for n−> ue
codingStd	’0’B		GSM
transferMode	’0’B		
itc	p_itc		Other ITC
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	’1’B		no extension
compress	px_BcapDataCompression		
structure	’00’B		SDU integrity
duplexMode	’1’B		Full duplex mode
cfg	’0’B		configuration: point−to−point
nirr	’0’B		negotiation of intermediate rate: no meanoing
establish	’0’B		demand
extBit5	’0’B		extension
accessId	’00’B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	’0’B		extension
OherItc	p_OtherItc		spare
OtherRateAdapt	p_OtherRA		
spare3	’000’B		
extBit5b	’1’B		no extension
rateAdaptHeader	’1’B		Rate adaptation header : included
multiFrame	’1’B		MultiFrame establish: supported
mode	’1’B		mode: protocol sensitive
logLinkId	’0’B		spare
assignorAssignee	’0’B		spare

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
inBandOutBand	’0’B		spare
spare1	’0’B		spare
extBit6	’0’B		extension
layer1Id	’01’B		Default
userInfoLayer1	’0000’B		
syncAsync	’1’B		Asynchronous
extBit6a	’0’B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	’0’B		Not possible
numDataBits	p_NumDataBits		
userRate	’0101’B		9.6 kBPS @sic Rash ER1396 sic@
extBit6b	’0’B		extension
intermRate	’11’B		spare
nicTx	’0’B		spare
nicRx	’0’B		spare
parity	p_Parity		
extBit6c	’0’B		extension
connectElem	’01’B		Non Transparent
modemType	’00000’B		none
extBit6d	’1’B		no extension
OtherModemType	’00’B		no other modem type
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		extension
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_7_AsyncNT (p_Itc : B3 ; p_RA: B2 ; p_Sacp : B3 ; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3; p_ModemType : B5; p_OtherModemType : B2; p_UserInfoLayer2 : B5)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, 6d and 7.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	’00000100’B		
iel	’09’O		
extBit3	’1’B		no extension
radioChRequi	’01’B		spare bits for n−> ue
codingStd	’0’B		GSM
transferMode	’0’B		transfer mode octet 3
itc	p_Itc		information transfer capability, octet 3
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	’1’B		no extension
compress	px_BcapDataCompression		PIXIT compression
structure	’00’B		SDU Integrity
duplexMode	’1’B		Full duplex mode
cfg	’0’B		configuration: point−to−point
nirr	’0’B		nirr: no meaning
establish	’0’B		demand
extBit5	’1’B		no extension
accessId	’00’B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	−		
OherItc	−		
OtherRateAdapt	−		
spare3	−		
extBit5b	−		
rateAdaptHeader	−		
multiFrame	−		
mode	−		
logLinkId	−		
assignorAssignee	−		
inBandOutBand	−		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
spare1	–		
extBit6	’0’B		extension
layer1Id	’01’B		Default
userInfoLayer1	’0000’B		
syncAsync	’1’B		Asynchronous
extBit6a	’0’B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	’0’B		Not possible
numDataBits	p_NumDataBits		
userRate	’0101’B		9.6 kBPS @sic Rash ER1396 sic@
extBit6b	’0’B		extension
intermRate	’11’B		spare @sic T1s−040709 sic@
nicTx	’0’B		spare
nicRx	’0’B		spare
parity	p_Parity		
extBit6c	’0’B		extension
connectElem	’01’B		Non Transparent
modemType	p_ModemType		
extBit6d	’1’B		no extension
OtherModemType	p_OtherModemType		@sic RASH Racal8.3.7.2 doc sic@
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	’1’B		no extension
layer2id	’10’B		layer 2 Id
userInfoLayer2	p_UserInfoLayer2		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapMT_AsyncNT
(p_Itc:B3; p_RA : B2 ; p_Sacp : B3; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ;
p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path :

Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and containing octets 3, 4, 5 , 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	’00000100’B		
iel	’08’O		
extBit3	’1’B		no extension
radioChRequi	’01’B		spare bits for n−> ue
codingStd	’0’B		GSM
transferMode	’0’B		transfer mode octet 3
itc	p_Itc		
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	’1’B		no extension
compress	px_BcapDataCompression		
structure	’00’B		SDU Integrity
duplexMode	’1’B		Full duplex mode
cfg	’0’B		configuration: point−to−point
nirr	’0’B		negotiation of intermediate rate: no meanoing
establish	’0’B		demand
extBit5	’1’B		no extension
accessId	’00’B		
rateAdapt	p_RA		
sacp	p_Sacp		I.440/I.450
extBit5a	−		
OherItc	−		
OtherRateAdapt	−		
spare3	−		
extBit5b	−		
rateAdaptHeader	−		
multiFrame	−		
mode	−		
logLinkId	−		
assignorAssignee	−		
inBandOutBand	−		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
spare1	–		
extBit6	’0’B		extension
layer1Id	’01’B		Default
userInfoLayer1	’0000’B		
syncAsync	’1’B		Asynchronous
extBit6a	’0’B		extension bit, octet 6a
numStopBits	p_NumStopBits		
nego	’0’B		Not possible
numDataBits	p_NumDataBits		
userRate	’0101’B		9.6 kBPS @sic Rash ER1396 sic@
extBit6b	’0’B		extension
intermRate	’11’B		spare @sic T1s040709 sic@
nicTx	’0’B		spare
nicRx	’0’B		spare
parity	p_Parity		
extBit6c	’0’B		extension
connectElem	’01’B		Non Transparent
modemType	p_ModemType		
extBit6d	’1’B		no extension
OtherModemType	p_OtherModemType		
FixedNtwUserRate	px_BcapFNUR		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_BcapSpeechMT
Group :
Structured Type : Bcap
Derivation Path :
Encoding Variation :
Comments : speech bearer capability for direction n−>ue

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'01'O		
extBit3	'1'B		extension bit
radioChRequi	'01'B		spare bits for n−> ue
codingStd	'0'B		coding standard : GSM
transferMode	'0'B		circuit mode
itc	'000'B		speech
bcap3aEtc1	−		
bcap3aEtc2	−		
bcap3aEtc3	−		
bcap3aEtc4	−		
bcap3aEtc5	−		
bcap3aEtc6	−		
extBit4	−		
compress	−		
structure	−		
duplexMode	−		
cfg	−		
nirr	−		
establish	−		
extBit5	−		
accessId	−		
rateAdapt	−		
sacp	−		
extBit5a	−		
OherItc	−		
OtherRateAdapt	−		
spare3	−		
extBit5b	−		
rateAdaptHeader	−		
multiFrame	−		
mode	−		
logLinkId	−		
assignorAssignee	−		
inBandOutBand	−		
spare1	−		
extBit6	−		
layer1Id	−		
userInfoLayer1	−		
syncAsync	−		
extBit6a	−		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
numStopBits	–		
nego	–		
numDataBits	–		
userRate	–		
extBit6b	–		
intermRate	–		
nicTx	–		
nicRx	–		
parity	–		
extBit6c	–		
connectElem	–		
modemType	–		
extBit6d	–		
OtherModemType	–		
FixedNtwUserRate	–		
extBit6e	–		
acceptChCoding	–		
maxNumTrafficCh	–		
extBit6f	–		
uIMI	–		
wAIUR	–		
extBit6g	–		
acceptChCodingExt	–		
asymInd	–		
spare2	–		
extBit7	–		
layer2id	–		
userInfoLayer2	–		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthFailParamGmmAny			
Group :			
Structured Type : AuthenticationFailureParameter			
Derivation Path :			
Encoding Variation :			
Comments : @sic R5s050146 sic@			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	’00110000’B		
iel	’0E’O		
auts	?		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AC_RefNum3			
Group :			
Structured Type : AC_ReferenceNumber			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
value	’0011’B		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AttachTypeAny			
Group :			
Structured Type : AttachType			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
for	?		Follow−on request
type	?		Type of attach
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_AuthCiphRspExtAny			
Group :			
Structured Type : AuthRspExt			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	’00101001’B		IEI is 0x29 (see 24.008 / 9.4.10)
iel	?		
rES	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_AuthFailParamAny
Group :
Structured Type : AuthenticationFailureParameter
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		
iel	'0E'O		
auts	?		@sic EW R5s050095 sic@

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_AuthRspAny_tv
Group :
Structured Type : AuthRsp_tv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		'00100010'B (22 hex)
value	?		Authentication Parameter RES

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_AuthRspExtAny
Group :
Structured Type : AuthRspExt
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100001'B		'00100001'B
iel	?		
rES	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_AUTN(p_AUTN: BITSTRING)
Group :
Structured Type : AUTN
Derivation Path :
Encoding Variation :
Comments : Authentication Parameter AUTN
3G TS 24.008 cl. 10.5.3.1.1

Element Name	Element Value	Element Encoding	Comments
iei	'00100000'B		
iel	'10'O		Length of 16 octets
aUTN	p_AUTN		value of Authentication Parameter AUTN

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellIndInfoDef
Group :
Structured Type : CellIndependantInfo
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cs_cipheringStarted	FALSE		
ps_cipheringStarted	FALSE		
recentSecureDomain	cs_domain		the domain on which security was recently started, and hence the SRB are ciphered and Integrit protected with this domain.
dL_CipherMode	cs_Null_CipheringModeCommand		
uL_CipherMode	–		
cipheringAlgorithmCapability	'0000000000000011'B		
integrityStarted	FALSE		
dL_Integrity	cs_IntegrityProtectStart (px_FRESH)		
uL_Integrity	–		
dl_IntegrityCheckInfo	–		
start_CS	'00000000000000000000'B		Default new key
start_PS	'00000000000000000000'B		Default new key

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CellInfoDef (p_CellId : INTEGER; p_priScrmCode : PrimaryScramblingCode; p_URA_Id : BITSTRING; p_tCell : Tcell; p_sfnOffset : INTEGER; p_FreqInfo : FrequencyInfo; p_UL_ScramblingCode : UL_ScramblingCode)

Group :

Structured Type : CellInfoCfg

Derivation Path :

Encoding Variation :

Comments :

Element Name	Element Value	Element Encoding	Comments
cellId	p_CellId		
frequencyInfo	p_FreqInfo		
attenuationLevel	tsc_AttenuationServingCell		
priScrmCode	p_priScrmCode		
powerpCPICH	tsc_PowerpCPICH		
powerpSCH	tsc_PowerpSCH		
powersSCH	tsc_PowersSCH		
powerpCCPCH	tsc_PowerpCCPCH		
powersCCPCH	tsc_PowersCCPCH1		
powersCCPCH1	tsc_PowersCCPCH1		
timingsCCPCH1	tsc_TimingsCCPCH1		
powerAICH	tsc_PowerAICH		
powerPICH	tsc_PowerPICH		
cellTxPowerLevel	defaultCellTxPowerLvl : NULL		
tCell	p_tCell		
sfnOffset	p_sfnOffset		
puncLimit	tsc_PuncLimit		
sf_PRACH	tsc_PRACH1_SF		
slotFormatsCCPCH1	tsc_SlotFormatsCCPCH1		
mcc	tsc_MCC_Def		
mnc	tsc_MNC_Def		
lac	tsc_LAC_Def		
rac	tsc_RAC_Def		
attFlag	tsc_AttOn		
nmo	tsc_NMO_I		
ura_Identity	p_URA_Id		
t3212	tsc_T3212_Def		
cRNTI	tsc_CRNTI		
uRNTI	c_U_RNTI_Def		
cellConfig	cell_NotConfigured		
dRX_CycleLength	c_DRX_CycleLengthStrucDef		
uL_ScramblingCode	p_UL_ScramblingCode		
DL_DPCH_SHO	FALSE		
UL_DPCH_SHO	FALSE		
dl_DPCH_2ndScrCode	tsc_DL_DPCH1_2ndScrC		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CiphAlgorithm (p_alg : B3)
Group :
Structured Type : CiphAlgorithm
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
algorithm	p_alg		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_CiphKeySeqNum(p_KeySeq: KeySeq)
Group :
Structured Type : CiphKeySeqNum
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
keySeq	p_KeySeq		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_DetachType(p_pow : B1; p_type : B3)
Group :
Structured Type : DetachType
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
powOff	p_pow		
type	p_type		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_DetachTypeReAttNotRequiredGPRS
Group :
Structured Type : DetachType
Derivation Path :
Encoding Variation :
Comments : 'normal detach, re−attach not required'

Element Name	Element Value	Element Encoding	Comments
powOff	'0'B		
type	'001'B		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_DRX_CycleLengthStrucDef
Group :
Structured Type : DRX_CycleLengthStructure
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cN_CS_DRX_CycleLength	7		
cN_PS_DRX_CycleLength	7		
uTRAN_DRX_CycleLength	9		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_DRX_ParamterAny
Group :
Structured Type : DRXparamter
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non−DRX timer

Detailed Comments :

Structured Type Constraint Declaration			
Constraint Name : c_ForceToStandby(p_val : B3)			
Group :			
Structured Type : ForceToStandby			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
spare	'0'B		
value	p_val		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_AttachResult(p_result : B3)			
Group :			
Structured Type : AttachResult			
Derivation Path :			
Encoding Variation :			
Comments :			
Element Name	**Element Value**	**Element Encoding**	**Comments**
spare	'0'B		
result	p_result		
Detailed Comments :			

Structured Type Constraint Declaration			
Constraint Name : c_GMM_AuthAUTN (p_autn : B128)			
Group :			
Structured Type : GMM_AUTN			
Derivation Path :			
Encoding Variation :			
Comments : @sic ER1432 sic@			
Element Name	**Element Value**	**Element Encoding**	**Comments**
iei	'00101000'B		
iel	'10'O		
aUTN	p_autn		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_GMM_AuthRAND (p_rand : BITSTRING)
Group :
Structured Type : AuthenticationParamterRAND
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100001'B		
randValue	p_rand		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GMM_KeySeq_tv (p_key : KeySeq)
Group :
Structured Type : CiphKeySeqNum_tv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1000'B		
spare1	'0'B		
keySeq	p_key		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GMM_MobileIdTMSI (p_tmsi : OCTETSTRING)
Group :
Structured Type : GMM_MS_Identity
Derivation Path :
Encoding Variation :
Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iei	'00100011'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI
otherDigits	p_tmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GMM_UpdateResult_v(p_result : B3)
Group :
Structured Type : UpdateResult_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_result		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GMM_UpdateType_v(p_for : B1; p_type : B3)
Group :
Structured Type : UpdateType_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
for	p_for		
value	p_type		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_Timer_v(p_unit : B3; p_value : B5)
Group :
Structured Type : GPRS_Timer_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
unit	p_unit		
value	p_value		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_GPRS_TimerAny
Group :
Structured Type : GPRS_Timer
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	?		Unit
value	?		Timer value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocAreaId_v(p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)
Group :
Structured Type : LocAreaId_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_MCC, p_MNC)		
lac	p_LAC		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocAreaIdAny_v
Group :
Structured Type : LocAreaId_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	?		
lac	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocUpdTypeAny
Group :
Structured Type : LocUpdType
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
fOR	?		
spare1	'0'B		
IUT	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdAny_lv
Group :
Structured Type : MS_Identity_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
iDigit1	?		
oddEvenInd	?		
typeOfId	?		
otherDigits	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdIMSI_lv
Group :
Structured Type : MS_Identity_lv
Derivation Path :
Encoding Variation :
Comments : Default IMSI

Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct(((LENGTH_OF(px_IMSI_Def))/2 + 1), 1)		
iDigit1	o_FirstDigit(px_IMSI_Def)		
oddEvenInd	o_OeBit(px_IMSI_Def)		
typeOfId	'001'B		IMSI
otherDigits	o_OtherDigits(px_IMSI_Def)		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdPTMSI (p_ptmsi : O0_8)
Group :
Structured Type : GMM_MS_IdentityPTMSI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI / P−TMSI
otherDigits	p_ptmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdPTMSI_Any
Group :
Structured Type : GMM_MS_IdentityPTMSI
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI / P−TMSI
otherDigits	?		Any value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdTMSI_lv
Group :
Structured Type : MS_Identity_lv
Derivation Path :
Encoding Variation :
Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI
otherDigits	px_TMSI_Def		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk1_Any
Group :
Structured Type : MS_Clsmk1
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk1_Def
Group :
Structured Type : MS_Clsmk1
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
revLvl	px_MS_ClsmkRevLvl		
eSIND	px_MS_ClsmkESIND		
a5_1	pc_MS_ClsmkA5_1		
rFPwrCap	px_MS_ClsmkRF_PwrCap		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk2_Any
Group :
Structured Type : MS_Clsmk2
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		
iel	'03'O		
spare1_1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
lCSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk2_Any_lv
Group :
Structured Type : MS_Clsmk2_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iel	'03'O		
spare1_1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
lCSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MS_RadioAccessCapAny_lv
Group :
Structured Type : MSRadioAccessCap_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
value	?		MS radio access capability value (CSN.1 coding)

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PriorityLvlAny
Group :
Structured Type : PriorityLvl
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1000'B		
spare1	'0'B		
callPrio	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_Signature (p_ptmsi : OCTETSTRING)
Group :
Structured Type : PTMSI_Signature
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
value	p_ptmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_Signature_tlv (p_ptmsi : OCTETSTRING)
Group :
Structured Type : PTMSI_Signature_tlv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
iel	'03'O		
value	p_ptmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_SignatureAny
Group :
Structured Type : PTMSI_Signature
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		'00011001'B (19 hex)
value	?		P−TMSI signature value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RadioPriority(p_val : B3)
Group :
Structured Type : RadioPriority_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RadioPriority2(p_val : B3)
Group :
Structured Type : RadioPriority2_v
Derivation Path :
Encoding Variation :
Comments : @sic EW R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RAI_Any_v
Group :
Structured Type : RAI_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	?		MCC + MNC 3 digits each
lac	?		LAC
rac	?		RAC

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RAI_v (p_mcc : HEXSTRING; p_mnc : HEXSTRING; p_lac : OCTETSTRING; p_rac : OCTETSTRING)
Group :
Structured Type : RAI_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_mcc, p_mnc)		
lac	p_lac		
rac	p_rac		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_RepeatIndAny
Group :
Structured Type : RepeatInd
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		'D'H
repeatInd	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_ServiceType_v(p_type : B3)
Group :
Structured Type : ServiceType_v
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
type	p_type		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_TMSI_StatusAny
Group :
Structured Type : TMSI_Status
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
spare3	'000'B		
flag	?		Flag

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cb_IMEISV_Request(p_value: B3)
Group :
Structured Type : IMEISVRequest
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
value	p_value		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_Bcap3aEtcAny
Group :
Structured Type : Bcap3aEtc
Derivation Path :
Encoding Variation :
Comments : @sic T1s040536 sic@

Element Name	Element Value	Element Encoding	Comments
extBit	?		
coding	?		
spare2	?		
speechVersion	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_BcapAnyMO
Group :
Structured Type : Bcap
Derivation Path :
Encoding Variation :
Comments : Any bearer capability for direction n <− ue

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	?		
extBit3	*		
radioChRequi	*		
codingStd	*		
transferMode	*		
itc	*		
bcap3aEtc1	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc2	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc3	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc4	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc5	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc6	cr_Bcap3aEtcAny IF_PRESENT		
extBit4	*		
compress	*		
structure	*		
duplexMode	*		
cfg	*		
nirr	*		
establish	*		
extBit5	*		
accessId	*		
rateAdapt	*		
sacp	*		
extBit5a	*		
OherItc	*		
OtherRateAdapt	*		
spare3	*		
extBit5b	*		
rateAdaptHeader	*		
multiFrame	*		
mode	*		
logLinkId	*		
assignorAssignee	*		
inBandOutBand	*		
spare1	*		
extBit6	*		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
layer1Id	*		
userInfoLayer1	*		
syncAsync	*		
extBit6a	*		
numStopBits	*		
nego	*		
numDataBits	*		
userRate	*		
extBit6b	*		
intermRate	*		
nicTx	*		
nicRx	*		
parity	*		
extBit6c	*		
connectElem	*		
modemType	*		
extBit6d	*		
OtherModemType	*		
FixedNtwUserRate	*		
extBit6e	*		
acceptChCoding	*		
maxNumTrafficCh	*		
extBit6f	*		
uIMI	*		
wAIUR	*		
extBit6g	*		
acceptChCodingExt	*		
asymInd	*		
spare2	*		
extBit7	*		
layer2id	*		
userInfoLayer2	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_CC_CapabilitiesAny
Group :
Structured Type : CC_Capabilities
Derivation Path :
Encoding Variation :
Comments : @sic T1s040536 sic@

Element Name	Element Value	Element Encoding	Comments
iei	'00010101'B		
iel	?		
maxNumBearer	?		
spare2	?		
pcp	?		
dtmf	?		
spare4	?		
maxNumSpeechBearer	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CDPN_Any
Group :
Structured Type : CDPN
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'01011110'B		information element identifier
iel	?		length
typeOfNumPlan	cr_TypeOfNumPlanAny		type of number and numbering plan identification
digits	*		BCD numbers

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CDPS_Any
Group :
Structured Type : CDPS
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'01101101'B		
iel	?		
subadrs	cr_SubadrsAny		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CGPS_Any
Group :
Structured Type : CGPS
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'01011101'B		information element identifier
iel	?		length
subadrs	cr_SubadrsAny		Subaddress

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CodecAny
Group :
Structured Type : Codec
Derivation Path :
Encoding Variation :
Comments : Codec
3G TS 24.008 cl. 10.5.4.32
@sic EW R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
sysId	?		system identifcation
len	?		length
bitMap1to8	?		codec bitmap bits 1−8
bitMap9to16	*		codec bitmap bits 9−16

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CodecListAny
Group :
Structured Type : CodecList
Derivation Path :
Encoding Variation :
Comments : Supported Codec List
3G TS 24.008 cl. 10.5.3.32
@sic EW R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
iei	'01000000'B		'01000000'B (40 hex)
iel	?		length
codec1	cr_CodecAny IF_PRESENT		Codec
codec2	cr_CodecAny IF_PRESENT		Codec
codec3	cr_CodecAny IF_PRESENT		Codec
codec4	cr_CodecAny IF_PRESENT		Codec
codec5	cr_CodecAny IF_PRESENT		Codec

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_DRXparamter_tv_Any
Group :
Structured Type : DRXparamter_tv
Derivation Path :
Encoding Variation :
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		'00100111'B (hex 27)
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non−DRX timer

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_Facility_Any
Group :
Structured Type : Facility
Derivation Path :
Encoding Variation :
Comments : Facility information element
3G TS 24.008 cl. 10.5.4.15

Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		information element identifier '00011100'B
iel	?		length
comps	*		Component

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_FacilityAdvRecall
Group :
Structured Type : Facility
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011101'B		information element identifier
iel	?		length
comps	*		Component

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_GPRS_TimerAny
Group :
Structured Type : GPRS_Timer
Derivation Path :
Encoding Variation :
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	?		Unit
value	?		Timer value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_HLC_Any
Group :
Structured Type : HLC
Derivation Path :
Encoding Variation :
Comments : High layer compatibility

Element Name	Element Value	Element Encoding	Comments
iei	'01111101'B		information element identifier
iel	?		
extBit3	*		
codingStd	*		
interpretation	*		
presentModeProtocolProfile	*		
extBit4	*		
hlcId	*		
extBit4a	*		
exteHlcId	*		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_LLC_Any
Group :
Structured Type : LLC
Derivation Path :
Encoding Variation :
Comments : Low layer compatibility (CC information element)

Element Name	Element Value	Element Encoding	Comments
iei	'01111100'B		
iel	?		@sic T1s040536 sic@
extBit3	*		
codingStd	*		
itc	*		
extBit3a	*		
negoInd	*		
spare6	*		
extBit4	*		
transferMode	*		
infoTransferRate	*		
extBit4_1	*		
rateMultiplier	*		
extBit5	*		
layer1Id	*		
userInfoLayer1	*		
extBit5a	*		
syncAsync	*		
nego	*		
userRate	*		
extBit5b1	*		
intermRate	*		
nicTx	*		
nicRx	*		
flowCtrlTx	*		
flowCtrlRx	*		
spare1	*		
extBit5b2	*		
rateAdaptHeader	*		
multiFrame	*		
mode	*		
logLinkId	*		
assignorAssignee	*		
inBandOutBand	*		
spare1_5b2	*		
extBit5c	*		
numStopBits	*		
numDataBits	*		
parity	*		
extBit5d	*		
duplexMode	*		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
modemType	*		
extBit6	*		
layer2id	*		
userInfoLayer2	*		
extBit6a1	*		
modeLayer2	*		
spare3	*		
q933	*		
extBit6a2	*		
userSpecifLayer2	*		
extBit6b	*		
windowSize	*		
extBit7	*		
layer3id	*		
userInfoLayer3	*		
extBit7a1	*		
OptionUserSpecifLayer3	*		
extBit7a2	*		
modeLayer3	*		
spare5	*		
extb7b	*		
spare3_7b	*		
defaultPacketSize	*		
extBit7c	*		
packetWindowSize	*		
extBit7a3	*		
spare3_7a3	*		
addLayer3ProtocolInfo	*		
extBit7a4	*		
spare3_7a4	*		
addLayer3ProtocolInfoL	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_MS_NetworkCap_tlv_Any
Group :
Structured Type : MS_NetworkCap_tlv
Derivation Path :
Encoding Variation :
Comments : @SIC EW T1−040350 SIC@

Element Name	Element Value	Element Encoding	Comments
iei	'00110001'B		'00110001'B (hex 31)
iel	?		
value	?		MS network capability value (CSN.1 coding)

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_MS_NetworkCapAss_lv
Group :
Structured Type : MS_NetworkCap_lv
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
value	?		MS network capability value (CSN.1 coding)

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_PDP_ContextStatusAny
Group :
Structured Type : PDP_ContextStatus
Derivation Path :
Encoding Variation :
Comments : to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments
iei	'00110010'B		'00110010'B
iel	?		Unit
nSAPI	?		Timer value

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_ProtoCfgOptAny
Group :
Structured Type : ProtoCfgOpt
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		27O @sic T1s040554 sic@
length	?		
ext	?		
spare	?		
configprotocol	?		
protocolIdContents	*		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_PS_LCS_CapabilityAny
Group :
Structured Type : PS_LCS_Capability
Derivation Path :
Encoding Variation :
Comments : PS LCS Capability
3GPP 24.008 / 10.5.5.22
@sic EW R5s050095 sic@

Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		'00110011'B (33 hex)
iel	'01'O		
spare	'000'B		
oTD_A	?		
oTD_B	?		
gPS_A	?		
gPS_B	?		
gPS_C	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_SS_VersionIndAny
Group :
Structured Type : SS_VersionInd
Derivation Path :
Encoding Variation :
Comments : SS version indicator IE with AnyOrOmit values

Element Name	Element Value	Element Encoding	Comments
iei	'01111111'B		
iel	?		
sS_VersionInfo	*		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_StreamIdAny
Group :
Structured Type : StreamId
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00101101'B		
iel	?		
val	?		@sic T1s−040536 sic@

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_SubadrsAny
Group :
Structured Type : Subadrs
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typrOfSubadrs	?		Type of subaddress
oddEven	?		odd/even indicator
spare3	?		3 spare bits
subadrsInfo	*		subaddress information

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_TearDwnInd_tv
Group :
Structured Type : TearDwnInd_tv
Derivation Path :
Encoding Variation :
Comments : Tear down indicator used for the direction ue −> n

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		
spare	'000'B		
tdiflag	'?'B		TDI Flag = 0, Tear down of all PDP Context not requested. TDI Flag = 1, Tear down of all PDP Context requested.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_TI_Any
Group :
Structured Type : TI
Derivation Path :
Encoding Variation :
Comments : Transaction identifier − used for MO calls

Element Name	Element Value	Element Encoding	Comments
tiFlag	?		from network to MS
tiVal	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_TI_MO
Group :
Structured Type : TI
Derivation Path :
Encoding Variation :
Comments : Transaction identifier − used for MO calls

Element Name	Element Value	Element Encoding	Comments
tiFlag	'0'B		from network to MS
tiVal	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_TypeOfNumPlanAny
Group :
Structured Type : TypeOfNumPlan
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typeOfNum	?		Type of number
numbPlanId	?		Numbering plan id.

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_UserUserAny
Group :
Structured Type : UserUser
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	’01111110’B		information element identifier
iel	?		length
userUserProtocolDiscr	?		user−user protocol discriminator
userUserInfo	*		user user information

Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE messages the userUserInfo length is of 0 − 32 bytes.
In USER INFORMATION messages the userUserInfo length is of 1 − 128.

Structured Type Constraint Declaration

Constraint Name : cs_CauNormCallClear_lv
Group :
Structured Type : Cau_lv
Derivation Path :
Encoding Variation :
Comments : Cause − Normal call clearing

Element Name	Element Value	Element Encoding	Comments
iel	'02'O		
extBit3	'1'B		no extension
codingStd	'11'B		coding standard − GSM
spare1	'0'B		bit
loc	'0000'B		location − user
extBit3a	−		
recommend	−		
extBit4	'1'B		no extension
cauValue	INT_TO_BIT (16, 7)		Normal call clearing
diagnostic	−		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_TI_MT
Group :
Structured Type : TI
Derivation Path :
Encoding Variation :
Comments : Transaction identifier − used for MT calls

Element Name	Element Value	Element Encoding	Comments
tiFlag	'0'B		from network to MS
tiVal	'000'B		

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoBelow64k
Group :
ASN1 Type : PowerOffsetInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  gainFactorInformation signalledGainFactors:{
    modeSpecificInfo fdd:{
      gainFactorBetaC tsc_GainFactorBetaC_Below64k
    },
    gainFactorBetaD tsc_GainFactorBetaD,
    referenceTFC_ID 0
  },
  powerOffsetPp_m OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoComputed
Group :
ASN1 Type : PowerOffsetInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  gainFactorInformation computedGainFactors : 0,
  powerOffsetPp_m OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoHigher64k
Group :
ASN1 Type : PowerOffsetInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  gainFactorInformation signalledGainFactors:{
    modeSpecificInfo fdd:{
      gainFactorBetaC tsc_GainFactorBetaC_Higher64k
    },
    gainFactorBetaD tsc_GainFactorBetaD,
    referenceTFC_ID 0
  },
  powerOffsetPp_m OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_PowerOffsetInfoDefCfg9
Group :
ASN1 Type : PowerOffsetInformation
Derivation Path : c_PowerOffsetInfoHigher64k.
Encoding Variation :
Comments :

Constraint Value

REPLACE gainFactorInformation.signalledGainFactors.modeSpecificInfo.fdd.gainFactorBetaC BY 8

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_AICH_Info
Group :
ASN1 Type : AICH_Info
Derivation Path :
Encoding Variation :
Comments : no transmission diversity, AICH timing = e0

Constraint Value

```
{
  channelisationCode256 tsc_AICH1_ChC,
  sttd_Indicator FALSE,
  aich_TransmissionTiming e0
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_103_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#2 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 103,
      numberOfTbSizeList { zero : NULL, one : NULL },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 190,
    crc_Size crc0
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
two transport formats: TransportBlocks = 0, TB size = 103 bits; TansportBlock = 1, Size = 103.
coding = convolutional;
coding rate = 1/3;
CRCsize = N/A;
RateMatching = 190

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_103_TFS_UE
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#2 on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti20 :{ { rlc_Size bitMode : sizeType1 : 103,
      numberOfTbSizeList { zero : NULL, one : NULL },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 190,
    crc_Size crc0
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
two transport formats: TransportBlocks = 0, TB size = 103 bits; TansportBlock = 1, Size = 103.
rlc_Size = TB_Size (DCH, w/o MUX)
coding = convolutional;
coding rate = 1/3;
CRCsize = N/A;
RateMatching = 190

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TFS_DL
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

```
{
  tti tti40 :{{ tb_Size 148,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 170,
    crc_Size crc16
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TFS_UE_UL
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti40 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT},
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 170,
    crc_Size crc16
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 40 ms;
two transport formats:
TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size = TB_Size −4 =144 bits.(DCH, w/ MUX)
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TFS_UL
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

```
{
  tti tti40 :{{ tb_Size 148,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 170,
    crc_Size crc16
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TTI_10_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

```
{
  tti tti10 :{{ tb_Size 148,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 192, −− dummy value, value is not needed for 13.6 kbps
    crc_Size crc16
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.3:
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192 (dummy value, value is not needed for 13.6 kbps)

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TTI_10_TFS_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path :

Encoding Variation :

Comments : transport format set for signalling bearer on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti10 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT},
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 192, −− dummy value, value is not needed for 13.6 kbps
    crc_Size crc16
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.3:
TTI = 10 ms;
two transport formats:
TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size = TB_Size −4 =144 bits.(DCH, w/ MUX)
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_148_DL_Info_RM160(p_ActTime: ActivationTime)
Group :
ASN1 Type : CphyTrchConfigReq
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  activationTime activationCFN : p_ActTime,
  ulconnectedTrCHList OMIT,
  ulTFCS OMIT,
  dlconnectedTrCHList {
    { trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_576_TFS},
    { trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_DL_RM160 }
  },
  dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( cd_PowerOffsetInfoDefCfg9 ) −−@sic G3t050036 sic@
}
```

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.17):
TTI = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4, TB size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = 125
For DCH5 (34.108 cl. 6.10.2.4.17):
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 155.

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_148_UL_Info_RM160(p_ActTime: ActivationTime)
Group :
ASN1 Type : CphyTrchConfigReq
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  activationTime activationCFN : p_ActTime,
  ulconnectedTrCHList {
    { trchid tsc_UL_DCH1,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_576_TFS},
    { trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo cd_DCH_148_TFS_UL_RM160 }
  },
  ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx , −− sent to SS
  dlconnectedTrCHList OMIT,
  dlTFCS OMIT
}
```

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.17):
TTI = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4, TB size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = 125
For DCH2 (34.108 cl. 6.10.2.4.17):
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 155..

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for transport channel used in CreateCell_DCH_57_6kCS_RAB_SRB

Constraint Value

```
{
  tti tti40 :{{tb_Size 576, −−@sic T1−S040063 sic@
     numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4},
     logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo: NULL,
    rateMatchingAttribute 145, −−@sic T1−S040063 sic@
    crc_Size crc16
  }
}
```

Detailed Comments : 3GPP TS 34.108 clause 6.10.2.4.17
TTI = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4, TB size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = 125

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_TFS_2
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for transport channel used in Streaming/Unknown/UL:14.4 DL:14.4kbps

Constraint Value

```
{
  tti tti40 :{ { tb_Size 576,
     numberOfTbSizeList { zero : NULL, one : NULL},
     logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo: NULL,
    rateMatchingAttribute 165,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = 165

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_576_TFS_3 (p_RM : INTEGER)
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for transport channel used in Conversational/Unknown/UL:28.8 DL:28.8kbps and Streaming/Unknown/UL:28.8 DL:28.8kbps

Constraint Value

```
{
  tti tti40 :{ { tb_Size 576,
      numberOfTbSizeList { zero : NULL, one : NULL, small : 2},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo: NULL,
    rateMatchingAttribute p_RM,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 40 ms;
five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits.
coding = turbo;
CRCsize = 16;
RateMatching = parameter

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_60_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#3 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 60,
      numberOfTbSizeList { zero : NULL, one : NULL },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 235,
    crc_Size crc0
  }
}
```

Detailed Comments : TS 34.108 subcl. 6.10.2.4.1.4:
TTI = 20 ms;
two transport formats: TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60.
coding = convolutional;
coding rate = 1/2;
CRCsize = N/A;
RateMatching = 235

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_60_TFS_UE
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#3 on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti20 :{ { rlc_Size bitMode : sizeType1: 60,
      numberOfTbSizeList { zero : NULL, one : NULL },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 235,
    crc_Size crc0
  }
}
```

Detailed Comments : TS 34.108 subcl. 6.10.2.4.1.4:
TTI = 20 ms;
two transport formats:
TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60.
rlc_Size = TB_Size (DCH, w/o MUX)
coding = convolutional;
coding rate = 1/2;
CRCsize = N/A;
RateMatching = 235

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 81,
      numberOfTbSizeList { zero : NULL },
      logicalChannelList allSizes : NULL
    },
    { tb_Size 39,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    },
    { tb_Size 81,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    }
  },
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats: TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39 bits; TansportBlock = 1, Size = 81.
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS_DL
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
  tti tti20 :{ { tb_Size 0,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    },
    { tb_Size 39,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    },
    { tb_Size 81,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    }
  },
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats: TransportBlocks = 1, TB size = 0 bits; TransportBlocks = 1, TB size = 39 bits; TansportBlock = 1, Size = 81.
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_81_TFS_UE
Group :
ASN1 Type : DedicatedTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RAB subflow#1 on dedicated channel used in message sent to UE

Constraint Value

```
{
  tti tti20 :{ { rlc_Size bitMode : sizeType1: 81,
      numberOfTbSizeList { zero : NULL },
      logicalChannelList allSizes : NULL
    },
    { rlc_Size bitMode : sizeType1 : 39,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    },
    { rlc_Size bitMode : sizeType1: 81,
      numberOfTbSizeList { one : NULL },
      logicalChannelList allSizes : NULL
    }
  },
  semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
  }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:
TTI = 20 ms;
three transport formats:
TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39 bits; TansportBlock = 1, Size = 81.
rlc_Size = TB_Size (DCH, w/o MUX)
coding = convolutional;
coding rate = 1/3;
CRCsize = 12;
RateMatching = 200

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_AddReconfTransChInfo (
p_DlTrChId:TransportChannelIdentity;
p_UlTrChId:TransportChannelIdentity
)

Group :

ASN1 Type : DL_AddReconfTransChInformation

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  dl_TransportChannelType dch,
  dl_transportChannelIdentity p_DlTrChId,
  tfs_SignallingMode sameAsULTrCH :
  {
    ul_TransportChannelType dch,
    ul_TransportChannelIdentity p_UlTrChId
  } ,
  dch_QualityTarget{
    bler_QualityValue −20
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_AddReconfTransChInfoListDCCH_SRB

Group :

ASN1 Type : DL_AddReconfTransChInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_DL_AddReconfTransChInfo(tsc_DL_DCH5,tsc_UL_DCH5)
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dl_DPCH_InfoCommon{
    cfnHandling initialise : {
      cfntargetsfnframeoffset OMIT
    },
    modeSpecificInfo fdd:{
      dl_DPCH_PowerControlInfo {
        modeSpecificInfo fdd:{
          dpc_Mode singleTPC
        }
      },
      powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
      dl_rate_matching_restriction OMIT,
      spreadingFactorAndPilot p_Sf,
      positionFixedOrFlexible flexible,
      tfci_Existence TRUE
    }
  },
  modeSpecificInfo fdd:{
    defaultDPCH_OffsetValue tsc_DefaultDPCH_OffsetValue,
    dpch_CompressedModeInfo OMIT,
    tx_DiversityMode noDiversity,
    ssdt_Information OMIT
  }
}
```

Detailed Comments : NOTE : not aligned with 34.108. Reason:The value 'inactive' in 34.018 is not valid with asn.1 definition v360

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationDCH_ToDCH_Offset1 (
p_Sf: SF512_AndPilot;
p_Tfci_Existence : BOOLEAN)

Group :

ASN1 Type : DL_CommonInformation

Derivation Path :

Encoding Variation :

Comments : @sic G3t050036 sic@

Constraint Value

```
{
  dl_DPCH_InfoCommon{
    cfnHandling maintain :NULL,
    modeSpecificInfo fdd:{
      dl_DPCH_PowerControlInfo {
        modeSpecificInfo fdd:{
          dpc_Mode singleTPC
        }
      },
      powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
      dl_rate_matching_restriction OMIT,
      spreadingFactorAndPilot p_Sf,
      positionFixedOrFlexible flexible,
      tfci_Existence p_Tfci_Existence
    }
  },
  modeSpecificInfo fdd:{
    defaultDPCH_OffsetValue 1 ,
    dpch_CompressedModeInfo OMIT,
    tx_DiversityMode noDiversity,
    ssdt_Information OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationPredefSIB16 (p_SF512_AndPilot : SF512_AndPilot)

Group :

ASN1 Type : DL_CommonInformationPredef

Derivation Path :

Encoding Variation :

Comments : p_SF512_AndPilot depends on the configuration (one of the following constants could be used: tsc_DL_DPCH1_SFP_Speech, tsc_DL_DPCH1_SFP_Streaming, tsc_DL_DPCH1_SFP_64k_PS or tsc_DL_DPCH1_SFP_64k_CS)

Constraint Value

```
{
  dl_DPCH_InfoCommon {
    modeSpecificInfo fdd : {
      spreadingFactorAndPilot p_SF512_AndPilot,
      positionFixedOrFlexible fixed,
      tfci_Existence FALSE}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationRB_SetUp (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dl_DPCH_InfoCommon{
    cfnHandling maintain :NULL,
    modeSpecificInfo fdd:{
      dl_DPCH_PowerControlInfo {
        modeSpecificInfo fdd:{
          dpc_Mode singleTPC
        }
      },
      powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
      dl_rate_matching_restriction OMIT,
      spreadingFactorAndPilot p_Sf,
      positionFixedOrFlexible flexible,
      tfci_Existence TRUE
    }
  },
  modeSpecificInfo fdd:{
    defaultDPCH_OffsetValue OMIT,
    dpch_CompressedModeInfo OMIT ,
    tx_DiversityMode noDiversity,
    ssdt_Information OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonInformationRB_SetUpSpeech (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dl_DPCH_InfoCommon{
    cfnHandling maintain :NULL,
    modeSpecificInfo fdd:{
      dl_DPCH_PowerControlInfo {
        modeSpecificInfo fdd:{
          dpc_Mode singleTPC
        }
      },
      powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
      dl_rate_matching_restriction OMIT,
      spreadingFactorAndPilot p_Sf,
      positionFixedOrFlexible fixed,
      tfci_Existence FALSE
    }
  },
  modeSpecificInfo fdd:{
    defaultDPCH_OffsetValue OMIT,
    dpch_CompressedModeInfo OMIT ,
    tx_DiversityMode noDiversity,
    ssdt_Information OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonTransChInfoSameAsUL
Group :
ASN1 Type : DL_CommonTransChInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  sccpch_TFCS OMIT,
  modeSpecificInfo fdd:{
    dl_Parameters sameAsUL: NULL
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_InfoPerRL_DPCH_Offset (
p_ScrmbCode : PrimaryScramblingCode ;
p_SecScrmbCode : SecondaryScramblingCode ;
p_Sf : SF512_AndCodeNumber
)

Group :

ASN1 Type : DL_InformationPerRL_List

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{{
   modeSpecificInfo fdd : {
     primaryCPICH_Info { primaryScramblingCode p_ScrmbCode } ,
     pdsch_SHO_DCH_Info OMIT,
     pdsch_CodeMapping OMIT
   } ,
   dl_DPCH_InfoPerRL fdd : {
     pCPICH_UsageForChannelEst mayBeUsed,
     dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
     -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
     -- Actual value DPCH-FrameOffset = IE value * 256
     -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512
     secondaryCPICH_Info OMIT,
     dl_ChannelisationCodeList {{
        secondaryScramblingCode p_SecScrmbCode,
        sf_AndCodeNumber p_Sf,
        scramblingCodeChange noCodeChange
     }},
     tpc_CombinationIndex tsc_TPC_CombinationIndex,
     ssdt_CellIdentity OMIT,
     closedLoopTimingAdjMode OMIT
   },
   sccpch_InfoforFACH OMIT
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_FACH_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for FACH

Constraint Value

```
{
  tti tti10 :{ {
      tb_Size 168,
      numberOfTbSizeList { zero : NULL, one : NULL, small : 2 },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 220,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
three transport formats: TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits; TansportBlock = 0, Size = 168.
coding = convolutional;
rate = 1/2;
CRCsize = 16;
RateMatching = 220

ASN.1 Type Constraint Declaration

Constraint Name : c_FACH_TFS_PS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for FACH (PS) used for SS configuration

Constraint Value

```
{
  tti tti10 :{ {
      tb_Size 360,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo : NULL,
    rateMatchingAttribute 130,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360.
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_FACH_TFS_PS_UE
Group :
ASN1 Type : CommonTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for FACH (PS)

Constraint Value

```
{
  tti tti10 :{ {
      rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType2: 3},
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType turbo : NULL,
    rateMatchingAttribute 130,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
two transport formats:
TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360.
rlc_Size = TB_Size (FACH)
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_FACH_TFS_UE
Group :
ASN1 Type : CommonTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for FACH

Constraint Value

```
{
  tti tti10 :{ {
      rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15},
      numberOfTbSizeList { zero : NULL, one : NULL, small : 2},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 220,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
three transport formats:
TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits; TansportBlock = 0, Size = 168.
rlc_Size = TB_Size (FACH)
coding = convolutional;
rate = 1/2;
CRCsize = 16;
RateMatching = 220

ASN.1 Type Constraint Declaration

Constraint Name : c_FreqInfo (p_uarfcnUL , p_uarfcnDL : UARFCN)
Group :
ASN1 Type : FrequencyInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  modeSpecificInfo fdd: {
    uarfcn_UL p_uarfcnUL ,
    uarfcn_DL p_uarfcnDL
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCommand (p_CiphAlg: CipheringAlgorithm; p_new_U_RNTI : U_RNTI_Short;
p_CellInfoCfg : CellInfoCfg ; p_SF : SpreadingFactor ; p_SFCode : SF512_AndCodeNumber ;
p_UARFCN_DL : UARFCN; p_Def_config_id: DefaultConfigIdentity)

Group :

ASN1 Type : HandoverToUTRANCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
r3 : {
  handoverToUTRANCommand_r3 {
    new_U_RNTI p_new_U_RNTI,
    dummy OMIT,
    cipheringAlgorithm p_CiphAlg, -- @sic GP-042540 sic@
    specificationMode preconfiguration : {
      preConfigMode defaultConfig : {
        defaultConfigMode fdd,
        defaultConfigIdentity p_Def_config_id
      },
      rab_Info {
        rab_Identity gsm_MAP_RAB_Identity : '00000001'B,
        cn_DomainIdentity cs_domain
      },
      modeSpecificInfo fdd : {
        ul_DPCH_Info {
          ul_DPCH_PowerControlInfo {
            dpcch_PowerOffset -20, -- @sic GP-042540 sic@
            pc_Preamble 1,
            sRB_delay 7
          },
          scramblingCodeType longSC,
          reducedScramblingCodeNumber 0,
          spreadingFactor p_SF
        },
        dl_CommonInformationPost {
          dl_DPCH_InfoCommon {
            dl_DPCH_PowerControlInfo {
              modeSpecificInfo fdd : { dpc_Mode singleTPC }
            }
          }
        },
        dl_InformationPerRL_List {
          {
            primaryCPICH_Info { primaryScramblingCode p_CellInfoCfg.priScrmCode },
            dl_DPCH_InfoPerRL
            {
              pCPICH_UsageForChannelEst mayBeUsed,
              dl_ChannelisationCode {
                secondaryScramblingCode 1,
                sf_AndCodeNumber p_SFCode ,
                scramblingCodeChange noCodeChange
              },
              tpc_CombinationIndex 0
            }
          }
        },
        frequencyInfo {
          uarfcn_DL p_UARFCN_DL
        }
      }
    },
```

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ASN.1 Type Constraint Declaration
Constraint Value
maxAllowedUL_TX_Power 21 −− @sic G3t050018 sic@ }, nonCriticalExtensions OMIT }
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_G_HandoverToUTRANCommandNoRABInfo (p_CiphAlg: CipheringAlgorithm; p_new_U_RNTI : U_RNTI_Short;
p_CellInfoCfg : CellInfoCfg ; p_SF : SpreadingFactor ; p_SFCode : SF512_AndCodeNumber ;
p_UARFCN_DL : UARFCN; p_Def_config_id: DefaultConfigIdentity)

Group :

ASN1 Type : HandoverToUTRANCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
r3 : {
  handoverToUTRANCommand_r3 {
    new_U_RNTI p_new_U_RNTI,
    dummy OMIT,
    cipheringAlgorithm p_CiphAlg, -- @sic GP-04250 sic@
    specificationMode preconfiguration : {
      preConfigMode defaultConfig : {
        defaultConfigMode fdd,
        defaultConfigIdentity p_Def_config_id
      },
      rab_Info OMIT,
      modeSpecificInfo fdd : {
        ul_DPCH_Info {
          ul_DPCH_PowerControlInfo {
            dpcch_PowerOffset -20, -- @sic GP-042540 sic@
            pc_Preamble 1,
            sRB_delay 7
          },
          scramblingCodeType longSC,
          reducedScramblingCodeNumber 0,
          spreadingFactor p_SF
        },
        dl_CommonInformationPost {
          dl_DPCH_InfoCommon {
            dl_DPCH_PowerControlInfo {
              modeSpecificInfo fdd : { dpc_Mode singleTPC }
            }
          }
        },
        dl_InformationPerRL_List {
          {
            primaryCPICH_Info { primaryScramblingCode p_CellInfoCfg.priScrmCode },
            dl_DPCH_InfoPerRL
            {
              pCPICH_UsageForChannelEst mayBeUsed,
              dl_ChannelisationCode {
                secondaryScramblingCode 1,
                sf_AndCodeNumber p_SFCode ,
                scramblingCodeChange noCodeChange
              },
              tpc_CombinationIndex 0
            }
          }
        },
        frequencyInfo {
          uarfcn_DL p_UARFCN_DL
        }
      }
    },
    maxAllowedUL_TX_Power 21 -- @sic G3t050018 sic@
  },
  nonCriticalExtensions OMIT
```

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ASN.1 Type Constraint Declaration
Constraint Value
}
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_MIB_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : MasterInformationBlock
Derivation Path :
Encoding Variation :
Comments : Default setting of MIB. 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  mib_ValueTag 1,
  plmn_Type gsm_MAP : {
    plmn_Identity {
      mcc o_HexToDigitsMCC ( p_CellInfo.mcc),
      mnc o_HexToDigitsMNC (p_CellInfo.mnc ) }
  },
  sibSb_ReferenceList {
    {
      sibSb_Type sysInfoTypeSB1 : 1,
      scheduling {scheduling {
          sib_Pos rep16 : 1
      }}
    },
    {
      sibSb_Type sysInfoType1 : 1,
      scheduling {scheduling {
          sib_Pos rep64 : 11
      }}
    },
    {
      sibSb_Type sysInfoType2 : 1,
      scheduling {scheduling {
          sib_Pos rep64 :11
      } }
    },
    {
      sibSb_Type sysInfoType3 : 1,
      scheduling {scheduling {
          sib_Pos rep64 : 10
      }}
    },
    {
      sibSb_Type sysInfoType4 : 1,
      scheduling {scheduling {
          sib_Pos rep64 : 26
      }}
    },
    {
      sibSb_Type sysInfoType5 : 1,
      scheduling {scheduling {
          segCount 4,
          sib_Pos rep64 : 19,
          sib_PosOffsetInfo {so4, so2, so2}
      } }
    }
  }
}
```

Detailed Comments : Assum no segmentation for SIB1, SIB2, SIB3, SIB4.
Contains scheduling informations for SIB1, SIB2, SIB3, SIB4, SIB5 and SB1 only, the scheduling information for other SIBs are in SysInfoTypeSB1.
The value 1 of valueTags is a place holder. actual values of them will be non−zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration

Constraint Name : c_MIB_MulRatOrBMC (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : MasterInformationBlock
Derivation Path :
Encoding Variation :
Comments : Default setting of MIB. 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  mib_ValueTag 1,
  plmn_Type gsm_MAP : {
    plmn_Identity {
      mcc o_HexToDigitsMCC ( p_CellInfo.mcc),
      mnc o_HexToDigitsMNC (p_CellInfo.mnc ) }
  },
  sibSb_ReferenceList {
    {
      sibSb_Type sysInfoTypeSB1 : 1,
      scheduling {scheduling {
          segCount 2,
          sib_Pos rep16 : 1
      }}
    },
    {
      sibSb_Type sysInfoType1 : 1,
      scheduling {scheduling {
          sib_Pos rep128 : 5
      }}
    },
    {
      sibSb_Type sysInfoType2 : 1,
      scheduling {scheduling {
          sib_Pos rep128 : 7
      } }
    },
    {
      sibSb_Type sysInfoType3 : 1,
      scheduling {scheduling {
          sib_Pos rep64 : 13
      }}
    },
    {
      sibSb_Type sysInfoType4 : 1,
      scheduling {scheduling {
          sib_Pos rep64 : 15
      }}
    },
    {
      sibSb_Type sysInfoType5 : 1,
      scheduling {scheduling {
          segCount 4,
          sib_Pos rep128 : 19,
          sib_PosOffsetInfo {so4, so2, so2}
      } }
    }
  }
}
```

Detailed Comments : Assum no segmentation for SIB1, SIB2, SIB3, SIB4.
Contains scheduling informations for SIB1, SIB2, SIB3, SIB4, SIB5 and SB1 only, the scheduling information for other SIBs are in SysInfoTypeSB1.
The value 1 of valueTags is a place holder. actual values of them will be non−zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration

Constraint Name : c_PCH_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for PCH

Constraint Value

```
{
  tti tti10 :{ {
      tb_Size 240,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 230,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240.
coding = convolutional;
rate = 1/2;
CRCsize = 16;
RateMatching = 230

ASN.1 Type Constraint Declaration

Constraint Name : c_PCH_TFS_UE
Group :
ASN1 Type : CommonTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for PCH

Constraint Value

```
{
  tti tti10 :{ {
      rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 24},
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 230,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 10 ms;
two transport formats:
TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240.
rlc_Size = TB_Size (PCH)
coding = convolutional;
rate = 1/2;
CRCsize = 16;
RateMatching = 230

ASN.1 Type Constraint Declaration

Constraint Name : c_PichInfo
Group :
ASN1 Type : PICH_Info
Derivation Path :
Encoding Variation :
Comments : value for pi_CountPerFrame FFS

Constraint Value

```
fdd :{
  channelisationCode256 tsc_PICH1_ChC,
  pi_CountPerFrame e18,
  sttd_Indicator FALSE
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PreDefPhyChCfgSIB16 (p_SF512_AndPilot : SF512_AndPilot)
Group :
ASN1 Type : PreDefPhyChConfiguration
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ul_DPCH_InfoPredef c_UL_DPCH_InfoPredefSIB16,
  dl_CommonInformationPredef c_DL_CommonInformationPredefSIB16 ( p_SF512_AndPilot )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PreDefTransChCfg_Speech12_2k
Group :
ASN1 Type : PreDefTransChConfiguration
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ul_CommonTransChInfo {
    tfc_Subset allowedTFC_List : {0, 1, 2, 3, 4, 5},
    modeSpecificInfo fdd : {ul_TFCS normalTFCI_Signalling : addition : {
      ctfcSize ctfc6Bit : {{
        ctfc6 0,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      },
      {
        ctfc6 1,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      },
      {
        ctfc6 11,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      },
      {
        ctfc6 12,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      },
      {
        ctfc6 13,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
          powerOffsetPp_m 0
        }
      },
      {
        ctfc6 23,
        powerOffsetInformation {
          gainFactorInformation signalledGainFactors : {
            modeSpecificInfo fdd : { gainFactorBetaC 0},
            gainFactorBetaD 0 },
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
            powerOffsetPp_m 0
          }
        }
      }
    }
  }
 },
 ul_AddReconfTrChInfoList {{
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH1,
    transportFormatSet dedicatedTransChTFS : c_DCH_81_TFS_UE},
  {
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH2,
    transportFormatSet dedicatedTransChTFS : c_DCH_103_TFS_UE},
  {
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH3,
    transportFormatSet dedicatedTransChTFS : c_DCH_60_TFS_UE},
  {
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH5,
    transportFormatSet dedicatedTransChTFS : c_DCH_148_TFS_UE_UL }},
 dl_CommonTransChInfo {
  sccpch_TFCS OMIT,
  modeSpecificInfo fdd : { dl_Parameters sameAsUL : NULL}
 },
 dl_TrChInfoList {{
    dl_TransportChannelType dch,
    dl_transportChannelIdentity tsc_DL_DCH1,
    tfs_SignallingMode sameAsULTrCH :
    {
      ul_TransportChannelType dch,
      ul_TransportChannelIdentity tsc_UL_DCH1
    },
    dch_QualityTarget { bler_QualityValue 0}
  },
  {
    dl_TransportChannelType dch,
    dl_transportChannelIdentity tsc_DL_DCH2,
    tfs_SignallingMode sameAsULTrCH :
    {
      ul_TransportChannelType dch,
      ul_TransportChannelIdentity tsc_UL_DCH2
    },
    dch_QualityTarget { bler_QualityValue 0}},
  {
    dl_TransportChannelType dch,
    dl_transportChannelIdentity tsc_DL_DCH3,
    tfs_SignallingMode sameAsULTrCH :
    {
      ul_TransportChannelType dch,
      ul_TransportChannelIdentity tsc_UL_DCH3
    },
    dch_QualityTarget { bler_QualityValue 0}} ,
  {
    dl_TransportChannelType dch,
    dl_transportChannelIdentity tsc_DL_DCH5,
    tfs_SignallingMode sameAsULTrCH :
    {
      ul_TransportChannelType dch,
      ul_TransportChannelIdentity tsc_UL_DCH5
```

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ASN.1 Type Constraint Declaration
Constraint Value
}, dch_QualityTarget { bler_QualityValue 0}} } }
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PredefinedRB_CfgSIB16
Group :
ASN1 Type : PredefinedRB_Configuration
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  re_EstablishmentTimer useT315,
  srb_InformationList {
    { rb_Identity tsc_RB1,
      rlc_InfoChoice rlc_Info : {
        ul_RLC_Mode ul_UM_RLC_Mode :{
          transmissionRLC_Discard timerBasedNoExplicit : dt100
        },
        dl_RLC_Mode dl_UM_RLC_Mode : NULL
      },
      rb_MappingInfo {{
          ul_LogicalChannelMappings oneLogicalChannel :{
            ul_TransportChannelType dch : tsc_UL_DCH5,
            logicalChannelIdentity tsc_UL_DCCH1,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          dl_LogicalChannelMappingList {{
              dl_TransportChannelType dch : tsc_DL_DCH5,
              logicalChannelIdentity tsc_DL_DCCH1
          }}
      }}
    },
    { rb_Identity tsc_RB2,
      rlc_InfoChoice rlc_Info : {
        ul_RLC_Mode ul_AM_RLC_Mode :{
          transmissionRLC_Discard maxDAT_Retransmissions : {
            maxDAT dat4,
            timerMRW te100,
            maxMRW mm4
          },
          transmissionWindowSize tw8,
          timerRST tr500,
          max_RST rst4,
          pollingInfo {
            timerPollProhibit tpp200,
            timerPoll tp200,
            poll_SDU sdu1,
            lastTransmissionPDU_Poll TRUE,
            lastRetransmissionPDU_Poll TRUE,
            pollWindow pw99
          }
        },
        dl_RLC_Mode dl_AM_RLC_Mode : {
          inSequenceDelivery TRUE,
          receivingWindowSize rw8,
          dl_RLC_StatusInfo {
            timerStatusProhibit tsp200,
            dummy te200, -- @sic Rel5 sic@
            missingPDU_Indicator TRUE }
        }
      },
      rb_MappingInfo {{
          ul_LogicalChannelMappings oneLogicalChannel :{
            ul_TransportChannelType dch : tsc_UL_DCH5,
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        logicalChannelIdentity tsc_UL_DCCH2,
        rlc_SizeList configured : NULL,
        mac_LogicalChannelPriority 2
      },
      dl_LogicalChannelMappingList {{
        dl_TransportChannelType dch : tsc_DL_DCH5,
        logicalChannelIdentity tsc_DL_DCCH2
      }}
    }}
  },
  { rb_Identity tsc_RB3,
    rlc_InfoChoice rlc_Info : {
      ul_RLC_Mode ul_AM_RLC_Mode :{
        transmissionRLC_Discard maxDAT_Retransmissions : {
          maxDAT dat4,
          timerMRW te100,
          maxMRW mm4
        },
        transmissionWindowSize tw8,
        timerRST tr500,
        max_RST rst4,
        pollingInfo {
          timerPollProhibit tpp200,
          timerPoll tp200,
          poll_SDU sdu1,
          lastTransmissionPDU_Poll TRUE,
          lastRetransmissionPDU_Poll TRUE,
          pollWindow pw99
        }
      },
      dl_RLC_Mode dl_AM_RLC_Mode : {
        inSequenceDelivery TRUE,
        receivingWindowSize rw8,
        dl_RLC_StatusInfo {
          timerStatusProhibit tsp200,
          dummy te200, -- @sic Rel5 sic@
          missingPDU_Indicator TRUE }
      }
    },
    rb_MappingInfo {{
      ul_LogicalChannelMappings oneLogicalChannel :{
        ul_TransportChannelType dch : tsc_UL_DCH5,
        logicalChannelIdentity tsc_UL_DCCH3,
        rlc_SizeList configured : NULL,
        mac_LogicalChannelPriority 3
      },
      dl_LogicalChannelMappingList {{
        dl_TransportChannelType dch : tsc_DL_DCH5,
        logicalChannelIdentity tsc_DL_DCCH3
      }}
    }}
  },
  { rb_Identity tsc_RB4,
    rlc_InfoChoice rlc_Info : {
      ul_RLC_Mode ul_AM_RLC_Mode :{
        transmissionRLC_Discard maxDAT_Retransmissions : {
          maxDAT dat4,
          timerMRW te100,
          maxMRW mm4
        },
        transmissionWindowSize tw8,
        timerRST tr500,
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        max_RST rst4,
        pollingInfo {
          timerPollProhibit tpp200,
          timerPoll tp200,
          poll_SDU sdu1,
          lastTransmissionPDU_Poll TRUE,
          lastRetransmissionPDU_Poll TRUE,
          pollWindow pw99
        }
      },
      dl_RLC_Mode dl_AM_RLC_Mode : {
        inSequenceDelivery TRUE,
        receivingWindowSize rw8,
        dl_RLC_StatusInfo {
          timerStatusProhibit tsp200,
          dummy te200, -- @sic Rel5 sic@
          missingPDU_Indicator TRUE }
      }
    },
    rb_MappingInfo {{
        ul_LogicalChannelMappings oneLogicalChannel :{
          ul_TransportChannelType dch : tsc_UL_DCH5,
          logicalChannelIdentity tsc_UL_DCCH4,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 4
        },
        dl_LogicalChannelMappingList {{
            dl_TransportChannelType dch : tsc_DL_DCH5,
            logicalChannelIdentity tsc_DL_DCCH4
        }}
    }}
  }
},
rb_InformationList {
  { rb_Identity tsc_RB10,
    rlc_InfoChoice rlc_Info : {
      ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE} ,
      dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE}
    },
    rb_MappingInfo {
      {
        ul_LogicalChannelMappings oneLogicalChannel : {
          ul_TransportChannelType dch : tsc_UL_DCH1,
          logicalChannelIdentity tsc_UL_DTCH1,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 6
        },
        dl_LogicalChannelMappingList {
          {
            dl_TransportChannelType dch : tsc_DL_DCH1,
            logicalChannelIdentity tsc_DL_DTCH1
          }
        }
      }
    }
  },
  { rb_Identity tsc_RB11,
    rlc_InfoChoice rlc_Info : {
      ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE} ,
      dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE}
    },
    rb_MappingInfo {
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
      {
        ul_LogicalChannelMappings oneLogicalChannel : {
          ul_TransportChannelType dch : tsc_UL_DCH2,
          logicalChannelIdentity tsc_UL_DTCH2,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 6
        },
        dl_LogicalChannelMappingList {
          {
            dl_TransportChannelType dch : tsc_DL_DCH2,
            logicalChannelIdentity tsc_DL_DTCH2
          }
        }
      }
    }
   },
   { rb_Identity tsc_RB12,
     rlc_InfoChoice rlc_Info : {
       ul_RLC_Mode ul_TM_RLC_Mode : { segmentationIndication TRUE} ,
       dl_RLC_Mode dl_TM_RLC_Mode : { segmentationIndication TRUE}
     },
     rb_MappingInfo {
       {
         ul_LogicalChannelMappings oneLogicalChannel : {
           ul_TransportChannelType dch : tsc_UL_DCH3,
           logicalChannelIdentity tsc_UL_DTCH3,
           rlc_SizeList configured : NULL,
           mac_LogicalChannelPriority 6
         },
         dl_LogicalChannelMappingList {
           {
             dl_TransportChannelType dch : tsc_DL_DCH3,
             logicalChannelIdentity tsc_DL_DTCH3
           }
         }
       }
     }
   }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_RACH_TFS
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RACH

Constraint Value

```
{
  tti tti20 :{{
      tb_Size 168,
      numberOfTbSizeList { one : NULL},
      logicalChannelList configured : NULL
    },
    {
      tb_Size 360,
      numberOfTbSizeList { one : NULL },
      logicalChannelList configured : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 150,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 20 ms;
two transport formats: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits;
coding = convolutional;
rate = 1/2;
CRCsize = 16

ASN.1 Type Constraint Declaration

Constraint Name : c_RACH_TFS_UE
Group :
ASN1 Type : CommonTransChTFS
Derivation Path :
Encoding Variation :
Comments : transport format set for RACH used in message sent to UE

Constraint Value

```
{
  tti tti20 :{{
      rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15},
      numberOfTbSizeList { one : NULL},
      logicalChannelList configured : NULL
    },
    {
      rlc_Size fdd : { octetModeRLC_SizeInfoType2 sizeType2 : 3},
      numberOfTbSizeList { one : NULL },
      logicalChannelList configured : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 150,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 20 ms;
two transport formats:
TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits;
rlc_Size = TB_Size (RACH)
coding = convolutional;
rate = 1/2;
CRCsize = 16;
RateMatching = 1

ASN.1 Type Constraint Declaration

Constraint Name : c_RB2_IntegrityProtActivationInfoList(p_RRCSN : RRC_MessageSequenceNumber)
Group :
ASN1 Type : IntegrityProtActivationInfoList
Derivation Path :
Encoding Variation :
Comments : To Start Integrity on RB2 in UL

Constraint Value

```
{{
   rb_Identity tsc_RB2,
   rrc_MessageSequenceNumber p_RRCSN
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_RB_ActTimeInfo(p_RB_Id: INTEGER; p_N: RLC_SequenceNumber)
Group :
ASN1 Type : RB_ActivationTimeInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  rb_Identity p_RB_Id,
  rlc_SequenceNumber p_N
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_RestRB_IntegrityProtActivationInfoList(p_SN0, p_SN1, p_SN3, p_SN4: RRC_MessageSequenceNumber)
Group :
ASN1 Type : IntegrityProtActivationInfoList
Derivation Path :
Encoding Variation :
Comments : To Start Integrity on RB2 in UL

Constraint Value

```
{{
    rb_Identity tsc_RB0,
    rrc_MessageSequenceNumber p_SN0
  },
  {
    rb_Identity tsc_RB1,
    rrc_MessageSequenceNumber p_SN1
  },
  {
    rb_Identity tsc_RB3,
    rrc_MessageSequenceNumber p_SN3
  },
  {
    rb_Identity tsc_RB4,
    rrc_MessageSequenceNumber p_SN4
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_RestRB_IntegrityProtActivationInfoList_NoSRB4(p_SN0, p_SN1, p_SN3: RRC_MessageSequenceNumber)

Group :

ASN1 Type : IntegrityProtActivationInfoList

Derivation Path :

Encoding Variation :

Comments : To Start Integrity on RB2 in UL @sic G3t040005 sic@

Constraint Value

```
{{
   rb_Identity tsc_RB0,
   rrc_MessageSequenceNumber p_SN0
 },
 {
   rb_Identity tsc_RB1,
   rrc_MessageSequenceNumber p_SN1
 },
 {
   rb_Identity tsc_RB3,
   rrc_MessageSequenceNumber p_SN3
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_Def
Group :
ASN1 Type : SysInfoTypeSB1
Derivation Path :
Encoding Variation :
Comments : Default setting of SB1. scheduling is defined in 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  sib_ReferenceList {
    {
      sib_Type sysInfoType6 : 1,
      scheduling {scheduling {
          segCount 4,
          sib_Pos rep64 : 3,
          sib_PosOffsetInfo {so4, so2, so2}
      }}
    },
    {
      sib_Type sysInfoType7 : NULL,
      scheduling {scheduling {
          sib_Pos rep16 : 2
      }}
    },
    {
      sib_Type sysInfoType11 : 1,
      scheduling { scheduling {
          segCount 3,
          sib_Pos rep64 : 29,
          sib_PosOffsetInfo {so2, so2}
      } }
    },
    {
      sib_Type sysInfoType12 : 1,
      scheduling { scheduling {
          segCount 3,
          sib_Pos rep64 : 13,
          sib_PosOffsetInfo {so2, so2}
      } }
    },
    {
      sib_Type sysInfoType18 : 1,
      scheduling { scheduling {
          sib_Pos rep64 : 18
      } }
  } },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments : Assum no segmentation for SIB7.
Contains scheduling informations for SIB6, SIB7, SIB11, SIB12, SIB18 only, the scheduling information for other SIBs may be added later.
The value 1 of valueTags is a place holder. actual values of them will be non−zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_MulRatHo
Group :
ASN1 Type : SysInfoTypeSB1
Derivation Path :
Encoding Variation :
Comments : Default setting of SB1 for multi−RAT handover test. No SIB6 and SIB12, SIB16 may segmented upto 8 segments. scheduling defined in 3GPP TS 34.123−3 clause 8.4.4.2

Constraint Value

```
{
  sib_ReferenceList {{
     sib_Type sysInfoType7 : NULL,
     scheduling {scheduling {
        sib_Pos rep32 : 11
     }}
   },
   {
     sib_Type sysInfoType11 : 1,
     scheduling { scheduling {
        segCount 3,
        sib_Pos rep128 : 29,
        sib_PosOffsetInfo {so2, so2}
     } }
   },
   {
     sib_Type sysInfoType16 : {
       predefinedConfigIdentity 1,
       predefinedConfigValueTag 0
     },
     scheduling {scheduling {
        segCount 8,
        sib_Pos rep128 : 35,
        sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2, so2}
     } }
   },
   {
     sib_Type sysInfoType18 : 1,
     scheduling { scheduling {
        segCount 1,
        sib_Pos rep128 : 6
     } }
  } },
  nonCriticalExtensions OMIT
}
```

Detailed Comments : Assum no segmentation for SIB7.
Contains scheduling informations for SIB7, SIB11, SIB16, SIB18 only, the scheduling information for other SIBs may be added later.
The value 1 of valueTags is a place holder. actual values of them will be non−zero and assigned dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_Schedul1
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SB1 of one segment

Constraint Value

```
{
  scheduling {
    sib_Pos rep16 :1
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SB1_Schedul2
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SB1 of two segment

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep16 :1,
    sib_PosOffsetInfo {so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_3_Intra3_Inter2_InterRAT_Def (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg ; p_InterRAT_1, p_InterRAT_2 : G_CellConfigInfo)

Group :

ASN1 Type : SysInfoType11

Derivation Path :

Encoding Variation :

Comments : Default system information block type 11. To be used by cell A,B,C,G and H (3 intra, 3 inter, 3InterRAT)

Constraint Value

```
{
  sib12indicator TRUE,
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
      cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo {
          intraFreqMeasurementID OMIT, -- default value
          intraFreqCellInfoSI_List {
            removedIntraFreqCellList OMIT, -- removeNoIntraFreqCells in SIB11 is not used and ignored by the UE
            newIntraFreqCellList {{
              intraFreqCellID p_ActiveCellInfo.cellId,
              cellInfo {
                cellIndividualOffset OMIT, -- default value
                referenceTimeDifferenceToCell OMIT,
                modeSpecificInfo fdd : {
                  primaryCPICH_Info { primaryScramblingCode p_ActiveCellInfo.priScrmCode },
                  readSFN_Indicator FALSE,
                  tx_DiversityIndicator FALSE
                },
                cellSelectionReselectionInfo OMIT
              }
            },
            {
              intraFreqCellID p_IntraCellInfo2.cellId,
              cellInfo {
                cellIndividualOffset OMIT, -- default value
                referenceTimeDifferenceToCell OMIT,
                modeSpecificInfo fdd : {
                  primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
                  readSFN_Indicator TRUE,
                  tx_DiversityIndicator FALSE
                },
                cellSelectionReselectionInfo OMIT -- value same as the serving cell
              }
            },
            {
              intraFreqCellID p_IntraCellInfo3.cellId,
              cellInfo {
                cellIndividualOffset OMIT, -- default value
                referenceTimeDifferenceToCell OMIT,
                modeSpecificInfo fdd : {
                  primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo3.priScrmCode },
                  readSFN_Indicator TRUE,
                  tx_DiversityIndicator FALSE
                },
                cellSelectionReselectionInfo OMIT -- value same as the serving cell
              }
            }}
          },
          intraFreqMeasQuantity {
            filterCoefficient OMIT, -- default value
            modeSpecificInfo fdd : {
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
    intraFreqMeasQuantity_FDD cpich_RSCP
   }
  },
  reportingInfoForCellDCH {
   intraFreqReportingQuantity {
    activeSetReportingQuantities {
     dummy noReport,
     cellIdentity_reportingIndicator TRUE,
     cellSynchronisationInfoReportingIndicator FALSE,
     modeSpecificInfo fdd : {
      cpich_Ec_N0_reportingIndicator FALSE,
      cpich_RSCP_reportingIndicator TRUE,
      pathloss_reportingIndicator FALSE }
    },
    monitoredSetReportingQuantities {
     dummy noReport,
     cellIdentity_reportingIndicator TRUE,
     cellSynchronisationInfoReportingIndicator TRUE,
     modeSpecificInfo fdd : {
      cpich_Ec_N0_reportingIndicator FALSE,
      cpich_RSCP_reportingIndicator TRUE,
      pathloss_reportingIndicator FALSE }
    }
   },
   measurementReportingMode {
    measurementReportTransferMode acknowledgedModeRLC,
    periodicalOrEventTrigger eventTrigger
   },
   reportCriteria intraFreqReportingCriteria : {
    eventCriteriaList {{
      event e1a : {
       triggeringCondition monitoredSetCellsOnly,
       reportingRange 5,
       w 1,
       reportDeactivationThreshold t2,
       reportingAmount ra4,
       reportingInterval ri4
      },
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3
     },
     {
      event e1b : {
       triggeringCondition activeSetCellsOnly,
       reportingRange 5,
       forbiddenAffectCellList OMIT,
       w 1},
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3
     },
     {
      event e1c : {
       replacementActivationThreshold t3,
       reportingAmount ra4,
       reportingInterval ri4
      },
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq : e3
     }
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
      } }

    }
  },
  interFreqMeasurementSysInfo
  {
    interFreqCellInfoSI_List {
      removedInterFreqCellList OMIT,
      newInterFreqCellList { {
        interFreqCellID p_InterCellInfo6.cellId,
        frequencyInfo p_InterCellInfo6.frequencyInfo,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      },
      {
        interFreqCellID p_InterCellInfo7.cellId,
        frequencyInfo OMIT,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo7.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      },
      {
        interFreqCellID p_InterCellInfo8.cellId,
        frequencyInfo OMIT,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo8.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      }
    } }}
  },
  interRATMeasurementSysInfo {
    interRATCellInfoList {
      removedInterRATCellList removeNoInterRATCells : NULL,
      newInterRATCellList {
        {
          interRATCellID o_OctToInt ( p_InterRAT_1.cellIdentity ),
          technologySpecificInfo gsm : {
            cellSelectionReselectionInfo OMIT,
            interRATCellIndividualOffset 0,
            bsic { ncc BIT_TO_INT (p_InterRAT_1.ncc), bcc BIT_TO_INT (p_InterRAT_1.bcc) },
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
            frequency_band p_InterRAT_1.bandIndicatorAsn1,
            bcch_ARFCN BIT_TO_INT ( p_InterRAT_1.bCCH_Freq )
           }
          },
          {
           interRATCellID o_OctToInt ( p_InterRAT_2.cellIdentity ),
           technologySpecificInfo gsm : {
            cellSelectionReselectionInfo OMIT,
            interRATCellIndividualOffset 0,
            bsic { ncc BIT_TO_INT (p_InterRAT_2.ncc), bcc BIT_TO_INT ( p_InterRAT_2.bcc ) },
            frequency_band p_InterRAT_2.bandIndicatorAsn1,
            bcch_ARFCN BIT_TO_INT (p_InterRAT_2.bCCH_Freq )
           }
          }
         }
 } }}}
 --nonCriticalExtensions OMIT @sic T1s040540 Rel5 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_Schedul1_MulRatOrBMC
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB11 of one segment, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
 scheduling {
  sib_Pos rep128 :29
 }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB11_Schedul2_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB11 of two segments, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep128 :29,
    sib_PosOffsetInfo {so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB11_Schedul3_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB11 of three segments, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep128 :29,
    sib_PosOffsetInfo {so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB16_Schedul1
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: one segment

Constraint Value

```
{
  scheduling {
    sib_Pos rep128 :35
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul2
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : two segments

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul3
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : three segments

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul4
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : four segments

Constraint Value

```
{
  scheduling {
    segCount 4,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul5
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : five segments

Constraint Value

```
{
  scheduling {
    segCount 5,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2, so2, so24}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul6
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : six segments

Constraint Value

```
{
  scheduling {
    segCount 6,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2, so2, so24, so4}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul7
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : seven segments

Constraint Value

```
{
  scheduling {
    segCount 7,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Schedul8
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : eight segments

Constraint Value

```
{
  scheduling {
    segCount 8,
    sib_Pos rep128 :35,
    sib_PosOffsetInfo {so4, so2, so2, so24, so4, so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB16_Speech12_2k (p_SF512_AndPilot : SF512_AndPilot)
Group :
ASN1 Type : SysInfoType16
Derivation Path :
Encoding Variation :
Comments : Default system information block type 16 @sic G3t050013 sic@

Constraint Value

```
{
  preDefinedRadioConfiguration {
    predefinedRB_Configuration c_PredefinedRB_CfgSIB16,
    preDefTransChConfiguration c_PreDefTransChCfg_Speech12_2k,
    preDefPhyChConfiguration c_PreDefPhyChCfgSIB16 ( p_SF512_AndPilot)
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB18_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType18
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  idleModePLMNIdentities
  {
    plmnsOfIntraFreqCellsList OMIT, −−@sic T1−040094 sic@
    plmnsOfInterFreqCellsList OMIT,
    plmnsOfInterRATCellsList OMIT
  },
  connectedModePLMNIdentities OMIT,
  nonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB2_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType2
Derivation Path :
Encoding Variation :
Comments : Default system information block type 2

Constraint Value

```
{
  ura_IdentityList { p_CellInfo.ura_Identity },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments : for cell 1 and cell 2.

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul1_MulRatOrBMC
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of one segment, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    sib_Pos rep128 :19
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul2_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of two segments, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep128 :19,
    sib_PosOffsetInfo {so4}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: c_SIB5_Schedul3_MulRatOrBMC
Group	:
ASN1 Type	: SchedulingInformation
Derivation Path	:
Encoding Variation	:
Comments	: SIB5 of three segments, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep128 :19,
    sib_PosOffsetInfo {so4, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul4_MulRatOrBMC
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of four segments, 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2

Constraint Value

```
{
  scheduling {
    segCount 4,
    sib_Pos rep128 :19,
    sib_PosOffsetInfo {so4, so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB7_Def
Group :
ASN1 Type : SysInfoType7
Derivation Path :
Encoding Variation :
Comments : Default system information block type 7

Constraint Value

```
{
  modeSpecificInfo fdd : {
    ul_Interference −100
  },
  prach_Information_SIB5_List { 2 },
  prach_Information_SIB6_List { 2 },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupAM_DCH (
p_Ul_lgchId : LogicalChannelIdentity;
p_MAC_lgch_prtDCH , p_MAC_lgch_prtRACH : MAC_LogicalChannelPriority ;
p_Dl_lgchId : LogicalChannelIdentity
)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  rb_Identity OMIT,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB,
    dl_RLC_Mode dl_AM_RLC_Mode : cd_DL_AM_RLC_SRB
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_lgch_prtDCH
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType dch: tsc_DL_DCH5,
          logicalChannelIdentity p_Dl_lgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
        mac_LogicalChannelPriority p_MAC_lgch_prtRACH
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType fach: NULL,
          logicalChannelIdentity p_Dl_lgchId
      }}
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupAM_FACH (p_RB_Id: RB_Identity; p_Ul_lgchId: LogicalChannelIdentity;p_MAC_lgch_prtDCH , p_MAC_lgch_prt: MAC_LogicalChannelPriority; p_Dl_lgchId: LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
 rb_Identity p_RB_Id,
 rlc_InfoChoice rlc_Info :
 {
  ul_RLC_Mode ul_AM_RLC_Mode: cd_UL_AM_RLC_SRB ,
  dl_RLC_Mode dl_AM_RLC_Mode: cd_DL_AM_RLC_SRB
 },
 rb_MappingInfo
 {
  {
   ul_LogicalChannelMappings oneLogicalChannel: {
    ul_TransportChannelType rach: NULL,
    logicalChannelIdentity p_Ul_lgchId,
    rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
    mac_LogicalChannelPriority p_MAC_lgch_prt
   },
   dl_LogicalChannelMappingList{{
      dl_TransportChannelType fach: NULL,
      logicalChannelIdentity p_Dl_lgchId
   }}
  },
  {
   ul_LogicalChannelMappings oneLogicalChannel: {
    ul_TransportChannelType dch: tsc_UL_DCH5,
    logicalChannelIdentity p_Ul_lgchId,
    rlc_SizeList configured :NULL,
    mac_LogicalChannelPriority p_MAC_lgch_prtDCH
   },
   dl_LogicalChannelMappingList{{
      dl_TransportChannelType dch: tsc_DL_DCH5,
      logicalChannelIdentity p_Dl_lgchId
   }}
  }
 }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupUM_DCH (p_Ul_lgchId : LogicalChannelIdentity ; p_MAC_lgch_prtDCH, p_MAC_lgch_prtRACH : MAC_LogicalChannelPriority ; p_Dl_lgchId : LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  rb_Identity OMIT,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_UM_RLC_Mode:
    {
      transmissionRLC_Discard OMIT
    },
    dl_RLC_Mode dl_UM_RLC_Mode: NULL
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_lgch_prtDCH
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType dch: tsc_DL_DCH5,
          logicalChannelIdentity p_Dl_lgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
        mac_LogicalChannelPriority p_MAC_lgch_prtRACH
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType fach: NULL,
          logicalChannelIdentity p_Dl_lgchId
      }}
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SRB_InfoSetupUM_FACH (p_RB_Id: RB_Identity; p_Ul_lgchId: LogicalChannelIdentity; p_MAC_lgch_prtDCH , p_MAC_lgch_prt: MAC_LogicalChannelPriority; p_Dl_lgchId: LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  rb_Identity p_RB_Id,
  rlc_InfoChoice rlc_Info :
  {
    ul_RLC_Mode ul_UM_RLC_Mode:
    {
      transmissionRLC_Discard timerBasedNoExplicit : dt50
    },
    dl_RLC_Mode dl_UM_RLC_Mode: NULL
  },
  rb_MappingInfo
  {
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType rach:NULL,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
        mac_LogicalChannelPriority p_MAC_lgch_prt
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType fach: NULL,
          logicalChannelIdentity p_Dl_lgchId
      }}
    },
    {
      ul_LogicalChannelMappings oneLogicalChannel: {
        ul_TransportChannelType dch: tsc_UL_DCH5,
        logicalChannelIdentity p_Ul_lgchId,
        rlc_SizeList configured :NULL,
        mac_LogicalChannelPriority p_MAC_lgch_prtDCH
      },
      dl_LogicalChannelMappingList{{
          dl_TransportChannelType dch: tsc_DL_DCH5,
          logicalChannelIdentity p_Dl_lgchId
      }}
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_StartListCS
Group :
ASN1 Type : STARTList
Derivation Path :
Encoding Variation :
Comments : Start list with CS_Domain only

Constraint Value

```
{ {
    cn_DomainIdentity cs_domain,
    start_Value '00000000000000000000'B
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0 (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc2Bit:{
    {
      ctfc2 0,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information − for receiver

Constraint Value

```
normalTFCI_Signalling : complete :
{
  ctfcSize ctfc6Bit:{
    {
      ctfc6 0,
      powerOffsetInformation OMIT
    },
    {
      ctfc6 1,
      powerOffsetInformation OMIT
    },
    {
      ctfc6 11,
      powerOffsetInformation OMIT
    },
    {
      ctfc6 12,
      powerOffsetInformation OMIT
    },
    {
      ctfc6 13,
      powerOffsetInformation OMIT
    },
    {
      ctfc6 23,
      powerOffsetInformation OMIT
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling : complete :
{
  ctfcSize ctfc6Bit:{
    {
      ctfc6 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 11,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 12,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 13,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc6 23,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 1,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 2,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 3,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 4,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 5,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 6,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 7,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 8,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 9,
      powerOffsetInformation OMIT
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx (p_PowerOffsetInformation : PowerOffsetInformation)

Group :

ASN1 Type : TFCS

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 4,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 5,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 6,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 7,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 8,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 9,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information − for receiver

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 1,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 2,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 3,
      powerOffsetInformation OMIT
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_2_3_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information − for receiver

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc2Bit:{
    {
      ctfc2 0,
      powerOffsetInformation OMIT
    },
    {
      ctfc2 1,
      powerOffsetInformation OMIT
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc2Bit:{
    {
      ctfc2 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc2 1,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_To3_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{ −−@sic T1−S040065 sic@
    { ctfc4 0, powerOffsetInformation OMIT },
    { ctfc4 1, powerOffsetInformation OMIT },
    { ctfc4 2, powerOffsetInformation OMIT },
    { ctfc4 3, powerOffsetInformation OMIT }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_To5_Rx
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information without power offset information − for receiver

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 1,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 2,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 3,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 4,
      powerOffsetInformation OMIT
    },
    {
      ctfc4 5,
      powerOffsetInformation OMIT
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_To5_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 4,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 5,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_CmplFACH_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :
Comments : TFCS information with power offset information − for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 4,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 5,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 6,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },

    {
      ctfc4 8,
      powerOffsetInformation p_PowerOffsetInformation
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrCHInfoUL_2_0_To5 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : With CTFC list : 0, 1, 2, 3, 4,5

Constraint Value

```
{
  ulconnectedTrCHList {{
      trchid tsc_UL_DCH1,
      transportChannelInfo p_DchTFS1
    } ,
    {
      trchid tsc_UL_DCH5,
      transportChannelInfo p_DchTFS5
  }},−−@sic ER1840 sic@
  ulTFCS c_TFCS_Cmpl0_To5_Rx
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChConfigTypeDCH_NoSHO
Group :
ASN1 Type : TrChConfigType
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

dch : normal

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoBCH1
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_BCH1,
      transportChannelInfo {
        tti tti20 : {{tb_Size 246,
            numberOfTbSizeList {one : NULL},
            logicalChannelList configured : NULL}},
        semistaticTF_Information {
          channelCodingType convolutional :half,
          rateMatchingAttribute 1,
          crc_Size crc16
        }
      }
  }},
  dlTFCS c_TFCS_Cmpl0 ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_122_AMR
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dlconnectedTrCHList { {
      trchid tsc_DL_DCH1,
      transportChannelInfo c_DCH_81_TFS_DL
    },
    {
      trchid tsc_DL_DCH2,
      transportChannelInfo c_DCH_103_TFS
    },
    {
      trchid tsc_DL_DCH3,
      transportChannelInfo c_DCH_60_TFS
    },
    {
      trchid tsc_DL_DCH5,
      transportChannelInfo c_DCH_148_TFS_DL
  }},
  dlTFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_13_6_StandAlone
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_DL_DCH5,
      transportChannelInfo c_DCH_148_TTI_10_TFS
  }},
  dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_2_0_To3 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : With CTFC list : 0, 1, 2, 3

Constraint Value

```
{
  dlconnectedTrCHList {{
      trchid tsc_DL_DCH1,
      transportChannelInfo p_DchTFS1
    },
    {
      trchid tsc_DL_DCH5,
      transportChannelInfo p_DchTFS5
  }}, −−@sic ER1437 sic@
  dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_2_0_To5 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : With CTFC list : 0, 1, 2, 3, 4, 5

Constraint Value

```
{
  dlconnectedTrCHList { {
      trchid tsc_DL_DCH1,
      transportChannelInfo p_DchTFS1
    },
    {
      trchid tsc_DL_DCH5,
      transportChannelInfo p_DchTFS5
    }
  },
  dlTFCS c_TFCS_Cmpl0_To5_Tx ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_576_148_RM160
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_DL_DCH1,
      transportChannelInfo c_DCH_576_TFS},
    { trchid tsc_DL_DCH5,
      transportChannelInfo cd_DCH_148_TFS_DL_RM160 }},
  dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( cd_PowerOffsetInfoDefCfg9 ) −− sent to SS @sic G3t050036
sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoPCH_FACH
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : For FDD mode only

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_PCH1,
      transportChannelInfo c_PCH_TFS
    },
    { trchid tsc_FACH1,
      transportChannelInfo c_FACH_TFS
    },
    { trchid tsc_FACH2,
      transportChannelInfo c_FACH_TFS_PS
  }},
  dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k ) -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoPCH_FACH_PS
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : For FDD mode only (PS)

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_PCH1,
      transportChannelInfo c_PCH_TFS
    },
    { trchid tsc_FACH1,
      transportChannelInfo c_FACH_TFS
    },
    { trchid tsc_FACH2,
      transportChannelInfo c_FACH_TFS_PS
  }},
  dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k ) -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_122_AMR
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      transportChannelInfo c_DCH_81_TFS
    },
    {
      trchid tsc_UL_DCH2,
      transportChannelInfo c_DCH_103_TFS
    },
    {
      trchid tsc_UL_DCH3,
      transportChannelInfo c_DCH_60_TFS
    },
    {
      trchid tsc_UL_DCH5,
      transportChannelInfo c_DCH_148_TFS_UL
  }},
  ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_13_6_StandAlone
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    { trchid tsc_UL_DCH5,
      transportChannelInfo c_DCH_148_TTI_10_TFS
  }},
  ulTFCS c_TFCS_Cmpl0_1_Rx -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_2_0_To3 (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : With CTFC list : 0, 1, 2, 3

Constraint Value

```
{
  ulconnectedTrCHList { {
      trchid tsc_UL_DCH1,
      transportChannelInfo p_DchTFS1
    },
    {
      trchid tsc_UL_DCH5,
      transportChannelInfo p_DchTFS5
  }},−−@sic ER1839 sic@
  ulTFCS c_TFCS_Cmpl0_To3_Rx
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_576_148_RM160
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    { trchid tsc_UL_DCH1,−−@sic ER1841 sic@
      transportChannelInfo c_DCH_576_TFS },
    { trchid tsc_UL_DCH5, −−@sic ER1841 sic@
      transportChannelInfo cd_DCH_148_TFS_UL_RM160 }},
  ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx −− sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingBCH1
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_BCH1,
      trCH_LogCHMappingList {{
          logicalChannel_Mapping dl_LogicalChannelMapping: {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType bch,
            logicalChannelIdentity tsc_BCCH1,
            logicalChannelType bCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB_BCCH
      }}
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_2
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {trchid tsc_DL_DCH1,
      trCH_LogCHMappingList { { logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DTCH1,
          logicalChannelType dTCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 7
        },
        rB_Identity tsc_RB10 }
    }},
    { trchid tsc_DL_DCH5,
      trCH_LogCHMappingList
      {
        { logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH1,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 1
        },
        rB_Identity tsc_RB1
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH2,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 2
        },
        rB_Identity tsc_RB2
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH3,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 3
        },
        rB_Identity tsc_RB3
      },
      {

        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader ,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH4,
```

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ASN.1 Type Constraint Declaration
Constraint Value
logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } }} } }
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_4DCCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH1,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH2,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 2
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH3,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 3
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DCCH4,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 4
          },
          rB_Identity tsc_RB4
        }
      }
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingDL_4DCCH_3DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH1,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB10
        }
      }
    },
    {
      trchid tsc_DL_DCH2,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH2,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB11
        }
      }
    },
    {
      trchid tsc_DL_DCH3,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType dch,
            logicalChannelIdentity tsc_DL_DTCH3,
            logicalChannelType dTCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB12
        }
      }
    },
    {
      trchid tsc_DL_DCH5,
      trCH_LogCHMappingList {
        {
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH1,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 1
        },
        rB_Identity tsc_RB1
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH2,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 2
        },
        rB_Identity tsc_RB2
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH3,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 3
        },
        rB_Identity tsc_RB3
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType dch,
          logicalChannelIdentity tsc_DL_DCCH4,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 4
        },
        rB_Identity tsc_RB4
      }
    }
  }
 }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingPCH_FACH_CellDCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments : For FDD mode only. map PCCH to PCH and CCCH and BCCH(for BCCH_FACH)
To be used for the Cell DCH configuration

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_PCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType pch,
            logicalChannelIdentity tsc_PCCH1,
            logicalChannelType pCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB_PCCH
        }
      }
    },
    {
      trchid tsc_FACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_CCCH5,
            logicalChannelType cCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB0
        }
      }
    }
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingPCH_FACH_PS
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments : For FDD mode only (PS). map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH2, and DTCH to FACH1

Constraint Value

```
{
  ulconnectedTrCHList OMIT,
  dlconnectedTrCHList {

    {
      trchid tsc_PCH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType pch,
            logicalChannelIdentity tsc_PCCH1,
            logicalChannelType pCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB_PCCH
        }
      }
    },
    {
      trchid tsc_FACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_BCCH6,
            logicalChannelType bCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 6
          },
          rB_Identity tsc_RB_BCCH_FACH
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_CCCH5,
            logicalChannelType cCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
          rB_Identity tsc_RB0
        },
        {
          logicalChannel_Mapping dl_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            dl_TransportChannelType fach,
            logicalChannelIdentity tsc_DL_DCCH1,
            logicalChannelType dCCH,
            rlc_SizeList configured : NULL,
            mac_LogicalChannelPriority 1
          },
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        rB_Identity tsc_RB1
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType fach,
          logicalChannelIdentity tsc_DL_DCCH2,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 2
        },
        rB_Identity tsc_RB2
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType fach,
          logicalChannelIdentity tsc_DL_DCCH3,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 3
        },
        rB_Identity tsc_RB3
      },
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType fach,
          logicalChannelIdentity tsc_DL_DCCH4,
          logicalChannelType dCCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 4
        },
        rB_Identity tsc_RB4
      }
    }
    },{
    trchid tsc_FACH2,
    trCH_LogCHMappingList {
      {
        logicalChannel_Mapping dl_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          dl_TransportChannelType fach,
          logicalChannelIdentity tsc_DL_DTCH1,
          logicalChannelType dTCH,
          rlc_SizeList configured : NULL,
          mac_LogicalChannelPriority 8
        },
        rB_Identity tsc_RB20
      }
    }
  }
 }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingRACH_DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_RACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_CCCH5,
            logicalChannelType cCCH
          },
          rB_Identity tsc_RB0
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH2,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH3,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DCCH4,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB4
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_DTCH1,
```

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ASN.1 Type Constraint Declaration
Constraint Value
logicalChannelType dTCH }, rB_Identity tsc_RB20 } } } }, dlconnectedTrCHList OMIT }
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_2
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
 ulconnectedTrCHList {
  {
   trchid tsc_UL_DCH1,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader ,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DTCH1,
      logicalChannelType dTCH
     },
     rB_Identity tsc_RB10
    }
   }
  },
  {
   trchid tsc_UL_DCH5,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader ,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DCCH1,
      logicalChannelType dCCH
     },
     rB_Identity tsc_RB1
    },
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader ,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DCCH2,
      logicalChannelType dCCH
     },
     rB_Identity tsc_RB2
    },
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader ,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DCCH3,
      logicalChannelType dCCH
     },
     rB_Identity tsc_RB3
    },
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader ,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DCCH4,
      logicalChannelType dCCH
     },
     rB_Identity tsc_RB4
    }
```

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ASN.1 Type Constraint Declaration
Constraint Value
} } }, dlconnectedTrCHList OMIT }
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH5,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH1,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB1
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH2,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB2
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH3,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB3
        },
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType dch,
            logicalChannelIdentity tsc_UL_DCCH4,
            logicalChannelType dCCH
          },
          rB_Identity tsc_RB4
        }
      }
    }
  },
  dlconnectedTrCHList OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH_3DTCH
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
 ulconnectedTrCHList {
  {
   trchid tsc_UL_DCH1,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DTCH1,
      logicalChannelType dTCH
     },
     rB_Identity tsc_RB10
    }
   }
  },
  {
   trchid tsc_UL_DCH2,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DTCH2,
      logicalChannelType dTCH
     },
     rB_Identity tsc_RB11
    }
   }
  },
  {
   trchid tsc_UL_DCH3,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DTCH3,
      logicalChannelType dTCH
     },
     rB_Identity tsc_RB12
    }
   }
  },
  {
   trchid tsc_UL_DCH5,
   trCH_LogCHMappingList {
    {
     logicalChannel_Mapping ul_LogicalChannelMapping : {
      macHeaderManipulation normalMacHeader,
      ul_TransportChannelType dch,
      logicalChannelIdentity tsc_UL_DCCH1,
      logicalChannelType dCCH
     },
     rB_Identity tsc_RB1
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
      },
      {
        logicalChannel_Mapping ul_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          ul_TransportChannelType dch,
          logicalChannelIdentity tsc_UL_DCCH2,
          logicalChannelType dCCH
        },
        rB_Identity tsc_RB2
      },
      {
        logicalChannel_Mapping ul_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          ul_TransportChannelType dch,
          logicalChannelIdentity tsc_UL_DCCH3,
          logicalChannelType dCCH
        },
        rB_Identity tsc_RB3
      },
      {
        logicalChannel_Mapping ul_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          ul_TransportChannelType dch,
          logicalChannelIdentity tsc_UL_DCCH4,
          logicalChannelType dCCH
        },
        rB_Identity tsc_RB4
      }
    }
  }
 } ,
 dlconnectedTrCHList OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UE_IdDefIMSI
Group :
ASN1 Type : InitialUE_Identity
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
imsi : o_ConvertIMSI(px_IMSI_Def)
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UE_Info (p_U_RNTI : U_RNTI ; p_CRNTI : BITSTRING)
Group :
ASN1 Type : UE_Info
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  u_RNTI p_U_RNTI,
  c_RNTI p_CRNTI
}
```

Detailed Comments : p_SRNCId: BITSTRING (SIZE (12))
p_SRNTI: BITSTRING (SIZE (20))
p_CRNTI: BITSTRING (SIZE (16))

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_AddReconfTransChInfoListDCCH_13_6k
Group :
ASN1 Type : UL_AddReconfTransChInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{{
   ul_TransportChannelType dch,
   transportChannelIdentity tsc_UL_DCH5,
   transportFormatSet dedicatedTransChTFS: c_DCH_148_TTI_10_TFS_UE
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_AddReconfTransChInfoListDCCH_3_4k
Group :
ASN1 Type : UL_AddReconfTransChInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{{
   ul_TransportChannelType dch,
   transportChannelIdentity tsc_UL_DCH5,
   transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL
}}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_CommTrChInfoDCCH_13_6k
Group :
ASN1 Type : UL_CommonTransChInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  tfc_Subset OMIT,
  prach_TFCS OMIT,
  modeSpecificInfo fdd:{
    ul_TFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_DPCH_13_6_StandAlone (p_UL_ScramblingCode : UL_ScramblingCode)
Group :
ASN1 Type : UL_DPCH_Info
Derivation Path :
Encoding Variation :
Comments : this DPCH is the same as stand−alone UL:13.6 DL:13.6 kbps SRBs for DCCH. Used for RLC AM and UM mode testing.

Constraint Value

```
{
  ul_DPCH_PowerControlInfo fdd:{
    dpcch_PowerOffset tsc_DPCCH_PowerOffset,
    pc_Preamble 1,
    sRB_delay 7,
    powerControlAlgorithm algorithm1: tsc_TpcStepSize
  },
  modeSpecificInfo fdd :{
    scramblingCodeType longSC ,
    scramblingCode p_UL_ScramblingCode,
    numberOfDPDCH OMIT,
    spreadingFactor tsc_UL_DPDCH_SF_SRB,
    tfci_Existence TRUE,
    numberOfFBI_Bits OMIT,
    puncturingLimit pl1
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_DPCH_InfoPredefSIB16
Group :
ASN1 Type : UL_DPCH_InfoPredef
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ul_DPCH_PowerControlInfo fdd : {
    powerControlAlgorithm algorithm1 : 1
  },
  modeSpecificInfo fdd : {
    tfci_Existence FALSE, -- @sic R5-050947 sic@
    puncturingLimit pl0_88
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_URNTI_Short (p_SRNC_Id : SRNC_Identity ; p_SRNTI_2 : S_RNTI_2)
Group :
ASN1 Type : U_RNTI_Short
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  srnc_Identity p_SRNC_Id,
  s_RNTI_2 p_SRNTI_2
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_U_RNTI
Group :
ASN1 Type : U_RNTI
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  srnc_Identity '000000000001'B,
  s_RNTI '00000000000000000001'B
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_U_RNTI_Def
Group :
ASN1 Type : U_RNTI
Derivation Path :
Encoding Variation :
Comments : Default U_RNTI identity

Constraint Value

```
{
  srnc_Identity px_SRNC_Id,
  s_RNTI px_SRNTI
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_AM_RLC
Group :
ASN1 Type : DL_AM_RLC_Mode
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  inSequenceDelivery TRUE,
  receivingWindowSize rw128,
  dl_RLC_StatusInfo {
    timerStatusProhibit tsp200,
    --timerEPC OMIT @sic Rel5 sic@
    missingPDU_Indicator TRUE,
    timerStatusPeriodic OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_122_AMR (p_DL_CommonInformation : DL_CommonInformation;
p_SecondaryScramblingCode : SecondaryScramblingCode)

Group :

ASN1 Type : DL_DPCHInfo

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  dl_CommonInformation p_DL_CommonInformation,
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode,
       sf_AndCodeNumber tsc_DL_DPCH1_ChC_Speech
    } },
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_64K_CS (p_DL_CommonInformation : DL_CommonInformation;
p_SecondaryScramblingCode : SecondaryScramblingCode)

Group :

ASN1 Type : DL_DPCHInfo

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  dl_CommonInformation p_DL_CommonInformation,
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { {secondaryScramblingCode p_SecondaryScramblingCode ,
       sf_AndCodeNumber tsc_DL_DPCH1_ChC_64k_CS
    } },
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_AMR (p_sf : SF512_AndCodeNumber; p_DL_CommonInformation : DL_CommonInformation)

Group :

ASN1 Type : DL_DPCHInfo

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  dl_CommonInformation p_DL_CommonInformation ,
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( ( tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512
    dl_ChannelisationCodeList { { secondaryScramblingCode 1,
       sf_AndCodeNumber p_sf
    } },
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCI_PO1 0,
  powerOffsetOfTPC_PO2 0,
  powerOffsetOfPILOT_PO3 0,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_SRB_StandAloneDPCH_Offset (p_SecondaryScramblingCode : SecondaryScramblingCode)

Group :

ASN1 Type : DL_DPCHInfo

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset ( tsc_DL_DPCH1_SFP_SRB),
  dl_DPCH_InfoPerRL fdd : {
    pCPICH_UsageForChannelEst mayBeUsed,
    dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
    -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
    -- Actual value DPCH-FrameOffset = IE value * 256
    -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,
    dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode ,
       sf_AndCodeNumber tsc_DL_DPCH1_ChC_SRB
    } },
    tpc_CombinationIndex 0
  },
  powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
  powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
  powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
  dl_TxPower tsc_DL_TxPower_DPCH,
  dl_TxPowerMax 15,
  dl_TxPowerMin -35
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB1_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  cn_CommonGSM_MAP_NAS_SysInfo p_CellInfo.lac,
  cn_DomainSysInfoList {{cn_DomainIdentity ps_domain,
      cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.rac, p_CellInfo.nmo ),
      cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength.cN_PS_DRX_CycleLength
    },
    {cn_DomainIdentity cs_domain,
      cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.t3212, o_IntToOct ( p_CellInfo.attFlag,1) ),
      cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength
    }
  },
  ue_ConnTimersAndConstants {
    t_301 OMIT,
    n_301 OMIT,
    t_302 OMIT,
    n_302 OMIT,
    t_304 OMIT,
    n_304 OMIT,
    t_305 OMIT,
    t_307 OMIT,
    t_308 OMIT,
    t_309 OMIT,
    t_310 OMIT,
    n_310 OMIT,
    t_311 OMIT,
    t_312 OMIT,
    n_312 OMIT,
    t_313 OMIT,
    n_313 OMIT,
    t_314 OMIT,
    t_315 OMIT,
    n_315 OMIT,
    t_316 OMIT,
    t_317 OMIT
  },
  ue_IdleTimersAndConstants {
    t_300 ms4000,
    n_300 tsc_N300,
    t_312 10,
    n_312 s1
  },
  v3a0NonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB3_DefUTRAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType3
Derivation Path :
Encoding Variation :
Comments : Default system information block type 3 for UTRAN only

Constraint Value

```
{
  sib4indicator TRUE,
  cellIdentity INT_TO_BIT ( p_CellInfoCfg.cellId , 28 ) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP: NULL, −−@sic ER1769 sic@
    modeSpecificInfo fdd : {
      s_Intrasearch 8,
      s_Intersearch 8,
      s_SearchHCS OMIT,
      rat_List OMIT,
      q_QualMin −24,
      q_RxlevMin −40 −− (IE value * 2) + 1
    },
    q_Hyst_l_S 2,
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList { notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred
    }
  }
  −− nonCriticalExtensions OMIT @sic T1s−040086 Rel5 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB3_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType3
Derivation Path :
Encoding Variation :
Comments : Default system information block type 3 for UTRAN/GERAN

Constraint Value

```
{
  sib4indicator TRUE,
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8,
      s_Intersearch 8,
      s_SearchHCS OMIT,
      rat_List {{
          rat_Identifier gsm,
          s_SearchRAT −16,
          s_HCS_RAT OMIT,
          s_Limit_SearchRAT 0
      }},
      q_QualMin −24,
      q_RxlevMin −40 −− (IE value * 2) + 1
    },
    q_Hyst_l_S 2,
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList { notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred,
      notBarred
    }
  }
  −− nonCriticalExtensions OMIT @sic T1s−040086 Rel5 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType4
Derivation Path :
Encoding Variation :
Comments : Default system information block type 4 for UTRAN only, used in connected mode.

Constraint Value

```
{
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8, −− IE value * 2
      s_Intersearch 8, −− IE value * 2
      s_SearchHCS OMIT,
      rat_List OMIT,
      q_QualMin −24,
      q_RxlevMin −40 −− (IE value * 2) + 1
    },
    q_Hyst_l_S 2,
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList OMIT
  }
  −− nonCriticalExtensions OMIT @sic T1s−040086 Rel5 sic@
}
```

Detailed Comments : Similar to c_SIB3_Def

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)
Group :
ASN1 Type : SysInfoType4
Derivation Path :
Encoding Variation :
Comments : Default system information block type 4 for UTRAN/GERAN, used in connected mode.

Constraint Value

```
{
  cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
  cellSelectReselectInfo {
    mappingInfo OMIT,
    cellSelectQualityMeasure cpich_RSCP : NULL,
    modeSpecificInfo fdd : {
      s_Intrasearch 8,
      s_Intersearch 8,
      s_SearchHCS OMIT,
      rat_List {{
          rat_Identifier gsm,
          s_SearchRAT −16,
          s_HCS_RAT OMIT,
          s_Limit_SearchRAT 0
      }},
      q_QualMin −24,
      q_RxlevMin −40 −− (IE value * 2) + 1
    },
    q_Hyst_l_S 2, −−@sic gt_040007 sic@
    t_Reselection_S 0,
    hcs_ServingCellInformation OMIT,
    maxAllowedUL_TX_Power 21
  },
  cellAccessRestriction {
    cellBarred notBarred : NULL,
    cellReservedForOperatorUse notReserved,
    cellReservationExtension notReserved,
    accessClassBarredList OMIT
  }
  −− nonCriticalExtensions OMIT @sic T1s−040086 Rel5 sic@
}
```

Detailed Comments : Similar to c_SIB3_Def

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB5_Def (p_CellInfo : CellInfoCfg)
Group :
ASN1 Type : SysInfoType5
Derivation Path :
Encoding Variation :
Comments : Default system information block type 5

Constraint Value

```
{
  sib6indicator TRUE,
  pich_PowerOffset p_CellInfo.powerPICH,
  modeSpecificInfo fdd : {
    aich_PowerOffset p_CellInfo.powerAICH
  },
  primaryCCPCH_Info OMIT,
  prach_SystemInformationList {{
      prach_RACH_Info {
        modeSpecificInfo fdd : {
          availableSignatures tsc_PRACH1_Signatures,
          availableSF tsc_PRACH1_SF,
          preambleScramblingCodeWordNumber tsc_PRACH1_ScrC,
          puncturingLimit pl1,
          availableSubChannelNumbers '111111111111'B
        }
      },
      transportChannelIdentity tsc_RACH1,
      rach_TransportFormatSet commonTransChTFS : c_RACH_TFS_UE,
      rach_TFCS normalTFCI_Signalling : complete : {
        ctfcSize ctfc2Bit : {{
            ctfc2 0,
            powerOffsetInformation { gainFactorInformation computedGainFactors : 0,
              powerOffsetPp_m 0
            }
          },
          { ctfc2 1,
            powerOffsetInformation {
              gainFactorInformation signalledGainFactors : {
                modeSpecificInfo fdd : {
                  gainFactorBetaC 11
                },
                gainFactorBetaD 15,
                referenceTFC_ID 0 },
              powerOffsetPp_m 0
            }
          }
      } },
      prach_Partitioning fdd : {{
          accessServiceClass_FDD OMIT
        },
        {
          accessServiceClass_FDD {
            availableSignatureStartIndex 0,
            availableSignatureEndIndex 7,
            assignedSubChannelNumber '1111'B
          }
        },
        {
          accessServiceClass_FDD OMIT
        },
        {
          accessServiceClass_FDD {
            availableSignatureStartIndex 0,
            availableSignatureEndIndex 7,
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        assignedSubChannelNumber '1111'B
       }
      },
      {
       accessServiceClass_FDD OMIT
      },
      {
       accessServiceClass_FDD {
        availableSignatureStartIndex 0,
        availableSignatureEndIndex 7,
        assignedSubChannelNumber '1111'B
       }
      },
      {
       accessServiceClass_FDD OMIT
      },
      {
       accessServiceClass_FDD {
        availableSignatureStartIndex 0,
        availableSignatureEndIndex 7,
        assignedSubChannelNumber '1111'B
       }
    }},
    persistenceScalingFactorList { psf0_9, psf0_9, psf0_9, psf0_9, psf0_9, psf0_9 },
    ac_To_ASC_MappingTable { 6, 5, 4, 3, 2, 1, 0 },
    modeSpecificInfo fdd : {
     primaryCPICH_TX_Power 31,
     constantValue −10,
     prach_PowerOffset {
      powerRampStep 3, −− db
      preambleRetransMax 4
     },
     rach_TransmissionParameters {
      mmax 2,
      nb01Min 3,
      nb01Max 10
     },
     aich_Info {
      channelisationCode256 tsc_AICH1_ChC,
      sttd_Indicator FALSE,
      aich_TransmissionTiming e0
     }
    }
}},
sCCPCH_SystemInformationList {{
    secondaryCCPCH_Info {
     modeSpecificInfo fdd : {
      dummy1 mayBeUsed, −− mandatory ie
      secondaryScramblingCode OMIT,
      sttd_Indicator FALSE,
      sf_AndCodeNumber tsc_S_CCPCH1_ChC,
      pilotSymbolExistence FALSE,
      tfci_Existence TRUE,
      positionFixedOrFlexible flexible,
      timingOffset 0
     }
    },
    tfcs normalTFCI_Signalling : complete: {ctfcSize ctfc4Bit : {
       {ctfc4 0 }, {ctfc4 1 }, {ctfc4 2 }, {ctfc4 3 }, {ctfc4 4}, {ctfc4 5 }, {ctfc4 6 }, {ctfc4 8}}},
    fach_PCH_InformationList { {
       transportFormatSet commonTransChTFS : c_PCH_TFS_UE,
       transportChannelIdentity tsc_PCH1, −− PCH
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        ctch_Indicator FALSE
      },
      {
        transportFormatSet commonTransChTFS : c_FACH_TFS_UE,
        transportChannelIdentity tsc_FACH1, -- FACH
        ctch_Indicator FALSE
      },
      {
        transportFormatSet commonTransChTFS : c_FACH_TFS_PS_UE,
        transportChannelIdentity tsc_FACH2, -- FACH
        ctch_Indicator FALSE
      }
    },
    pich_Info fdd :{
      channelisationCode256 tsc_PICH1_ChC,
      pi_CountPerFrame e18,
      sttd_Indicator FALSE
    }
  }},
  cbs_DRX_Level1Information OMIT
  -- nonCriticalExtensions OMIT @sic T1s-040086 Rel5 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_TrChInfoRACH1
Group :
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    { trchid tsc_RACH1,
      transportChannelInfo c_RACH_TFS
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_Rx, -- sent to SS
  dlconnectedTrCHList OMIT,
  dlTFCS OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_TrLogMappingRACH2
Group :
ASN1 Type : TrCH_LogCHMappingList1
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_RACH1,
      trCH_LogCHMappingList {
        {
          logicalChannel_Mapping ul_LogicalChannelMapping : {
            macHeaderManipulation normalMacHeader,
            ul_TransportChannelType rach,
            logicalChannelIdentity tsc_UL_CCCH5,
            logicalChannelType cCCH
          },
          rB_Identity tsc_RB0
        }
      }
    }
  },
  dlconnectedTrCHList OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_UL_AM_RLC
Group :
ASN1 Type : UL_AM_RLC_Mode
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  transmissionRLC_Discard noDiscard : dat15,
  transmissionWindowSize tw128,
  timerRST tr500,
  max_RST rst4, −−@sic T1s−040165 sic@
  pollingInfo {
    timerPollProhibit tpp200,
    timerPoll tp200, −−@sic T1s−040165 sic@
    poll_PDU OMIT,
    poll_SDU sdu1,
    lastTransmissionPDU_Poll TRUE,
    lastRetransmissionPDU_Poll TRUE,
    pollWindow pw99,
    timerPollPeriodic OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_UL_DPCH_Info (p_SprdFct: SpreadingFactor; p_PuncLimit: PuncturingLimit; p_UL_ScramblingCode : UL_ScramblingCode)

Group :

ASN1 Type : UL_DPCH_Info

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  ul_DPCH_PowerControlInfo fdd:{
    dpcch_PowerOffset tsc_DPCCH_PowerOffset,
    pc_Preamble 1,
    sRB_delay 7,
    powerControlAlgorithm algorithm1: tsc_TpcStepSize
  },
  modeSpecificInfo fdd :{
    scramblingCodeType longSC ,
    scramblingCode p_UL_ScramblingCode ,
    numberOfDPDCH OMIT,
    spreadingFactor p_SprdFct,
    tfci_Existence TRUE,
    numberOfFBI_Bits OMIT,
    puncturingLimit p_PuncLimit
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_DCH_148_TFS_DL_RM160

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : c_DCH_148_TFS_DL.

Encoding Variation :

Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

REPLACE semistaticTF_Information.rateMatchingAttribute BY 160

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : cd_DCH_148_TFS_UL_RM160
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path : c_DCH_148_TFS_UL.
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

REPLACE semistaticTF_Information.rateMatchingAttribute BY 160

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : cd_DCH_148_TTI_10_TFS_RM160
Group :
ASN1 Type : CommonOrDedicatedTFS
Derivation Path : c_DCH_148_TTI_10_TFS.
Encoding Variation :
Comments : transport format set for signalling bearer on dedicated channel

Constraint Value

REPLACE semistaticTF_Information.rateMatchingAttribute BY 160

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU size =148 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_AM_RLC_SRB
Group :
ASN1 Type : DL_AM_RLC_Mode
Derivation Path : cb_DL_AM_RLC.
Encoding Variation :
Comments :

Constraint Value

REPLACE receivingWindowSize BY rw32

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_AM_RLC_SRB_DefCfg1
Group :
ASN1 Type : DL_AM_RLC_Mode
Derivation Path : cb_DL_AM_RLC.
Encoding Variation :
Comments : The value specified in 25.331 sec 13.7 for default configuration id 1. This is required for 60.4

Constraint Value

REPLACE dl_RLC_StatusInfo.timerStatusProhibit BY tsp100,
REPLACE dl_RLC_StatusInfo.missingPDU_Indicator BY FALSE,
REPLACE dl_RLC_StatusInfo.timerStatusPeriodic BY tsp100

Detailed Comments : ANITE added this constraint

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_AM_RLC_SRB_IR_G
Group :
ASN1 Type : DL_AM_RLC_Mode
Derivation Path : cb_DL_AM_RLC.
Encoding Variation :
Comments : The value specified in 25.331 sec 13.7 for default configuration id 3. This is required for 60.x test cases

Constraint Value

REPLACE dl_RLC_StatusInfo.timerStatusProhibit BY tsp100,
REPLACE dl_RLC_StatusInfo.missingPDU_Indicator BY FALSE,
REPLACE dl_RLC_StatusInfo.timerStatusPeriodic BY tsp300

Detailed Comments : ANITE added this constraint

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path : c_DL_CommonInformationDCH_DPCH_Offset.
Encoding Variation :
Comments :

Constraint Value

REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.positionFixedOrFlexible BY fixed,
REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.tfci_Existence BY FALSE

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_CommonInformationDCH_DPCH_Offset2 (p_Sf: SF512_AndPilot)
Group :
ASN1 Type : DL_CommonInformation
Derivation Path : c_DL_CommonInformationDCH_DPCH_Offset.
Encoding Variation :
Comments :

Constraint Value

REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.positionFixedOrFlexible BY fixed,
REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.tfci_Existence BY FALSE,
REPLACE modeSpecificInfo.fdd.defaultDPCH_OffsetValue BY tsc_S_RNTI_2

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_DPCH_122_AMR_Offset2 (p_DL_CommonInformation : DL_CommonInformation; p_SecondaryScramblingCode : SecondaryScramblingCode)
Group :
ASN1 Type : DL_DPCHInfo
Derivation Path : cb_DL_DPCH_122_AMR.
Encoding Variation :
Comments :

Constraint Value

REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_DPCH_64K_CS_Offset2 (p_DL_CommonInformation : DL_CommonInformation; p_SecondaryScramblingCode : SecondaryScramblingCode)
Group :
ASN1 Type : DL_DPCHInfo
Derivation Path : cb_DL_DPCH_64K_CS.
Encoding Variation :
Comments :

Constraint Value

REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)

Detailed Comments :

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_AMR_Offset2 (p_sf : SF512_AndCodeNumber; p_DL_CommonInformation : DL_CommonInformation)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_DL_DPCH_SRB_StandAloneDPCH_Offset2 (p_SecondaryScramblingCode : SecondaryScramblingCode)
Group	:
ASN1 Type	: DL_DPCHInfo
Derivation Path	: cb_DL_DPCH_SRB_StandAloneDPCH_Offset.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dl_CommonInformation BY cd_DL_CommonInformationDCH_DPCH_Offset2(tsc_DL_DPCH1_SFP_SRB), REPLACE dl_DPCH_InfoPerRL.fdd.dpch_FrameOffset BY (((tsc_S_RNTI_2*512) MOD 38400) / 256)	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB11_InterRATNoSIB12Ind (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg ; p_InterRAT_1, p_InterRAT_2 : G_CellConfigInfo)
Group	:
ASN1 Type	: SysInfoType11
Derivation Path	: c_SIB11_3_Intra3_Inter2_InterRAT_Def.
Encoding Variation	:
Comments	: Default system information block type 11. To be used by cell A,B,C,G and H: − 5 intra cells frequency of the same frequency − 3 inter cell frequency of the same frequency.
Constraint Value	
REPLACE sib12indicator BY FALSE	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB5_DefMulRatHo (p_CellInfo : CellInfoCfg)
Group	:
ASN1 Type	: SysInfoType5
Derivation Path	: cb_SIB5_Def.
Encoding Variation	:
Comments	: Default system information block type 5 for multi RAT HO test
Constraint Value	
REPLACE sib6indicator BY FALSE	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_SIB7_DefMulRatHo
Group	:
ASN1 Type	: SysInfoType7
Derivation Path	: c_SIB7_Def.
Encoding Variation	:
Comments	: Default system information block type 7
Constraint Value	
REPLACE prach_Information_SIB6_List BY OMIT	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_122_AMR_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_122_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dlconnectedTrCHList.[3].transportChannelInfo BY cd_DCH_148_TFS_DL_RM160 −−@sic G3t040005 sic@	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_13_6_StandAlone_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_13_6_StandAlone.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE dlconnectedTrCHList.[0].transportChannelInfo BY cd_DCH_148_TTI_10_TFS_RM160	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoDL_2_0_To3_IR_G (p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS)
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoDL_2_0_To3.
Encoding Variation	:
Comments	: With CTFC list : 0, 1, 2, 3
Constraint Value	
REPLACE dlTFCS BY c_TFCS_Cmpl0_1_2_3_Tx (c_PowerOffsetInfoBelow64k)	
Detailed Comments	:

ASN.1 Type Constraint Declaration	
Constraint Name	: cd_TrChInfoUL_122_AMR_RM160
Group	:
ASN1 Type	: TrCHInfo
Derivation Path	: c_TrChInfoUL_122_AMR.
Encoding Variation	:
Comments	:
Constraint Value	
REPLACE ulconnectedTrCHList.[3].transportChannelInfo BY cd_DCH_148_TFS_UL_RM160 −−@sic G3t040005 Comments3 sic@	
Detailed Comments	:

ASN.1 Type Constraint Declaration

Constraint Name : cd_TrChInfoUL_13_6_StandAlone_RM160
Group :
ASN1 Type : TrCHInfo
Derivation Path : c_TrChInfoUL_13_6_StandAlone.
Encoding Variation :
Comments :

Constraint Value

REPLACE ulconnectedTrCHList.[0].transportChannelInfo BY cd_DCH_148_TTI_10_TFS_RM160

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_UL_AM_RLC_SRB
Group :
ASN1 Type : UL_AM_RLC_Mode
Derivation Path : cb_UL_AM_RLC.
Encoding Variation :
Comments :

Constraint Value

REPLACE transmissionWindowSize BY tw32,
REPLACE max_RST BY rst1

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cd_UL_AM_RLC_SRB_DefCfg1
Group :
ASN1 Type : UL_AM_RLC_Mode
Derivation Path : cb_UL_AM_RLC.
Encoding Variation :
Comments : The value specified in 25.331 sec 13.7 for default configuration id 1. This is required for 60.4

Constraint Value

REPLACE transmissionWindowSize BY tw128,
REPLACE max_RST BY rst1,
REPLACE timerRST BY tr300,
REPLACE pollingInfo. timerPollProhibit BY OMIT,
REPLACE pollingInfo. timerPoll BY OMIT,
REPLACE pollingInfo. poll_PDU BY OMIT,
REPLACE pollingInfo. poll_SDU BY OMIT,
REPLACE pollingInfo.lastTransmissionPDU_Poll BY FALSE,
REPLACE pollingInfo.lastRetransmissionPDU_Poll BY FALSE,
REPLACE pollingInfo.pollWindow BY OMIT,
REPLACE pollingInfo. timerPollPeriodic BY tper100

Detailed Comments : ANITE added this constraint

ASN.1 Type Constraint Declaration

Constraint Name	:	cd_UL_AM_RLC_SRB_IR_G
Group	:	
ASN1 Type	:	UL_AM_RLC_Mode
Derivation Path	:	cb_UL_AM_RLC.
Encoding Variation	:	
Comments	:	The value specified in 25.331 sec 13.7 for default configuration id 3. This is required for 60.x test cases

Constraint Value

REPLACE transmissionWindowSize BY tw128,
REPLACE max_RST BY rst1,
REPLACE timerRST BY tr300,
REPLACE pollingInfo. timerPollProhibit BY OMIT,
REPLACE pollingInfo. timerPoll BY OMIT,
REPLACE pollingInfo. poll_PDU BY OMIT,
REPLACE pollingInfo. poll_SDU BY OMIT,
REPLACE pollingInfo.lastTransmissionPDU_Poll BY FALSE,
REPLACE pollingInfo.lastRetransmissionPDU_Poll BY FALSE,
REPLACE pollingInfo.pollWindow BY OMIT,
REPLACE pollingInfo. timerPollPeriodic BY tper300

Detailed Comments : ANITE added this constraint

ASN.1 Type Constraint Declaration

Constraint Name : cr_RadioAccessCapabilityDef (
p_PDCP_Capability: PDCP_Capability;
p_DL_TurboSupport: TurboSupport;
p_UL_TurboSupport: TurboSupport;
p_SimultaneousSCCPCH_DPCH_Reception: SimultaneousSCCPCH_DPCH_Reception;
p_SecurityCapability: SecurityCapability)

Group :

ASN1 Type : UE_RadioAccessCapability

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  pdcp_Capability p_PDCP_Capability,
  rlc_Capability {
    totalRLC_AM_BufferSize px_TotalRLC_AM_BufferSize,
    maximumRLC_WindowSize px_MaxRLC_WindowSize,
    maximumAM_EntityNumber px_MaxAM_EntityNumberRLC_Cap
  },
  transportChannelCapability {
    dl_TransChCapability {
      maxNoBitsReceived px_DL_MaxTB_Bits,
      maxConvCodeBitsReceived px_DL_MaxCC_TB_Bits,
      turboDecodingSupport p_DL_TurboSupport,
      maxSimultaneousTransChs px_DL_MaxTrCHs,
      maxSimultaneousCCTrCH_Count px_DL_MaxCCTrCH,
      maxReceivedTransportBlocks px_DL_MaxTTI_TB,
      maxNumberOfTFC px_DL_MaxTFS,
      maxNumberOfTF px_DL_MaxTF
    },
    ul_TransChCapability {
      maxNoBitsTransmitted px_UL_MaxTB_Bits,
      maxConvCodeBitsTransmitted px_UL_MaxCC_TB_Bits,
      turboEncodingSupport p_UL_TurboSupport,
      maxSimultaneousTransChs px_UL_MaxTrCHs,
      modeSpecificInfo fdd: NULL,
      maxTransmittedBlocks px_UL_MaxTTI_TB,
      maxNumberOfTFC px_UL_MaxTFS,
      maxNumberOfTF px_UL_MaxTF
    }
  },
  rf_Capability {fddRF_Capability
    {
      ue_PowerClass px_UE_PowerClass,
      txRxFrequencySeparation ?
    },
    tddRF_Capability OMIT},
  physicalChannelCapability {
    fddPhysChCapability
    {
      downlinkPhysChCapability {
        maxNoDPCH_PDSCH_Codes px_MaxNoDPCH_PDSCH_Codes,
        maxNoPhysChBitsReceived px_MaxNoPhysChBitsReceived,
        supportForSF_512 pc_SupportForSF_512,
        supportOfPDSCH pc_SupportOfPDSCH,
        simultaneousSCCPCH_DPCH_Reception p_SimultaneousSCCPCH_DPCH_Reception
      },
      uplinkPhysChCapability {
        maxNoDPDCH_BitsTransmitted px_MaxNoDPDCH_BitsTransmitted,
        supportOfPCPCH pc_SupportOfPCPCH
      }
    } ,
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
    tddPhysChCapability OMIT
  },
  ue_MultiModeRAT_Capability {
    multiRAT_CapabilityList {
      supportOfGSM pc_SupportOfGSM,
      supportOfMulticarrier pc_SupportOfMulticarrier
    },
    multiModeCapability fdd
  },
  securityCapability p_SecurityCapability,
  ue_positioning_Capability {
    standaloneLocMethodsSupported pc_UE_PositioningStandaloneLocMethodsSup,
    ue_BasedOTDOA_Supported pc_UE_PositioningBasedOTDOA_Sup,
    networkAssistedGPS_Supported px_UE_PositioningNetworkAssistedGPS_Sup,
    supportForUE_GPS_TimingOfCellFrames pc_UE_PositioningGPS_TimingOfCellFramesSup,
    supportForIPDL pc_UE_PositioningIPDL_Sup
  },
  measurementCapability ? --@sic VB R5s050167 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_CipheringModeCmdOn (p_CipheringAlgorithm : CipheringAlgorithm)
Group :
ASN1 Type : CipheringModeCommand
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
startRestart : p_CipheringAlgorithm
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityCheckInfo0
Group :
ASN1 Type : IntegrityCheckInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  messageAuthenticationCode tsc_MessAuthCode,
  rrc_MessageSequenceNumber tsc_MSN
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityProtectModify_NoSRB4(p1,p2,p3,p4 : RRC_MessageSequenceNumber)
Group :
ASN1 Type : IntegrityProtectionModeInfo
Derivation Path :
Encoding Variation :
Comments : Used in 60 series tests @sic G3t040005 sic@

Constraint Value

```
{
  integrityProtectionModeCommand modify : {
    dl_IntegrityProtActivationInfo {
      rrc_MessageSequenceNumberList {p1,p2,p3,p4 } -- fixed reasonnable value
    }
  },
  integrityProtectionAlgorithm uia1
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityProtectModify_P(p1,p2,p3,p4,p5 : RRC_MessageSequenceNumber)
Group :
ASN1 Type : IntegrityProtectionModeInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  integrityProtectionModeCommand modify : {
    dl_IntegrityProtActivationInfo {
      rrc_MessageSequenceNumberList {p1,p2,p3,p4,p5 } -- fixed reasonnable value
    }
  },
  integrityProtectionAlgorithm uia1
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityProtectStart (p_Integrityprotnumber: BITSTRING)
Group :
ASN1 Type : IntegrityProtectionModeInfo
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  integrityProtectionModeCommand startIntegrityProtection :{
    integrityProtInitNumber p_Integrityprotnumber
  },
  integrityProtectionAlgorithm uia1
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_Null_CipheringModeCommand
Group :
ASN1 Type : CipheringModeCommand
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

dummy : NULL

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4 : RLC_SequenceNumber)
Group :
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ) }
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_20 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20 : RLC_SequenceNumber)

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ),
  c_RB_ActTimeInfo ( tsc_RB20, p_RLC_SN20 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_20_21 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20, p_RLC_SN21 : RLC_SequenceNumber)

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ),
  c_RB_ActTimeInfo ( tsc_RB20, p_RLC_SN20 ) ,
  c_RB_ActTimeInfo ( tsc_RB21, p_RLC_SN21 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_20_22 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN20, p_RLC_SN22 : RLC_SequenceNumber)

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ),
  c_RB_ActTimeInfo ( tsc_RB20, p_RLC_SN20 ) ,
  c_RB_ActTimeInfo ( tsc_RB22, p_RLC_SN22 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_21 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4, p_RLC_SN21 : RLC_SequenceNumber)

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
  c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ),
  c_RB_ActTimeInfo ( tsc_RB21, p_RLC_SN21 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoListSRBs_NoSRB4 (p_RLC_SN1, p_RLC_SN2, p_RLC_SN3 : RLC_SequenceNumber)

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo ( tsc_RB1, p_RLC_SN1 ) ,
  c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
  c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ) }
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RRC_SecModeCmdCiphInt (
p_RRC_Ti : RRC_TransactionIdentifier;
p_CipheringModeCommand : CipheringModeCommand;
p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList ;
p_ActTimeDPCH : INTEGER;
p_cn_domain : CN_DomainIdentity;
p_integrityMode : IntegrityProtectionModeInfo;
p_SecurityCapability:BITSTRING;
p_SystemSpecCap: InterRAT_UE_SecurityCapList)

Group :

ASN1 Type : SecurityModeCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
r3
:
{
  securityModeCommand_r3
  {
    rrc_TransactionIdentifier p_RRC_Ti,
    securityCapability
    {
      cipheringAlgorithmCap p_SecurityCapability,
      integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap
    },
    cipheringModeInfo
    {
      cipheringModeCommand p_CipheringModeCommand,
      activationTimeForDPCH p_ActTimeDPCH,
      rb_DL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList
    },
    integrityProtectionModeInfo p_integrityMode,
    cn_DomainIdentity p_cn_domain,
    ue_SystemSpecificSecurityCap p_SystemSpecCap -- @sic RASH T1-031470 sic@
  },
  laterNonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RRC_SecModeCmdInt (p_RRC_Ti: RRC_TransactionIdentifier; p_cn_domain: CN_DomainIdentity; p_integrityMode : IntegrityProtectionModeInfo; p_SecurityCapability:BITSTRING; p_SystemSpecCap: InterRAT_UE_SecurityCapList)

Group :

ASN1 Type : SecurityModeCommand

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
r3
:
{
  securityModeCommand_r3
  {
    rrc_TransactionIdentifier p_RRC_Ti,
    securityCapability
    {
      cipheringAlgorithmCap p_SecurityCapability,
      integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap
    },
    cipheringModeInfo OMIT,
    integrityProtectionModeInfo p_integrityMode,
    cn_DomainIdentity p_cn_domain,
    ue_SystemSpecificSecurityCap p_SystemSpecCap --@sic RASH T1-031470 sic@
  },
  laterNonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_UE_SysSpecCap(p_SysSpecCap : BITSTRING)

Group :

ASN1 Type : InterRAT_UE_SecurityCapList

Derivation Path :

Encoding Variation :

Comments : @sic RASH T1-031470 sic@

Constraint Value

```
{ gsm :
  {
    gsmSecurityCapability p_SysSpecCap
}}
```

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_HandoverFailureInd (p_CellId : CellId ; p_SAPI:SAPI; p_PhysicalChId : PhysicalChId; p_G_LogicChType: G_LogicChType ; p_subcn : SubChannelNumber ; p_rfn : RFN ; p_Msg : PDU)

Group :

ASP Type : G_L2_DATA_IND

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	p_SAPI	0
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_rfn	The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : c_GSM_CL1_ComingFN_REQ(p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType; p_SubChannel : SubChannelNumber)

Group :

ASP Type : G_CL1_ComingFN_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_SubChannel	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15

Detailed Comments :

ASP Constraint Declaration

Constraint Name : c_G_CL1_ChangePowerLevel_CNF (p_CellId : CellId ; p_PhychId : PhysicalChId)
Group :
ASP Type : G_CL1_ChangePowerLevel_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhychId	Channel identifier

Detailed Comments :

ASP Constraint Declaration

Constraint Name : c_G_CL1_ChangePowerLevel_REQ (p_CellId : CellId ; p_PhyChId : PhysicalChId ; p_txPow : TX_Power)
Group :
ASP Type : G_CL1_ChangePowerLevel_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	Channel identifier
txPower	p_txPow	the new transmission power level. in dBuVemf()

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCnf(p_CellId : CellId; p_PhyChId :PhysicalChId)
Group :
ASP Type : G_CL1_CreateBasicPhyCh_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType1(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode; p_CipherKey : B64)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/F + FACCH/F + SACCH/F

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType1	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	@sic G3t050015 sic@
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4, TCH/AFS, TCH/EFS, TCH/FS and signalling only are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType10(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/F + SACCH/MD

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType10	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode.

This is dwonlink only channel, used to form a multislot configuration with type 8 channel.

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType11(p_CellId : CellId; p_PhyChId : PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC; p_PCCHParams : PCCCH_OrganisationParameters; p_PBCCHInfo : PBCCH_Info)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : PBCCH + PCCCH + PDTCH/F + PACCH/F + PTCCH/F

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType11	logical channels combined onto the basic physical channel
freqInfo	p_FreqInfo	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_Tsc	
channelSpecificPara	c_ChSpecificPara(OMIT, OMIT, c_PCCCH_Info(p_PCCHParams.bS_PBCCH_BLKS, p_PCCHParams.bS_PAG_BLKS_RES , p_PCCHParams.bS_PRACH_BLKS), p_PBCCHInfo)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType13(p_CellId : CellId; p_PhyChId : PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : PDTCH/F + PACCH/F + PTCCH/F

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType13	logical channels combined onto the basic physical channel
freqInfo	p_FreqInfo	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_Tsc	
channelSpecificPara	OMIT	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType18(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : E−TCH/F +E−IACCH/F + E−FACCH/F + E−SACCH/TF

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType18	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only E−TCH/F43.2, E−TCH/F32.0 and E−TCH/F28.8 are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType19(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : E−TCH/F +E−IACCH/F + E−FACCH/F + E−SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType19	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only E−TCH/F43.2, E−TCH/F32.0 and E−TCH/F28.8 are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType2(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode; p_CipherKey : B64)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1)

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType2	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only TCH/H2.4, TCH/H4.8, TCH/AHS, TCH/HS and signalling only are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType20(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : E−TCH/F + E−IACCH/F + E−SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType20	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only E−TCH/F43.2, E−TCH/F32.0 and E−TCH/F28.8 are allowed for p_ChMode.
This type of channel is used as additional channel in the multislot configuration.

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType21(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : E−TCH/F + E−IACCH/F + E−SACCH/MD

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType21	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only E−TCH/F43.2, E−TCH/F32.0 and E−TCH/F28.8 are allowed for p_ChMode.
This is dwonlink only channel, it is used to form a multislot configuration with one type 8 channel.

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType5(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_CipherKey : B64)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType5	logical channels combined onto the basic physical channel
freqInfo	c_FreqInfoBCCH(p_CellCfgInfo.bCCH_Freq)	
timeSlot	tsc_TN0	the time slot number of the physical channel
tSC	p_CellCfgInfo.bcc	
channelSpecificPara	c_ChSpecificPara(c_SDCCH4_Ch(p_CellCfgInfo.cipherMode, p_CipherKey, px_PowerLevel, px_TimingAdvance), c_CCCH_Info(p_CellCfgInfo.bS_PA_MFRMS, p_CellCfgInfo.bS_AG_BLKS_RES), OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType8(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/F + FACCH/F + SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType8	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode

ASP Constraint Declaration

Constraint Name : ca_BasicPhyChCombType9(p_CellId : CellId; p_PhyChId :PhysicalChId; p_CellCfgInfo : G_CellConfigInfo; p_TimeSlot: TN; p_ChMode:ChMode)

Group :

ASP Type : G_CL1_CreateBasicPhyCh_REQ

Derivation Path :

Comments : TCH/F + SACCH/M

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel created
channelCombination	tsc_BasicPhyChCombType9	logical channels combined onto the basic physical channel
freqInfo	p_CellCfgInfo.tCH_Freq	
timeSlot	p_TimeSlot	the time slot number of the physical channel
tSC	p_CellCfgInfo.tSC	
channelSpecificPara	c_ChSpecificPara(c_DedCh(p_ChMode, p_CellCfgInfo.cipherMode, p_CellCfgInfo.cipherKey, px_PowerLevel, px_TimingAdvance), OMIT,OMIT,OMIT)	
txPower	p_CellCfgInfo.downlinkPowerLevel	
bandIndicator	p_CellCfgInfo.bandIndicator	@sic T1−040055 sic@

Detailed Comments : Only TCH/F2.4, TCH/F4.8, TCH/F9.6, TCH/F14.4 and signalling only are allowed for p_ChMode.

This type of chaanels are used with type 8 channel to form a multislot configuration.

ASP Constraint Declaration

Constraint Name : ca_CellId(p_CellId : CellId; p_NCC, p_BCC : B3; p_TA :O1)

Group :

ASP Type : G_CL1_CreateCell_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
baseId	o_BitstringConcat(p_NCC,p_BCC,3,3)	
timingAdvance	o_OctToBit(p_TA)	@sic T1−040055 sic@

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_CellIdCnf(p_CellId : CellId)
Group :
ASP Type : G_CL1_CreateCell_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL1_CipheringControl_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_CiphMode : B1)
Group :
ASP Type : G_CL1_CipheringControl_REQ
Derivation Path :
Comments : The ASP is used to set the ciphering mode of the physical channel in the receiving direction, the kc and ciphering algorithm were set by the G_CL1CreateBasicPhyCh_REQ for the physical channel before calling the ASP.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel Identifier
rcvCipherMode	p_CiphMode	Ciphering Mode in SS receiving direction: 0 −> not ciphered 1 −> ciphered

Detailed Comments : For GSM dedicated physical channels, the ciphering mode of the SS shall be changed in three steps: (3GPP TS 44.018, clause 3.4.7)
Before the SS sends CIPHERING MODE COMMAND the SS is transmitting and receiving in the old ciphering mode (e.g. not ciphered), after the SS sends the CIPHERING MODE COMMAND the SS changes its receiving ciphering mode to the new ciphering mode (e.g. ciphered) and keeps transmitting in the old ciphering mode; then after receiving the CIPHERING MODE COMPLETE, or any correct L2 frame in the new ciphering mode, the SS changes the transmitting ciphering mode to the new mode.
The TTCN writer shall use the ASP before sending the CIPHERING MODE COMMAND to ensure the ciphering mode of the physical channel is changed in sufficient time, according to the 3 step procedure outlined above.

ASP Constraint Declaration

Constraint Name : ca_G_CL1_CipheringControl_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId)
Group :
ASP Type : G_CL1_CipheringControl_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel Identifier

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL1_CipherModeModify_CNF
Group :
ASP Type : G_CL1_CipherModeModify_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	?	
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL1_CipherModeModify_REQ(p_CellId: CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubCh : SubChannelNumber; p_CipherMode : CipherModeSetting)
Group :
ASP Type : G_CL1_CipherModeModify_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogCh	
subChannel	p_SubCh	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
cipherMode	p_CipherMode	the new cipher mode. definition see 3GPP TS 44.018 section 10.5.2.9

Detailed Comments :

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteCell_CNF (p_CellId : CellId) **Group** : **ASP Type** : G_CL1_DeleteCell_CNF **Derivation Path** : **Comments** :		
Parameter Name	**Parameter Value**	**Comments**
cellId	p_CellId	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteCell_REQ (p_CellId : CellId) **Group** : **ASP Type** : G_CL1_DeleteCell_REQ **Derivation Path** : **Comments** :		
Parameter Name	**Parameter Value**	**Comments**
cellId	p_CellId	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_G_CL1_DeleteChannel_CNF (p_CellId : CellId; p_PhyChId : PhysicalChId) **Group** : **ASP Type** : G_CL1_DeleteChannel_CNF **Derivation Path** : **Comments** :		
Parameter Name	**Parameter Value**	**Comments**
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel or the multi−slot configuration to be deleted
Detailed Comments :		

ASP Constraint Declaration

Constraint Name : ca_G_CL1_DeleteChannel_REQ (p_CellId : CellId; p_PhyChId : PhysicalChId)
Group :
ASP Type : G_CL1_DeleteChannel_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	identifier of the physical channel or the multi−slot configuration to be deleted

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_L2_UnitDataInd_MeasReport(p_CellID:CellId ; p_PhyChId : PhysicalChId ; p_Logch : G_LogicChType ; p_SubChNum :SubChannelNumber ; p_RFN :RFN; p_msg :PDU)
Group :
ASP Type : G_L2_UNITDATA_IND
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellID	
sAPI	0	0
physicalChId	p_PhyChId	Channel identifier
g_LogicChType	p_Logch	
subChannel	p_SubChNum	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame carrying the message
msg	p_msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_L2_Unitdata_Ind_ChannelReq(p_CellId: CellId; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_UNITDATA_IND

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	
physicalChId	p_PhyId	Channel identifier
g_LogicChType	p_LogType	
subChannel	OMIT	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame carrying the message
msg	p_Msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_Paging_REQ_PCH (p_CellId : CellId ;p_IMSI : HEXSTRING;p_CCCH_Conf : B3; p_N : INTEGER ; p_msg : PDU)

Group :

ASP Type : G_L2_Paging_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0
physicalChId	0	Channel identifier of the right CCCH_GROUP or PCCCH_GROUP
g_LogicChType	2	PCH
pAGING_GROUP	o_PagingGroupCalculate(p_IMSI, p_CCCH_Conf , p_N)	INTEGER
pagingMode	0	0 −− normal paging; 1−− exteded paging; 3 −− paging reorganization
msg	p_msg	paging message to be sent

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo1(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_CellAlloc : CellChDescr; p_RACHControlParam: RACHControlParam; p_BandInd : B1)
Group :
ASP Type : G_L2_SYSINFO_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType1	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType1(p_CellAlloc, p_RACHControlParam, p_BandInd)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo13(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_BCCHExt : B1; p_SI13RO: SI13RO)
Group :
ASP Type : G_L2_SYSINFO_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType13	
bCCHExt	p_BCCHExt	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType13(p_SI13RO)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo2(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_NeighBCCHs: NeighCellDescr;p_NCC_Permitted: O1;p_RACHControlParam: RACHControlParam)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType2	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType2(p_NeighBCCHs, p_NCC_Permitted, p_RACHControlParam)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo2bis(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_InstanceIndex : INTEGER; p_XneighCellFreqList :NeighCellDescr; p_RACHControlParam: RACHControlParam)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	p_InstanceIndex	
sysInfoType	tsc_SysInfoType2bis	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType2bis(p_XneighCellFreqList, p_RACHControlParam)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo2quater(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_InstanceIndex : INTEGER; p_BCCHExt : B1; p_SI2quaterRO: SI2quaterRO)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	p_InstanceIndex	
sysInfoType	tsc_SysInfoType2quater	
bCCHExt	p_BCCHExt	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType2quater(p_SI2quaterRO)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo3(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_CellIdentity : O2; p_LAI: LocAreaId_v ;p_ControlChDescr:ControlChDescr; p_CellOption: CellOptionBCCH; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI3RO: SI3RO)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType3	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType3(p_CellIdentity, p_LAI, p_ControlChDescr, p_CellOption, p_CellSelParam, p_RACHControlParam, p_SI3RO)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo4(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LAI: LocAreaId_v; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI4RO: SI4RO)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	tsc_BCCH	BCCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType4	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType4(p_LAI, p_CellSelParam, p_RACHControlParam, p_SI4RO)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo5(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LogicChType: G_LogicChType; p_NeighCellFreqList :NeighCellDescr)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogicChType	SACCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType5	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType5(p_NeighCellFreqList)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_SysInfo6(p_CellId :INTEGER;p_PhyCh :PhysicalChId; p_LogicChType: G_LogicChType; p_CellIdentity : O2; p_LAI:LocAreaId_v; p_CellOptionSACCH: CellOptionSACCH; p_NCCPermitted : NCCPermitted; p_SI6RO: SI6RO)

Group :

ASP Type : G_L2_SYSINFO_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	tsc_SAPI_0	0
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogicChType	SACCH
instanceIndex	0	
sysInfoType	tsc_SysInfoType6	
bCCHExt	'0'B	'0' indicates message sent on BCCH Norm '1' indicates message sent on BCCH Ext. Only valid for SI2quater, 7, 8, 13, 16, 17. Default value '0'. @sic R5−050980 sic@
msg	c_SysInfoType6(p_CellIdentity, p_LAI, p_CellOptionSACCH, p_NCCPermitted, p_SI6RO)	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cabr_G_L2_ACCESS_IND (p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType ; p_subcn : SubChannelNumber ; p_rfn : RFN ; p_burst : PDU)

Group :

ASP Type : G_L2_ACCESS_IND

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4.This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn	p_rfn	The reduced frame number of the frame carrying the burst
burst	p_burst	random access burst or handover access burst

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_G_L2_L2Estab_IND (p_CellId : CellId; p_Msg : PDU)

Group :

ASP Type : G_L2_L2Estab_IND

Derivation Path :

Comments : The ASP is used to receive an indication of that L2 multiple frame operation on the specified channel has been established.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4,This field shall be coded as 15 if it is not applicable.
sAPI	?	0, 3
establish_mode	?	Norm
rfn	?	The reduced frame number of the first frame carries the L2 SABM frame
msg	p_Msg	this field is present only when the establidg mode is CoRes (collision resolution)

Detailed Comments : see 3GPP TS 44.006 clause 7.1.1 and 7.1.3

ASP Constraint Declaration

Constraint Name : cas_G_L2_DATA_REQ (p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType : G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_DATA_REQ

Derivation Path :

Comments : The ASP is used to send L3 signalling message on the signalling channels or user data on the traffic channels to the UE/MS in acknowledged mode.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	p_SAPI	0
physicalChId	p_PhyId	Channel identifier
g_LogicChType	p_LogType	
subChannel	p_SubchNo	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	p_Msg	Signalling message or user data to be sent

Detailed Comments : Parameter fn is only used in the test cases which requires specific L3 message to be sent on specified frame number

ASP Constraint Declaration

Constraint Name : cas_G_L2_UNITDATA_REQ (p_CellId:CellId;p_PhysicalChId : PhysicalChId;p_G_LogicChType: G_LogicChType; p_subcn : SubChannelNumber;p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_UNITDATA_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
msg	p_Msg	Signalling message or user data to be sent

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cr_G_L2_Release_IND (p_CellId : INTEGER)

Group :

ASP Type : G_L2_Release_IND

Derivation Path :

Comments : The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt. @sic T1−041010 sic@

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	?	0
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
release_Mode	?	0 = normal release; 1 = local end release
outstanding_Indicator	?	whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cr_G_L2_DATA_IND (p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_DATA_IND

Derivation Path :

Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	p_SAPI	0
physicalChId	p_PhyId	Channel identifier
g_LogicChType	p_LogType	
subChannel	p_SubchNo	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL2_MeasRptControl_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId)

Group :

ASP Type : G_CL2_MeasRptControl_CNF

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL2_MeasRptControl_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubCh : SubChannelNumber; p_OnOff : BOOLEAN)
Group :
ASP Type : G_CL2_MeasRptControl_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogCh	Valid only for lofical channel types: SACCH/TF, SACCH/TH, SACCH/C8 and SACCH/C4
subChannel	p_SubCh	For SACCH/TH value is (0..1), for SACCH/C8 value is (0..7) and for SACCH/C4 value is (0..3)
sendMeasRpts	p_OnOff	Whether or not to report received Measurement Reports to the TTCN

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL2_Release_CNF(p_CellId : CellId; p_PhyCh : PhysicalChId)
Group :
ASP Type : G_CL2_Release_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CL2_Release_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId)
Group :
ASP Type : G_CL2_Release_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyCh	Channel identifier

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_G_RLC_ControlMsg_IND(p_CellId : CellId; p_PhyChId:PhysicalChId; p_msg: PDU)
Group :
ASP Type : G_RLC_ControlMsg_IND
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	Channel identifier
g_LogicChType	tsc_PACCH_F	PCCCH or PACCH or PTCCH
tBF_Direction	?	0 −− downlink; 1 −− uplink @sic T1s040615 sic@
tFI	?	temporary flow identity
rfn	?	the reduced frame number of the frame carrying this message
msg	p_msg	uplink RLC/MAC control message

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CRLC_CreateRLC_MAC_REQ(p_cellId: CellId)
Group :
ASP Type : G_CRLC_CreateRLC_MAC_REQ
Derivation Path :
Comments : The ASP is used to create a RLC/MAC entity in GERAN RLC/MAC emulation module.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell

Detailed Comments : One RLC/MAC entity per cell can exist, cellId will be used for couping LLC layer module to the RLC/MAC emulation module.. The packet channel description given in the ChannelSpecificInfo of G_CL1_CreateBasicPhyCh_REQ shall be used to configure this layer. This ASP shall be called after the G_CL1_CreateBasicPhyCh_REQ ASP.

ASP Constraint Declaration

Constraint Name : ca_G_CRLC_CreateRLC_MAC_CNF(p_cellId: CellId)
Group :
ASP Type : G_CRLC_CreateRLC_MAC_CNF
Derivation Path :
Comments : The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ

Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CRLC_DeleteRLC_MAC_REQ(p_cellId: CellId)
Group :
ASP Type : G_CRLC_DeleteRLC_MAC_REQ
Derivation Path :
Comments : The ASP is used to delete a RLC/MAC entity in GERAN RLC/MAC emulation module.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	The identifier of the cell

Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.

ASP Constraint Declaration

Constraint Name : ca_G_CRLC_DeleteRLC_MAC_CNF
Group :
ASP Type : G_CRLC_DeleteRLC_MAC_CNF
Derivation Path :
Comments : The ASP is used to delete a RLC/MAC entity in GERAN RLC/MAC emulation module.

Parameter Name	Parameter Value	Comments
cellId	?	The identifier of the cell

Detailed Comments : This ASP is used to release any resource used for the RLC/MAC emulation entity in the SS.

ASP Constraint Declaration

Constraint Name : ca_G_RLC_PSI_REQ(p_cellId:CellId; p_physicalChId:PhysicalChId; p_PSICategory:PSI_Category; p_PosInList: PositionInList; p_PSIMessage:PDU)
Group :
ASP Type : G_RLC_PSI_REQ
Derivation Path :
Comments : The ASP is used to send packet system information messages to the lower layer emulatior.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	
physicalChId	p_physicalChId	Channel identifier
g_LogicChType	tsc_PBCCH_LogicalType	PBCCH or PACCH or PCCCH
packetSysInfoCategory	p_PSICategory	PSI1 or high repetition rate or low repetition rate
positionInList	p_PosInList	Position in the high repetition rate list or the low repetition rate list, for PSI1 this field has no meaning.
msg	p_PSIMessage	This field contains PACKET SYSTEM INFORMATION message. See 3GPP TS 44.060 section 11.2.18 to section 11.2.25 for PACKET SYSTEM INFORMATION message definitions.

Detailed Comments : On BCCH, the lower layer emulator shall store the PACKET SYSTEM INFORMATION's, and transmit them according to the rules specified in section 6.3.2.4 of 3GPP TS 45.002. The msg shall override the same type system information message previous stored in the lower layer emulator.

Multiple instances of a PSI shall be put in the same list and in ascending order of the message instance number.

ASP Constraint Declaration

Constraint Name : c_G_L2_DATA_IND (p_cellId : CellId ; p_msg : PDU)
Group :
ASP Type : G_L2_DATA_IND
Derivation Path :
Comments : The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	
sAPI	?	0
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	*	The reduced frame number of the first frame on which this message is received
msg	p_msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cabr_G_L2_L2Estab_IND (p_CellId : CellId ;p_PhysicalChId : PhysicalChId;p_G_LogicChType: G_LogicChType; p_subcn : SubChannelNumber ; p_msg : PDU)
Group :
ASP Type : G_L2_L2Estab_IND
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	p_subcn	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4,This field shall be coded as 15 if it is not applicable.
sAPI	0	0
establish_mode	?	Norm
rfn	*	
msg	p_msg	this field is present only when the establidg mode is CoRes (collision resolution)

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_G_LLC_UnitData_IND (p_LLMEID : LLMEID ; p_Msg : PDU)
Group :
ASP Type : G_LLC_UNITDATA_IND
Derivation Path :
Comments : The ASP is used to receive an L3 PDU from the UE/MS in LLC unconfirmed transmission.

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEID	
tLLI	?	temporary logical link identifier
sAPI	?	
msg	p_Msg	L3 PDU

Detailed Comments : 3GPP TS 44.064 clause 8.4.2

ASP Constraint Declaration

Constraint Name : cas_G_LLC_UnitData_Req (p_LLMEID : LLMEID ; p_TLLI : TLLI ; p_Sapi : SAPI ; p_ProtectMode : B1 ; p_CipherMode : B1 ; p_Msg : PDU)
Group :
ASP Type : G_LLC_UNITDATA_REQ
Derivation Path :
Comments : The ASP is used to transmit an L3 PDU to the UE/MS in LLC unconfirmed transmission.

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEID	
tLLI	p_TLLI	temporary logical link identifier
sAPI	p_Sapi	
protectMode	p_ProtectMode	0 −− unprotected; 1 −− protected
cipherMode	p_CipherMode	0 −− no encryption; 1 −− encrypted
msg	p_Msg	L3 PDU

Detailed Comments : 3GPP TS 44.064 clause 8.4.1

ASP Constraint Declaration

Constraint Name : ca_PRACH(p_CellId : CellId; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType ; p_retry : B1; p_rfn : RFN ; p_data : PDU)

Group :

ASP Type : G_RLC_ACCESS_IND

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Isn't there only one channel??
g_LogicChType	p_G_LogicChType	PRACH or PACCH or PTCCH
rfn	p_rfn	The reduced frame number of the frame carrying the burst
retryBit	p_retry	For access bursts on PRACH, RACH. For PACCH, this field is no meaning
burst	p_data	8−bit or 11−bit access burst

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_ActivateTBF_UplinkDyn (p_CellId : CellId ; p_rLC_Mode : BITSTRING; p_USFRate : INTEGER)
Group :
ASP Type : G_CRLC_UL_TBF_Config_REQ
Derivation Path :
Comments : the ASP is used to configure a TBF used for uplink data transfer

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
tFI	tsc_uplinkTFI	
tBF_Mode	'0'B	0 − GPRS; 1 − EGPRS
channelCoding	1	CS−1
tLLI_BlockChannelCoding	'1'B	0 − CS−1 or MCS−1(EGPRS); 1 − same as channelCoding
rLC_Mode	p_rLC_Mode	0 − acknowledged mode; 1 − unacknowledged mode
startingTime	c_G_RFN_Omit	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
uSF_Rate	p_USFRate	This parameter controls the speed of the UL TBF transferring data blocks by controlling the USF rate: 1−−−> implementation dependent. TTCN does not specify the USF generating rate; 2−−−> 10 USF's per second; 3−−−> 5 USF's per second; 4−−−> 1 USF per second; 5−−−> 1 USF per 2 seconds; 6−−−> 1 USF per 3 seconds; 7−−−> 1 USF per 4 seconds
dynamicAllocation	cs_DynamicAllocation	

Detailed Comments : For GPRS channel coding can be: CS−1, CS−2, CS−3 and CS−4;For EGPRS channel coding can be : MCS−1, MCS−2, MCS−3, MCS−4, MCS−5, MCS−6, MCS−7, MCS−8, MCS−9, MCS−5−7 and MCS−6−9.

ASP Constraint Declaration

Constraint Name : ca_Activate_UL_TBF_CNF
Group :
ASP Type : G_CRLC_UL_TBF_Config_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	?	
tFI	?	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_Activate_DL_TBF_CNF
Group :
ASP Type : G_CRLC_DL_TBF_Config_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	?	
tFI	?	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_Assign_Req(p_cellId : CellId; p_oldTLLI, p_newTLLI: TLLI; p_CipherAlg : GPRS_CipherAlg; p_CipherKey : B64)
Group :
ASP Type : G_CLLC_Assign_REQ
Derivation Path :
Comments : The constraint is used to assign the TLLI, the cipher key (Kc) and the cipher algorithm of GERAN LLC emulator module.

Parameter Name	Parameter Value	Comments
cellId	p_cellId	
oldTLLI	p_oldTLLI	OCTETSTRING[4]
newTLLI	p_newTLLI	
cipherKey	p_CipherKey	@sic G3t050015 sic@
cipherAlgorithm	p_CipherAlg	BITSTRING[3], 3GPP TS 24.008 section 10.5.5.3

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_Assign_CNF(p_LLMEId :LLMEId)
Group :
ASP Type : G_CLLC_Assign_CNF
Derivation Path :
Comments : The constraint is used to get confirmation of G_CLLC_Assign_REQ

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEId	Logical Layer Management Entity Id

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_CreateLLE_REQ(p_LLMEId: LLMEId ; p_CellId : CellId)
Group :
ASP Type : G_CLLC_CreateLLE_REQ
Derivation Path :
Comments : The ASP is used to create an LLE (LLC Entity) in GERAN LLC emulation module.

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEId	Logical Layer Management Entity Id @sic R5s050089 sic@
rLC_MAC_MappingInfo	p_CellId	This parameter indicates the RLC/MAC emulation module in the cell, not the cell itself.

Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_CreateLLE_CNF(p_LLMEId: LLMEId)
Group :
ASP Type : G_CLLC_CreateLLE_CNF
Derivation Path :
Comments : The ASP is used to confirm the G_CRLC_CreateRLC_MAC_REQ

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEId	The identifier of the cell Logical Layer Management Entity Id @sic R5s050089 sic@

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_DeleteLLE_REQ(p_LLMEId: LLMEId)
Group :
ASP Type : G_CLLC_DeleteLLE_REQ
Derivation Path :
Comments : The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.

Parameter Name	Parameter Value	Comments
lLMEId	p_LLMEId	Logical Layer Management Entity Id @sic R5s050089 sic@

Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.

ASP Constraint Declaration

Constraint Name : ca_G_CLLC_DeleteLLE_CNF
Group :
ASP Type : G_CLLC_DeleteLLE_CNF
Derivation Path :
Comments : The ASP is used to delete an LLE (LLC Entity) in GERAN LLC emulation module.

Parameter Name	Parameter Value	Comments
lLMEId	?	Logical Layer Management Entity Id @sic R5s050089 sic@

Detailed Comments : The RlcMacEntityId needs to be created prior to this by G_CRLC_CreateRLC_MAC_REQ ASP.

ASP Constraint Declaration

Constraint Name : ca_ActivateTBF_Downlink(p_CellId : CellId; p_PhyChId : PhysicalChId; p_rLC_Mode : BITSTRING; p_USFRate : INTEGER)
Group :
ASP Type : G_CRLC_DL_TBF_Config_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
tFI	tsc_downlinkTFI	
tBF_Mode	'0'B	0 − GPRS; 1 − EGPRS
channelCoding	1	
rLC_Mode	p_rLC_Mode	0 − acknowledged mode; 1 − unacknowledged mode
timeSlotAllocation	c_TimeSlotAllocation_TN4(p_PhyChId)	Downlink TBF time slot allocation
startingTime	c_G_RFN_Omit	This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
dataBlockRate	p_USFRate	This parameter controls the speed of the DL TBF transferring data blocks by controlling the USF rate: 1−−−> implementation dependent. TTCN does not specify the USF generating rate; 2−−−> 10 data blocks per second; 3−−−> 5 data blocks per second; 4−−−> 1 data block per second; 5−−−> 1 data block 2 seconds; 6−−−> 1 data block 3 seconds; 7−−−> 1 data block 4 seconds

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_G_RLC_ControlMsg_REQ_PAGCH(p_CellId : CellId; p_PhyChId:PhysicalChId; p_TFI : B5; p_SP : B1; p_RFN : RFN; p_msg : PDU)

Group :

ASP Type : G_RLC_ControlMsg_REQ

Derivation Path :

Comments : The constraint is used to transmitt the down link RLC/MAC control message to the UE/MS on PAGCH channel.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	
g_LogicChType	tsc_PAGCH_LogicalType	PACCH
tBF_Direction	1	0 −− downlink; 1 −− uplink
tFI	p_TFI	
rRBP	'00'B	relative reserved block period
s_P_Bit	p_SP	supplementary/polling bit
rfn	p_RFN	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	−	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	−	0 −− normal paging;1−− exteded paging;3 −− paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	p_msg	Signalling message or user data to be sent

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_G_RLC_ControlMsg_REQ_Paging(p_CellId : CellId; p_PhyChId:PhysicalChId; p_TFI : B5; p_SP : B1; p_IMSI : HEXSTRING; p_KC_Conf, p_M, p_N, p_PagingMode : INTEGER; p_SplitPGCycle : B8; p_msg : PDU)

Group :

ASP Type : G_RLC_ControlMsg_REQ

Derivation Path :

Comments : The constraint is used to transmitt the down link RLC/MAC control message to the UE/MS on PPCH channel.

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhyChId	
g_LogicChType	tsc_PPCH_LogicalType	PCCCH
tBF_Direction	0	0 −− downlink; 1 −− uplink
tFI	p_TFI	
rRBP	'00'B	relative reserved block period
s_P_Bit	p_SP	supplementary/polling bit
rfn	c_G_RFN_Omit	The reduced frame number of the first frame on which this message is sent.If the field t2 of rfn is coded as '11111'B lower layer shall ignore this field.
pagingGroup	o_PacketPagingGroupCalculate(p_IMSI, p_KC_Conf, p_M, p_N, p_SplitPGCycle)	for message other than PACKET PAGING REQUEST this field shall be omitted
pagingMode	p_PagingMode	0 −− normal paging;1−− exteded paging;3 −− paging reorganization.this field is valid only for PACKET PAGING REQUEST control message, for message other than PACKET PAGING REQUEST this field shall be omitted
msg	p_msg	Signalling message or user data to be sent

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_Paging_REQ (p_CellId : CellId ; p_PG : INTEGER ; p_msg : PDU)

Group :

ASP Type : G_L2_Paging_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0
physicalChId	0	Channel identifier of the right CCCH_GROUP or PCCCH_GROUP
g_LogicChType	2	PCH
pAGING_GROUP	p_PG	INTEGER
pagingMode	0	0 −− normal paging; 1−− exteded paging; 3 −− paging reorganization
msg	p_msg	paging message to be sent

Detailed Comments :

ASP Constraint Declaration

Constraint Name : c_G_CL1_ComingFN_CNF
Group :
ASP Type : G_CL1_ComingFN_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	?	
physicalChId	?	
g_LogicChType	?	
subChannel	*	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15
rfn	?	the reduced frame number (FN modulo 42432) which is about 5 seconds later than current frame number and is able to carry L3 message on the channel specified by "physicalChId"+"G_LogicChType"+"subChannel"

Detailed Comments :

ASP Constraint Declaration

Constraint Name : c_G_CL1_ComingFN_REQ(p_CellId : CellId ; p_PhysicalChId : PhysicalChId ; p_G_LogicChType: G_LogicChType)
Group :
ASP Type : G_CL1_ComingFN_REQ
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
physicalChId	p_PhysicalChId	Channel identifier
g_LogicChType	p_G_LogicChType	
subChannel	OMIT	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). this field is not applicable and the SS shall ignore it if this field is coded as 15

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_G_L2_DATA_IND_Gen(p_CellId: CellId; p_SAPI : SAPI ; p_PhyId :PhysicalChId ; p_LogType :G_LogicChType ; p_SubchNo : SubChannelNumber; p_RFN : RFN; p_Msg : PDU)

Group :

ASP Type : G_L2_DATA_IND

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	p_SAPI	0
physicalChId	p_PhyId	Channel identifier
g_LogicChType	p_LogType	
subChannel	p_SubchNo	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
rfn	p_RFN	The reduced frame number of the first frame on which this message is received
msg	p_Msg	Signalling message or user data received

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_G_L2_Release_REQ(p_CellId : CellId; p_PhyCh : PhysicalChId; p_LogCh : G_LogicChType; p_SubchNo : SubChannelNumber)

Group :

ASP Type : G_L2_Release_REQ

Derivation Path :

Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
sAPI	0	0 or 3
physicalChId	p_PhyCh	Channel identifier
g_LogicChType	p_LogCh	
subChannel	p_SubchNo	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	’1’B	0−normal release, 1−local release

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_G_L2_Release_CNF
Group :
ASP Type : G_L2_Release_CNF
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	?	
sAPI	?	0 or 3
physicalChId	?	Channel identifier
g_LogicChType	?	
subChannel	?	For SDCCH/8, SACCH/C8 value is (0..7); for SDCCH/4, and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	?	0−normal release, 1−local release

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_AT_CmdCnfWithString
Group :
ASP Type : AT_CmdCnf
Derivation Path :
Comments : The ASP is used get a positive result only for a requested command to the UT (UT −>LT).
@SIC EW ER 1522 SIC@

Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	
resultString	?	@SIC EW ER 1522 SIC@
sMS_BlockMode	−	Defined for future development

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_AT_CmdCnf
Group :
ASP Type : AT_CmdCnf
Derivation Path :
Comments : The ASP is used get a positive result only for a requested command to the UT (UT −>LT).

Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	
resultString	tsc_AT_ResultOK IF_PRESENT	
sMS_BlockMode	−	Defined for future development

Detailed Comments :

ASP Constraint Declaration		
Constraint Name : ca_AT_CmdReq (p_Cmd : IA5String)		
Group :		
ASP Type : AT_CmdReq		
Derivation Path :		
Comments : The ASP is used to request a command to the UT (LT −>UT).		
Parameter Name	**Parameter Value**	**Comments**
cmd	p_Cmd	
sMS_BlockMode	−	Defined for future development
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_DataReq (p_CellId : INTEGER; p_Rb : SS_RB_Identity ; p_Pdu : PDU)		
Group :		
ASP Type : RRC_DataReq		
Derivation Path :		
Comments : The ASP is used to request the transmission of the NAS PDU message using acknowledged operation (NAS −> RRC).		
Parameter Name	**Parameter Value**	**Comments**
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_CS_Domain	
msg	p_Pdu	
Detailed Comments :		

ASP Constraint Declaration		
Constraint Name : ca_MMI_CmdCnf		
Group :		
ASP Type : MMI_CmdCnf		
Derivation Path :		
Comments : The ASP is used get the result of a requested MMI command to the UT (UT −>LT).		
Parameter Name	**Parameter Value**	**Comments**
result	TRUE	
resultString	*	
Detailed Comments :		

ASP Constraint Declaration

Constraint Name : ca_MMI_CmdReq (p_Cmd : IA5String)
Group :
ASP Type : MMI_CmdReq
Derivation Path :
Comments : The ASP is used to request a MMI command to the UT (LT −>UT).

Parameter Name	Parameter Value	Comments
cmd	p_Cmd	command line

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_PS_DataReq (p_CellId : INTEGER; p_Rb : SS_RB_Identity ; p_Pdu : PDU)
Group :
ASP Type : RRC_DataReq
Derivation Path :
Comments :

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_PS_Domain	
msg	p_Pdu	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_InitDirectTransfer (p_CellId: INTEGER; p_Rb : SS_RB_Identity; p_Pdu : PDU)
Group :
ASP Type : RRC_DataInd
Derivation Path :
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <− RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	?	
msg	p_Pdu	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_PS_InitDirectTransfer (p_CellId: INTEGER; p_Rb :SS_RB_Identity; p_Pdu : PDU)
Group :
ASP Type : RRC_DataInd
Derivation Path :
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <− RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	?	
msg	p_Pdu	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_PS_UplinkDirectTransfer (p_CellId: INTEGER; p_Rb :SS_RB_Identity; p_Pdu : PDU)
Group :
ASP Type : RRC_DataInd
Derivation Path :
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <− RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	−	
msg	p_Pdu	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_StatusInd (p_RB_Id: SS_RB_Identity)
Group :
ASP Type : RLC_TR_TestDataInd
Derivation Path :
Comments : This constraint is used to receive a STATUS PDU with the given super fields, and using the given RB Id.
Any padding octets present are ignored.

Parameters:
p_RB_Id: The identifier for the RB to be used for reception of data. This is expected to be one of the following values, depending on the RLC configuration being tested.
tsc_RB_AM_7_RLC, tsc_RB_UM_7_RLC, tsc_RB_AM_15_RLC, tsc_RB_UM_15_RLC

p_SuperFields: The super fields expected to be included in the STATUS PDU.

Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_RB_Id	
data	cr_StatusAny	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_UplinkDirectTransfer (p_CellId: INTEGER; p_Rb : SS_RB_Identity; p_Pdu : PDU)
Group :
ASP Type : RRC_DataInd
Derivation Path :
Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <− RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_Id	p_Rb	
ch	−	GERAN only
sapId	−	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	−	
msg	p_Pdu	

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cd_2_DCH_0_To3_DL_Info_IR_G (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path : ca_2_DCH_0_To3_DL_Info.

Comments : For FDD mode only, used in aknowledged mode RLC testing

Constraint Value

REPLACE configMessage.dlTFCS BY c_TFCS_Cmpl0_1_2_3_Tx (c_PowerOffsetInfoBelow64k)

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_4DCH_DL_Info_RM160 (p_CellId : INTEGER; p_PhyChId : INTEGER; p_Type : TrChConfigType;p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing
This constraint is same as ca_4DCH_DL_Info except for RM 160 for DCH5

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType p_Type,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    dlconnectedTrCHList {{
        trchid tsc_DL_DCH1,
        dl_TransportChannelType dch,
        transportChannelInfo c_DCH_81_TFS_DL
      },
      {
        trchid tsc_DL_DCH2,
        dl_TransportChannelType dch,
        transportChannelInfo c_DCH_103_TFS
      },
      {
        trchid tsc_DL_DCH3,
        dl_TransportChannelType dch,
        transportChannelInfo c_DCH_60_TFS
      },
      {
        trchid tsc_DL_DCH5,
        dl_TransportChannelType dch,
        transportChannelInfo cd_DCH_148_TFS_DL_RM160
    }},
    dlTFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 155

ASN.1 ASP Constraint Declaration

Constraint Name : ca_4DCH_UL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_Type : TrChConfigType; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing
This Constraint is Same as ca_4DCH_UL_Info, aexcept for RM160 for DCH5

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType p_Type,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    ulconnectedTrCHList {{
        trchid tsc_UL_DCH1,
        ul_TransportChannelType dch,
        transportChannelInfo c_DCH_81_TFS
      },
      {
        trchid tsc_UL_DCH2,
        ul_TransportChannelType dch,
        transportChannelInfo c_DCH_103_TFS
      },
      {
        trchid tsc_UL_DCH3,
        ul_TransportChannelType dch,
        transportChannelInfo c_DCH_60_TFS
      },
      {
        trchid tsc_UL_DCH5,
        ul_TransportChannelType dch,
        transportChannelInfo cd_DCH_148_TFS_UL_RM160
    }},
    ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx

  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):
TTI = 40 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 155

ASN.1 ASP Constraint Declaration

Constraint Name : cd_DCH_148_TTI_10_DL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path : ca_DCH_148_TTI_10_DL_Info.

Comments :

Constraint Value

REPLACE configMessage.dlconnectedTrCHList.[0].transportChannelInfo BY cd_DCH_148_TTI_10_TFS_RM160

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cd_DCH_148_TTI_10_UL_Info_RM160(p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path : ca_DCH_148_TTI_10_UL_Info.

Comments :

Constraint Value

REPLACE configMessage.ulconnectedTrCHList.[0].transportChannelInfo BY cd_DCH_148_TTI_10_TFS_RM160

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_InterSystemHandoverComplete (
p_CellId : INTEGER;
p_routingInfo: INTEGER;
p_PDU: UL_DCCH_Message
)

Group :

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_routingInfo,
  integrityResult ?,
  aM_message uL_DCCH_Message : p_PDU
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_AM_ReconfInfoSS_SRB_IR_G (p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : This is required for 60.x test cases. The RLC params are specified in 25.331 sec 13.7 for default configuration id 3.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage reconfigure : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cd_DL_AM_RLC_SRB_IR_G,
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayLoad,
        dl_RLCModeInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB_IR_G
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_AM_ReconfInfoSS_SRB_DefCfg1(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : This is required for 60.4. The RLC params are specified in 25.331 sec 13.7 for default configuration id 1.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage reconfigure : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cd_DL_AM_RLC_SRB_DefCfg1,
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayLoad,
        dl_RLCModeInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB_DefCfg1
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To3_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    dlconnectedTrCHList {{
        trchid tsc_DL_DCH1,
        dl_TransportChannelType dch,
        transportChannelInfo p_DchTFS1
      },
      {
        trchid tsc_DL_DCH5,
        dl_TransportChannelType dch,
        transportChannelInfo p_DchTFS5
    }},
    dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k )
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To3_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing. With ctfc from 0 to 3.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList { {
        trchid tsc_UL_DCH1,
        ul_TransportChannelType dch,
        transportChannelInfo p_DchTFS1
      },
      {
        trchid tsc_UL_DCH5,
        ul_TransportChannelType dch,
        transportChannelInfo p_DchTFS5
    }},
    ulTFCS c_TFCS_Cmpl0_1_2_3_Rx −− sent to SS
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To5_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    dlconnectedTrCHList { {
        trchid tsc_DL_DCH1,
        dl_TransportChannelType dch,
        transportChannelInfo p_DchTFS1
      },
      {
        trchid tsc_DL_DCH5,
        dl_TransportChannelType dch,
        transportChannelInfo p_DchTFS5
    }},
    dlTFCS c_TFCS_Cmpl0_To5_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_2_DCH_0_To5_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_DchTFS5 , p_DchTFS1 : CommonOrDedicatedTFS ; p_ActTime: ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing. With ctfc from 0 to 5.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList {{
        trchid tsc_UL_DCH1,
        ul_TransportChannelType dch,
        transportChannelInfo p_DchTFS1
      },
      {
        trchid tsc_UL_DCH5,
        ul_TransportChannelType dch,
        transportChannelInfo p_DchTFS5
    }},
    ulTFCS c_TFCS_Cmpl0_To5_Rx −− sent to SS
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_UTRAN_MobilityInfoCnfInd(
p_CellId: INTEGER;
p_RB_Id: INTEGER;
p_PDU: UL_DCCH_Message
)

Group :

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_PDU
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_UtranMobilityInfo(
p_CellId: INTEGER;
p_RB_Id: INTEGER;
p_PDU: DL_DCCH_Message
)

Group :

ASP Type : RLC_AM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  confirmationRequest noConfirmationRequest: NULL,
  aM_message dL_DCCH_Message : p_PDU
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnRej (
p_CellId: INTEGER;
p_RB_Id: INTEGER ;
p_Pdu: DL_CCCH_Message)

Group :

ASP Type : RLC_UM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  uM_message dL_CCCH_Message : p_Pdu,
  specialI TRUE
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_AichInfo(
p_CellId: INTEGER;
p_PhyChId: INTEGER;
p_AICH_Info: AICH_Info;
p_TxPower: AICH_PowerOffset)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  setupMessage {
    physicalChannelInfo aICHInfo : {
      aichinfo p_AICH_Info,
      dl_TxPower p_TxPower
    }
  }
}
```

Detailed Comments : The following are fixed in this constraint (34.108):
transmission diversity is off,
speading factor is set to 256,
AICH timing scheme is 0

ASN.1 ASP Constraint Declaration

Constraint Name : ca_BCH_InfoActNow (p_CellId : INTEGER)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: tsc_P_CCPCH,
  ratType fdd,
  trchConfigType nonDch: NULL,
  configMessage {

    activationTime activateNow : NULL,
    ulconnectedTrCHList OMIT,
    ulTFCS OMIT,
    dlconnectedTrCHList {{
       trchid tsc_BCH1,
       dl_TransportChannelType bch,
       transportChannelInfo {
         tti tti20 : {{tb_Size 246,
            numberOfTbSizeList {one : NULL},
            logicalChannelList configured : NULL}},
        semistaticTF_Information {
          channelCodingType convolutional :half,
          rateMatchingAttribute 1,
          crc_Size crc16
        }
       }
    }},
    dlTFCS c_TFCS_Cmpl0 ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For BCH transport channel the following parameters are fixed by core spec.(25.212 and 25.302):
TTI = 20 ms;
TransportBlocks = 1;
transport block size = 246 bits;
coding = convolutional;
coding rate = 1/2;
CRCsize = 16;
RateMatching = 1 (this parameter is not relevant to BCH, value can be any number between 1 to hiRM)

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CellCfgCnf(p_CellId : INTEGER)
Group :
ASP Type : CPHY_Cell_Config_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CellCfgReq(p_CellId : INTEGER; p_Tcell: INTEGER; p_FreqInfo : FrequencyInfo; p_PriScmCode : INTEGER; p_DL_TxAttenLevel: INTEGER; p_SfnOffset : INTEGER; p_totalCellPower : CellTxPowerLevel)

Group :

ASP Type : CPHY_Cell_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  tcell p_Tcell,
  sfnOffset p_SfnOffset,
  frequencyInfo p_FreqInfo,
  primaryScramblingCode_SS p_PriScmCode,
  cellTxPowerLevel p_totalCellPower,
  dLTxAttenuationLevel p_DL_TxAttenLevel
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CellTxPowerModiCnf(p_CellId : INTEGER)

Group :

ASP Type : CPHY_Cell_TxPower_Modify_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CellTxPowerModiReq(p_CellId : INTEGER; p_DL_TxAttenLevel: INTEGER)

Group :

ASP Type : CPHY_Cell_TxPower_Modify_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  dLTxAttenuationLevel p_DL_TxAttenLevel
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_CfgCnf (p_CellId: INTEGER; p_PhyChId : INTEGER)
Group	:
ASP Type	: CMAC_Config_CNF
Derivation Path	:
Comments	:

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_CfgInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  configMessage setup: {
    activationTime activateNow : NULL,
    uE_Info p_UEInfo,
    trCHInfo p_TrCHInfo,
    trCH_LogCHMapping p_TrCH_LogCHMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CMAC_CipherActCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CMAC_Ciphering_Activate_CNF
Derivation Path	:
Comments	:

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_DL_CipherActReq (p_CellId: INTEGER; p_PhyChId: INTEGER; p_CipherMode: CipheringModeCommand; p_ActTimeDPCH: INTEGER;p_IncrDcr : Increment_Mode)

Group :

ASP Type : CMAC_Ciphering_Activate_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  cn_DomainIdentity cs_domain, −−the domain is hard coded as no TM RAB in PS domain
  cipheringModeInfo
  {
    cipheringModeCommand p_CipherMode,
    activationTimeForDPCH p_ActTimeDPCH,
    rb_DL_CiphActivationTimeInfo OMIT
  },
  incHFN p_IncrDcr
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_ReconfigInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1; p_ActivationTime : ActivationTime)

Group :

ASP Type : CMAC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  configMessage reconfigure: {
    activationTime activationCFN : p_ActivationTime,
    uE_Info p_UEInfo,
    trCHInfo p_TrCHInfo,
    trCH_LogCHMapping p_TrCH_LogCHMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_ReconfigInfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1)

Group :

ASP Type : CMAC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  configMessage reconfigure: {
    activationTime activateNow : NULL,
    uE_Info p_UEInfo,
    trCHInfo p_TrCHInfo,
    trCH_LogCHMapping p_TrCH_LogCHMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_SecurityModeCfgCnf (p_CellId: INTEGER)

Group :

ASP Type : CMAC_SecurityMode_Config_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_SecurityModeCfgReq (p_CellId: INTEGER; p_Domain : CN_DomainIdentity; p_Hfn: HyperFrameNumber; p_KC: KeyCiphering; p_IK:IntegrityKey; p_GSM_ck : GSM_CipheringKey)

Group :

ASP Type : CMAC_SecurityMode_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  macCipheringInfo
  {
    cn_DomainIdentity p_Domain ,
    startValue p_Hfn,
    cipheringKey p_KC,
    integrityKey p_IK,
    gsmCipheringKey p_GSM_ck
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_UL_CipherActReq (p_CellId: INTEGER; p_PhyChId: INTEGER; p_CipherMode: CipheringModeCommand; p_ActTimeDPCH: INTEGER;p_IncrDcr : Increment_Mode)

Group :

ASP Type : CMAC_Ciphering_Activate_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  cn_DomainIdentity cs_domain, −− domain hard coded as no TM RAB in PS Domain
  cipheringModeInfo
  {
    cipheringModeCommand p_CipherMode,
    activationTimeForDPCH p_ActTimeDPCH,
    rb_DL_CiphActivationTimeInfo OMIT
  },
  incHFN p_IncrDcr
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CPHY_Cell_Release_CNF(
p_CellId: INTEGER)

Group :

ASP Type : CPHY_Cell_Release_CNF

Derivation Path :

Comments : 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE.
2. Releases the associated Memory Buffers (if any).
3. Cancels all active timers (if any)
With "Soft_Reset" flag OFF:
1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any)
2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List
3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Constraint Value

```
{
  soft_Reset FALSE,
  cell_ID_List { p_CellId }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CPHY_Cell_Release_REQ(
p_CellId: INTEGER)

Group :

ASP Type : CPHY_Cell_Release_REQ

Derivation Path :

Comments : 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE.
2. Releases the associated Memory Buffers (if any).
3. Cancels all active timers (if any)
With "Soft_Reset" flag OFF:
1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any)
2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List
3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Constraint Value

```
{
  soft_Reset FALSE,
  cell_ID_List { p_CellId }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_CfgCnf(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo rB_Identity: p_RB_Id
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_CipherActCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_Ciphering_Activate_CNF
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_DL_CipherActReq(p_CellId: INTEGER; p_CN_Domain : CN_DomainIdentity; p_RB_Id : INTEGER; p_CipherMode: CipheringModeCommand; p_N: RLC_SequenceNumber ;p_IncMode : RLC_IncMode)

Group :

ASP Type : CRLC_Ciphering_Activate_REQ

Derivation Path :

Comments : @sic T1−031732 sic@

Constraint Value

```
{
  cellId p_CellId,
  ratType fdd,
  cn_DomainIdentity p_CN_Domain,
  ciphActivationInfo cipheringModeInfo :
  {
    cipheringModeCommand p_CipherMode,
    activationTimeForDPCH OMIT,
    rb_DL_CiphActivationTimeInfo
    {
      c_RB_ActTimeInfo(p_RB_Id, p_N)
    }
  },
  incHFN p_IncMode
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_DL_IntegrityActivateReq(p_CellId: INTEGER; p_Domain : CN_DomainIdentity;p_IntegrityProtectionModeInfo : IntegrityProtectionModeInfo)

Group :

ASP Type : CRLC_Integrity_Activate_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  cn_DomainIdentity p_Domain,
  integrityActivationInfo integrityProtectionModeInfo : p_IntegrityProtectionModeInfo
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_IntegrityActivateCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_Integrity_Activate_CNF
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_RB_RelReq (p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo rB_Identity: p_RB_Id,
ratType fdd,
configMessage release : NULL
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SecurityModeCfgCnf(p_CellId: INTEGER)
Group	:
ASP Type	: CRLC_SecurityMode_Config_CNF
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SecurityModeCfgReq(p_CellId: INTEGER; p_Domain : CN_DomainIdentity; p_Hfn: HyperFrameNumber; p_KC: KeyCiphering; p_Ik: IntegrityKey; p_GSM_ck: GSM_CipheringKey)
Group	:
ASP Type	: CRLC_SecurityMode_Config_REQ
Derivation Path	:
Comments	:

Constraint Value

```
{
  cellId p_CellId,
  rlcSecurityInfo
  {
    cn_DomainIdentity p_Domain ,
    startValue p_Hfn,
    cipheringKey p_KC,
    integrityKey p_Ik,
    gsmCipheringKey p_GSM_ck
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: ca_CRLC_SetRRC_MSN_CNF (p_CellID :INTEGER ; p_RBID : INTEGER)
Group	:
ASP Type	: CRLC_SetRRC_MessageSN_CNF
Derivation Path	:
Comments	:

Constraint Value

```
{
  cellId p_CellID,
  routingInfo rB_Identity : p_RBID
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_UL_CipherActReq (p_CellId: INTEGER; p_CN_Domain : CN_DomainIdentity; p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList;p_IncMode : RLC_IncMode)

Group :

ASP Type : CRLC_Ciphering_Activate_REQ

Derivation Path :

Comments : @sic T1−031732 sic@

Constraint Value

```
{
  cellId p_CellId,
  ratType fdd,
  cn_DomainIdentity p_CN_Domain,
  ciphActivationInfo rb_UL_CipheringActivationTimeInfo : p_RB_ActivationTimeInfoList,
  incHFN p_IncMode
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_UL_IntegrityActivateReq (p_CellId: INTEGER ; p_Domain : CN_DomainIdentity; p_IntegrityProtActivationInfo : IntegrityProtActivationInfoList)

Group :

ASP Type : CRLC_Integrity_Activate_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  cn_DomainIdentity p_Domain ,
  integrityActivationInfo ul_IntegProtActivationInfo : p_IntegrityProtActivationInfo
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_DL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only. The configuration is defined in TS 34.123−1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    dlconnectedTrCHList {{
        trchid tsc_DL_DCH5,
        dl_TransportChannelType dch,
        transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spe:
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU SIZE = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only. The configuration is defined in TS 34.123−1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activateNow : NULL,
    dlconnectedTrCHList {{
       trchid tsc_DL_DCH5,
       dl_TransportChannelType dch,
       transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU SIZE = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_UL_Info (p_CellId : INTEGER; p_PhyChId : INTEGER; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only. The configuration is defined in TS 34.123−1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activationCFN : p_ActivationTime,
    ulconnectedTrCHList {{
        trchid tsc_UL_DCH5,
        ul_TransportChannelType dch,
        transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    ulTFCS c_TFCS_Cmpl0_1_Rx
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU Size = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only. The configuration is defined in TS 34.123−1 cl. 6.10.2.4.1.3

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType c_TrChConfigTypeDCH_NoSHO,
  configMessage {
    activationTime activateNow : NULL,
    ulconnectedTrCHList {{
       trchid tsc_UL_DCH5,
       ul_TransportChannelType dch,
       transportChannelInfo c_DCH_148_TTI_10_TFS
    }},
    ulTFCS c_TFCS_Cmpl0_1_Rx
  }
}
```

Detailed Comments : For DCH1 transport channel the following parameters are fixed by core spec.:
TTI = 10 ms;
two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
rlc_Size = RLC PDU Size = 144 bits.
coding = convolutional;
coding rate = 1/3;
CRCsize = 16;
RateMatching = 192

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DL_CRLC_SetRRC_MSN_REQ (p_CellID :INTEGER ; p_RBID : INTEGER; p_DL_MSN : RRC_SequenceNumber)

Group :

ASP Type : CRLC_SetRRC_MessageSN_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellID,
  routingInfo rB_Identity : p_RBID,
  count_I_LSB_UL OMIT,
  count_I_LSB_DL p_DL_MSN
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DL_DPCH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo: DL_DPCHInfo)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments : To setup down link physical channel DPCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  setupMessage {
    physicalChannelInfo dPCHInfo : {
      dl_DPCHInfo p_DL_DPCHInfo
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_DL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo: DL_DPCHInfo; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_RL_Modify_REQ

Derivation Path :

Comments : To modify down link physical channel DPCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  modifyMessage {
    activationTime activationCFN : p_ActivationTime,
    physicalChannelInfo dPCHInfo : {
      dl_DPCHInfo p_DL_DPCHInfo
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_OutOfSyncInd (p_PhysicalChannelIdentity : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_Out_of_Sync_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId ?,
  routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_pCCPCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)
Group :
ASP Type : CPHY_RL_Setup_REQ
Derivation Path :
Comments : For FDD mode only

Constraint Value

```
{ cellId p_CellId,
  routingInfo physicalChannelIdentity: tsc_P_CCPCH,
  ratType fdd,
  setupMessage {
    physicalChannelInfo primaryCCPCHInfo : {
      sttd_Indicator FALSE,
      dl_TxPower p_TxPower
    }
  }
}
```

Detailed Comments : PhysycalChannelIdentity for p−CCPCH is fixed as tsc_pCCPCH;

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PCH_2_FACH_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only (PS)

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType nonDch: NULL,
  configMessage {
    activationTime activateNow : NULL,
    ulconnectedTrCHList OMIT,
    ulTFCS OMIT,
    dlconnectedTrCHList {
      { trchid tsc_PCH1,
        dl_TransportChannelType pch,
        transportChannelInfo c_PCH_TFS},
      { trchid tsc_FACH1,
        dl_TransportChannelType fach,
        transportChannelInfo c_FACH_TFS},
      { trchid tsc_FACH2,
        dl_TransportChannelType fach,
        transportChannelInfo c_FACH_TFS_PS} },
    dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments : For PCH transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3):
TTI = 10 ms;
two transport formats: TransportBlocks = 0, TB size = 240 bits; and TransportBlocks = 1, TB size = 240 bits;
coding = convolutional;
coding rate = 1/2;
CRCsize = 16;
RateMatching = 210
For FACH1 transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3.2):
TTI = 10 ms;
two transport formats: TransportBlocks = 0, TB size = 360 bits; TransportBlocks = 1, TB size = 360 bits;
coding = turbo;
CRCsize = 16;
RateMatching = 110
For FACH2 transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.3):
TTI = 10 ms;
three transport formats: TransportBlocks = 0, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits;and TransportBlocks = 2, TB size = 168 bits
coding = convolutional;
coding rate = 1/2;
CRCsize = 16;
RateMatching = 210

ASN.1 ASP Constraint Declaration

Constraint Name : ca_pCPICH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower_PCPICH)
Group :
ASP Type : CPHY_RL_Setup_REQ
Derivation Path :
Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: tsc_P_CPICH,
  ratType fdd,
  setupMessage {
    physicalChannelInfo primaryCPICHInfo:{
      dl_TxPower_PCPICH p_TxPower,
      txdiversityIndicator FALSE
    }
  }
}
```

Detailed Comments : PhysycalChannelIdentity for p−CPICH is fixed as tsc_pCPICH;

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelCnf (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group :
ASP Type : CPHY_TrCH_Release_CNF
Derivation Path :
Comments : To confirm to release tthe Radio Link

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelReqDCH_NoSHO (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group :
ASP Type : CPHY_TrCH_Release_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  trchConfigType dch : normal
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelReqNonDch (p_CellId : INTEGER; p_PhyChId: INTEGER)
Group :
ASP Type : CPHY_TrCH_Release_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  trchConfigType nonDch: NULL
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PICH_Info(p_CellId: INTEGER; p_PICH_Info: PICH_Info; p_TxPower : PICH_PowerOffset;p_SCCPCH_Ass: INTEGER)
Group :
ASP Type : CPHY_RL_Setup_REQ
Derivation Path :
Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : tsc_PICH1,
  ratType fdd,
  setupMessage {
    physicalChannelInfo pICHInfo : {
      pichinfo p_PICH_Info,
      dl_TxPower p_TxPower,
      sccpchId_associated p_SCCPCH_Ass
    }
  }
}
```

Detailed Comments : Value of PI per frame is fixed to 18 (34.108)
Value of sndScramCode can be 2 (34.108)

ASN.1 ASP Constraint Declaration

Constraint Name : ca_PRACH_Info(
p_CellId: INTEGER;
p_PhyChId: INTEGER;
p_Signatures:AvailableSignatures;
p_PreScramCodeWord: PreambleScramblingCodeWordNumber;
p_PuncLimit: PuncturingLimit;
p_SF_PRACH: SF_PRACH;
p_SubChNum: AvailableSubChannelNumbers
)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd ,
  setupMessage {
    physicalChannelInfo pRACHInfo :{
      fdd_tdd fdd : {
        preambleSignature p_Signatures,
        spreadingFactorForDataPart p_SF_PRACH,
        preambleScramblingCode p_PreScramCodeWord,
        puncturingLimit p_PuncLimit,
        accessSlot p_SubChNum

      }
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_pSCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: tsc_P_SCH,
  ratType fdd,
  setupMessage {
    physicalChannelInfo primarySCHInfo : {
      tstdIndicator FALSE,
      dl_TxPower p_TxPower
    }
  }
}
```

Detailed Comments : PhysycalChannelIdentity for p−SCH is fixed as tsc_pSCH;

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_AM_Info_RAB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt :TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : Used to setup AM RLC entity

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cb_DL_AM_RLC,
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayLoad,
        dl_RLCModeInfo ul_AM_RLC_Mode : cb_UL_AM_RLC
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_AM_Info_SRB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt :TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow; p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : Used to setup AM RLC entity

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cd_DL_AM_RLC_SRB,
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayLoad,
        dl_RLCModeInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_BCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_dl_RLC_Mode {
        dl_PayloadSize 246,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication FALSE
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments : dl_PayloadSize = TB_Size

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_PCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_dl_RLC_Mode {
        dl_PayloadSize 240,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication FALSE
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments : dl_PayloadSize = TB_Sze

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_TM_DL_InfoNoSeg(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : @sic R5s050192 sic@

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_dl_RLC_Mode {
        dl_PayloadSize p_PayloadSize,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication FALSE
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_TM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{
        segmentationIndication FALSE −− @sic 04/03/04 OG ER1504 sic@
      },
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayloadSize,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication FALSE −− @sic 04/03/04 OG ER1504 sic@
        }
    }},
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_TM_UL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER;p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{
        segmentationIndication FALSE −− @sic 04/03/04 OG ER1504 sic@
      } ,
      sS_dl_RLC_Mode {
        dl_PayloadSize p_PayloadSize,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication FALSE −− @sic 04/03/04 OG ER1504 sic@
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_UM_DL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_dl_RLC_Mode {
        dl_PayloadSize 152,
        dl_RLCModeInfo ul_UM_RLC_Mode : {
          transmissionRLC_Discard timerBasedNoExplicit : dt100
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RB_UM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : Used to setup UM RLC entity

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_UM_RLC_Mode :NULL,
      sS_dl_RLC_Mode{
        dl_PayloadSize 136,
        dl_RLCModeInfo ul_UM_RLC_Mode : {
          transmissionRLC_Discard timerBasedNoExplicit : dt100
        }
      }
    },
    rB_LogCH_Mapping p_LogChMapping
  }
}
```

Detailed Comments : dl_PayloadSize = TB_Size − 12 = 136

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_ModifyCnf(
p_CellId : INTEGER;
p_PhyChId: INTEGER
)

Group :

ASP Type : CPHY_RL_Modify_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_RelCnf (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_RL_Release_CNF
Derivation Path :
Comments : To confirm that a specified physical channel has been released

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyCH
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_RelReq(p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_RL_Release_REQ
Derivation Path :
Comments : To release the specified physical channel.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyCH
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_SetupCnf(
p_CellId : INTEGER;
p_PhyChId: INTEGER
)
Group :
ASP Type : CPHY_RL_Setup_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_sCCPCH_Info (p_CellId: INTEGER; p_PhyChId: INTEGER; p_SndScramCode : INTEGER;
p_ChannelizationCode: SF256_AndCodeNumber;
p_SlotFormat: SCCPCHSlotFormat;
p_TxPower : DL_TxPower;
p_Timing: INTEGER)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments : For FDD mode only,

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  setupMessage {
    physicalChannelInfo secondaryCCPCHInfo : {
      scramblingCode p_SndScramCode,
      dl_ChannelizationCode p_ChannelizationCode,
      sCCPCHSlotFormat p_SlotFormat,
      timingOffset p_Timing,
      positionFixedOrFlexible flexible,
      sttd_Indicator FALSE,
      dl_TxPower p_TxPower,
      powerOffsetOfTFCI_PO1 tsc_sCCPCH_PowerOffsetTFCI,
      powerOffsetOfPILOT_PO3 tsc_sCCPCH_PowerOffsetPILOT
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_SchedulLater(p_CellId: INTEGER;p_REP : INTEGER; p_POS : INTEGER; p_Timing :
BCCH_ModificationTime)

Group :

ASP Type : CMAC_SYSINFO_Config_REQ

Derivation Path :

Comments : scheduling information for system information change at the frame = p_Timing.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : tsc_RB_BCCH,
  ratType fdd,
  configMessage {
    sg_REP p_REP,
    sg_POS p_POS,
    bcch_ModificationTime p_Timing
  }
}
```

Detailed Comments : ?? for MIB

ASN.1 ASP Constraint Declaration

Constraint Name : ca_SchedulNow(p_CellId: INTEGER; p_REP : INTEGER; p_POS : INTEGER)
Group :
ASP Type : CMAC_SYSINFO_Config_REQ
Derivation Path :
Comments : scheduling information for immediately change

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : tsc_RB_BCCH,
  ratType fdd,
  configMessage {
    sg_REP p_REP,
    sg_POS p_POS,
    bcch_ModificationTime OMIT
  }
}
```

Detailed Comments : ?? for MIB

ASN.1 ASP Constraint Declaration

Constraint Name : ca_sSCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)
Group :
ASP Type : CPHY_RL_Setup_REQ
Derivation Path :
Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: tsc_S_SCH,
  ratType fdd,
  setupMessage {
    physicalChannelInfo secondarySCHInfo : {
      tstdIndicator FALSE,
      dl_TxPower p_TxPower
    }
  }
}
```

Detailed Comments : PhysycalChannelIdentity for s−SCH is fixed as tsc_sSCH;

ASN.1 ASP Constraint Declaration

Constraint Name : ca_SyncInd (p_PhysicalChannelIdentity : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_Sync_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId ?,
  routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_SysInfoCfgCnf(p_CellId: INTEGER; p_RB_Identity: SS_RB_Identity)
Group :
ASP Type : CMAC_SYSINFO_Config_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB_Identity
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_TR_DataReq(p_CellId : INTEGER; p_RB : SS_RB_Identity ; p_Message : BCCH_BCH_Message)
Group :
ASP Type : RLC_TR_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  tM_message bCCH_BCH_Message : p_Message
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_TrChCfgCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)
Group :
ASP Type : CPHY_TrCH_Config_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_TrChCfgInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_Type : TrChConfigType;p_TrChConfig: CphyTrchConfigReq)
Group :
ASP Type : CPHY_TrCH_Config_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType p_Type,
  configMessage p_TrChConfig
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_UL_DPCH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UL_DPCHInfo: UL_DPCH_Info)
Group :
ASP Type : CPHY_RL_Setup_REQ
Derivation Path :
Comments : To setup uplink physical channel DPCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  setupMessage {
    physicalChannelInfo dPCHInfo : {
      ul_DPCHInfo p_UL_DPCHInfo
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_UL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UL_DPCHInfo: UL_DPCH_Info; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_RL_Modify_REQ

Derivation Path :

Comments : To setup uplink physical channel DPDCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  modifyMessage {
    activationTime activationCFN : p_ActivationTime,
    physicalChannelInfo dPCHInfo : {
      ul_DPCHInfo p_UL_DPCHInfo
    }
  }
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cab_RACH_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  trchConfigType nonDch: NULL,
  configMessage {
    activationTime activateNow : NULL,
    ulconnectedTrCHList {{
       trchid tsc_RACH1,
       ul_TransportChannelType rach,
       transportChannelInfo c_RACH_TFS
    }},
    ulTFCS c_TFCS_Cmpl0_1_Rx,
    dlconnectedTrCHList OMIT,
    dlTFCS OMIT
  }
}
```

Detailed Comments : For RACH transport channel the following parameters are fixed by core spec.(34.108 cl. 6.10.2.4.4):
TTI = 20 ms;
two transport format: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits;
coding = convolutional;
coding rate = 1/2;
CRCsize = 16;
RateMatching = 1

ASN.1 ASP Constraint Declaration

Constraint Name : car_AM_DataCnf(
p_CellId: INTEGER;
p_RB : INTEGER
)

Group :

ASP Type : RLC_AM_DATA_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  mui ?
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_CRLC_IntegrityFail

Group :

ASP Type : CRLC_Integrity_Failure_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId ?,
  routingInfo ?,
  failureCause codeNotMatched
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_CRLC_RRC_MessageSN_CNF(p_CellId, p_RBID : INTEGER)

Group :

ASP Type : CRLC_RRC_MessageSN_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RBID,
  count_I_MSB_UL ?,
  count_I_LSB_UL ?,
  count_I_MSB_DL ?,
  count_I_LSB_DL ?
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)
Group :
ASP Type : CPHY_Frame_Number_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity : p_PhysicalChannelIdentity,
  frameNumber ?
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group :
ASP Type : CRLC_SequenceNumber_CNF
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  count_C_MSB_UL ?,
  count_C_LSB_UL ?,
  count_C_MSB_DL ? ,
  count_C_LSB_DL ?
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_IniCnf
Group :
ASP Type : CPHY_Ini_CNF
Derivation Path :
Comments : Confirm the test initialisation

Constraint Value

```
{
  confirmation NULL
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_MeasRepAM (
p_CellId : INTEGER;
p_RB : INTEGER;
p_Pdu: UL_DCCH_Message
)

Group :

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_MeasRepUM(
p_CellId : INTEGER;
p_RB : INTEGER ;
p_Pdu: UL_DCCH_Message)

Group :

ASP Type : RLC_UM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult ?,−−@sic T1s040644 sic@
  uM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :

ASP Type : CRLC_Resume_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnRelCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message)
Group :
ASP Type : RLC_AM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnRelCmplUM(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu:UL_DCCH_Message)
Group :
ASP Type : RLC_UM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  integrityResult ?,−−@sic T1s040644 sic@
  uM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnReq(p_CellId: INTEGER; p_RB_Id: SS_RB_Identity; p_Pdu: UL_CCCH_Message)
Group :
ASP Type : RLC_TR_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  tM_message uL_CCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnSetupCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message)
Group :
ASP Type : RLC_AM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  integrityResult ?,
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_SecModeCmpl(
p_CellId: INTEGER;
p_RB : INTEGER ;
p_Pdu: UL_DCCH_Message
)
Group :
ASP Type : RLC_AM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_SecModeFail(
p_CellId: INTEGER;
p_RB : INTEGER;
p_Pdu: UL_DCCH_Message)

Group :

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB ,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_Status(
p_CellId: INTEGER;
p_RBId :INTEGER;
p_Pdu: UL_DCCH_Message)

Group :

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RBId,
  integrityResult ?,−−@sic T1s040644 sic@
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_SuspendRB (p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :

ASP Type : CRLC_Suspend_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  vt ?
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_CRLC_RRC_MessageSN_REQ(p_CellId, p_RBID : INTEGER)
Group	:
ASP Type	: CRLC_RRC_MessageSN_REQ
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo rB_Identity : p_RBID
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)
Group	:
ASP Type	: CPHY_Frame_Number_REQ
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group	:
ASP Type	: CRLC_SequenceNumber_REQ
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo rB_Identity: p_RB_Id
}	

Detailed Comments	:

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_InitReqDef
Group	:
ASP Type	: CPHY_Ini_REQ
Derivation Path	:
Comments	: Request to initialise the test
Constraint Value	
defaultRadioEnvironment	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_InitReqNonDef
Group	:
ASP Type	: CPHY_Ini_REQ
Derivation Path	:
Comments	: Request to initialise the test
Constraint Value	
nonDefaultMultiCell	
Detailed Comments :	

ASN.1 ASP Constraint Declaration	
Constraint Name	: cas_MAC_Rel (p_CellId: INTEGER; p_PhyChId: INTEGER)
Group	:
ASP Type	: CMAC_Config_REQ
Derivation Path	:
Comments	:
Constraint Value	

{
cellId p_CellId,
routingInfo physicalChannelIdentity: p_PhyChId,
ratType fdd,
configMessage release : NULL
}	

Detailed Comments :	

ASN.1 ASP Constraint Declaration

Constraint Name : cas_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)
Group :
ASP Type : CRLC_Resume_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RLC_SuspendRB(p_CellId: INTEGER; p_RB_Id: INTEGER; p_RLC_SeqNum: RLC_SequenceNumber)
Group :
ASP Type : CRLC_Suspend_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  n p_RLC_SeqNum
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnRelCCCH(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_CCCH_Message)
Group :
ASP Type : RLC_UM_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  uM_message dL_CCCH_Message : p_Pdu,
  specialLI TRUE −−@sic T1−031737 sic@
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnRelDCCH(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu : DL_DCCH_Message)
Group :
ASP Type : RLC_UM_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  uM_message dL_DCCH_Message : p_Pdu,
  specialLI FALSE
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnSetup(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_CCCH_Message)
Group :
ASP Type : RLC_UM_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  uM_message dL_CCCH_Message : p_Pdu,
  specialLI TRUE
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_SecModeCmd(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu: DL_DCCH_Message)
Group :
ASP Type : RLC_AM_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  confirmationRequest noConfirmationRequest : NULL,
  aM_message dL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_HandoverFailure (p_RRCau : RR_Cause)
Group :
PDU Type : HANDOVERFAILURE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR HANDOVER FAILURE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.17

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'28'O		message type M BITSTRING [8]
rRCau	p_RRCau		RR cuase M OCTETSTRING [1] without IEI

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_InterSystemToUTRAN_HandoverCommand (p_HandoverToUTRANCmd : HandoverToUTRANCmd)
Group :
PDU Type : INTERSYSTEMTOUTRANHANDOVERCOMMAND
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR INTER SYSTEM TO UTRAN HANDOVER COMMAND ntw −> ue/ms
3GPP TS 44.018 clause 9.1.15a

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'63'O		message type M O1
handoverToUTRANCommand	p_HandoverToUTRANCmd		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_MeasurementInformation(p_neighCellDescr3G : NeighCellDescr3G_MI; p_measParamDescr3G : MeasParamDescr3GMI)

Group :

PDU Type : MEASUREMENTINFORMATION

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Field Name	Field Value	Field Encoding	Comments
rR_ShortPD	’0’B		see 3GPP TS 24.007
msgType	’00101’B		message type.
shortL2Header	’00’B		short layer 2 header
bA_IND	’0’B		BCCH allocation sequence number indication
bA_IND3G	’0’B		3G sequence number
mP_CHANGE_MARK	’0’B		measurement parameters change mark
mI_INDEX	’0000’B		MEASUREMENT INFORMATION index
mI_COUNT	’0000’B		MEASUREMENT INFORMATION count
pWRC	’0’B		power control indicator
rEPORT_TYPE	’1’B		
rEPORT_RATE	’0’B		
iNVALID_BSIC_REPORTING	’0’B		
maskBit1	’0’B		
realTimeDiff	−		not present if maskBit1 = 0
maskBit2	’0’B		
bSIC_Descr	−		not present if maskBit2 = 0
maskBit3	’0’B		
reportPriorityDescr	−		not present if maskBit3 = 0
maskBit4	’0’B		
measParamDescr	−		not present if maskBit4 = 0
maskBit5	’0’B		
extensionLength	−		not present if maskBit5 = 0
maskBit6	’1’B		
neighCellDescr3G	p_neighCellDescr3G		not present if maskBit6 = 0
MaskBit7	’1’B		not present if maskBit1 = 0
measParamDescr3G	p_measParamDescr3G		not present if maskBit7 = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_MeasReport(p_MeasResults : MeasResults)
Group :
PDU Type : MEASUREMENTREPORT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'15'O		message type M BITSTRING [8]
measResults	p_MeasResults		measurement results M OCTETSTRING [16]

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_ClassmarkEnquiry(p_CEMask : ClassmarkEnquiryMask)
Group :
PDU Type : CLASSMARKENQUIRY
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK ENQUIRY ntw −> ue/ms
3GPP TS 44.018 clause 9.1.12

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'13'O		message type M BITSTRING [8]
mask	p_CEMask		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_ClassmarkChange
Group :
PDU Type : CLASSMARKCHANGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK CHANGE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.11

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	’0110’B		RR protocol discriminator M BITSTRING [4]
msgType	’16’O		message type M BITSTRING [8]
msclsmk	c_MS_Clsmk2_Def_lv		mobile station classmark M OCTETSTRING [4]
additionalMsclsmk	cr_MSCLSMK3_Any		addtional mobile station classmark information C OCTETSTRING [14] @sic G3t050003 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_GPRS_SUSPENSIONREQ(p_TLLI: TLLI;p_RAI :RAI_v;p_Cause : O1)
Group :
PDU Type : GPRS_SUSPENSIONREQ
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR GPRS Suspension Request ue/ms −> ntw
3GPP TS 44.018 clause 9.1.13b

Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		skip indicator
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator
msgType	’34’O		’00110100’B
tlli	p_TLLI		Temporary Logical Link Identity
raIdentification	p_RAI		Routeing Area Identification
cause	p_Cause		SuspensionCause

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_G_ChReleaseNormal
Group :
PDU Type : CHANNELRELEASE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : A CHANNEL RELEASE message with RR cause = normal event

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		
msgType	'0D'O		'00001101'B
rRCau	c_G_RR_CauNormalevent		normal event
bA_Range	−		BA range O OCTETSTRING minimum 6 octets no up limit
groupChannelDescr	−		group channel description O OCTETSTRING[4..13]
groupCipherKey	−		group cipher key number C OCTETSTRING[1]
gPRS_Resumption	−		GPRS resumptioon O OCTETSTRING[1]
bA_ListPref	−		BA list pref O OCTETSTRING at least 3 octets no up limit
uTRAN_FreqList	−		UTRAN frequency list O OCTETSTRING[3..

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_G_ChannelReq_Any
Group :
PDU Type : CHANNELREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : To match any received CHANNEL REQUEST message

Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	?		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_G_MeasReport_Any
Group :
PDU Type : MEASUREMENTREPORT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : A measurement report match any received MSR_RPT_PDU.

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'15'O		measurement message type
measResults	c_G_MeasResults_Any		containing any value @sic T1s040536 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_G_PagingRequest1_TMSI_Def
Group :
PDU Type : PAGINGREQUESTTYPE1
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'25'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'21'O		message type M BITSTRING [8]
chNeeded_m1_2	c_G_ChneededAny		channels needed for mobiles 1 and 2 M BITSTRING [4] without IEI
pageMode	c_G_PagModeNormal		page mode M BITSTRING [4] without IEI
mobileId1	c_G_MobileIdTMSI_lv		mobility identity 1 M OCTETSTRING [2..9]
mobileId2	−		mobility identity 2 O OCTETSTRING [3..10]
p1RO	OMIT		P1 rest octets. The SS will fill the rest of the message with spare padding, so no need to include this field. @sic T1−040940 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType1(p_CellAlloc : CellChDescr; p_RACHControlParam: RACHControlParam; p_BandInd : B1)
Group :
PDU Type : SYSTEMINFORMATIONTYPE1
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'55'O		L2 pseudo length = 21
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011001'B		message type
cellChDescr	p_CellAlloc		cell channel description, with IEI omitted
rACHControlParam	p_RACHControlParam		rach control parameters, without IEI
sI1RO	c_SI1_RO(p_BandInd)		SI1 rest octets

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType13(p_SI13RO: SI13RO)
Group :
PDU Type : SYSTEMINFORMATIONTYPE13
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'01'O		L2 pseudo length = 0
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000000'B		message type
si13roct	p_SI13RO		SI3 rest octets

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType2(p_NeighBCCHs: NeighCellDescr;p_NCC_Permitted: O1;p_RACHControlParam: RACHControlParam)
Group :
PDU Type : SYSTEMINFORMATIONTYPE2
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'59'O		L2 pseudo length = 22
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011010'B		message type
neighBCCHFreqList	p_NeighBCCHs		bcch frequency list of neighbour cells with IEI omitted
nCCPermitted	p_NCC_Permitted		ncc permitted
rACHControlParam	p_RACHControlParam		rach control parameters

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType2bis(p_ExtBCCHs : NeighCellDescr; p_RACHControlParam: RACHControlParam)
Group :
PDU Type : SYSTEMINFORMATIONTYPE2bis
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : @sic T1s040644 sic@

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'55'O		L2 pseudo length = 21
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000010'B		message type
extNeighBCCHFreqList	p_ExtBCCHs		extended bcch frequency list of neighbour cells
rACHControlParam	p_RACHControlParam		rach control parameters

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType2quater(p_SI2quaterRO : SI2quaterRO)
Group :
PDU Type : SYSTEMINFORMATIONTYPE2quater
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'05'O		L2 pseudo length = 1
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00000111'B		message type
sI2quaterRO	p_SI2quaterRO		UTRAN parameters

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType3(p_CellIdentity : O2; p_LAI: LocAreaId_v; p_ControlChDescr:ControlChDescr; p_CellOption: CellOptionBCCH; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI3RO: SI3RO)
Group :
PDU Type : SYSTEMINFORMATIONTYPE3
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'49'O		L2 pseudo length = 18
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011011'B		message type
cellId	p_CellIdentity		cell identity
lai	p_LAI		location area identification
controlChDescr	p_ControlChDescr		control channel description
cellOption	p_CellOption		cell options/BCCH
cellSelParam	p_CellSelParam		cell selection parameters
rACHControlParam	p_RACHControlParam		rach control parameters
sI3RO	p_SI3RO		SI3 rest octets

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType4(p_LAI: LocAreaId_v; p_CellSelParam : CellSelParam; p_RACHControlParam: RACHControlParam; p_SI4RO: SI4RO)
Group :
PDU Type : SYSTEMINFORMATIONTYPE4
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'31'O		L2 pseudo length = 12
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011100'B		message type
lai	p_LAI		location area identification
cellSelParam	p_CellSelParam		cell selection parameters
rACHControlParam	p_RACHControlParam		rach control parameters
cbchd	OMIT		cbch channel description
cbchmobileAlloc	OMIT		mobile allocation
si4roct	p_SI4RO		SI4 rest octets OCTETSTRING [10]

Detailed Comments : no cell broadcast channel description IE, no cell broadcast channel mobile allocation IE.

PDU Constraint Declaration

Constraint Name : c_SysInfoType5(p_NeighCellFreqList :NeighCellDescr)
Group :
PDU Type : SYSTEMINFORMATIONTYPE5
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'49'O		L2 pseudo length =18
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011101'B		message type
bCCHFreqList	p_NeighCellFreqList		bcch frequency list

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_SysInfoType6(p_CellIdentity : O2; p_LAI: LocAreaId_v;p_CellOptionSACCH : CellOptionSACCH; p_NCCPermitted : NCCPermitted; p_SI6RO: SI6RO)
Group :
PDU Type : SYSTEMINFORMATIONTYPE6
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length = 11
skipIndicator	'0000'B		skip indicator
rRProtocolDiscriminator	'0110'B		RR protocol discriminator
msgType	'00011110'B		message type
ci	p_CellIdentity		cell identity
lai	p_LAI		location area identification
co	p_CellOptionSACCH		cell options /SACCH
nCCPermitted	p_NCCPermitted		ncc permitted
si6roct	p_SI6RO		SI6 Rest Octets

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_CallConfAny
Group :
PDU Type : CALLCONFIRMED
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CALL CONFIRMED − receive constraint
@sic G3t050025 sic@

Field Name	Field Value	Field Encoding	Comments
ti	?		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??001000'B		
repeatInd	c_RepeatIndAny IF_PRESENT		
bcap1	cr_BcapAnyMO IF_PRESENT		
bcap2	cr_BcapAnyMO IF_PRESENT		
cau	cr_CauAny IF_PRESENT		
cC_Capabilities	cr_CC_CapabilitiesAny IF_PRESENT		
streamId	cr_StreamIdAny IF_PRESENT		
supportedCodecs	cr_CodecListAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_CipheringModeComplete
Group :
PDU Type : CIPHERINGMODECOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CIPHERING MODE COMPLETE ue/ms −> ntw/ue
3GPP TS 44.018 clause 9.1.10

Field Name	Field Value	Field Encoding	Comments
skipIndicator	?		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_CipheringModeComplete_Msg_Type		message type M BITSTRING [8]
mobileEquipId	OMIT		mobile equipment identity O OCTETSTRING [10], 15 digits, BCD

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_CipheringModeCommand(p_StartCiph : B1)
Group :
PDU Type : CIPHERINGMODECOMMAND
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CIPHERING MODE COMMAND ntw −> ue/ms
3GPP TS 44.018 clause 9.1.9

Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_CipheringModeCommand_Msg_Type		message type M BITSTRING [8]
cipherResponse	c_CipherResponse		cipher response M BITSTRING [4]
cipherModeSetting	c_CipherModeSetting(p_StartCiph)		cipher mode setting M BITSTRING [4]

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_ClassmarkChangeAny
Group :
PDU Type : CLASSMARKCHANGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR CLASSMARK CHANGE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.11

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'16'O		message type M BITSTRING [8]
msclsmk	c_MS_Clsmk2_Any_lv		mobile station classmark M OCTETSTRING [4] @sic R5s050106 sic@
additionalMsclsmk	cr_MSCLSMK3_Any		addtional mobile station classmark information C OCTETSTRING [14] @sic R5s050106 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_LocationUpdatingAccept (p_G_CellConfigInfo : G_CellConfigInfo;p_MS_Id : MM_MS_Identity)

Group :

PDU Type : LOCATIONUPDATINGACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : MM LOCATION UPDATING ACCEPT n −> ms
3G TS 24.008 V3.4.0 cl. 9.2.13

Field Name	Field Value	Field Encoding	Comments
skipIndicator	tsc_Gen_SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	tsc_MM_Msgs_Proto_Disc		MM Protocol Discriminator M BITSTRING [4]
msgType	tsc_LocationUpdatingAccept_Msg_Type		Message Type (1) M BITSTRING [8]
locAreaId	c_LocAreaId_v_UdateAccept (p_G_CellConfigInfo)		Location Area Id. V M LocAreaId_v (5 octets)
mobileId	p_MS_Id		Mobile Identity O MobileId (3−11 octets)
followOnProceed	OMIT		Follow on proceed O BITSTRING [8]
cTSPerm	OMIT		CTS Permission O BITSTRING [8]
equivalentPLMN	OMIT		O 17 octets
emergNumList	OMIT		O TLV 5−50 octets @sic R5s050095 sic@

Detailed Comments : (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4) .

PDU Constraint Declaration

Constraint Name : cr_G_UtranClassmarkChange
Group :
PDU Type : UTRANCLASSMARKCHANGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR UTRAN CLASSMARK CHANGE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.11a @sic ER2012 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'60'O		message type M BITSTRING [8]
uTRANPreConfigInfo	c_UtranPreConfigInfo		UTRAN predefined configuration status informatiom M OCTETSTRING [2..n]

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_ImmediateAssignment (p_ARFCN : B10 ; p_TSC : B3; p_RR_RA : INTEGER ; p_RR_RFN : RFN)

Group :

PDU Type : IMMEDIATEASSIGNMENT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : RR IMMEDIATE ASSIGNMENT ntw −> ue/ms
3GPP TS 44.018 clause 9.1.18

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_ImmediateAssignmentMsg_Type		message type M BITSTRING [8]
dedicatedModeOrTBF	c_G_DedicatedModeOrTBF		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	c_G_PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	c_G_ChannelDescr (p_ARFCN, p_TSC)		channel description C OCTETSTRING [3]
packetChDescr	OMIT		packet channel description C OCTETSTRING [3]
reqRef	c_G_ReqRef (p_RR_RA , p_RR_RFN)		request reference M OCTETSTRING [3]
ta	c_G_TA		timing advance M OCTETSTRING [1]
mobileAlloc	c_G_MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	OMIT		starting time O OCTETSTRING [3]
iaroct	c_G_IARO		IA rest octets / frequency parameter, before time M

Detailed Comments : The message has a fixed length of 23 octets.

PDU Constraint Declaration

Constraint Name : cr_G_SetupUL_MO
Group :
PDU Type : SETUPul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP n <− ue

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_MO		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000101'B		
repeatInd	c_RepeatIndAny IF_PRESENT		@sic T1s040536 sic@
bcap1	cr_BcapAnyMO		@sic T1s040536 sic@
bcap2	cr_BcapAnyMO IF_PRESENT		@sic T1s040536 sic@
facility	cr_FacAny IF_PRESENT		@sic T1s040536 sic@
cgps	cr_CGPS_Any IF_PRESENT		@sic T1s040536 sic@
cdpn	cr_CDPN_Any		@sic T1s040536 sic@
cdps	cr_CDPS_Any IF_PRESENT		@sic T1s040536 sic@
llcRepeatInd	c_RepeatIndAny IF_PRESENT		@sic T1s040536 sic@
llc1	cr_LLC_Any IF_PRESENT		@sic T1s040536 sic@
llc2	cr_LLC_Any IF_PRESENT		@sic T1s040536 sic@
hlcRepeatInd	c_RepeatIndAny IF_PRESENT		@sic T1s040536 sic@
hlc1	cr_HLC_Any IF_PRESENT		@sic T1s040536 sic@
hlc2	cr_HLC_Any IF_PRESENT		@sic T1s040536 sic@
userUser	cr_UserUserAny IF_PRESENT		@sic T1s040536 sic@
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		@sic T1s040536 sic@
cLIR_Suppression	'10100001'B IF_PRESENT		@sic T1s040536 sic@
cLIR_Invocation	'10100010'B IF_PRESENT		@sic T1s040536 sic@
cC_Capabilities	cr_CC_CapabilitiesAny IF_PRESENT		@sic T1s040536 sic@
facilityCCBS_AdvRecall	cr_FacilityAdvRecall IF_PRESENT		@sic T1s040536 sic@
facilityCCBS_RecallAlign	cr_FacilityRecallAlign IF_PRESENT		@sic T1s040536 sic@
streamId	cr_StreamIdAny IF_PRESENT		@sic T1s040536 sic@
supportedCodecs	cr_CodecListAny IF_PRESENT		supported codecs O OCTETSTRING[5−n] @sic R5s050095 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_8BitPRACH_MMProc
Group :
PDU Type : PACKETCHANNELREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	'01011???'B		BITSTRING

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_11BitPRACH_MMProc
Group :
PDU Type : PACKETCHANNELREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	'110011?????'B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_PacketEnhancedMeasRpt(p_TLLI : O4; p_NCMeasRpt : NC_MeasRpt)
Group :
PDU Type : PACKETENHANCEDMEASUREMENTREPORT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Includes NC Measurement Report

Field Name	Field Value	Field Encoding	Comments
msgType	'001010'B		Message type
tLLI	p_TLLI		
nCMeasRep	p_NCMeasRpt		
r5Mask	?		
grntiXMask	*		not present if r5Mask = 0
gRNTIExtension	*		not present if r5Mask = 0 or grntiXMask = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketUplinkAssignment_Dynamic_OnePhase(p_packetRequestReference : PacketRequestReference)

Group :

PDU Type : PACKETUPLINKASSIGNMENT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This message is sent on the PCCCH or PACCH by the network to the mobile station to assign uplink resources for One phase TBF.

TS 3GPP 44.046 clause 11.2.29
Values are taken from 51010 clause 40.2.3.4 @sic R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
msgType	'001010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal paging
persistenceLevelMask	'0'B		
persistenceLevel1	OMIT		not Presenet if persistenceLevelMask=0
persistenceLevel2	OMIT		not Presenet if persistenceLevelMask=0
persistenceLevel3	OMIT		not Presenet if persistenceLevelMask=0
persistenceLevel4	OMIT		not Presenet if persistenceLevelMask=0
referenceAddress	c_ReferenceAddress_PRR(p_packetRequestReference)		
eGPRPSmask	'0'B		
channelCodingCommand	INT_TO_BIT(tsc_CS1,2)		not present of EGPRPSmask=1
tLLIBlockChannelCoding	'0'B		0 − the mobile station shall use CS−1 in GPRS TBF mode and MCS−1 in EGPRS TBF mode. 1 − the mobile station shall use the value commanded in the CHANNEL_CODING_COMMAND or EGPRS_CHANNEL_CODING_COMMAND field.
packetTimingAdvance	c_PacketTimingAdvance		
freqParamMask	'1'B		
freqParam	c_FreqParam_PBBCH		not present if freqParamMask=0
allocationMask	'01'B		
dynamicAllocation	c_DynamicAllocationPacket		present if allocationMask=01
singleBlockAllocation	OMIT		present if allocationMask=10
r99Mask	'1'B		
packetExtTAmask	'0'B		not present if r99Mask=0
packetExtendedTA	OMIT		not present if r99Mask=0 and packetExtTImask=0
r5Mask	OMIT		

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PDU Constraint Declaration			
Field Name	**Field Value**	**Field Encoding**	**Comments**
gRNTIMask	OMIT		not present if r99Mask=0 and r5Mask=0
gRNTIExtension	OMIT		not present if r99Mask=0, r5Mask=0 and gRNTIMask=0
rBIdMask	OMIT		not present if r99Mask=0 and r5Mask=0
rBId	OMIT		not present if r99Mask=0, r5Mask=0 and rBIdMask=0
eGPRSmessage	OMIT		not present of EGPRPSmask=0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PacketDownlinkAssignment(p_TLLI : OCTETSTRING; p_DLTFI, p_Gamma : B5)
Group :
PDU Type : PACKETDOWNLINKASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'000010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal paging
persistenceLevelMask	'0'B		
persistenceLevel1	−		not Present if persistenceLevelMask=0
persistenceLevel2	−		not Present if persistenceLevelMask=0
persistenceLevel3	−		not Present if persistenceLevelMask=0
persistenceLevel4	−		not Present if persistenceLevelMask=0
globalTFImask	'1'B		
gLOBAL_TFI	OMIT		not present if globalTFImask=1
mask2	'0'B		not present if globalTFImask=0
tLLI	p_TLLI		not present if globalTFImask=0 and mask2=1
spareBit1	'0'B		set to '0'B
mACMode	'00'B		
rLCMode	'0'B		
controlAck	'0'B		
timeslotAllocation	'00010000'B		
pktTimingAdvance	c_PacketTimingAdvance		
mask1	'0'B		
p0	−		not present if mask1 = 0
spareBit2	−		not present if mask1 = 0. set to '0'B if present
pRMode	−		not present if mask1 = 0
freqParamMask	'0'B		
freqParams	−		not present if freqParamMask = 0
tfiMask	'1'B		
dlTFIAssignment	p_DLTFI		not present if tfiMask = 0
pcMask	'1'B		
powerCtrlParams	c_PowerControlParams(p_Gamma)		not present if pcMask = 0
startTimeMask	'0'B		
tbfStartTime	−		not present if startTimeMask = 0
spareBit3	'0'B		set to '0'B
r99Mask	'1'B		

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PDU Constraint Declaration			
Field Name	**Field Value**	**Field Encoding**	**Comments**
egprsMask	'0'B		not present if r99mask = 0
egprsWindowSize	–		not present if r99mask = 0 or if egprsMask=0
linkQualMeasMode	–		not present if r99mask = 0 or if egprsMask=0
bepMask	–		not present if r99mask = 0 or if egprsMask=0
bepPeriod2	–		not present if r99mask = 0 or if egprsMask=0 or if bepMask=0
pktXTAMask	'0'B		not present if r99mask = 0
pktExtendedTA	–		not present if r99mask = 0 or if pktXTAMask=0
compactMask	'0'B		not present if r99mask = 0
compactReducedMA	–		not present if r99mask = 0 or if compactMask=0
r5Mask	'0'B		not present if r99mask = 0
rBIdMask	–		not present if r99mask = 0 or if r5Mask=0
rBId	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
grntiXMask	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
gRNTIExtension	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if grntiXMask=0
ulCtrlMask	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
ulCtrlTimeslot	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if ulCtrlMask=0
hfnMask	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0
hfnLSB	–		not present if r99mask = 0 or if r5Mask=0 or if rBIdMask=0 or if hfnMask=0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_PacketControlAcknowledgement
Group :
PDU Type : PACKETCONTROLACKNOWLEDGEMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'000001'B		Message type
tLLI	?		
ctrlAck	?		
mask	*		
rRBPMask	*		not present if mask=0
tn_RRBP	*		not present if mask=0 or if rRBPMask=0
gRNTIMask	*		not present if mask=0
gRNTIExt	*		not present if mask=0 or if gRNTIMask=0
paddingBits	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_P_ImmediateAssignment(p_downlink : B1; p_ARFCN : B10 ; p_RR_RA : INTEGER ; p_RR_RFN : RFN; p_RO : IARO)
Group :
PDU Type : IMMEDIATEASSIGNMENT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
l2PseudoLength	'2D'O		L2 pseudo length M OCTETSTRING [1]
skipIndicator	tsc_Gen_SkipIndicator		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	tsc_RR_Msgs_Proto_Disc		RR protocol discriminator M BITSTRING [4]
msgType	tsc_ImmediateAssignmentMsg_Type		message type M BITSTRING [8]
dedicatedModeOrTBF	c_G_TBFMode(p_downlink)		dedicated mode or TBF M BITSTRING [4] without IEI
pageMode	c_G_PageModeIE		page mode M BITSTRING [4] without IEI
chDescr	OMIT		channel description C OCTETSTRING [3]
packetChDescr	c_PacketChDescr(p_ARFCN)		packet channel description C OCTETSTRING [3]
reqRef	c_G_ReqRef (p_RR_RA, p_RR_RFN)		request reference M OCTETSTRING [3]
ta	c_G_TA		timing advance M OCTETSTRING [1]
mobileAlloc	c_G_MobileAlloc		mobile allocation, M OCTETSTRING [1..9]
startingTime	OMIT		starting time O OCTETSTRING [3]
iaroct	p_RO		IA rest octets / frequency parameter, before time M

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType1(p_PBCCHInfo : PBCCH_Info; p_PCCCHParams : PCCCH_OrganisationParameters; p_CellCnfgInfo : G_CellConfigInfo; p_NMO : B2; p_MeasOrder : B1)

Group :

PDU Type : PACKETSYSTEMINFORMATIONTYPE1

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Default PSI 1 defined in 51.010 40.2.2.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	'110001'B		Message type
pageMode	'00'B		
pBCCH_CHANGE_MARK	'000'B		
pSI_CHANGE_FIELD	'0000'B		
pSI1_REPEAT_PERIOD	p_PBCCHInfo.pSI1_REPEAT_PERIOD		
pSI_COUNT_LR	p_PBCCHInfo.pSI_COUNT_LR		
pSI_COUNT_HR_Mask	'1'B		
pSI_COUNT_HR	p_PBCCHInfo.pSI_COUNT_HR		not present if pSI_COUNT_HR_Mask = 0
MEASUREMENT_ODER	p_MeasOrder		
gPRS_CellOptions	c_GPRS_CellOptionsPSI1(p_NMO)		
pRACH_ControlParameters	c_PRACHCntrlParams		
pCCCH_OrganisationParameters	p_PCCCHParams		
globalPowerControlParameters	c_GlobalPowerCtrlParams		
pSI_STATUS_IND	'0'B		
spareMask	'1'B		fields below are added in R99
mSCR	'1'B		present if spareMask = 1
sGSNR	'1'B		present if spareMask = 1
bandIndicator	p_CellCnfgInfo.bandIndicator		present if spareMask = 1

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_1st(p_MCC, p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_RAC : O1; p_AddPSIMask : B1; p_AddPSI : AdditionalPSIMessages)

Group :

PDU Type : PACKETSYSTEMINFORMATIONTYPE2

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : ist Instance of Default PSI 2

Field Name	Field Value	Field Encoding	Comments
msgType	'110010'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		
pSI2_CHANGE_MARK	'01'B		
pSI2_INDEX	'000'B		
pSI2_COUNT	'010'B		
cellIdentificationMask	'1'B		
cellIdentification	c_CellIdentification(p_MCC, p_MNC, p_LAC, p_RAC)		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	'1'B		
nonGPRSCellOptions	c_NonGPRSCellOptions		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_RefFreqListNone		
cellAllocation	c_CellAllocListNone		
gPRS_MobileAllocations	c_GPRSMobAllocListNone		
pCCCH_Description	c_PCCCH_DescrListNone		
spareMask	'1'B		fields below are added in R99
compactControlMask	'0'B		not present if spareMask = 0
compactControlInfo	–		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	p_AddPSIMask		not present if spareMask = 0
additionalPSI_Msg	p_AddPSI		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_2nd(p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)

Group :

PDU Type : PACKETSYSTEMINFORMATIONTYPE2

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : If this needs to be padded to a set number of octets, a second copy needs to be produced for DCS/PCS because their GPRS MA is different.
values from TS 51.010−1 v.5.5.0 subclause 40.2.1.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	’110010’B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI2_CHANGE_MARK	’01’B		
pSI2_INDEX	’001’B		
pSI2_COUNT	’010’B		Three instances of PSI2
cellIdentificationMask	’0’B		Cell Identification parametersnot present
cellIdentification	OMIT		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	’0’B		Non GPRS Cell Options not present
nonGPRSCellOptions	OMIT		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_ReferenceFreqLists(’0010’B,p_rFL_Contents_Len,p_rFL_Contents)		
cellAllocation	c_CellAllocLists(’0010’B)		List 2
gPRS_MobileAllocations	c_GPRS_MobileAllocationLists(’0001’B,p_mA_LENGTH,p_mA_BITMAP)		
pCCCH_Description	c_PCCCH_DescriptionList_Hopping(’0010’B,’000010’B,’00001000’B)		
spareMask	’1’B		fields below are added in R99
compactControlMask	’0’B		not present if spareMask = 0
compactControlInfo	OMIT		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	’0’B		not present if spareMask = 0
additionalPSI_Msg	OMIT		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType2_3rd(p_rFL_Contents_Len:B4;p_rFL_Contents: OCTETSTRING;p_mA_LENGTH:B6;p_mA_BITMAP:BITSTRING)

Group :

PDU Type : PACKETSYSTEMINFORMATIONTYPE2

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : If this needs to be padded to a set number of octets, a second copy needs to be produced for DCS/PCS because their frequency list and GPRS MA is different.
values from TS 51.010−1 v.5.5.0 subclause 40.2.1.1.1

Field Name	Field Value	Field Encoding	Comments
msgType	’110010’B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI2_CHANGE_MARK	’01’B		
pSI2_INDEX	’010’B		
pSI2_COUNT	’010’B		Three instances of PSI2
cellIdentificationMask	’0’B		Cell Identification parametersnot present
cellIdentification	OMIT		not present if cellIdentificationMask = 0
nonGPRSCellOptionsMask	’0’B		Non GPRS Cell Options not present
nonGPRSCellOptions	OMIT		not present if nonGPRSCellOptionsMask = 0
referenceFreqLists	c_ReferenceFreqLists(’0001’B,p_rFL_Contents_Len,p_rFL_Contents)		
cellAllocation	c_CellAllocListNone		List 2
gPRS_MobileAllocations	c_GPRS_MobileAllocationLists(’0010’B,p_mA_LENGTH,p_mA_BITMAP)		
pCCCH_Description	c_PCCCH_DescrListNone		
spareMask	’1’B		fields below are added in R99
compactControlMask	’0’B		not present if spareMask = 0
compactControlInfo	OMIT		not present if spareMask = 0 or compactControlMask = 0
additionalPSI_MsgMask	’0’B		not present if spareMask = 0
additionalPSI_Msg	OMIT		not present if spareMask = 0 or additionalPSI_MsgMask = 0

Detailed Comments : Reference : 3GPP TS 44.060 clause 11.2.19

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType3(p_StartFreq:B10; p_FreqDiffLen : B3; p_FreqDiff:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE3
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'110011'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI3_CHANGE_MARK	'00'B		
pSI3_BIS_COUNT	'0010'B		Three 3bis messages
servingCellParameters	c_ServingCellParams		
generalCellSelectionParameter	c_GenCellSel		
neighCellParameters	c_NeighCellParamsList(p_StartFreq, c_CellSelection_Cell1, p_FreqDiffLen, p_FreqDiff, c_CellSelection_Cell2)		
spareMask1	'1'B		fields below are add in R98
servingCell_LSA_Id_Info	c_LSA_ID_Info_OMIT		not present if spareMask1 = 0
lSA_ParameterMask	'0'B		not present if spareMask1 = 0
lSA_Parameter	OMIT		not present if spareMask1 = 0 or lSA_ParameterMask = 0
spareMask2	'1'B		fields below are added in R99
spareBits	'00'B		not present if spareMask1 = 0 or spareMask2 = 0
compactInfoMask	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
compactInfo	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or compactInfoMask = 0
spareBit	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
spareMask3	'0'B		fields below are added in R4
cCN_SupportDescriptionMask	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	OMIT		not present if cCN_SupportDescriptionMask = 0
spareMask4	'0'B		fields below are added in Release 5
cellBarQualify3	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

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PDU Constraint Declaration			
Field Name	**Field Value**	**Field Encoding**	**Comments**
iuModeNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType3bis(p_Index : B4; p_StartFreq:B10;p_FreqDiffLen:B3;p_FreqDiff:BITSTRING)
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE3bis
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'110100'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		Normal Paging
pSI3_CHANGE_MARK	'00'B		
pSI3_BIS_INDEX	p_Index		
pSI3_BIS_COUNT	'0010'B		
neighCellParameters	c_NeighCellParamsList(p_StartFreq,c_CellSelection_Cell3,p_FreqDiffLen,p_FreqDiff,c_CellSelection_Cell3)		
neighCellParameters2	c_NeighCellParams2List_OMIT		Neighbour Cell parameters 2 not present
spareMask1	'1'B		fields below are add in R98
lSA_ParameterMask	'0'B		not present if spareMask1 = 0
lSA_Parameter	OMIT		not present if spareMask1 = 0 or lSA_ParameterMask = 0
spareMask2	'1'B		fields below are added in R99
compactNeighCellParams	c_CompactNeighCellParams2List_OMIT		not present if spareMask1 = 0 or spareMask2 = 0
spareBit	'0'B		not present if spareMask1 = 0 or spareMask2 = 0
spareMask3	'0'B		fields below are added in R4
cCN_SupportDescriptionMask	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0
cCN_SupportDescription	OMIT		not present if cCN_SupportDescriptionMask = 0
spareMask4	'0'B		fields below are added in Release 5
iuModeNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0
iuModeOnlyNeighCellParams	OMIT		not present if spareMask1 = 0 or spareMask2 = 0 or spareMask3 = 0 or spareMask4 = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PacketSysInfoType5
Group :
PDU Type : PACKETSYSTEMINFORMATIONTYPE5
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
msgType	'110110'B		Message type
pAGE_MODE	INT_TO_BIT(tsc_NormalPaging,2)		
pSI5_CHANGE_MARK	'00'B		
pSI5_INDEX	'000'B		
pSI5_COUNT	'000'B		
nC_MeasMask	'1'B		
pSI5_NC_MeasParameter	c_NC_MeasParams		not present if nC_MeasMask = 0
extMeasMask	'1'B		
extMeasParameter	c_ExtMeasParams		not present if extMeasMask = 0
spareMask	'1'B		following fields are added in R99
eNH_ReportingParamMask	'0'B		not present if spareMask = 0
eNH_ReportingParam	–		not present if eNH_ReportingParaMask = 0 or spareMask = 0

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_ChanReqOnePhase
Group :
PDU Type : CHANNELREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
estCauRandomRef	('011110??'B, '01111?0?'B, '01111??0'B)		establishment cause / random reference M

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_G_AssignmentComplete
Group :
PDU Type : ASSIGNMENTCOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RR ASSSIGNMENT COMPLETE ue/ms −> ntw
3GPP TS 44.018 clause 9.1.3

Field Name	Field Value	Field Encoding	Comments
skipIndicator	?		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	'0110'B		RR protocol discriminator M BITSTRING [4]
msgType	'29'O		message type M BITSTRING [8]
rRCau	c_G_RR_Cause		RR cuase M BITSTRING [8] without IEI @sic G3t040005 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_AssignmentCommand (p_ChMode : ChMode ; p_Ch_Desc : ChannelDescr2 ; p_FreqList_at : FreqList; p_CellChDescr : CellChDescr; p_MultiSlot : MultislotAlloc; p_MobileAlloc : MobileAlloc ; p_Cphms : CipherModeSetting)

Group :

PDU Type : ASSIGNMENTCOMMAND

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : RR ASSSIGNMENT COMMAND ntw −> ue/ms
3GPP TS 44.018 claus 9.1.2

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		skip indicator M BITSTRING [4]
rRProtocolDiscriminator	’0110’B		RR protocol discriminator M BITSTRING [4]
msgType	’2E’O		message type M BITSTRING [8] ’00101110’B @sic ER1490 sic@
ch1Descr_at	p_Ch_Desc		description of the 1st channel, after time M OCTETSTRING [3]
powerCmd	c_PowerCommand		power command M OCTETSTRING [1] without IEI
freqList_at	p_FreqList_at		frequency list, after time C OCTETSTRING [4..132]
cellChDescr	p_CellChDescr		cell channel description O OCTETSTRING [17]
multiSlotConfig	p_MultiSlot		multislot allocation C OCTETSTRING [3..12]
ch1Mode	p_ChMode		mode of the 1st channel (channel set 1) O OCTETSTRING [2]
channelSet2Mode	OMIT		mode of channel set 2 O OCTETSTRING [2]
channelSet3Mode	OMIT		mode of channel set 3 O OCTETSTRING [2]
channelSet4mode	OMIT		mode of channel set 4 O OCTETSTRING [2]
channelSet5mode	OMIT		mode of channel set 5 O OCTETSTRING [2]
channelSet6mode	OMIT		mode of channel set 6 O OCTETSTRING [2]

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PDU Constraint Declaration			
Field Name	**Field Value**	**Field Encoding**	**Comments**
channelSet7mode	OMIT		mode of channel set 7 O OCTETSTRING [2]
channelSet8mode	OMIT		mode of channel set 8 O OCTETSTRING [2]
ch2Descr_at	OMIT		description of the 2nd channel, after time O OCTETSTRING [4]
ch2Mode	OMIT		mode 2 of the 2nd channel O OCTETSTRING [2]
mobileAlloc_at	p_MobileAlloc		mobile allocation after time C OCTETSTRING [3..10]
startingTime	OMIT		starting time O OCTETSTRING [3]
freqList_bt	OMIT		frequency list, before time C OCTETSTRING [4..132]
ch1Descr_bt	OMIT		description of the 1st channel, before time O OCTETSTRING [4]
ch2Descr_bt	OMIT		description of the 2nd channel, before time O OCTETSTRING [4]
frqchs_bt	OMIT		frequency channel sequence before time C OCTETSTRING [10]
mobileAlloc_bt	OMIT		mobile allocation before time C OCTETSTRING [3..10]
cphms	p_Cphms		cipher mode setting O OCTETSTRING [1]
vGCS_TargetMode	OMIT		VGCS target mode Indication O OCTETSTRING [3]
mltiRateConfig	OMIT		multiRate configuration O OCTETSTRING [4..8]
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_G_AttachAcc (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature; p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)

Group :

PDU Type : ATTACHACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : As per default message in 51.010, clause 40.2.4

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00000010’B		
forceToStandby	c_ForceToStandby(’000’B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v(’111’B, ’00000’B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2(’000’B)		@sic R5s050095, R5s050193 sic@
radioPrioSMS	c_RadioPriority(’011’B)		3
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	c_GPRS_Timer_tlv(’000’B, ’10000’B)		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	−		
t3302Value	−		
cellNotification	−		
equivalentPLMN	−		
ntwFeatureSupport	−		O TV 1 octet @sic R5s050095 sic@
emergNumList	−		O TLV 5−50 octets @sic R5s050095 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_G_AuthAndCiphReq(p_rand : AuthenticationParamterRAND; p_ckNo : CiphKeySeqNum_tv; p_CipherAlg : GPRS_CipherAlg; p_autn : GMM_AUTN)
Group :
PDU Type : AUTHENTICATIONANDCIPHERINGREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Used in the GERAN cell

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010010'B		
imeisvReq	cb_IMEISV_Request('000'B)		IMEISV not requested
ciphAlgorithm	c_CiphAlgorithm(p_CipherAlg)		GPRS encryption algorithm
acRefNo	c_AC_RefNum3		Use any reference value
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
authRand	p_rand		Authentication paramter RAND
gprsCiphKeySeqNo	p_ckNo		GPRS ciphering key sequence number
aUTN	p_autn		AUTN parameter

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_LocUpdReqAny_IMSI (p_KeySeq : KeySeq)
Group :
PDU Type : LOCATIONUPDATINGREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Any Location Updating Request with IMSI

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??001000'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
locUpdType	c_LocUpdTypeAny		
locAreaId	c_LocAreaIdAny_v		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdIMSI_lv		
mSClsmk2	c_MS_Clsmk2_Any IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : c_CM_ServAcp			
Group :			
PDU Type : CMSERVICEACCEPT			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	**Field Value**	**Field Encoding**	**Comments**
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00100001'B		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_IMSI_DetachInd			
Group :			
PDU Type : IMSIDETACHINDICATION			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments :			
Field Name	**Field Value**	**Field Encoding**	**Comments**
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??000001'B		
mSClsmk1	c_MS_Clsmk1_Def		
mobileId	c_MobileIdTMSI_lv		IMSI DETACH INDICATION message carries TMSI information element
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cb_CM_ServReqAny (p_KeySeq : KeySeq)
Group :
PDU Type : CMSERVICEREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??100100'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
cMServType	?		
mSClsmk2	c_MS_Clsmk2_Any_lv		
mobileId	c_MobileIdAny_lv		
priorityLvl	c_PriorityLvlAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_Alert (p_TI : TI)
Group :
PDU Type : ALERTINGul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : ALERTING − receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000001'B		
facility	cr_FacAny IF_PRESENT		@sic T1s040540 sic@
userUser	cr_UserUserAny IF_PRESENT		@sic T1s040540 sic@
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		@sic T1s040540 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_Connect (p_TI : TI)
Group :
PDU Type : CONNECTul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CONNECT − receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000111'B		
facility	cr_FacAny IF_PRESENT		@sic T1s040540 sic@
connectedSubAdrs	cr_ConnectedSubAdrs_Any IF_PRESENT		@sic T1s040540 sic@
userUser	cr_UserUserAny IF_PRESENT		@sic T1s040540 sic@
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		@sic T1s040540 sic@
streamId	cr_StreamIdAny IF_PRESENT		@sic T1s040540 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_DetachReq (p_type : DetachType; p_ptmsi : GMM_MS_IdentityPTMSI; p_signature : PTMSI_Signature_tlv)
Group :
PDU Type : DETACHREQUESTMO
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000101'B		
spare4	?		
detachType	p_type		
ptmsi	p_ptmsi		
ptmsiSignature	p_signature		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_Disc (p_TI : TI)
Group :
PDU Type : DISCONNECTul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : DISCONNECT − receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??100101'B		
cau	cr_CauAny_lv		
facility	−		
userUser	−		
sS_VersionInd	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_Rel (p_TI : TI)
Group :
PDU Type : RELEASEul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RELEASE − receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101101'B		
cau	cr_CauAny IF_PRESENT		@sic T1s040540 sic@
cau2	cr_CauAny IF_PRESENT		@sic T1s040540 sic@
facility	cr_FacAny IF_PRESENT		@sic T1s040540 sic@
userUser	cr_UserUserAny IF_PRESENT		@sic T1s040540 sic@
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		@sic T1s040540 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_RelCmpl (p_TI : TI)
Group :
PDU Type : RELEASECOMPLETEul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RELEASE COMPLETE − receive constraint
@sic t1s−050063 sic@

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101010'B		
cau	cr_CauAny IF_PRESENT		
facility	cr_Facility_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_ConnAck (p_TI : TI)
Group :
PDU Type : CONNECTACKNOWLEDGE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CONNECT ACKNOWLEDGE − send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00001111'B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_Disc (p_TI : TI)
Group :
PDU Type : DISCONNECTdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : DISCONNECT − send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00100101'B		
cau	cs_CauNormCallClear_lv		cause
facility	−		
progInd	−		
userUser	−		
allowedAction	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_LocUpdAcpTMSI_2 (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_TMSI : OCTETSTRING)
Group :
PDU Type : LOCATIONUPDATINGACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : @sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00000010'B		
locAreaId	c_LocAreaId_v(p_MCC, p_MNC, p_LAC)		
mobileId	c_MobileIdTMSILoc(p_TMSI)		
followOnProceed	'10100001'B		
cTSPerm	'10100010'B		
equivalentPLMN	−		
emergNumList	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_RA_UpdAcc3
(p_updateResult : UpdateResult_v; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature;
p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)

Group :

PDU Type : ROUTINGAREAUPDATEACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : @sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001001'B		@sic OLAF CR T1−031930 sic@
updateResult	p_updateResult		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
periodicRAupdateTimer	c_GPRS_Timer_v('010'B, '01001'B)		T3312 (default value 54 minutesor 9 decihours, see 3GPP 24.008 clause 11.2.2)
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		
listNPDUnumbers	−		
readyTimer	−		
gmmCause	−		
t3302Value	−		
cellNotification	−		
equivalentPLMN	−		
pDP_ContextStatus	−		
ntwFeatureSupport	−		
emergNumList	−		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : cr_RA_UpdComplete			
Group :			
PDU Type : ROUTING_AREA_UPDATE_COMPLETE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : @sic EW R5s050095 sic@			
Field Name	**Field Value**	**Field Encoding**	**Comments**
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001010'B		
listNPDUnumbers	*		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : cs_Rel (p_TI : TI)			
Group :			
PDU Type : RELEASEdl			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : RELEASE − send constraint			
Field Name	**Field Value**	**Field Encoding**	**Comments**
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101101'B		
cau	−		
cau2	−		
facility	−		
userUser	−		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cs_RelCmpl (p_TI : TI)
Group :
PDU Type : RELEASECOMPLETEdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : RELEASE COMPLETE − send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101010'B		
cau	−		
facility	−		
userUser	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_SetupMT(p_Bcap : Bcap)
Group :
PDU Type : SETUPdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP − sent constraint
@sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	’0011’B		
msgType	’00000101’B		
repeatInd	−		
bcap1	p_Bcap		
bcap2	−		
facility	−		
progInd	−		
signal	−		
cgpn	−		
cgps	−		
cdpn	−		
cdps	−		
redirectingPN	−		
redirectingPSubadrs	−		
llcRepeatInd	−		
llc1	−		
llc2	−		
hlcRepeatInd	−		
hlc1	−		
hlc2	−		
userUser	−		
priority	−		
alert	−		
ntwCCCapabilities	−		
cauNoCLI	−		
buBcap	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_SetupMT_2_Bcap (p_Bcap1, p_Bcap2 : Bcap)
Group :
PDU Type : SETUPdl
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : CC SETUP − sent constraint
@sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00000101'B		
repeatInd	c_RepeatInd1		Bcap repeat indicator for alternate (circular selection)
bcap1	p_Bcap1		
bcap2	p_Bcap2		
facility	−		
progInd	−		
signal	−		
cgpn	−		
cgps	−		
cdpn	−		
cdps	−		
redirectingPN	−		
redirectingPSubadrs	−		
llcRepeatInd	−		
llc1	−		
llc2	−		
hlcRepeatInd	−		
hlc1	−		
hlc2	−		
userUser	−		
priority	−		
alert	−		
ntwCCCapabilities	−		
cauNoCLI	−		
buBcap	−		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_AuthFailAny
Group :
PDU Type : AUTHENTICATIONFAILURE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??011100'B		
rejCau	?		
authFailParam	c_AuthFailParamAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_AuthReq(p_KeySeq: KeySeq; p_RAND: MM_RAND; p_AUTN: AUTN)
Group :
PDU Type : AUTHENTICATIONREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00010010'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeySeq)		
rAND	p_RAND		
aUTN	p_AUTN		

Detailed Comments :

PDU Constraint Declaration			
Constraint Name : c_AuthRspAnyExt			
Group :			
PDU Type : AUTHENTICATIONRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Any Authentication Response containing the Authentication Response Extension IE			
Field Name	**Field Value**	**Field Encoding**	**Comments**
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	c_AuthRspExtAny		
Detailed Comments :			

PDU Constraint Declaration			
Constraint Name : c_AuthRspAnyNoExt			
Group :			
PDU Type : AUTHENTICATIONRESPONSE			
Derivation Path :			
Encoding Rule Name :			
Encoding Variation :			
Comments : Any Authentication Response NOT containing the Authentication Response Extension IE			
Field Name	**Field Value**	**Field Encoding**	**Comments**
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	–		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_PagRsp (p_KeySeq: KeySeq; p_MobileId: MS_Identity_lv)
Group :
PDU Type : PAGINGRESPONSE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		
msgType	'??100111'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeySeq)		
mSClsmk2	c_MS_Clsmk2_Any_lv		
mobileId	p_MobileId		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_TMSI_ReallocCmpl
Group :
PDU Type : TMSIREALLOCATIONCOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
mMProtocolDiscriminator	'0101'B		MM Protocol Discriminator
msgType	'??011011'B		Message Type

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cb_LocUpdReqAny (p_KeySeq : KeySeq)
Group :
PDU Type : LOCATIONUPDATINGREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??001000'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
locUpdType	c_LocUpdTypeAny		
locAreaId	c_LocAreaIdAny_v		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdAny_lv		
mSClsmk2	c_MS_Clsmk2_Any IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cbr_Deact_PDP_ContextReq_MO(p_SM_Cause: SM_Cause_v)
Group :
PDU Type : DEACTIVATEPDPCONTEXTREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Deactivate PDP Context Request
n <=> ue
24.008, 9.5.14
@sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		@sic T1s−040695 sic@
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_SM_Cause		
tearDwnInd	cr_TearDwnInd_tv IF_PRESENT		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cbr_RA_UpdReqAny
(p_UpdateType : UpdateType_v; p_RAI : RAI_v; p_KeySeq : KeySeq)

Group :

PDU Type : ROUTINGAREAUPDATEREQUEST

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : @sic EW T1s040041 sic@
@sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001000'B		
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
updateType	p_UpdateType		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny_lv		@sic T1s040536 sic@
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		
readyTimer	cr_GPRS_TimerAny IF_PRESENT		
drxParameter	cr_DRXparamter_tv_Any IF_PRESENT		
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		
msnetworkcap	cr_MS_NetworkCap_tlv_Any IF_PRESENT		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_AttachComplete
Group :
PDU Type : ATTACHCOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00000011’B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_AttachReq (p_AttachType : AttachType; p_MobId : MS_Identity_lv; p_RAI : RAI_v; p_KeySeq : KeySeq)
Group :
PDU Type : ATTACHREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : @sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00000001’B		
msNetworkCap	cr_MS_NetworkCapAss_lv		@sic T1s040536 sic@
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
attachType	p_AttachType		
drxParameter	c_DRX_ParamterAny		@sic T1s040536 sic@
ptmsiORimsi	p_MobId		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny_lv		@sic T1s040536 sic@
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		@sic OLAF R&S T1−031835 and Anite T1−03xtc2 sic@
readyTimer	c_GPRS_TimerAny IF_PRESENT		@sic OLAF T1−031835 sic@
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		@sic OLAF T1−031835 sic@
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		

Detailed Comments : @SIC OLAF R&S T1−031835 and Anite T1−03xtc2 SIC@

PDU Constraint Declaration

Constraint Name : cr_AuthAndCiphFailureAny
Group :
PDU Type : AUTHENTICATION_AND_CIPHERING_FAILURE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : @sic R5s050146 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00011100'B		
gmmCause	?		
authFailurePar	c_AuthFailParamGmmAny IF_PRESENT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_AuthAndCiphRsp(p_authRsp : AuthRsp_tv; p_authRspExt :AuthRspExt)
Group :
PDU Type : AUTHENTICATIONANDCIPHERINGRESPONSE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010011'B		
spare4	'0000'B		
acRefNo	?		Should be the one sent in the auth request
authRsp	p_authRsp		Authentication RES
imeisv	–		No IMEISV requested
authRspExt	p_authRspExt		Authentication paramter AUTN, a UMTS challenge is requested

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_DetachRequest_MO
Group :
PDU Type : DETACHREQUESTMO
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
gMMProtocolDiscriminator	tsc_GMM_PD		GMM Protocol Discriminator
msgType	'00000101'B		Message Type
spare4	'0000'B		M
detachType	c_DetachTypeReAttNotRequiredGPRS		M
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		O
ptmsiSignature	c_PTMSI_Signature_tlv(?) IF_PRESENT		O

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_ServiceRequest (p_sType : ServiceType_v; p_PTMSI : MS_Identity_lv; p_KeySeq : KeySeq)
Group :
PDU Type : SERVICEREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001100'B		
serviceType	p_sType		
ciphKeySeqNo	c_CiphKeySeqNum(p_KeySeq)		
ptmsi	p_PTMSI		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		@sic ER1534 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_StatusAny
Group :
PDU Type : STATUS_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This constraint is used to receive an AM STATUS PDU containing the given SUFI list. Any padding included is ignored.

Field Name	Field Value	Field Encoding	Comments
dC_Field	tsc_DC_ControlPDU		
type	tsc_PDU_TypeStatus		
superFieldsTx	OMIT		
superFieldsAndPadRx	?		
paddingTx	OMIT		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AttachAcc (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature; p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity)

Group :

PDU Type : ATTACHACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : @sic EW R5s050095 sic@

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000010'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v('111'B, '00000'B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2('000'B)		Lowest @sic R5s050193 sic@
radioPrioSMS	c_RadioPriority('100'B)		Lowest
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	–		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	–		
t3302Value	–		
cellNotification	–		
equivalentPLMN	–		
ntwFeatureSupport	–		
emergNumList	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AttachRej(p_cause : RejCau)
Group :
PDU Type : ATTACHREJECT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00000100’B		
gmmCause	p_cause		
t3302Value	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AuthAndCiphReq(p_rand : AuthenticationParamterRAND; p_ckNo : CiphKeySeqNum_tv; p_autn : GMM_AUTN)
Group :
PDU Type : AUTHENTICATIONANDCIPHERINGREQUEST
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00010010’B		
imeisvReq	cb_IMEISV_Request(’000’B)		IMEISV not requested
ciphAlgorithm	c_CiphAlgorithm(px_CipherAlg)		GPRS encryption algorithm GEA/1 @sic T1s−040615 sic@
acRefNo	c_AC_RefNum3		Use any reference value
forceToStandby	c_ForceToStandby(’000’B)		Force to standby not indicated
authRand	p_rand		Authentication paramter RAND
gprsCiphKeySeqNo	p_ckNo		GPRS ciphering key sequence number
aUTN	p_autn		Authentication paramter AUTN, an UMTS challenge is requested

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_HandoverToUTRANComplete
Group :
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{
  integrityCheckInfo *,
  message handoverToUTRANComplete :
  {
    startList *,
    count_C_ActivationTime *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_HandoverToUTRANComplete_Security
Group :
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{
  integrityCheckInfo *,
  message handoverToUTRANComplete :
  {
    startList {
      { cn_DomainIdentity cs_domain,
        start_Value ?},
      { cn_DomainIdentity ps_domain,
        start_Value ?}
    },
    count_C_ActivationTime *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cdr_UTRAN_MobilityInfo_CNInfo(
p_RRC_TI: RRC_TransactionIdentifier;
p_IntegrityCheckInfo : IntegrityCheckInfo ;
p_U_RNTI_New : U_RNTI;
p_C_RNTI_New : C_RNTI
)

Group :

PDU Type : DL_DCCH_Message

Derivation Path : cbs_108_UTRAN_MobilityInfo.

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
REPLACE
message.utranMobilityInformation.r3.utranMobilityInformation_r3.cn_InformationInfo BY
{
  cn_DomainInformationListFull
  {{
     cn_DomainIdentity ps_domain,
     cn_DomainSpecificNAS_Info '0000'O,
     cn_DRX_CycleLengthCoeff 7
  }}
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_UTRAN_MobilityInfoCnf_ActTime(p_RRC_Ti : RRC_TransactionIdentifier)

Group :

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{
  integrityCheckInfo *,
  message utranMobilityInformationConfirm
  :
  {
    rrc_TransactionIdentifier p_RRC_Ti,
    ul_IntegProtActivationInfo *,
    count_C_ActivationTime *,
    rb_UL_CiphActivationTimeInfo *,
    ul_CounterSynchronisationInfo *,
    laterNonCriticalExtensions *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_108_RRC_ConnRej (p_InitialUEId:InitialUE_Identity; p_RRC_Ti: RRC_TransactionIdentifier; p_RejCause: RejectionCause; p_Wait_time: WaitTime)

Group :

PDU Type : DL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{ integrityCheckInfo OMIT,
  message rrcConnectionReject : r3 :
  {
    rrcConnectionReject_r3
    {
      initialUE_Identity p_InitialUEId,
      rrc_TransactionIdentifier p_RRC_Ti,
      rejectionCause p_RejCause,
      waitTime p_Wait_time,
      redirectionInfo OMIT
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_108_RRC_ConnReq (p_EstCause: EstablishmentCause)

Group :

PDU Type : UL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo OMIT,
  message rrcConnectionRequest :
  {
    initialUE_Identity ( imsi : ? , tmsi_and_LAI : ? , p_TMSI_and_RAI : ?, imei : ? ),
    establishmentCause p_EstCause,
    protocolErrorIndicator noError,
    measuredResultsOnRACH *,
    v3d0NonCriticalExtensions * −−@sic T1s−040086 sic@
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_108_RRC_SecModeCmpl
(p_RRC_Ti : RRC_TransactionIdentifier;
p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList
)

Group :

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo *,
  message securityModeComplete : {
    rrc_TransactionIdentifier p_RRC_Ti ,
    ul_IntegProtActivationInfo *,
    rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList,
    laterNonCriticalExtensions * −−@sic T1s−040086 sic@
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_RRC_ConnSetupDCH
(
p_InitUEId : InitialUE_Identity;
p_RRC_Ti : RRC_TransactionIdentifier;
p_PrmbScrmCode : PrimaryScramblingCode;
p_U_RNTI_New : U_RNTI;
p_UL_ScramblingCode : UL_ScramblingCode
)

Group :

PDU Type : DL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{
  integrityCheckInfo OMIT,
  message rrcConnectionSetup:
  r3 :
  {
    rrcConnectionSetup_r3 −−RRCConnectionSetup_r3_IEs
    {
      initialUE_Identity p_InitUEId,
      rrc_TransactionIdentifier p_RRC_Ti,
      activationTime OMIT,
      new_U_RNTI p_U_RNTI_New ,
      new_c_RNTI OMIT,
      rrc_StateIndicator cell_DCH ,
      utran_DRX_CycleLengthCoeff 9,
      capabilityUpdateRequirement {
        ue_RadioCapabilityFDDUpdateRequirement TRUE,
        ue_RadioCapabilityTDDUpdateRequirement FALSE,
        systemSpecificCapUpdateReqList {gsm}
      },
      srb_InformationSetupList {
        c_SRB_InfoSetupUM_DCH ( tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1, tsc_DL_DCCH1),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2, tsc_DL_DCCH2),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3, tsc_DL_DCCH3),
        c_SRB_InfoSetupAM_DCH ( tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4, tsc_DL_DCCH4)
      },
      ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k,
      ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCCH_13_6k,
      dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
      dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCCH_SRB,
      frequencyInfo OMIT,
      maxAllowedUL_TX_Power OMIT,
      ul_ChannelRequirement ul_DPCH_Info : c_UL_DPCH_13_6_StandAlone ( p_UL_ScramblingCode ),
      dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset ( tsc_DL_DPCH1_SFP_SRB ),
      dl_InformationPerRL_List c_DL_InfoPerRL_DPCH_Offset (p_PrmbScrmCode, tsc_DL_DPCH1_2ndScrC,
tsc_DL_DPCH1_ChC_SRB)
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_RRC_ConnSetupFACH
(
p_InitUEId : InitialUE_Identity;
p_RRC_Ti : RRC_TransactionIdentifier;
p_PrmbScrmCode: PrimaryScramblingCode;
p_U_RNTI_New : U_RNTI;
p_CRNTI_New : C_RNTI;
p_UL_ScramblingCode : UL_ScramblingCode
)

Group :

PDU Type : DL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.123−1 annex A

Constraint Value

```
{
  integrityCheckInfo OMIT,
  message rrcConnectionSetup:
  r3 :
  {
    rrcConnectionSetup_r3 −−RRCConnectionSetup_r3_IEs
    {
      initialUE_Identity p_InitUEId,
      rrc_TransactionIdentifier p_RRC_Ti ,
      activationTime OMIT,
      new_U_RNTI p_U_RNTI_New ,
      new_c_RNTI p_CRNTI_New,
      rrc_StateIndicator cell_FACH ,
      utran_DRX_CycleLengthCoeff 9,
      capabilityUpdateRequirement {
        ue_RadioCapabilityFDDUpdateRequirement TRUE,
        ue_RadioCapabilityTDDUpdateRequirement FALSE,
        systemSpecificCapUpdateReqList {gsm}
      },
      srb_InformationSetupList {
        c_SRB_InfoSetupUM_FACH (tsc_RB1, tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1,
tsc_DL_DCCH1),
        c_SRB_InfoSetupAM_FACH (tsc_RB2,tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2,
tsc_DL_DCCH2),
        c_SRB_InfoSetupAM_FACH (tsc_RB3, tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3,
tsc_DL_DCCH3),
        c_SRB_InfoSetupAM_FACH (tsc_RB4, tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4,
tsc_DL_DCCH4)
      },
      ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k,
      ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCCH_3_4k,
      dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
      dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCCH_SRB,
      frequencyInfo OMIT,
      maxAllowedUL_TX_Power OMIT,
      ul_ChannelRequirement OMIT,
      dl_CommonInformation OMIT,
      dl_InformationPerRL_List OMIT
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cbr_108_RRC_ConnRelCmpl (p_RRC_Ti: RRC_TransactionIdentifier)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo *,
  message rrcConnectionReleaseComplete : {
    rrc_TransactionIdentifier p_RRC_Ti,
    errorIndication *,
    laterNonCriticalExtensions *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cr_108_RRC_ConnSetupCmpl (p_RRC_Ti : RRC_TransactionIdentifier; p_STARTList : STARTList)
Group	:
PDU Type	: UL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo OMIT,
  message rrcConnectionSetupComplete : {
    rrc_TransactionIdentifier p_RRC_Ti,
    startList p_STARTList ,
    ue_RadioAccessCapability *,
    ue_RATSpecificCapability *,
    v370NonCriticalExtensions *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_108_SecModeFail (p_RRC_Ti : RRC_TransactionIdentifier; p_FailureCauseWithProtErr : FailureCauseWithProtErr)

Group :

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{ integrityCheckInfo * ,
  message securityModeFailure :
  {
    rrc_TransactionIdentifier p_RRC_Ti,
    failureCause p_FailureCauseWithProtErr,
    laterNonCriticalExtensions * −− @sic RASH T1−031723 sic@
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_MeasRep

Group :

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{ integrityCheckInfo *,
  message measurementReport : ?
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_RrcConnReqAny
Group :
PDU Type : UL_CCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{ integrityCheckInfo OMIT,
  message rrcConnectionRequest :
  {
    initialUE_Identity ?,
    establishmentCause ?,
    protocolErrorIndicator noError,
    measuredResultsOnRACH *,
    v3d0NonCriticalExtensions * −−@sic T1s−040086 sic@
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_RrcStatus
Group :
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{ integrityCheckInfo *,
  message rrcStatus : ?
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_108_RRC_ConnRelCCCH (
p_U_rnti: U_RNTI;
p_RRC_Ti: RRC_TransactionIdentifier)

Group :

PDU Type : DL_CCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo OMIT,
  message rrcConnectionRelease : r3 :
  {
    rrcConnectionRelease_CCCH_r3
    {
      u_RNTI p_U_rnti,
      rrcConnectionRelease
      {
        rrc_TransactionIdentifier p_RRC_Ti,
        n_308 OMIT,
        releaseCause normalEvent
      }
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_108_RRC_ConnRelDCCH (
p_IntegrityCheckInfo : IntegrityCheckInfo;
p_RRC_Ti: RRC_TransactionIdentifier;
p_N308: INTEGER)

Group :

PDU Type : DL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo p_IntegrityCheckInfo,
  message rrcConnectionRelease : r3 :
  {
    rrcConnectionRelease_r3
    {
      rrc_TransactionIdentifier p_RRC_Ti,
      n_308 p_N308,
      releaseCause normalEvent,
      rplmn_information OMIT
    },
    laterNonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_108_RRC_SecModeCmd (p_IntegrityCheckInfo : IntegrityCheckInfo; p_SecModeCmd: SecurityModeCommand)
Group	:
PDU Type	: DL_DCCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: Defined in TS 34.108 clause 9.

Constraint Value

```
{ integrityCheckInfo p_IntegrityCheckInfo,
  message securityModeCommand : p_SecModeCmd
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	: cs_SIB_MsgCmpl(p_SIBType : SIB_Type; p_SIBData: SIB_Data_fixed)
Group	:
PDU Type	: BCCH_BCH_Message
Derivation Path	:
Encoding Rule Name	:
Encoding Variation	:
Comments	: System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload completeSIB : {
      sib_Type p_SIBType,
      sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgCmplList1(p_SIBType : SIB_Type; p_SIBData: SIB_Data_variable)
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload completeSIB_List : {{
        sib_Type p_SIBType,
        sib_Data_variable p_SIBData }}
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgFirst(p_SIBType : SIB_Type; p_SegCount: INTEGER; p_SIBData: SIB_Data_fixed)
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0, −− place holder
    payload firstSegment : {
      sib_Type p_SIBType,
      seg_Count p_SegCount,
      sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgLast(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_fixed)
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message contains last segment which is 222 bits long.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload lastSegment : {
      sib_Type p_SIBType,
      segmentIndex p_SegIndex,
      sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgLastShort(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_variable)
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message contains last segment which is short than 215 bits.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload lastSegmentShort : {
      sib_Type p_SIBType,
      segmentIndex p_SegIndex,
      sib_Data_variable p_SIBData }
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgNoSegment
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	System information message contains no SIB, sent on the frame which there is no any SIB/SB/MIB scheduled on. The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload noSegment : NULL
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name	:	cs_SIB_MsgSubsequent(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_fixed)
Group	:	
PDU Type	:	BCCH_BCH_Message
Derivation Path	:	
Encoding Rule Name	:	
Encoding Variation	:	
Comments	:	The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload subsequentSegment : {
      sib_Type p_SIBType,
      segmentIndex p_SegIndex,
      sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbs_108_UTRAN_MobilityInfo (
p_RRC_TI: RRC_TransactionIdentifier;
p_IntegrityCheckInfo : IntegrityCheckInfo ;
p_U_RNTI_New : U_RNTI;
p_C_RNTI_New : C_RNTI
)

Group :

PDU Type : DL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{
  integrityCheckInfo p_IntegrityCheckInfo,
  message utranMobilityInformation: r3 :
  { utranMobilityInformation_r3
    { −−UTRANMobilityInformation
      rrc_TransactionIdentifier p_RRC_TI,
      integrityProtectionModeInfo OMIT,
      cipheringModeInfo OMIT,
      new_U_RNTI p_U_RNTI_New,
      new_C_RNTI p_C_RNTI_New ,
      ue_ConnTimersAndConstants {
        t_301 ms2000,
        n_301 2,
        t_302 ms4000,
        n_302 3,
        t_304 ms1000,
        n_304 3,
        t_305 m60,
        t_307 s50,
        t_308 ms320,
        t_309 8,
        t_310 ms320,
        n_310 5,
        t_311 ms500,
        t_312 5,
        n_312 s200,
        t_313 10,
        n_313 s200,
        t_314 s20,
        t_315 s30,
        n_315 s200,
        t_316 s50,
        t_317 infinity7 −−@sic Rel5 sic@
      } ,
      cn_InformationInfo OMIT,
      ura_Identity OMIT,
      dl_CounterSynchronisationInfo OMIT
    },
    v3a0NonCriticalExtensions OMIT
  }
}
```

Detailed Comments :

IV

Dynamic Part

Test Case Dynamic Behaviour

Test Case Name : tc_60_1
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN handovers to the indicated channel in the UTRAN target cell when it is in the speech call active state in the GSM serving cell and receives a INTER−SYSTEM HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Inter system handover to UTRAN/From GSM/Speech/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			Combined Control Channel at −50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff(tsc_CellA)			@sic t1−040940 sic@
8	TBS	(tcv_TestBody := TRUE)			
9		REPEAT lt_LocalTest UNTIL [tcv_ISHO_SubtestCounter = 4]			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		(tcv_ISHO_SubtestCounter := tcv_ISHO_SubtestCounter + 1)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17		[(tcv_ISHO_SubtestCounter = 1) AND (NOT pc_GSM_FR)]			If yes skip the subtest 1
18		[(tcv_ISHO_SubtestCounter = 2) AND (NOT pc_GSM_EFR)]			If yes skip the subtest 2
19		[(tcv_ISHO_SubtestCounter = 3) AND (NOT pc_GSM_AMR)]			If yes skip the subtest 3
20		[(tcv_ISHO_SubtestCounter = 4) AND (NOT pc_GSM_HR)]			If yes skip the subtest 4
21		[TRUE]			
22		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			No PBCCH
23		+lt_G_ConfigTrafficChannel			
24		+lt_InitAssignmentCmd			
25		+ts_SS_SwitchBackCellOn (tsc_CellA)			@sic t1−040940 sic@
26		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;
27		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Step 3 of prose; Configure DTCH and RB10,11,12
28		+lt_Meas			Steps 4 and 5 of prose
29		+lt_InitHOCmd			
30		+lt_SubTest			
31		+lt_Postamble			
		lt_G_ConfigTrafficChannel			
32		[tcv_ISHO_SubtestCounter = 1]			Sub Test 1 Specific
33		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
34		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
35		[tcv_ISHO_SubtestCounter = 2]			Sub Test 2 Specific

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
36		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV2)			
37		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
38		[tcv_ISHO_SubtestCounter = 3]			Sub Test 3 Specific
39		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV3)			
40		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
41		[tcv_ISHO_SubtestCounter = 4]			Sub Test 4 Specific
42		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
43		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TS0, tcv_Ch_Mode, 2) lt_SubTest			
44		+lt_ConfigCipher_BeforeHO			@sic G3t050 018 sic@
45		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_TrchId1 , tcv_RR_ChannelType2 , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 6 of prose; Sending the Handover Command.
46	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete .startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete .count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 9 of prose; Receiving Handover complete @sic G3t050 018 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
47		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
48		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
49		+lt_ConfigCipher_AfterHO			@sic G3t050018 sic@
		lt_ConfigCipher_BeforeHO			
50		+ts_GetHFN			@sic G3t050018 sic@
51		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
52		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018 sic@
53		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018, G3t050026 sic@
54		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			@sic G3t050018 sic@
		lt_ConfigCipher_AfterHO			
55		+ts_GetHFN			@sic G3t050018 sic@
56		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
57		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			@sic G3t050018 sic@
		lt_Postamble			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
58		+ts_GetHFN			Update StartValue
59		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
60		+ts_ActivateIntegrity_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			@sic G3t040005, G3t050018 sic@
61		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
62		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
63		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
64		+ts_CC_Disconnect (tsc_CellA)			
65		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
66		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
67		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
68		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
69		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			@sic G3t040005 sic@
70		+ts_SS_SwitchCellOff(tsc_CellA)			
71		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
72		[TRUE]			
73		+lt_GMMduringCS			
74		+ts_CC_Disconnect (tsc_CellA)			
75		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
76		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
77		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
78		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
79		+ts_SS_SwitchCellOff(tsc_CellA)			
80		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
81		+ts_G_DisableCiphering(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)			@sic G3t050036 sic@
		lt_GMMduringCS			
82		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
83		+ts_U_GPRSAttach(tsc_CellA)			
84		[TRUE]			
85		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating @sic G3t040005 sic@
		lt_InitVariables			
86		+ts_RRC_InitVariables (cell_DCH)			
87		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040654 sic@
88		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
89		+ts_GSM_InitVariablesSpecific40			@sic GP−042725 sic@
90		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
91		+ts_GPRS_InitVariablesDef			
		lt_InitAssignmentCmd			
92		[(tcv_ISHO_SubtestCounter= 1) OR (tcv_ISHO_SubtestCounter= 2) OR (tcv_ISHO_SubtestCounter= 3)]			
93		+ts_InitAssigmentCmd (tcv_Ch_Mode)			
94		[tcv_Ch_Mode = c_G_ChModeSpeechFROrHRV3]			
95		(tcv_AssignmentCommand.mltiRateConfig := c_G_MultiRateConfig)			If AMR channel, need to include optional MultiRate Config
96		[TRUE]			
97		[tcv_ISHO_SubtestCounter= 4]			
98		+ts_InitAssigmentCmd_HR (tsc_GSM_CellA , tcv_Ch_Mode)			
99		[TRUE]			
		lt_InitHOCmd			
100		[px_CipheringOnOff]			
101		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
102		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
103		[NOT px_CipheringOnOff]			
104		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT,c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech, tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
105		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
		lt_Meas			
106		[tcv_RR_ChannelType2 = 11]			must be half rate, so SACCH is LogicCh 13

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
107		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , 13 , tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
108		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
109		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , 13 , tcv_RR_Subchannel2, c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3GFDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measurement Information on the SACCH/TH
110		+lt_Meas_contd			
111		[TRUE]			
112		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
113		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
114		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3GFDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measurement Information on the SACCH
115		+lt_Meas_contd			
		lt_Meas_contd			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
116		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
117	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?,?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
118		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport (tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
119		−>RcvMR			wait for the next one
120		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_2a
Group : IntersytemHO/
Purpose : To test that the MS handovers to the indicated UTRAN target cell and the data rate of the target channel is the same as the old channel when it is in the data call active state in the GSM serving cell and receives a INTER SYSTEM TO UTRAN HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_C286
Description : Inter system handover to UTRAN/From GSM/Data/Same data rate/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			@sic R5−050947 sic@
7		+ts_SS_SwitchCellOff(tsc_CellA)			@sic t1−040940 sic@
8	TBS	(tcv_TestBody := TRUE, tcv_ISHO_SubtestCounter := 1)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
17		+lt_G_ConfigTrafficChannel			
18		+ts_InitAssigmentCmd (tcv_Ch_Mode)			
19		+ts_SS_SwitchBackCellOn (tsc_CellA)			@sic t1−040940 sic@
20		+ ts_CC_InitTCV_MT_ForMultiRAT (streamUnknown_14_4k)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		+ts_G_CC_EnterU10_MT (tsc_GSM_CellA)			Step 2 of prose; Bring the mobile into Mobile terminated CC U10 state.
22		+ ts_CalculateActTime (tsc_CellA)			@sic G3t050 013 sic@
23		+ts_SS_Reconf_DPCH_StreamingUnknown14_4k_28_8k_57_6k (tsc_CellA , tcv_ActTime)			Step 3 of prose; Configure DTCH and RB10
24		+lt_Meas			
25		+lt_InitHOCmd			
26		+lt_SubTest			Step 4 & 5 of prose;
27		+lt_Postamble			
28		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
29		+ts_SS_SwitchCellOff(tsc_CellA)			
30		+ts_SSconfigToInitialState (tsc_CellA)			
31		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
		lt_InitVariables			
32		+ts_RRC_InitVariables (cell_DCH)			
33		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040 654 sic@
34		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
35		+ts_GSM_InitVariablesSpecific40			@sic GP−042 725 sic@
36		+ts_GPRS_InitVariablesDef			
37		+ts_GSM_InitVariablesSpecific26_6_5_1_ 2 (tsc_GSM_CellA)			
		lt_G_ConfigTrafficChannel			
38		(tcv_Ch_Mode := c_G_ChModeDataRI_14_5)			
39		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1,tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
		lt_InitHOCmd			
40		[px_CipheringOnOff]			
41		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_Sf64 , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 7))			
42		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
43		[NOT px_CipheringOnOff]			
44		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_Sf64 ,tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 7))			
45		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
		lt_SubTest			
46		+lt_ConfigCipher_BeforeHO			@sic G3t050 018 sic@
47		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_G_TrchId1 , tcv_RR_ChannelType2 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 6 of prose; Sending the Handover Command.

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
48	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 9 of prose; Receiving Handover complete @sicG3t050018sic@
49		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
50		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
51		+lt_ConfigCipher_AfterHO			@sicG3t050018sic@
		lt_ConfigCipher_BeforeHO			
52		+ts_GetHFN			@sicG3t050018sic@
53		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sicG3t050018sic@
54		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sicG3t050018sic@
55		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sicG3t050018sic@
56		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			@sicG3t050018sic@
		lt_ConfigCipher_AfterHO			
57		+ts_GetHFN			@sicG3t050018sic@

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Test Case Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
58		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050 018 sic@
59		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			@sic G3t050 018 sic@
		lt_Postamble			
60		+ts_GetHFN			Update StartVal ue
61		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
62		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			@sic G3t050 018 sic@
63		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
64		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
65		[pc_RLPSupported]			@sic R5−050 546 sic@
66		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Disc (?))		UE supporti ng RLP will timeout and send Disconn ect
67	TSP	Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Rel (tcv_TI_S))		
68		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_RelCmpl (?))		
69		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
70		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
71		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
72		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
73		[TRUE]			
74		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
75		[NOT pc_RLPSupported]			@sic R5−050546 sic@
76		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
77		+ts_CC_Disconnect (tsc_CellA)			
78		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
79		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
80		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
81		[TRUE]			
82		+lt_GMMduringCS			
83		+ts_CC_Disconnect (tsc_CellA)			
84		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
85		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
86		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
		lt_GMMduringCS			
87		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
88		+ts_U_GPRSAttach(tsc_CellA)			
89		[TRUE]			
90		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
		lt_Meas			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
91		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), 15, TRUE)		Turn Meas Rpts On
92		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
93		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , 15 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3GFDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measurement Information on the SACCH
94		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
95	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ? ,?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
96		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport (tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
97		−>RcvMR			wait for the next one
98		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_4
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN handovers from GSM serving cell to the indicated channel in the UTRAN target cell when the MS is in the call establishment phase and receives a INTER−SYSTEM HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Establishment/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, si2quater, nopsi5)			no PBCCH, but SI2quater
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ts_SS_SwitchCellOff (tsc_CellA)			@sic T1040940 sic@
8		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
9		+lt_LocalTest			
10		+lt_Postamble			
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16	TBS	(tcv_TestBody := TRUE)			
17		+ts_CC_BasicServMO(tsc_SrvTelephony)			
18		+ts_G_CC_EnterU1 (tsc_GSM_CellA)			Step 2−7 of prose;

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		+ ts_SS_SwitchBackCellOn (tsc_CellA)			@sic T1040940 sic@
20		+ts_SS_RB2_RB3_ReCfg_DefCfg1			
21		+ ts_CalculateActTime (tsc_CellA)			@sic G3t050013 sic@
22		+ts_SS_1DCH_DCCH_Modify_IR_G(tsc_CellA, tcv_ActTime)			
23		+lt_InitHOCmd			
24		+lt_Meas			Step 9 − 10 of Prose
25		+lt_SubTest			Step 9 − 14 of prose;
26	TBE	(tcv_TestBody := FALSE)		(P)	
		lt_SubTest			
27		+lt_ConfigCipher_BeforeHO			@sic G3t050018 sic@
28		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_PhyCh0 , tcv_RR_ChannelType, tcv_RR_Subchannel , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 11 of prose; Sending the Handover Command.
29	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 14 of prose; Receiving Handover complete @sic G3t050018 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
30		G_L2 ! G_L2_Release_REQ	cas_G_L2_Release_REQ (tsc_GSM_CellA, tsc_PhyCh0 , tcv_RR_ChannelType, tcv_RR_Subchannel)		Handover successful, Release old channel @sic G3t050001 sic@
31		G_L2 ? G_L2_Release_CNF	ca_G_L2_Release_CNF		@sic G3t050001 sic@
32		+lt_ConfigCipher_AfterHO			@sic G3t050018 sic@
		lt_ConfigCipher_BeforeHO			
33		+ts_GetHFN			@sic G3t050018 sic@
34		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
35		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018 sic@
36		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018 sic@
37		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			@sic G3t050018 sic@
		lt_ConfigCipher_AfterHO			
38		+ts_GetHFN			@sic G3t050018 sic@
39		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
40		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			@sic G3t050018 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_InitVariables			
41		+ts_RRC_InitVariables (cell_DCH)			
42		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040654 sic@
43		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
44		+ts_GSM_InitVariablesSpecific40			@sic GP−042725 sic@
45		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
46		+ts_GPRS_InitVariablesDef			
47		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '0000'B, '000'B), '0'B, OMIT))			@sic R5s050088 sic@
		lt_InitHOCmd			
48		[px_CipheringOnOff]			
49		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommandNoRABInfo (uea1, c_URNTI_Short ('000000000001'B , '0000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 1))			
50		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
51		[NOT px_CipheringOnOff]			
52		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommandNoRABInfo (OMIT, c_URNTI_Short ('000000000001'B , '0000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 1))			
53		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_Meas			
54		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_PhyCh0, (tcv_RR_ChannelType +1), tcv_RR_Subchannel, TRUE)		Turn Meas Rpts On
55		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
56		START t_WaitS(20)			Just so we don't sit here forever
57	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ? ,?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
58		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ? ,?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
59		−>RcvMR			wait for the next one
60		?TIMEOUT t_WaitS		(F)	No measurement report received
		lt_Postamble			
61		+ts_GetHFN			Update StartValue
62		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
63		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			@sic G3t050018 sic@
64		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo(tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
65		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
66		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
67		Dc ! RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_RelCmpl(tcv_TI_S))		
68		+ts_RRC_ConnRel_RelDPCH (tsc_CellA , cell_Dch)			@sic G3t050 001 sic@
69		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
70		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
71		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
72		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			
73		[TRUE]			
74		+lt_GMMduringCS			
75		Dc ! RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_RelCmpl(tcv_TI_S))		
76		+ ts_RRC_ConnRel_RelDPCH (tsc_CellA , cell_Dch)			@sic G3t050 001 sic@
77		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
78		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
79		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
		lt_GMMduringCS			
80		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
81		+ts_U_GPRSAttach(tsc_CellA)			
82		[TRUE]			
83		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_5
Group : IntersytemHO/
Purpose : To test that the MS handovers from the GSM serving cell to the indicated channel of UTRAN target cell when it is in the speech call active state without any knowledge of the target system (blind handover) and receives a INTER−SYSTEM TO UTRAN HANDOVER COMMAND.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Blind HO/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff(tsc_CellA)			@sic T1040940 sic@
8		+lt_LocalTest			
9		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
10		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
11		+po_ConnectionAndSS_Rels			
12	ERR1	[px_RAT = tdd]		(I)	
13	ERR2	[TRUE]		(I)	
		lt_LocalTest			
14	TBS	(tcv_TestBody := TRUE)			
15		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
16		+lt_G_ConfigTrafficChannel			
17		+ts_InitAssigmentCmd (tcv_Ch_Mode)			
18		+ts_SS_SwitchBackCellOn (tsc_CellA)			@sic T1040940 sic@
19		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Configure DTCH and RB10,11,12

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			
21		+lt_InitHOCmd			
22		+lt_SubTest			Step 3 – 6 of prose;
23	TBE	(tcv_TestBody := FALSE)		(P)	
24		+lt_Postamble			
		lt_Postamble			
25		+ts_GetHFN			Update StartValue
26		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			
27		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			@sic G3t050 018 sic@
28		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
29		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
30		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
31		+ts_CC_Disconnect (tsc_CellA)			
32		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
33		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
34		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
35		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
36		+ts_MM_IMSI_Detach (tsc_CellA, FALSE)			
37		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
38		[TRUE]			
39		+lt_GMMduringCS			
40		+ts_CC_Disconnect (tsc_CellA)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
41		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
42		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
43		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
44		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
45		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
		lt_GMMduringCS			
46		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
47		+ts_U_GPRSAttach(tsc_CellA)			
48		[TRUE]			
49		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
		lt_G_ConfigTrafficChannel			
50		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
51		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
		lt_SubTest			
52		+lt_ConfigCipher_BeforeHO			@sic G3t050 018 sic@
53		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_TrchId1 , 9 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd, tcv_GSM_ToUTRAN_HO_Cmd)))		Step 3 of prose; Sending the Handover Command.

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
54	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete)	(P)	Step 6 of prose; Receiving Handover complete @sicG3t050018sic@
55		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
56		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
57		+lt_ConfigCipher_AfterHO			@sicG3t050018sic@
		lt_ConfigCipher_BeforeHO			
58		+ts_GetHFN			@sicG3t050018sic@
59		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sicG3t050018sic@
60		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sicG3t050018sic@
61		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sicG3t050018sic@
62		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			@sicG3t050018sic@
		lt_ConfigCipher_AfterHO			
63		+ts_GetHFN			@sicG3t050018sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
64		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050 018 sic@
65		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			@sic G3t050 018 sic@
		lt_InitVariables			
66		+ts_RRC_InitVariables (cell_DCH)			
67		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040 654 sic@
68		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
69		+ts_GSM_InitVariablesSpecific40			@sic GP−042 725 sic@
70		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
71		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
72		[px_CipheringOnOff]			
73		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
74		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
75		[NOT px_CipheringOnOff]			
76		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
77		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_6
Group : IntersytemHO/
Purpose : To test that the MS reactivates the old channel and transmits HANDOVER FAILURE message to the network on the old channel in the GSM cell when it received a INTER−SYSTEM TO UTRAN HANDOVER COMMAND and the handover to UTRAN failed.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechFR
Description : Inter system handover to UTRAN/From GSM/Speech/Failure

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT=fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			no PBCCH
5		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff(tsc_CellA)			@sic T1040940 sic@
8		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			no PBCCH
9		+lt_LocalTest			
10		+ts_G_Disconnect(tsc_GSM_CellA , tsc_G_TrchId1)			
11		+ ts_G_ChannelRelease(tsc_GSM_CellA, tsc_G_TrchId1)			
12		+ts_MM_PwrOrUSIM_Off(FALSE)			
13		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
14		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
15		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
16		+po_ConnectionAndSS_Rels			
17	ERR1	[px_RAT = tdd]		(I)	
18	ERR2	[TRUE]		(I)	

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_LocalTest			
19	TBS	(tcv_TestBody := TRUE)			
20		+lt_G_ConfigTrafficChannel			
21		+ts_InitAssigmentCmd (tcv_Ch_Mode)			
22		+ts_SS_SwitchBackCellOn (tsc_CellA)			@sic T1040940 sic@
23		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;
24		+lt_InitHOCmd			
25		+lt_Meas			
26		+lt_SubTest			Step 5 − 8 of prose;
27	TBE	(tcv_TestBody := FALSE)		(P)	
		lt_G_ConfigTrafficChannel			
28		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
29		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
		lt_SubTest			
30		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_TrchId1 , 9 , 15 , c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 5 of prose; Sending the Handover Command.
31		G_L2 ? G_L2_L2Estab_IND	cabr_G_L2_L2Estab_IND(tsc_GSM_CellA ,tsc_G_TrchId1 ,9 , 15, ?)		
32	TBP1	G_L2 ? G_L2_DATA_IND	car_HandoverFailureInd (tsc_GSM_CellA , 0, tsc_G_TrchId1, 9, 15, ?, cr_G_HandoverFailure (c_G_RR_Cause))	(P)	Step 8 of prose; Receiving Handover Failure @sic G3t040011 sic@
		lt_InitVariables			
33		+ts_RRC_InitVariablesCS			
34		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040654 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
35		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
36		+ts_GSM_InitVariablesSpecific40			@sic GP−042 725 sic@
37		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
38		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
39		[px_CipheringOnOff]			
40		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , '0000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
41		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
42		[NOT px_CipheringOnOff]			
43		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , '0000000001'B) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
44		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
		lt_Meas			
45		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
46		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
47		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , 10, tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3GFDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 4 of prose; Sending the Measurement Information on the SACCH
48		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
49	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ? ,?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
50		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
51		−>RcvMR			wait for the next one
52		?TIMEOUT t_WaitMS		(F)	
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_60_10
Group : IntersytemHO/
Purpose : To test that MS supporting both GSM and UTRAN applies the correct CS Security START value after a successful handover from GSM to UTRAN when Integrity protection is activated by the NW.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Inter system handover to UTRAN/From GSM/Speech/Success

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, nosi2quater, nopsi5)			Combined Control Channel at −50 dBm, no PBCCH
5		+ts_SS_CreateCellDCH_DPCH_Offset (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff (tsc_CellA)			@sic T1−040 940 sic@
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			No PBCCH
17		+lt_G_ConfigTrafficChannel			
18		+ts_InitAssigmentCmd (tcv_Ch_Mode)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		+ts_SS_SwitchBackCellOn (tsc_CellA)			@sic T1−040 940 sic@
20		+ts_G_CC_EnterU10_MT_Speech (tsc_GSM_CellA)			Step 2 of prose;
21		+ts_SS_Reconf_DPCH_Speech (tsc_CellA)			Step 3 of prose; Configure DTCH and RB10,11,12
22		+lt_Meas			Steps 4 and 5 of prose
23		+lt_InitHOCmd			
24		+lt_SubTest			
25		+lt_Postamble			
		lt_G_ConfigTrafficChannel			
26		(tcv_Ch_Mode := c_G_ChModeSpeechFROrHRV1)			
27		+ts_SS_CreatePhyChOfTrafficChType (tsc_GSM_CellA, tsc_G_TrchId1, tsc_G_TimeSlot, tcv_Ch_Mode, 1)			
		lt_SubTest			
28		+lt_ConfigCipher_BeforeHO			@sic G3t050 018 sic@
29		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_G_TrchId1, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cr_G_ClassmarkEnquiry(c_ClassmarkEnquiryMask('88'O)))		SS sends CLASSMARK ENQUIRY MESSAGE on DCCH Channel to the Mobile Station, requesting only UTRAN CLASSMARK CHANGE

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
30		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_G_TrchId1, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	UE sends UTRAN CLASSMARK CHANGE message on DCCH Channel to SS.@sicER2012 sic@
31		+lt_CheckUtranClassmarkChange			@sicER2012 sic@
32		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0 , tsc_G_TrchId1 , tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit , cs_G_InterSystemToUTRAN_HandoverCommand (c_G_HandoverToUTRANCmd (tcv_LengthOfHO_Cmd , tcv_GSM_ToUTRAN_HO_Cmd)))		Step 9 of prose; Sending the Handover Command.
33	TBP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.startList, tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.handoverToUTRANComplete.count_C_ActivationTime)	car_InterSystemHandoverComplete (tsc_CellDedicated, tsc_RB2, cbr_HandoverToUTRANComplete_Security)	(P)	Step 12 of prose; Receiving Handover complete @sicG3t050018 sic@
34		G_CL2 ! G_CL2_Release_REQ	ca_G_CL2_Release_REQ (tsc_GSM_CellA, tsc_G_TrchId1)		Handover successful, Release old channel
35		G_CL2 ? G_CL2_Release_CNF	ca_G_CL2_Release_CNF (tsc_GSM_CellA, tsc_G_TrchId1)		
36		+lt_ConfigCipher_AfterHO			@sicG3t050018 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
37		+ts_GetHFN			Update StartValue
38		[tcv_CellIndInfo.start_CS =tcv_ResAndStartValue.start]		(P)	Step 12 of prose
39		+lt_Security			
40		[TRUE]		(F)	Start value from HO Complete doesn't match that from Classmark
41		+lt_Security			
		lt_ConfigCipher_BeforeHO			
42		+ts_GetHFN			@sic G3t050018 sic@
43		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
44		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018 sic@
45		CPHY ? CPHY_Frame_Number_CNF (tcv_CipherActTime := CPHY_Frame_Number_CNF.frameNumber MOD 256)	car_GetFrameNum(tsc_CellA, tsc_DL_DPCH1)		@sic G3t050018 sic@
46		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, notInc, notInc, cs_domain)			@sic G3t050018 sic@
		lt_ConfigCipher_AfterHO			
47		+ts_GetHFN			@sic G3t050018 sic@
48		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_CellIndInfo.start_CS)			@sic G3t050018 sic@
49		+ts_ActivateCiphering_NoSRB4 (tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, tcv_CipherActTime, incByOne_IncPerCFN_Cycle, inc, cs_domain)			@sic G3t050018 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_CheckUtranClassmarkChange			
50		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, ?))			get start value, other elements of message not checked
		lt_Security			
51		+ lt_SS_InvalidSecurity_Step12			
52		(tcv_CellIndInfo.integrityStarted := FALSE)			@sic G3t050004 sic@
53		+ts_ActivateIntegrity_NoSRB4(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, FALSE, cs_domain)			now do it properly @sic G3t050004, G3t050018 sic@
		lt_Postamble			
54		AM ! RLC_AM_DATA_REQ	cas_RRC_UtranMobilityInfo (tsc_CellDedicated, tsc_RB2, cdr_UTRAN_MobilityInfo_CNInfo (tcv_RRC_Ti, tcv_CellIndInfo.dl_IntegrityCheckInfo, OMIT, OMIT))		
55		AM ? RLC_AM_DATA_IND	car_UTRAN_MobilityInfoCnfInd (tsc_CellDedicated, tsc_RB2, cr_UTRAN_MobilityInfoCnf_ActTime(?))		
56		[(px_UE_OpModeDef = opModeC) AND pc_CS]			CS only mobile won't do RAU
57		+ts_CC_Disconnect (tsc_CellA)			
58		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
59		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
60		+ts_RegistrationOnCS (tsc_CellA, px_TMSI_Def)			
61		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
62		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
63		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
64		[TRUE]			
65		+lt_GMMduringCS			
66		+ts_CC_Disconnect (tsc_CellA)			
67		+ ts_RRC_ConnRel (tsc_CellA , cell_Dch)			
68		+ts_RRC_ConnEst (tsc_CellA, est_Reg, registration)			
69		+ts_CellChange_RAUpdate(tsc_CellA, '0'B, ('001'B, '010'B), TRUE)			Combined Updating
70		+ts_GMM_DetachOnSwitchOff (tsc_CellA)			
71		+ts_GSM_ChannelRelease (tsc_GSM_CellA, tsc_G_TrchId1)			To Release the Traffic channel
		lt_GMMduringCS			
72		[NOT pc_GPRS]			Will attach here if hasn't already done so in GERAN
73		+ts_U_GPRSAttach(tsc_CellA)			
74		[TRUE]			
75		+ts_CellChange_RAUpdate_NoSRB4(tsc_CellA, '0'B, '000'B)			RA Updating
		lt_InitVariables			
76		+ts_RRC_InitVariables (cell_DCH)			
77		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O)			@sic T1−040654 sic@
78		+ts_GSM_InitVariablesAllBands			Initialises the Variables depending on the GSM Band under usage.
79		+ts_GSM_InitVariablesSpecific40			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
80		+ts_GSM_InitVariablesSpecific26_6_5_1_2 (tsc_GSM_CellA)			
81		+ts_GPRS_InitVariablesDef			
		lt_InitHOCmd			
82		[px_CipheringOnOff]			
83		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (uea1, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
84		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
85		[NOT px_CipheringOnOff]			
86		(tcv_GSM_ToUTRAN_HO_Cmd := c_G_HandoverToUTRANCommand (OMIT, c_URNTI_Short ('000000000001'B , INT_TO_BIT(tsc_S_RNTI_2,10)) , tcv_CellInfoA , tsc_UL_DPDCH_SF_Speech , tsc_DL_DPCH1_ChC_Speech, tcv_CellInfoA.frequencyInfo.modeSpecificInfo.fdd.uarfcn_DL, 3))			
87		(tcv_LengthOfHO_Cmd := o_LengthofHO_Cmd (tcv_GSM_ToUTRAN_HO_Cmd))			
		lt_Meas			
88		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1), tcv_RR_Subchannel2, TRUE)		Turn Meas Rpts On
89		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
90		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (tsc_GSM_CellA, tsc_G_TrchId1 , (tcv_RR_ChannelType2 +1) , tcv_RR_Subchannel2 , c_G_RFN_Omit , cs_G_MeasurementInformation (c_G_NeighbourCellDescr3GFDD(c_G_FDD_Descr(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL,14),INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10))), c_G_MeasParamDescr3G))		Step 5 of prose; Sending the Measurement Information on the SACCH

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
91		START t_WaitMS(5500)			Measurement Report must be received within 5 + 10% secs
92	RcvMR	G_L2 ? G_L2_UNITDATA_IND CANCEL t_WaitMS	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ?, ?, ?, cr_G_MeasReport(c_G_MeasResults_1UTRAN))	(P)	Receive Measurement Report showing 1 UTRAN cell
93		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(tsc_GSM_CellA, ?, ? ,?, ?, c_G_MeasReport_Any)		Not showing UTRAN cell
94		−>RcvMR			wait for the next one
95		?TIMEOUT t_WaitMS		(F)	
		lt_SS_InvalidSecurity_Step12			
96		+ lt_InitSecurityVariables			
97		+ ts_SS_DownloadSecurityKey (tsc_CellA,tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, cs_domain)			
98		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
99		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, cs_domain, tcv_CellIndInfo.dL_Integrity, tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Step 12

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
100		START t_WaitMS(4500)			Verify that the UE does not respond to the invalid security comman d for 5 −10% secs.
101		AM?RLC_AM_DATA_IND	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti , OMIT))	(F)	
102		?TIMEOUT t_WaitMS		(P)	
		lt_InitSecurityVariables			
103		(tcv_HFN := (INT_TO_BIT(((BIT_TO_INT(tcv_CellIndInfo.start_CS) + 10) MOD 1048576), 20)))			Use a different start value @sic G3t050 004 sic@
104		+ ts_InitSystemSpecificCap			
105		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0)			Start integrity
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_2
Group : CellReselection/
Purpose : To verify that when the MS uses the FDD_Qmin parameter at cell re−selection from GSM to UTRAN while in GSM Idle Mode
Configuration :
Default : IntersystemDef
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / FDD_Qmin

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_CreateCell_GSM_Comb (tsc_GSM_CellA)			Combined Control Channel at −50 dBm
5		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, si2quater)			no GPRS indicated
6		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
7		+ts_SS_CreateCellFACH (tsc_CellB)			to provide noise source (not in Neighbour cell list)
8		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
9		+ts_SendSIB11_MulRatOrBMC(cd_SIB11_InterRATNoSIB12Ind (tcv_CellInfoA, tcv_CellInfoH, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_G_CellInfoA, tcv_G_CellInfoB), tsc_CellA, tsc_Now)			don't include Cell B in the neighbour cell lists
10		+ ts_SS_SwitchCellOff (tsc_CellA)			
11		+ ts_SS_SwitchCellOff (tsc_CellB)			
12	TBS	(tcv_TestBody := TRUE)			
13		+lt_LocalTest			
14	TBE	(tcv_TestBody := FALSE)		(P)	

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
16		+po_ConnectionAndSS_ Rels			
17	ERR1	[px_RAT = tdd]		(I)	
18	ERR2	[TRUE]		(I)	
		lt_LocalTest			
19		+ts_MM_PwrOrUSIM_On(FALSE)			
20		+ts_G_LocationUpdate(tsc_GSM_CellA)			
21		+ ts_SS_SwitchBackCellOn (tsc_CellA)			
22		+ ts_SS_SwitchBackCellOn (tsc_CellB)			
23		START t_WaitS(27)			30 seconds − 10%
24		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn’t receive anything
25		?TIMEOUT t_WaitS		(P)	Step 2 of Prose
26		(tcv_SI2quaterRO.mP_CHANGE_MARK := ’1’B, tcv_SI2quaterRO.measurementParams3G.fDD_Qmin := ’100’B)			change FDD_Qmin in SI2quater to −16 dB
27		+ts_SendSysInfoType2quater(tsc_GSM_CellA, tsc_PhyCh0, 0, ’0’B, tcv_SI2quaterRO)			Step 3 of prose @sic R5−050980 sic@
28		START t_WaitMS(49500)			UE should answer in 45s + 10%
29		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	Step 4 of Prose
30		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establishment cause
31		?TIMEOUT t_WaitMS		(F)	
		lt_InitVariables			
32		+ts_RRC_InitVariables (cell_FACH)			
33		(tcv_CellInfoA.lac := ’0080’O, tcv_CellInfoA.rac := ’00’O)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
34		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
35		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_Cel lInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '0000'B, '001'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('0111' B, '0'B)))			FDD_Q min −6dB
36		(tcv_CellInfoA.powerpCPICH := −48, tcv_CellInfoB.powerpCPICH := −43)			Set Cell A to −48 dBm and noise source to −43 dBm − to give an Ec/No of approx −10 dB
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_3
Group : CellReselection/
Purpose : To verify that the MS uses the FDD_Qoffset parameter at cell re−selection from GSM/GPRS to UTRAN while in Idle Mode
Configuration :
Default : IntersystemDef
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / FDD_Qoffset

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_CreateCell_GSM_Comb (tsc_GSM_CellA)			Combined Control Channel at −50 dBm
5		+ts_SendGSMSysInfo_SI2qBCCHExt(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, si2quater)			no GPRS indicated @sic G3t050 006 sic@
6		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
7		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
8		+ ts_SS_SwitchCellOff (tsc_CellA)			
9	TBS	(tcv_TestBody := TRUE)			
10		+lt_LocalTest			
11	TBE	(tcv_TestBody := FALSE)		(P)	
12		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		+ts_MM_PwrOrUSIM_On(FALSE)			@sic G3t050 006 sic@
17		+ts_G_LocationUpdate(tsc_GSM_CellA)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
18		+ts_SetAttenuationLevel (tsc_CellA, 10)			turn UTRAN Cell on and set to −60 dBm @sic G3t050 006 sic@
19		START t_WaitS(27)			wait for 30 sec − 10%
20		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn’ t receive anything
21		?TIMEOUT t_WaitS		(P)	Step 2 of Prose @sic G3t050 006 sic@
22		+ts_SetAttenuationLevel (tsc_CellA, 0)			Set UTRAN Cell to −50 dBm step 3 of prose @sic G3t050 006 sic@
23		START t_WaitS(11)			UE should answer in 10s + 10%
24		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	Step 4 of Prose
25		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establish ment cause
26		?TIMEOUT t_WaitS		(F)	
		lt_InitVariables			
27		+ts_RRC_InitVariables (cell_FACH)			
28		(tcv_CellInfoA.lac := ’0080’O, tcv_CellInfoA.rac := ’00’O, tcv_CellInfoA.powerpCPICH := −50)			@sic G3t050 006 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
29		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
30		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('0111'B, '1101'B, '111'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('0111' B, '0'B)))			
31		(tcv_G_CellInfoA.downlinkPowerLevel := tsc_ChPwrLvl_75dBm, tcv_G_CellInfoA.rXLEV_ACCESS_MIN := '001011'B, tcv_G_CellInfoA.bS_AG_BLKS_RES := '001'B)			GSM cell at −75 dBm @sic GP−042 820, G3t050 006, G3t050 013 sic@
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_20_25_4
Group : CellReselection/
Purpose : To verify that the MS uses the Qsearch_I parameter at cell re−selection from GSM to UTRAN while in Idle Mode
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAllBands
Description : Intersystem Cell Reselcection / Idle Mode / Qsearch_I

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+lt_InitVariables			
4		+ts_GERANCreateCell(tsc_GSM_CellA, bcch, si2quater, nopsi5)			GPRS but no PBCCH
5		+ts_SS_CreateCellFACH (tsc_CellA)			Configure lower tester
6		+ts_SendDefSysInfoMulRatHo (tsc_CellA , c_SIB16_Speech12_2k (tsc_DL_DPCH1_SFP_Speech))			Sends the default system information in CellA
7		+ ts_SS_SwitchCellOff (tsc_CellA)			
8	TBS	(tcv_TestBody := TRUE)			
9		+lt_LocalTest			
10	TBE	(tcv_TestBody := FALSE)		(P)	
11		+ts_Delete_GPRS_Entities(tsc_GSM_CellA, tsc_PhyCh1, tsc_LLEEntity)			
12		+po_GPRS_SS_CellRelease (tsc_GSM_CellA)			
13		+po_ConnectionAndSS_Rels			
14	ERR1	[px_RAT = tdd]		(I)	
15	ERR2	[TRUE]		(I)	
		lt_LocalTest			
16		+ts_GERANIdleUpdated(tsc_GSM_CellA, bcch)			
17		+ ts_SS_SwitchBackCellOn (tsc_CellA)			Set UTRAN Cell to −50 dBm step 1 of prose
18		START t_WaitS(30)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	shouldn't receive anything
20		?TIMEOUT t_WaitS		(P)	Step 2 of Prose @sic G3t050 008 sic@
21		(tcv_SI2quaterRO.mP_CHANGE_MARK := '1'B, tcv_SI2quaterRO.measurementParams3G := c_SI2quaterMeasParams3G_None)			change SI2quater
22		+ts_SendSysInfoType2quater(tsc_GSM_CellA, tsc_PhyCh0, 0, '0'B, tcv_SI2quaterRO)			Step 3 of prose @sic G3t050 008, R5−050 980 sic@
23		START t_WaitS(65)			UE shouldn't answer
24		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	Step 4 of Prose
25		?TIMEOUT t_WaitS		(P)	
26		+ts_GSM_SetChPowerLevel (tsc_GSM_CellA, tsc_PhyCh0, tsc_ChPwrLvl_77dBm)			reduce GSM cell to −77 dBm step 5 of prose
27		START t_WaitS(33)			
28		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (interRAT_CellReselection))	(P)	UE should reselect UTRAN cell within 30s + 10%
29		TM ? RLC_TR_DATA_IND CANCEL t_WaitS	car_RRC_ConnReq (tsc_CellA, tsc_RB0, cbr_108_RRC_ConnReq (?))	(F)	wrong establishment cause
30		?TIMEOUT t_WaitS		(F)	
		lt_InitVariables			
31		+ts_RRC_InitVariables (cell_FACH)			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
32		(tcv_CellInfoA.lac := '0080'O, tcv_CellInfoA.rac := '00'O, tcv_CellInfoA.powerpCPICH := −50)			@sic G3t050 008 sic@
33		+ts_GSM_InitVariablesAllBands			Initialises the Variables dependi ng on the GSM Band under usage.
34		+ts_GSM_InitVariablesSpecific40			
35		+ts_GPRS_InitVariablesDef			
36		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv _CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_Meas('1111' B, '0000'B, '111'B), '1'B, c_SI2quater_GPRS_3G_MeasParams('01 11'B, '0'B)))			
37		(tcv_G_CellInfoA.downlinkPowerLevel := tsc_ChPwrLvl_60dBm, tcv_G_CellInfoA.rXLEV_ACCESS_MIN := '001011'B)			GSM cell at −60 dBm, @sic GP−048 20, G3t050 008 sic@
Detailed Comments :					

Test Case Dynamic Behaviour

Test Case Name : tc_26_6_11_3
Group : Classmark_Interrogation/
Purpose : To verify that if the network requests the MS to supply all its classmark information, including the UTRA Classmark information, then this information is communicated on the DCCH to the network.
Configuration :
Default : IntersystemGPRS
Comments :
Selection Ref : GERAN_Band_SpeechAnyRate
Description : Test of Classmark interrogation / UTRAN Classmark Change

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+ts_MMI_UE_SwitchOff			@sic G3t040001 sic@
4		+lt_Preamble			
5		+ts_InitCapability			
6		+lt_InitCipherMode			@sic G3t040001 sic@
7	TBS	(tcv_TestBody := TRUE)			
8		+lt_LocalTest			
9	TBE	(tcv_TestBody := FALSE)		(P)	
10		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
11	ERR1	[px_RAT = tdd]		(I)	
12	ERR2	[TRUE]		(I)	
		lt_LocalTest			
13		+ts_G_RR_Con_Est (tsc_GSM_CellA)			
14		+ts_G_Loc_UpdatingRequest (tsc_GSM_CellA)			@sic G3t040001 sic@
15		G_CL1 ! G_CL1_ComingFN_REQ	c_GSM_CL1_ComingFN_REQ(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)		@sic G3t040001 sic@ Get next dl FN for SDCCH/4
16		G_CL1 ? G_CL1_ComingFN_CNF (tcv_RR_RFN := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		@sic T1s040536 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, tcv_RR_RFN, cr_G_ClassmarkEnquiry(c_ ClassmarkEnquiryMask('0C' O)))		Step 5 SS sends CLASS MARK ENQUIR Y MESSA GE on DCCH Channel to the Mobile Station, requesti ng CLASS MARK CHANG E and UTRAN CLASS MARK CHANG E message s @sic G3t040 001 sic@ Specify frame number to send message on
18		G_L2 ? G_L2_DATA_IND (tcv_G_ClassmarkChange := G_L2_DATA_IND.msg, tcv_P_Classmark3 := tcv_G_ClassmarkChange.additionalMscls mk, tcv_RFN2 := G_L2_DATA_IND.rfn)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChange)	(P)	Step 6 UE sends CLASS MARK CHANG E message on DCCH Channel to SS. @sic G3t040 001 sic@ Store RFN

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		+ts_G_CheckTimeFrames(15, 66)			@sic G3t040001, G3t050029 sic@ see Note 1
20		+lt_CheckClassmark3			
21		G_L2 ? G_L2_DATA_IND(tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	UE sends UTRAN CLASSMARK CHANGE message on DCCH Channel to SS. @sic ER2012 sic@
22		+lt_CheckUtranClassmarkChange			@sic ER2012 sic@
23		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAccept (tcv_G_CellConfigInfo, OMIT))		SendLocation Updating Accept.
24		+ts_G_ChannelRelease (tsc_GSM_CellA, tsc_PhyCh0)			
		lt_InitCipherMode			
25		[pc_UEA1_Supp]			
26		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
27		[NOT (pc_UEA1_Supp)]			
28		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
		lt_Preamble			
29		+ts_GSM_InitVariablesAllBands			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
30		+ts_CreateCell_GSM_Comb(tsc_GSM_CellA)			Combined Control Channel at −50 dBm, no GPRS @sic G3t050 024 sic@
31		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, nosi2quater)			no GPRS indicated @sic G3t050 024 sic@
32		+ts_MM_PwrOrUSIM_On (tsc_USIM_NeedRmv) lt_CheckClassmark3			
33		(tcv_Res := o_P_CheckClassmark3(tcv_P_Classmark3, pc_FDD, pc_TDD, pc_P_GSM_900_BAND, pc_E_GSM_900_BAND, pc_R_GSM_900_BAND, pc_DCS_1800_BAND, pc_PCS_1900_BAND, pc_GSM_450_BAND, pc_GSM_480_BAND, pc_GSM_700_BAND, pc_GSM_850_BAND, pc_TypeGSMClass2, pc_TypeGSMClass3, pc_TypeGSMClass4, pc_TypeGSMClass5, pc_TypeDCSClass1, pc_TypeDCSClass2, pc_TypeDCSClass3, pc_TypePCSClass1, pc_TypePCSClass2, pc_TypePCSClass3, pc_TypeGSM850Class2, pc_TypeGSM850Class3, pc_TypeGSM850Class4, pc_TypeGSM850Class5, pc_DTM_Multislotclass5, pc_DTM_Multislotclass9, pc_DTM_SingleSlotAllocation, pc_EOTD_Assist, pc_A_GPS_Assist, pc_A_GPS_Based, pc_Conv_GPS, px_EOTD_Based, pc_GERANFeaturePackage1, pc_GERANFeaturePackage2, pc_GERANIuMode, px_MultiSlotClass, px_EGPRS_MultiSlotClass, px_SMS_Value, px_SM_Value, px_GSM400_RadioCapability, px_RGSM_RadioCapability, px_DTM_EGPRS_MultiSlotSubClass, px_EDGEPwrCap1, px_EDGEPwrCap2, px_ExtDTM_MultiSlotClass, px_ExtDTM_EGPRS_MultiSlotClass, px_HighMultiSlotCap, px_GMSKPowerProfile, px_8PSKPowerProfile, pc_MS_ClsmkA5_4, pc_MS_ClsmkA5_5, pc_MS_ClsmkA5_6, pc_MS_ClsmkA5_7, px_CDMA2000, px_ExtMeasCap, px_ModulationCapability, pc_MS_ClsmkUCS2))			@sic R5s050 095 sic@
34		[tcv_Res]		(P)	Classmark 3 ok
35		[NOT tcv_Res]		(F)	Classmark 3 not correct

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_CheckUtranClassmarkChange			
36		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, cr_RadioAccessCapabilityDef(tcv_PDCP_Capability, tcv_DL_TurboSupport, tcv_UL_TurboSupport, tcv_SimultaneousSCCPCH_DPCH_Reception, {cipheringAlgorithmCap tcv_CellIndInfo.cipheringAlgorithmCapability, integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap})))			Check the ASN.1 contents of the UtranClassmark Change message
37		[tcv_ResAndStartValue.res]		(P)	UE RA Capabilities ok
38		[NOT tcv_ResAndStartValue.res]		(F)	UE RA Capabilities not correct

Detailed Comments : 1. This test is performed on an SDCCH/4. Referring to 45.002, Table 3 each SDCCH/4 subchannel is allocated only 4 frames out of a 51 frame multiframe. Also, the uplink frames for a particular subchannel occur 15 frames after the corresponding downlink frames.
e.g:
STEP 5: The Classmark Enquiry message is sent in frame 26 of the 51 frame multiframe. This relates to the first frame of the SDCCH/4 subchannel 1 downlink (45.002, Table 3: SDCCH/4, subch1 D/L B(26,..29)).

STEP 6: The first opportunity for the MS to send a response to this message is in frames 41−44 of the 51 frame multiframe (45.002, Table 3: SDCCH/4, subch1 U/L B(41,..44)). i.e. 15 frames (69 ms) after the Classmark Enquiry message is sent.

The next opportunity for the MS to send the Classmark Change message is 51 frames later in the next uplink block (B41,...44). i.e. 66 frames (305 ms) after the Classmark Enquiry message is sent.

Therefore in order to meet the prose requirement of the MS being ready to send the Classmark Change message in Step 6 within 300 ms of the Classmark Enquiry message in Step 5 the difference in frames between step 5 and step 6 must be either 15 or 66 frames exactly.

Test Case Dynamic Behaviour

Test Case Name : tc_26_6_11_4

Group : Classmark_Interrogation/

Purpose : To verify that if the network requests the MS to supply all its classmark information, including the UTRA Classmark information, then this information is communicated on the DCCH to the network. The request of the classmark information is indicated in SYSTEM INFORMATION TYPE 3.

Configuration :

Default : IntersystemGPRS

Comments :

Selection Ref : GERAN_Band_SpeechAnyRate

Description : Test of Early UTRAN Classmark Sending

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard			
2		[px_RAT = fdd]			FDD specific behaviour
3		+ts_MMI_UE_SwitchOff			@sic G3t040003 sic@
4		+lt_Preamble			
5		+ts_InitCapability			@sic G3t040003 sic@
6		+lt_InitCipherMode			@sic G3t040003 sic@
7	TBS	(tcv_TestBody := TRUE)			
8		+lt_LocalTest			
9	TBE	(tcv_TestBody := FALSE)		(P)	
10		+po_GSM_SS_CellRelease (tsc_GSM_CellA)			
11	ERR1	[px_RAT = tdd]		(I)	
12	ERR2	[TRUE]		(I)	
		lt_LocalTest			
13		+ts_G_RR_Con_Est (tsc_GSM_CellA)			
14		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel, tcv_RR_RFN := G_L2_L2Estab_IND.rfn)	car_G_L2_L2Estab_IND (tsc_GSM_CellA, cb_LocUpdReqAny(?))		Step 4. Location Updating Request. Store FN

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		G_L2 ? G_L2_DATA_IND (tcv_RFN2 := G_L2_DATA_IND.rfn, tcv_G_ClassmarkChange := G_L2_DATA_IND.msg, tcv_P_Classmark3 := tcv_G_ClassmarkChange.additionalMsclsmk)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChange)	(P)	Step 6. UE sends CLASSMARK CHANGE message on DCCH Channel to SS. Store 2nd FN
16		+lt_CheckTiming			Classmark Change must be exactly 51 frames after Location Updating Request in order to meet prose requirement. see note 1 @sic G3t040003 sic@
17		+lt_CheckClassmark3			
18		G_L2 ? G_L2_DATA_IND(tcv_G_UtranClassmarkChange:= G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	UE sends UTRAN CLASSMARK CHANGE message on DCCH Channel to SS.@sic ER2012 sic@
19		+lt_CheckUtranClassmarkChange			@sic ER2012 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (tsc_GSM_CellA, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAccept (tcv_G_CellConfigInfo, OMIT))		SendLocation Updating Accept.
21		+ts_G_ChannelRelease (tsc_GSM_CellA, tsc_PhyCh0)			
		lt_CheckTiming			
22		+ts_GetFNFromRFN(tcv_RR_RFN, tcv_FN1)			
23		+ts_GetFNFromRFN(tcv_RFN2, tcv_FN2)			
24		[(tcv_FN2 − tcv_FN1 = 51)]		(P)	Classmark Change need exactly 51 frames after Location Updating Request see note 1 @sic G3t040003 sic@
25		[TRUE]		(F)	
		lt_InitCipherMode			
26		[pc_UEA1_Supp]			
27		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := ’0000000000000011’B)			
28		[NOT (pc_UEA1_Supp)]			
29		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := ’0000000000000001’B)			
		lt_Preamble			
30		+ts_GSM_InitVariablesAllBands			
31		+ts_CreateCell_GSM_Comb(tsc_GSM_CellA)			Combined Control Channel at −50 dBm, no GPRS @sic G3t050024 sic@

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
32		+ts_SendGSMSysInfo(tsc_GSM_CellA, tsc_PhyCh0, gsmonly, bcch, nosi2quater)			no GPRS indicated @sic G3t050 024 sic@
33		+ts_SendSysInfoType3 (tsc_GSM_CellA, tsc_PhyCh0, c_SI3_RO_Classmark (tsc_ECMSHigh, tsc_3GECMSHigh))			send SI3 now with Classmark High
34		+ts_MM_PwrOrUSIM_On (tsc_USIM_NeedRmv)			
		lt_CheckClassmark3			
35		(tcv_Res := o_P_CheckClassmark3(tcv_P_Classmark3, pc_FDD, pc_TDD, pc_P_GSM_900_BAND, pc_E_GSM_900_BAND, pc_R_GSM_900_BAND, pc_DCS_1800_BAND, pc_PCS_1900_BAND, pc_GSM_450_BAND, pc_GSM_480_BAND, pc_GSM_700_BAND, pc_GSM_850_BAND, pc_TypeGSMClass2, pc_TypeGSMClass3, pc_TypeGSMClass4, pc_TypeGSMClass5, pc_TypeDCSClass1, pc_TypeDCSClass2, pc_TypeDCSClass3, pc_TypePCSClass1, pc_TypePCSClass2, pc_TypePCSClass3, pc_TypeGSM850Class2, pc_TypeGSM850Class3, pc_TypeGSM850Class4, pc_TypeGSM850Class5, pc_DTM_Multislotclass5, pc_DTM_Multislotclass9, pc_DTM_SingleSlotAllocation, pc_EOTD_Assist, pc_A_GPS_Assist, pc_A_GPS_Based, pc_Conv_GPS, px_EOTD_Based, pc_GERANFeaturePackage1, pc_GERANFeaturePackage2, pc_GERANIuMode, px_MultiSlotClass, px_EGPRS_MultiSlotClass, px_SMS_Value, px_SM_Value, px_GSM400_RadioCapability, px_RGSM_RadioCapability, px_DTM_EGPRS_MultiSlotSubClass, px_EDGEPwrCap1, px_EDGEPwrCap2, px_ExtDTM_MultiSlotClass, px_ExtDTM_EGPRS_MultiSlotClass, px_HighMultiSlotCap, px_GMSKPowerProfile, px_8PSKPowerProfile, pc_MS_ClsmkA5_4, pc_MS_ClsmkA5_5, pc_MS_ClsmkA5_6, pc_MS_ClsmkA5_7, px_CDMA2000, px_ExtMeasCap, px_ModulationCapability, pc_MS_ClsmkUCS2))			@sic R5s050 095 sic@
36		[tcv_Res]		(P)	Classmark 3 ok
37		[NOT tcv_Res]		(F)	Classmark 3 not correct
		lt_CheckUtranClassmarkChange			

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
38		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, cr_RadioAccessCapabilityDef(tcv_PDCP_Capability, tcv_DL_TurboSupport, tcv_UL_TurboSupport, tcv_SimultaneousSCCPCH_DPCH_Reception, {cipheringAlgorithmCap tcv_CellIndInfo.cipheringAlgorithmCapability, integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap})))			Check the ASN.1 contents of the UtranClassmark Change message
39		[tcv_ResAndStartValue.res]		(P)	UE RA Capabilities ok
40		[NOT tcv_ResAndStartValue.res]		(F)	UE RA Capabilities not correct

Detailed Comments : 1. This test is performed on an SDCCH/4. Referring to 45.002, Table 3 each SDCCH/4 subchannel is allocated only 4 frames out of a 51 frame multiframe. Also, the uplink frames for a particular subchannel occur 15 frames after the corresponding downlink frames.
e.g:
STEP 4: The Location Updating Request (SABM) is received (uplink) in frame 41 of the 51 frame multiframe. This relates to the first frame of the SDCCH/4 subchannel 1 uplink (45.002, Table 3: SDCCH/4, subch1 U/L B(41,..44)).

STEP 5: The first opportunity for the network to send a UA a response to this message is in frames 26−29 of the 51 frame multiframe (45.002, Table 3: SDCCH/4, subch1 D/L B(26,..29)). Because this is only a L2 message, it is not in the TTCN.

STEP 6: The next opportunity for the MS to send the Classmark Change message is 15 frames (69ms) later in the next uplink block (B41,...44). i.e. exactly 51 frames after sending the SABM in Step 4.

Therefore in order to meet the prose requirement of the MS sending the Classmark Change message in Step 6, 69ms after the SS sends the UA in Step 5 (a message not visible to the TTCN), the time between Step 6 and Step 4 must be exactly 51 frames.

Test Step Dynamic Behaviour

Test Step Name : ts_2DCH_ModifyStreamUnknown14_4_IR_G (
p_CellId : INTEGER;
p_ActTime : ActivationTime;
p_DL_CommonInformation : DL_CommonInformation;
p_UL_DPCH_Info : UL_DPCH_Info;
p_CommonTFS_CPHY : CommonOrDedicatedTFS
)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1and connect DCH1 and DCH5 to the physical channel, then map DCCH1−4 on to the DCH5 transport channel and map DTCH(subflow#1) to the DCH1 transport channel respectively. Used for Streaming / unknown 14.4kbps.
This step is same asts_2DCH_ModifyStreamUnknown14_4 except for 1. RM attaribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_AMR_Offset2 (tsc_DL_DPCH1_ChC_SRB , p_DL_CommonInformation) ,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	cd_2_DCH_0_To3_DL_Info_IR_G (p_CellId, tsc_DL_DPCH1, cd_DCH_148_TFS_DL_RM160, p_CommonTFS_CPHY,p_ActTime)		2. @sic G3t050 015 sic@
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), cd_TrChInfoDL_2_0_To3_IR_G (cd_DCH_148_TFS_DL_RM160, p_CommonTFS_CPHY), c_TrLogMappingDL_2 ,p_ActTime)		3. C−RNTI and U−RNTI are not required on DPCH @sic G3t050 015 sic@
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info,p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_UL_DPCH1)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
11		CPHY!CPHY_TrCH_Config_REQ	ca_2_DCH_0_To3_UL_Info (p_CellId , tsc_UL_DPCH1, cd_DCH_148_TFS_UL_RM160, p_CommonTFS_CPHY ,p_ActTime)		2.
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_2_0_To3 (cd_DCH_148_TFS_UL_RM160, p_CommonTFS_CPHY), c_TrLogMappingUL_2 ,p_ActTime)		3. C−RNTI and U−RNTI are not required on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	

Detailed Comments : 1. configure DPCH1for transporting conversational / unknown / UL:28.8 DL:28.8 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
2. connect DCH1 and DCH5 to DPCH1.
3. map logical channels: DCCH1−4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.

Test Step Dynamic Behaviour

Test Step Name : ts_2DCH_ModifyStreamUnknown28_8_IR_G (
p_CellId : INTEGER;
p_ActTime : ActivationTime;
p_DL_CommonInformation : DL_CommonInformation;
p_UL_DPCH_Info : UL_DPCH_Info;
p_CommonTFS_CPHY : CommonOrDedicatedTFS
)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1and connect DCH1 and DCH5 to the physical channel, then map DCCH1−4 on to the DCH5 transport channel and map DTCH(subflow#1) to the DCH1 transport channel respectively. Used for Streaming / unknown 28.8kbs.
This step is same asts_2DCH_ModifyStreamUnknown28_8 except for 1. RM attaribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_AMR_Offset 2 (tsc_Sfc64, p_DL_CommonInformation) ,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_2_DCH_0_To5_DL_Info (p_CellId, tsc_DL_DPCH1, cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY ,p_ActTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), c_TrChInfoDL_2_0_To5 (cd_DCH_148_TFS_DL_RM 160, p_CommonTFS_CPHY), c_TrLogMappingDL_2 ,p_ActTime)		3. C−RNTI and U−RNTI is not required on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_Cell Dedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info,p_ActTi me)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_RE Q	ca_2_DCH_0_To5_UL_Info (p_CellId , tsc_UL_DPCH1, cd_DCH_148_TFS_UL_RM 160, p_CommonTFS_CPHY ,p_ActTime)		2.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrCHInfoUL_2_0_To5 (cd_DCH_148_TFS_UL_RM160 ,p_CommonTFS_CPHY), c_TrLogMappingUL_2 ,p_ActTime)		3. C−RNTI and U−RNTI is not required on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	

Detailed Comments : 1. configure DPCH1for transporting conversational / unknown / UL:28.8 DL:28.8 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
2. connect DCH1 and DCH5 to DPCH1.
3. map logical channels: DCCH1−4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.

Test Step Dynamic Behaviour

Test Step Name : ts_ActivateCiphering_NoSRB4 (
p_CellId : INTEGER;
p_KC : KeyCiphering;
p_IK : IntegrityKey;
p_GSM_ck : GSM_CipheringKey;
p_NewKey : BOOLEAN;
p_CipherActTime : ActivationTime;
p_IncrDcr : Increment_Mode;
p_RLC_IncDcr : RLC_IncMode;
p_CN_Domain : CN_DomainIdentity)

Group : UMTS_Specific/

Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs

Default : RRC_Def1

Comments : This is only used for the 60 series test cases

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ lt_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ lt_ActivateSecurity_DL_SS lt_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain))]			
6		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
7		(tcv_CellIndInfo.uL_CipherMode := cs_RB_ActTimeInfoListSRBs_NoSRB4 (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2, tcv_RLC_SeqNumDL_RB3))			
8		+ ts_CRLC_DL_CipherCfgSRB1_3 (tcv_CellIndInfo.dL_CipherMode, p_RLC_IncDcr, TRUE)			Configure ciphering for RLC (RBs 1, 2, 3 and 4)@sic T1−01732 sic@
9		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode , p_RLC_IncDcr)			@sic T1−01732 sic@
10		+ts_CMAC_DL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, p_IncrDcr)			
11		+ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, p_IncrDcr)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
12		[TRUE]			If no New Ciphering config
		lt_RRC_InitVariables			
13		+ lt_InitCipherMode			
14		+ ts_SaveCellInfo (p_CellId)			
15		[p_NewKey = TRUE]			Authentication was done, reset HFN
16		(tcv_HFN := '00000000000000000000'B)			
17		[p_CN_Domain = cs_domain]			
18		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
19		[p_CN_Domain = ps_domain]			
20		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
21		[p_NewKey = FALSE]			
22		[p_CN_Domain = cs_domain]			
23		(tcv_HFN := tcv_CellIndInfo.start_CS)			
24		[p_CN_Domain = ps_domain]			
25		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitCipherMode			
26		[px_CipheringOnOff = TRUE]			
27		[pc_UEA1_Supp]			
28		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Swithch On ciphering
29		[p_CN_Domain = cs_domain]			
30		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
31		[p_CN_Domain = ps_domain]			
32		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
33		[NOT (pc_UEA1_Supp)]			
34		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			Swithch On ciphering
35		[p_CN_Domain = cs_domain]			
36		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
37		[p_CN_Domain = ps_domain]			
38		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
39		[NOT (px_CipheringOnOff)]			
40		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
41		[pc_UEA1_Supp]			
42		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
43		[NOT (pc_UEA1_Supp)]			
44		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour

Test Step Name : ts_ActivateIntegrity_NoSRB4 (
p_CellId : INTEGER;
p_KC : KeyCiphering;
p_IK : IntegrityKey;
p_GSM_ck : GSM_CipheringKey;
p_NewKey : BOOLEAN;
p_CN_Domain : CN_DomainIdentity)

Group : UMTS_Specific/

Objective : Activate integrity for all concerned RBs

Default : RRC_Def1

Comments : This is only used for the 60 series test cases

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ lt_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ lt_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		+lt_RB2_UL_IntegrityActivate			
6		+ lt_StartSecurity_UE			
		lt_RB2_UL_IntegrityActivate			
7		[tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
8		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)			
9		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
10		+ ts_RB2_UL_IntegrityActivate(0)			
		lt_ActivateSecurity_DL_SS			
11		+ lt_InitialiseRRC_MSN			
12		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
		lt_InitialiseRRC_MSN			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
14		+ ts_SetDL_RRC_MessageSN_NoSRB4 (p_CellId)			
15		[tcv_Int_ModifyFlag] lt_StartSecurity_UE			
16		+ lt_SendSecurityModeCommand			
17	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.ul_IntegProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , OMIT))	(P)	No UL Cipherin g informati on
18		+ ts_CRLC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			@sic G3t040 005 sic@
19	TSF2	AM?RLC_AM_DATA_IND lt_SendSecurityModeCommand	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti, ?))	(F)	
20		[pc_UMTS_GSM]			@sic RASH T1−031 470 sic@ Branchin g if GSM Support ed
21		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_Sy		@sic RASH T1−031 470 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
			sSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		
22		[NOT pc_UMTS_GSM]			@sic RASH T1−031470 all this tree sic@ Branching if GSM Not Supported
23		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity, tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT)))		
		lt_RRC_InitVariables			
24		+ lt_InitIntegrity			
25		+ ts_InitSystemSpecificCap			@sic RASH T1−031470 sic@
26		+ ts_SaveCellInfo (p_CellId)			
27		[p_NewKey = TRUE]			Authentication was done, reset HFN
28		(tcv_HFN := ’00000000000000000000’B)			
29		[p_CN_Domain = cs_domain]			
30		(tcv_CellIndInfo.start_CS := ’00000000000000000000’B)			
31		[p_CN_Domain = ps_domain]			
32		(tcv_CellIndInfo.start_PS := ’00000000000000000000’B)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
33		[p_NewKey = FALSE]			
34		[p_CN_Domain = cs_domain]			
35		(tcv_HFN := tcv_CellIndInfo.start_CS)			
36		[p_CN_Domain = ps_domain]			
37		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitIntegrity			
38		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
39		[tcv_CellIndInfo.integrityStarted]			
40		+ts_GetRRC_MessageSN_NoSRB4 (p_CellId)			
41		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_NoSRB4(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
42		[NOT tcv_CellIndInfo.integrityStarted]			
43		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour

Test Step Name : ts_CellChange_RAUpdate_NoSRB4(p_CellId : INTEGER; p_FOR : B1; p_UpdateType : B3)
Group : UMTS_Specific/
Objective : Perform appropriate signalling to re−establish the connection after moving from GERAN to UTRAN
Default : RRC_Def1
Comments : This version is used in 60 series test cases as the UE will not configure SRB4 @sic G3t040005 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(p_FOR, p_UpdateType), ?, ?))		ROUTING AREA UPDATING REQUEST
2		+lt_SendAccept			
3		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?, ?), ?, ?))	(F)	ROUTING AREA UPDATING REQUEST wrong type
4		+lt_SendAccept lt_SendAccept			
5		(tcv_TmpB3 := '000'B)			@sic ER2055 sic@
6		+lt_DoSecurity			
7		+ ts_SetTmpCellInfo (p_CellId)			Get cell info of new UTRAN cell
8		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_RA_UpdAcc3 (c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def), −))		ROUTING AREA UPDATING ACCEPT Send back appropriate update type
9		Dc ? RRC_DataInd lt_DoSecurity	car_PS_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		@sic R5s050095 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
10		+ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
11		+ ts_RRC_Security_NoSRB4 (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_DL_CipherCfgSRB1_3 (p_CipherMode: CipheringModeCommand;p_IncMode : RLC_IncMode; p_Now : BOOLEAN)

Group : UMTS_Specific/

Objective : Configure ciphering for RLC layer for RB1, RB2, RB3

Default : SS_Def

Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ lt_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1)			@sic RASH Er1433 sic@
2		+ lt_RLC_Activate (tsc_RB3 , tcv_RLC_SeqNumDL_RB3)			@sic RASH Er1433 sic@
3		[p_Now]			@sic G3t050 018 sic@
4		+ lt_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2)			
5		[NOT p_Now]			if not now, must be later@si c G3t050 018 sic@
6		+ lt_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2+2) lt_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber)			
7		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated ,tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq,p_IncMode)		configur e cipherin g for signaling radio bearers @sic T1−017 32 sic@
8		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(ts c_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_UL_Integrity_NoSRB4 (p_IntegrityProtActivationInfo : IntegrityProtActivationInfo)
Group : UMTS_Specific/
Objective : To start the integrity protection
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, c_RestRB_IntegrityProtActivationInfoList_NoSRB4(p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[0], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[1], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[3]))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GetHFN
Group : UMTS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Count := NUMBER_OF_ELEMENTS (tcv_StartList))			
2		[tcv_Count = 1]			
3		+ lt_FirstValue			
4		[tcv_Count = 2]			
5		+ lt_FirstValue			
6		+ lt_SecondValue			
7	ERR1	[TRUE]		F	
		lt_FirstValue			
8		[tcv_StartList.[0].cn_DomainIdentity = tsc_CS_Domain]			
9		(tcv_CellIndInfo.start_CS := tcv_StartList.[0].start_Value)			
10		[tcv_StartList.[0].cn_DomainIdentity = tsc_PS_Domain]			
11		(tcv_CellIndInfo.start_PS := tcv_StartList.[0].start_Value)			
12	ERR2	[TRUE]		F	
		lt_SecondValue			
13		[tcv_StartList.[1].cn_DomainIdentity = tsc_CS_Domain]			
14		(tcv_CellIndInfo.start_CS := tcv_StartList.[1].start_Value)			
15		[tcv_StartList.[1].cn_DomainIdentity = tsc_PS_Domain]			
16		(tcv_CellIndInfo.start_PS := tcv_StartList.[1].start_Value)			
17	ERR3	[TRUE]		F	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GetRRC_MessageSN_NoSRB4(p_CellId : INTEGER)
Group : UMTS_Specific/
Objective : To Calculate the Message sequence numbers for RB0 to RB3 and store in TCV's.
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB0)		
2		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB0 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB0)		
3		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB1)		
4		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB1 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB2)		
6		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB2 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL, tcv_RRC_MSN_RB2_UL := CRLC_RRC_MessageSN_CNF.count_I_LSB_UL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB3)		
8		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB3 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB3)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel_RelDPCH (
p_CellId: INTEGER;
p_RRC_RelStatus : RRC_Rel_Status
)

Group : UMTS_Specific/

Objective : To bring the UE from state CELL_DCH to idle state by releasing the RRC connection, regardless of whether a RAB is configured

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ lt_Send_RRC_ConnectionRelease			
4		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
5		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
6		+ ts_SS_ResetSecurityKey lt_Send_RRC_ConnectionRelease			
7		[p_RRC_RelStatus= cell_Dch]			
8		(tcv_N308 := 1, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
9		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
10	TSP1	UM ? RLC_UM_DATA_IND	car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
11		REPEAT lt_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
12		[p_RRC_RelStatus = cell_Fach_Dcch]			
13		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT))		
14	TSP2	AM ? RLC_AM_DATA_IND	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
15		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			@sic T1s040XXXDelayAfterRRCConnRel sic@
16		[p_RRC_RelStatus = cell_Fach_Ccch]			
17		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0, cs_108_RRC_ConnRelCCCH (tcv_RRC_Ti))		
18		[TRUE] lt_RptRcvConnRel		I	Programming error
19		START t_Dly			
20	TSF2	? TIMEOUT t_Dly		(F)	
21		(tcv_K := tcv_N308 + 1)			To stop the loop
22	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	Retransmission
Detailed Comments : 1. No RRC connection is established					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Security_NoSRB4 (
p_CellId : INTEGER;
p_KC : KeyCiphering;
p_IK : IntegrityKey;
p_GSM_ck : GSM_CipheringKey;
p_NewKey : BOOLEAN;
p_CN_Domain : CN_DomainIdentity)

Group : UMTS_Specific/

Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs

Default : RRC_Def1

Comments : This is only used for the 60 series test cases @sic G3t040005 sic@

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ lt_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ lt_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		+lt_RB2_UL_IntegrityActivate			
6		+ lt_StartSecurity_UE			
7		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain = ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain = cs_domain))]			
8		+ ts_CRLC_ResumeSecurity (p_CellId)			
9		[TRUE]			
		lt_RB2_UL_IntegrityActivate			
10		[tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
11		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)			
12		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
13		+ ts_RB2_UL_IntegrityActivate(0)			
		lt_ActivateSecurity_DL_SS			
14		+ lt_InitialiseRRC_MSN			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
16		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain))]			
17		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
18		+ lt_AssignRB_ActivationTimeInfoList			
19		+ ts_CRLC_SuspendSecurity (p_CellId)			Suspend SRBs 1, 3 and 4
20		+ ts_CRLC_DL_CipherCfgSRB1_3 (tcv_CellIndInfo.dL_CipherMode, notInc, FALSE)			Configure ciphering for RLC (RBs 1, 2, 3 and 4)@sic T1−01732, G3t050018 sic@
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			@sic T1−01732 sic@
22		+ ts_CMAC_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[TRUE]			If no New Ciphering config
		lt_InitialiseRRC_MSN			
24		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
25		+ ts_SetDL_RRC_MessageSN_NoSRB4 (p_CellId)			
26		[tcv_Int_ModifyFlag]			
		lt_StartSecurity_UE			
27		+ lt_SendSecurityModeCommand			
28		[px_CipheringOnOff]			Ciphering and Integrity

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
29	TSP1	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.ul_IntegProtActivationInfo, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.rb_UL_CiphActivationTimeInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , ?))	(P)	UL ciphering information is present
30		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode ,notInc)			@sic T1−01732 sic@
31		+ ts_CRLC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			@sic G3t040005 sic@
32	TSF1	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti, ?))	(F)	
33		[NOT (px_CipheringOnOff)]			Integrity only no ciphering
34	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.ul_IntegProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , OMIT))	(P)	No UL Ciphering information
35		+ ts_CRLC_UL_Integrity_NoSRB4 (tcv_CellIndInfo.uL_Integrity)			@sic G3t040005 sic@
36	TSF2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti, ?))	(F)	
		lt_SendSecurityModeCommand			
37		[pc_UMTS_GSM]			@sic RASH T1−031470 sic@ Branching if GSM Supported
38		[px_CipheringOnOff]			Ciphering ON and integrity ON

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
39		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)]			Ciphering on TM RAB present, hence include Ciphering activation time
40		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Ciphering for signalling RBs 1 to 4 @sic RASH T1−031 470 sic@
41		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
42		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Ciphering for signalling RBs 1 to 4 @sic RASH T1−031 470 sic@
43		[NOT (px_CipheringOnOff)]			Integrity ON and ciphering OFF
44		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		@sic RASH T1−031 470 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
45		[NOT pc_UMTS_GSM]			@sic RASH T1−031 470 all this tree sic@ Branching if GSM Not Supported
46		[px_CipheringOnOff]			Ciphering ON and integrity ON
47		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)]			Ciphering on TM RAB present, hence include Ciphering activation time
48		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT		Ciphering for signalling RBs 1 to 4

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
			)))		
49		[TRUE]			
50		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT)))		Ciphering for signalling RBs 1 to 4
51		[NOT (px_CipheringOnOff)]			Integrity ON and ciphering OFF
52		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT)))		
		lt_RRC_InitVariables			
53		+ lt_InitCipherMode			
54		+ lt_InitIntegrity			
55		+ ts_InitSystemSpecificCap			@sicRASHT1−031470sic@
56		+ ts_SaveCellInfo (p_CellId)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
57		[p_NewKey = TRUE]			Authentication was done, reset HFN
58		(tcv_HFN := '00000000000000000000'B)			
59		[p_CN_Domain = cs_domain]			
60		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
61		[p_CN_Domain = ps_domain]			
62		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
63		[p_NewKey = FALSE]			
64		[p_CN_Domain = cs_domain]			
65		(tcv_HFN := tcv_CellIndInfo.start_CS)			
66		[p_CN_Domain = ps_domain]			
67		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitCipherMode			
68		[px_CipheringOnOff = TRUE]			
69		[pc_UEA1_Supp]			
70		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Swithch On ciphering
71		[p_CN_Domain = cs_domain]			
72		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
73		[p_CN_Domain = ps_domain]			
74		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
75		[NOT (pc_UEA1_Supp)]			
76		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			Swithch On ciphering
77		[p_CN_Domain = cs_domain]			
78		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
79		[p_CN_Domain = ps_domain]			
80		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
81		[NOT (px_CipheringOnOff)]			
82		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			
83		[pc_UEA1_Supp]			
84		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
85		[NOT (pc_UEA1_Supp)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
86		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
		lt_InitIntegrity			
87		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
88		[tcv_CellIndInfo.integrityStarted]			
89		+ts_GetRRC_MessageSN_NoSRB4 (p_CellId)			
90		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_NoSRB4(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
91		[NOT tcv_CellIndInfo.integrityStarted]			
92		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
		lt_AssignRB_ActivationTimeInfoList			
93		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_NoSRB4 (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2 +2, tcv_RLC_SeqNumDL_RB3))			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour

Test Step Name : ts_SendDefSysInfoMulRatHo(p_CellId: INTEGER; p_SIB16 : SysInfoType16)
Group : UMTS_Specific/
Objective : To broadcast default system infomation.
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch record corresponding to current cell
2		+ ts_UTRAN_GERAN_ParaInit(p_CellId)			
3		+ts_CellDependentPara(p_CellId)			
4		[px_RAT = fdd]			
5		(tcv_SB1 := c_SB1_MulRatHo, tcv_MIB := c_MIB_MulRatOrBMC(tcv_TmpCellInfo))			
6		+ts_SendNoSegMulRatHo(p_CellId)			
7		+ts_SendSIB1_MulRatOrBMC (cb_SIB1_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
8		+ts_SendSIB2_MulRatOrBMC(c_SIB2_Def (tcv_TmpCellInfo), p_CellId, tsc_Now)			
9		+ts_SendSIB3_MulRatOrBMC(tcv_SIB3, p_CellId, tsc_Now)			
10		+ts_SendSIB4_MulRatOrBMC(tcv_SIB4, p_CellId, tsc_Now)			
11		+ts_SendSIB5_MulRatHo(cd_SIB5_DefMulRatHo(tcv_TmpCellInfo), p_CellId, tsc_Now)			
12		+ts_SendSIB7_MulRatOrBMC(cd_SIB7_DefMulRatHo, p_CellId, tsc_Now)			
13		+ts_SendSIB11_MulRatOrBMC(cd_SIB11_InterRATNoSIB12Ind (tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_G_CellInfoA, tcv_G_CellInfoB), p_CellId, tsc_Now)			@sicG3t050031sic@
14		+ts_SendSIB16_MulRatHo (p_SIB16 , p_CellId, tsc_Now)			
15		+ts_SendSIB18_MulRatOrBMC(c_SIB18_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
16		+ts_SendSB1_MulRatOrBMC(tcv_SB1, p_CellId, tsc_Now)			
17		+ts_SendMIB(tcv_MIB , p_CellId, tsc_Now)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
18	ERR1	[px_RAT = tdd]		I	
19	ERR2	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendNoSegMulRatHo(p_CellId : INTEGER)

Group : UMTS_Specific/

Objective : To deliver the system information message with NoSegment to SS on the frames on which there is no any SIB/MIB/SB scheduled

Default : InitOtherwiseFail

Comments : Current scheduling assumption:
Repetition period: 128;
Not scheduled positions: 3, 14, 46, 61, 62, 63.
Above unscheduled positions can be used for other SIBs later, if so this test Step shall be modified accordingly.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_Scheduling(p_CellId, 7, 3, tsc_Now)			pos = 3
2		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
3		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
4		+ts_Scheduling(p_CellId, 7, 14, tsc_Now)			pos = 14
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
7		+ts_Scheduling(p_CellId, 7, 46, tsc_Now)			pos = 46
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
10		+ts_Scheduling(p_CellId, 7, 61, tsc_Now)			pos = 61
11		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
13		+ts_Scheduling(p_CellId, 7, 62, tsc_Now)			pos = 62
14		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		
16		+ts_Scheduling(p_CellId, 7, 63, tsc_Now)			pos = 63
17		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
18		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB5_MulRatHo(p_SIB: SysInfoType5; p_CellId : INTEGER; p_Timing: INTEGER)
Group : UMTS_Specific/
Objective : To deliver the SIBType5 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB5 : p_SIB)))			1.
2		[tcv_Segs.segCount >4]		I	2.
3		[tcv_Segs.segCount <=4]			
4		[tcv_Segs.segCount = 1]			
5		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
6		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
7		+lt_CompleteSIB(systemInformationBlock Type5)			4.
8		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
9		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
11		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
12		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
14		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
15		CMAC?CMAC_SYSINFO_ Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
17		(tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5 := (tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5) MOD 4 + 1, tcv_MIB.sibSb_Referenc eList.[5].scheduling := c_SIB5_Schedul1_MulRa tOrBMC)			
18		+ts_ChangeMIB_Value Tag			
19		[tcv_Segs.segCount = 2]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul2_MulRatOrBMC)			
21		+ts_ChangeMIB_ValueTag			
22		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
26		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
28		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType5, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
32		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Seg s.seg2) <= 214]			
34		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType5, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType5, 1, tcv_Segs.seg2))		7.
37		[tcv_Segs.segCount = 3]			
38		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul3_MulRatOrBMC)			
39		+ts_ChangeMIB_ValueTag			
40		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
43		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
44		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType5, 3, tcv_Segs.seg1))		4.
46		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
47		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 1, tcv_Segs.seg2))		7.
49		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
50		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
51		[LENGTH_OF(tcv_Segs.seg3) <= 214]			
52		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
53		[TRUE]			
54		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
55		[tcv_Segs.segCount = 4]			
56		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type.sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type.sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul4_MulRatOrBMC)			
57		+ts_ChangeMIB_ValueTag			
58		+ts_Scheduling(p_CellId, 7, 19, p_Timing)			3.
59		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
60		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType5, 4, tcv_Segs.seg1))		4.

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
61		+ts_Scheduling(p_CellId, 7, 21, p_Timing)			5.
62		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
63		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 1, tcv_Segs.seg2))		7.
64		+ts_Scheduling(p_CellId, 7, 22, p_Timing)			8.
65		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
66		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType5, 2, tcv_Segs.seg3))		9.
67		+ts_Scheduling(p_CellId, 7, 23, p_Timing)			10.
68		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
69		[LENGTH_OF(tcv_Segs.seg4) <= 214]			
70		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType5, 3, tcv_Segs.seg4))		11.
71		[TRUE]			
72		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType5, 3, tcv_Segs.seg4))		11.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
73		[LENGTH_OF(tcv_Segs.seg1) = 226]			
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments :
1. Unaligned PER encoding of the SIB5 then segmentation.
2. The result of segmentation shall be one or two or four segments for the SIB5 (current assumption).
3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=19.
4. Construct the first system information message containing first segment of SIB5 and send it to SS.
5. Send the scheduling info for second segment to SS. one segment: REP=128, POS=21.
6. Send no segment system information message to SS.
7. Construct the second system information message containing second segment of SIB5 and send it to SS.

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Test Step Dynamic Behaviour	
Detailed Comments :	... 8. Send the scheduling info for third segment to SS. one segment: REP=128, POS=22. 9. Construct the third system information message containing third segment of SIB5 and send it to SS. 10. Send the scheduling info for third segment to SS. one segment: REP=128, POS=23. 11. Construct the fourth system information message containing fourth segment of SIB5 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB16_MulRatHo(p_SIB: SysInfoType16; p_CellId : INTEGER; p_Timing: INTEGER)
Group : UMTS_Specific/
Objective : To deliver the SIBType16 to SS
Default : InitOtherwiseFail
Comments : used for multi−rat handover test cases
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB16 : p_SIB)))			1.
2		[tcv_Segs.segCount >8]		I	2.
3		[tcv_Segs.segCount <=8]			
4		+lt_SendNoSegments			
5		[tcv_Segs.segCount = 1]			
6		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := ((tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) +1) MOD 16, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul1)			
7		+ts_ChangeSB1_ValueTag			
8		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
9		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		+lt_CompleteSIB(systemInformationBlockType16)			4.
11		[tcv_Segs.segCount = 2]			
12		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul2)			
13		+ts_ChangeSB1_ValueTag			
14		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
15		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 2, tcv_Segs.seg1))		4.
17		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
18		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		[LENGTH_OF(tcv_Segs.seg2) <= 214]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
21		[TRUE]			
22		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
23		[tcv_Segs.segCount = 3]			
24		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul3)			
25		+ts_ChangeSB1_ValueTag			
26		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
27		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 3, tcv_Segs.seg1))		4.
29		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
30		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
31		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
32		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
33		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
34		[LENGTH_OF(tcv_Segs.seg3) <= 214]			
35		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
36		[TRUE]			
37		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
38		[tcv_Segs.segCount = 4]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
39		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul4)			
40		+ts_ChangeSB1_ValueTag			
41		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
42		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 4, tcv_Segs.seg1))		4.
44		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
45		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
46		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
47		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
48		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
49		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
50		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
51		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
52		[LENGTH_OF(tcv_Segs.seg4) <= 214]			
53		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
54		[TRUE]			
55		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
56		[tcv_Segs.segCount = 5]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
57		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul5)			
58		+ts_ChangeSB1_ValueTag			
59		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
60		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
61		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 5, tcv_Segs.seg1))		4.
62		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
63		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
64		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
65		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
66		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
67		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
68		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
69		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
70		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
71		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
72		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
73		[LENGTH_OF(tcv_Segs.seg5) <= 214]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
77		[tcv_Segs.segCount = 6]			
78		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul6)			
79		+ts_ChangeSB1_ValueTag			
80		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
81		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
82		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 6, tcv_Segs.seg1))		4.
83		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
84		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
85		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
86		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
87		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
88		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
89		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
90		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
91		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
92		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
93		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
94		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
95		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
96		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
97		[LENGTH_OF(tcv_Segs.seg6) <= 214]			
98		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
99		[TRUE]			
100		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
101		[tcv_Segs.segCount = 7]			
102		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul7)			
103		+ts_ChangeSB1_ValueTag			
104		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
105		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
106		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 6, tcv_Segs.seg1))		4.
107		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
108		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
109		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
110		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
111		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
112		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
113		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
114		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
115		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
116		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
117		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
118		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
119		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
120		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
121		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
122		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
123		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
124		[LENGTH_OF(tcv_Segs.seg7) <= 214]			
125		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 6, tcv_Segs.seg7))		16.
126		[TRUE]			
127		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 6, tcv_Segs.seg7))		16.
128		[tcv_Segs.segCount = 8]			
129		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType16.predefinedConfigValueTag) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling :=c_SIB16_Schedul8)			
130		+ts_ChangeSB1_ValueTag			
131		+ts_Scheduling(p_CellId, 7, 35, p_Timing)			3.
132		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
133		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType16, 6, tcv_Segs.seg1))		4.
134		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
135		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
136		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 1, tcv_Segs.seg2))		6.
137		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
138		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
139		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 2, tcv_Segs.seg3))		8.
140		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
141		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
142		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 3, tcv_Segs.seg4))		10.
143		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
144		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
145		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 4, tcv_Segs.seg5))		12.
146		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
147		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
148		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 5, tcv_Segs.seg6))		14.
149		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
150		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
151		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType16, 6, tcv_Segs.seg7))		16.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
152		+ts_Scheduling(p_CellId, 7, 55, p_Timing)			17.
153		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
154					
155			ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType16, 7, tcv_Segs.seg8))		18.
156					
157			ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType16, 7, tcv_Segs.seg8))		18.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
158		[LENGTH_OF(tcv_Segs.seg1) = 226]			
159		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
160		[TRUE]			
161		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.
		lt_SendNoSegments			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
162		+ts_Scheduling(p_CellId, 7, 37, p_Timing)			5.
163		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
164		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
165		+ts_Scheduling(p_CellId, 7, 38, p_Timing)			7.
166		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
167		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
168		+ts_Scheduling(p_CellId, 7, 39, p_Timing)			9.
169		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
170		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
171		+ts_Scheduling(p_CellId, 7, 51, p_Timing)			11.
172		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
173		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
174		+ts_Scheduling(p_CellId, 7, 53, p_Timing)			13.
175		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
176		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
177		+ts_Scheduling(p_CellId, 7, 54, p_Timing)			15.
178		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
179		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
180		+ts_Scheduling(p_CellId, 7, 55, p_Timing)			17.
181		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
182		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
183		+ts_Scheduling(p_CellId, 7, 61, p_Timing)			remove possible SIB12

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
184		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
185		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.
186		+ts_Scheduling(p_CellId, 7, 62, p_Timing)			remove possible SIB12
187		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
188		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		19.

Detailed Comments :
1. Unaligned PER encoding of the SIB16 then segmentation.
2. The segmentation shall result in one to eight segments for the SIB16 (current assumption).
3. Send the scheduling info for first segment to SS.(one segment; REP=128; POS=35).
4. Construct the first system information message containing first segment of SIB16 and send it to SS.
5. Send the scheduling info for second segment to SS.(one segment; REP=128; POS=37).
6. Construct the second system information message containing second segment of SIB16 and send it to SS.
7. Send the scheduling info for thirdt segment to SS.(one segment; REP=128; POS=38).
8. Construct the third system information message containing third segment of SIB16 and send it to SS.
9. Send the scheduling info for forth segment to SS.(one segment; REP=128; POS=39).
10. Construct the forth system information message containing forth segment of SIB16 and send it to SS.
11. Send the scheduling info for fifth segment to SS.(one segment; REP=128; POS=51).
12. Construct the fifth system information message containing fifth segment of SIB16 and send it to SS.
13. Send the scheduling info for sixth segment to SS.(one segment; REP=128; POS=53).
14. Construct the sixth system information message containing sixth segment of SIB16 and send it to SS.
15. Send the scheduling info for seventh segment to SS.(one segment; REP=128; POS=54).
16. Construct the seventh system information message containing seventh segment of SIB16 and send it to SS.
17. Send the scheduling info for eighth segment to SS.(one segment; REP=128; POS=55).
18. Construct the eighth system information message containing eighth segment of SIB16 and send it to SS.
19. Send no segment system information message to SS when the number of segments is less than 8.

Test Step Dynamic Behaviour

Test Step Name : ts_SetDL_RRC_MessageSN_NoSRB4 (p_ActCell : INTEGER)
Group : UMTS_Specific/
Objective : To Set the Message sequence number in DL to all 0 for RB0 to RB3
Default : SS_Def
Comments : This step to be used when Integrity is to be started
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ (p_ActCell, tsc_RB0, 0)		
2		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (p_ActCell, tsc_RB0)		
3		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB1, 0)		
4		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB2, 0)		
6		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB3, 0)		
8		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB3)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Modify_IR_G (p_CellId : INTEGER; p_ActTime : ActivationTime)

Group : UMTS_Specific/

Objective : to configure physical channel DPCH1and connect DCH5 to the physical channel,then map DCCH1−4 on to the DCH5 transport channel. Used for setting up stand−alone UL:13.6 DL:13.6 kbps SRBs This ts is the same as ts_SS_1DCH_DCCH_Modify expect for 1. RM attaribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments : The transport channel DCH5 carries only dedicated control channels.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_TrCH_Config_REQ	cd_DCH_148_TTI_10_DL_Info_RM160 (p_CellId, tsc_DL_DPCH1,p_ActTime)		2.
5		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
6		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoDL_13_6_StandAlone_RM160, c_TrLogMappingDL_4DCCH ,p_ActTime)		3. C−RNTI and U−RNTI are not needed on DPCH
7		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
8		CPHY!CPHY_TrCH_Config_REQ	cd_DCH_148_TTI_10_UL_Info_RM160 (p_CellId, tsc_UL_DPCH1,p_ActTime)		2.
9		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_UL_DPCH1)		
10		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info(OMIT, OMIT), cd_TrChInfoUL_13_6_StandAlone_RM160, c_TrLogMappingUL_4DCCH,p_ActTime)		3. C−RNTI and U−RNTI are not needed on DPCH
11		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_UL_DPCH1)		@sicG3t050001sic@
12		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			1.
13	ERR1	[px_RAT = tdd]		I	
14	ERR2	[TRUE]		I	

Detailed Comments : 1. configure physical channel DPCH1.
2. connect DCH5 to DPCH1.
3. map logical channels: DCCH1−4 to DCH5.

Test Step Dynamic Behaviour

Test Step Name : ts_SS_4DCH_Modify_IR_G (p_CellId : INTEGER; p_ActTime : ActivationTime; p_DL_CommonInformation : DL_CommonInformation; p_UL_DPCH_Info : UL_DPCH_Info)

Group : UMTS_Specific/

Objective : to modify physical channel DPCH1and connect DCH1, DCH2, DCH3 and DCH5 to the physical channel, then map DCCH1−4 on to the DCH5 transport channel and map DTCH(subflow#1), DTCH(subflow#2), DTCH(subflow#3) to the DCH1, DCH2, DCH3 transport channel respectively. Used for AMR speech.
This step is same as ts_SS_4DCH_Modify except for 1. RM attaribute for DCH SRB = 160, and DPCH Offset set as 2.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_122_AMR_ Offset2 (p_DL_CommonInformation , tcv_TmpCellInfo.dl_DPCH_ 2ndScrCode) ,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_4DCH_DL_Info_RM160 (p_CellId, tsc_DL_DPCH1,c_TrChCo nfigTypeDCH_NoSHO,p_Ac tTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoDL_122_AMR_ RM160, c_TrLogMappingDL_4DCC H_3DTCH ,p_ActTime)		3. C−RNTI and U−RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info ,p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_RE Q	ca_4DCH_UL_Info_RM160 (p_CellId, tsc_UL_DPCH1,c_TrChCo nfigTypeDCH_NoSHO,p_Ac tTime)		2.
12		CPHY?CPHY_TrCH_Config_C NF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), cd_TrChInfoUL_122_AMR_RM160, c_TrLogMappingUL_4DCCH_3DTCH,p_ActTime)		3. C−RNTI and U−RNTI are not needed on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	
Detailed Comments : 1. configure new DPCH1for transporting conversational/speech/UL:12.2 DL:12.2 kbps/CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH. 2. connect DCH1, DCH2, DCH3 and DCH5 to DPCH1. 3. map logical channels: DCCH1−4 to DCH5, DTCH1 to DCH1, DTCH2 to DCH2, DTCH3 to DCH3 for both uplink and downlink and send relevant transport channel configuration information to MAC.					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB2_RB3_ReCfg
Group : UMTS_Specific/
Objective : To setup radio bearers : RB2 and RB3 as per values specified in 25.331 Sec 13.7 for 60.x test cases.
Default : SS_Def
Comments : CRLC is Reconfigured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_IR_G (tsc_CellDedicated, tsc_RB2, {uLlogicalChannelIdentity tsc_UL_DCCH2, dLlogicalChannelIdentity tsc_DL_DCCH2}, 128)		cofigure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_IR_G (tsc_CellDedicated, tsc_RB3, {uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3}, 128)		cofigure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		

Detailed Comments : ANITE Added this step

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB2_RB3_ReCfg_DefCfg1

Group : UMTS_Specific/

Objective : To setup radio bearers : RB2 and RB3 as per values specified in 25.331 Sec 13.7, default config 1, for 60.4

Default : SS_Def

Comments : CRLC is Reconfigured with cellId −1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_DefCfg1 (tsc_CellDedicated, tsc_RB2, {uLlogicalChannelIdentity tsc_UL_DCCH2, dLlogicalChannelIdentity tsc_DL_DCCH2}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_ReconfInfoSS_SRB_DefCfg1 (tsc_CellDedicated, tsc_RB3, {uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3}, 128)		configure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		

Detailed Comments : ANITE Added this step

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Reconf_DPCH_Speech (p_CellId : INTEGER)
Group : UMTS_Specific/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ts_SS_RB2_RB3_ReCfg			
3		+ ts_CalculateActTime (p_CellId)			@sic G3t050 013 sic@
4		+ts_SS_4DCH_Modify_IR_G (p_CellId , tcv_ActTime, c_DL_CommonInformationRB_SetUpSpeech (tsc_DL_DPCH1_SFP_Speech), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_Speech, pl0_84, tcv_TmpCellInfo.uL_ScramblingCode))			
5		+ts_SS_RB10_ToRB12_TM_Cfg			
6		+ ts_SetCellCfg (p_CellId, tcv_RRC_RAB_Type)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Reconf_DPCH_StreamingUnknown14_4k_28_8k_57_6k (p_CellId : INTEGER ; p_ActTime : ActivationTime)

Group : UMTS_Specific/

Objective :

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ts_SS_RB2_RB3_ReCfg			
3		[tcv_ISHO_SubtestCounter = 1]			For 14.4kbps
4		+ ts_2DCH_ModifyStreamUnknown14_4_IR_G (p_CellId, p_ActTime, c_DL_CommonInformationRB_SetUp (tsc_Sfd128_8) , cb_UL_DPCH_Info (tsc_Sf64, pl1, tcv_TmpCellInfo.uL_ScramblingCode), c_DCH_576_TFS_2)			
5		+ts_SS_RB10_TM_Cfg (576)			
6		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
7		[tcv_ISHO_SubtestCounter = 2]			For 28.8kbps
8		+ ts_2DCH_ModifyStreamUnknown28_8_IR_G (p_CellId, p_ActTime, c_DL_CommonInformationRB_SetUp (tsc_Sfd64) , cb_UL_DPCH_Info (tsc_Sf32, pl1, tcv_TmpCellInfo.uL_ScramblingCode), c_DCH_576_TFS_3 (155))			
9		+ts_SS_RB10_TM_Cfg (576)			
10		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
11		[tcv_ISHO_SubtestCounter = 3]			For 57.6kbps
12		+ts_SS_2DCH_Modify (tsc_CellA , c_DCH_576_148_UL_Info_RM160 (tcv_ActTime) , c_DCH_576_148_DL_Info_RM160 (tcv_ActTime) , c_TrChInfoUL_576_148_RM160, c_TrChInfoDL_576_148_RM160, c_TrLogMappingUL_2, c_TrLogMappingDL_2, p_ActTime, cd_DL_DPCH_64K_CS_Offset2 (c_DL_CommonInformationDCH_ToDCH_Offset1 (tsc_DL_DPCH1_SFP_Streaming, TRUE), tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		Streaming , pl0_96, tcv_TmpCellInfo.uL_ScramblingCode))			
13		+ts_SS_RB10_TM_Cfg (576)			
14		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_U_GPRSAttach(p_CellId : INTEGER)
Group : UMTS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
3		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
4		+ts_GMM_Authentication (p_CellId)			AUTHENTICATION AND CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE
5		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
6		(tcv_AssignedPTMSI := px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('001'B), c_RAI_v(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI),−))		ATTACH ACCEPT for PS only − Attach result 'GPRS attached' − RAI default (RAI−1) − P−TMSI−1 signature − MobileId P−TMSI−1 − omit TMSI
8		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_SSconfigToInitialState(p_CellId:INTEGER)					
Group : UMTS_Specific/					
Objective :					
Default : SS_Def					
Comments : @sic G3t050036 sic@					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		+ts_SS_RelDPCH (p_CellId)			Release RAB/RAB's
2		+ts_SS_AddDPCH(p_CellId)			
3		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			1.
4		+ts_SS_ResetSecurityKey			
Detailed Comments : 1. configure DPCH1supporting13.6 ksps Signalling RB.					

Test Step Dynamic Behaviour

Test Step Name : ts_CellChange_RAUpdate(p_CellId : INTEGER; p_FOR : B1; p_UpdateType : B3; p_SecurityReqd : BOOLEAN)

Group : UMTS_Specific/

Objective : Perform appropriate signalling to re−establish the connection after moving from GERAN to UTRAN

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(p_FOR, p_UpdateType), ?, ?))		ROUTING AREA UPDATING REQUEST
2		+lt_SendAccept			
3		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start, tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_TmpB3 := tcv_TmpRAU_ReqPDU.updateType.value)	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?, ?), ?, ?))	(F)	ROUTING AREA UPDATING REQUEST wrong type
4		+lt_SendAccept lt_SetUpdateResult			
5		[pc_PS AND pc_CS]			
6		(tcv_TmpB3 := '001'B)			
7		[pc_PS]			
8		(tcv_TmpB3 := '000'B) lt_SendAccept			
9		+lt_SetUpdateResult			@sic ER2055 sic@
10		+lt_DoSecurity			
11		+ ts_SetTmpCellInfo (p_CellId)			Get cell info of new UTRAN cell
12		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_RA_UpdAcc3 (c_GMM_UpdateResult_v(tcv_TmpB3), c_RAI_v (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (px_PTMSI_SigDef), c_MobileIdPTMSI (px_PTMSI_Def), −))		ROUTING AREA UPDATING ACCEPT Send back appropriate update type

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cr_RA_UpdComplete)		@sic R5s050095 sic@
14		+lt_RRC_ConnRel			@sic ER2055 sic@
		lt_DoSecurity			
15		[p_SecurityReqd]			
16		+ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
17		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
18		[NOT p_SecurityReqd]			
		lt_RRC_ConnRel			
19		[tcv_TmpRAU_ReqPDU.updateType.for = '0'B]			if no follow on request, release connection
20		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dcch)			
22		[tcv_TmpCellInfo.cellConfig <> cell_FACH]			
23		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			
24		[TRUE]			another procedure to follow, so don't release connection
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_InitAssigmentCmd_HR (p_CellId : CellId ; p_ChMode : ChMode)					
Group : GSM_Specific/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest =tsc_GSM_480Band_Test) OR (px_GSM_BandUnderTest =tsc_GSM_480Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
2		(tcv_AssignmentCommand := cs_G_AssignmentCommand (tcv_Ch_Mode , c_ChannelDescr2_FH (INT_TO_BIT ((2 + BIT_TO_INT (tsc_G_TCH_H_SubA)), 5), tsc_G_TS0, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 16) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			@sicG3t050010sic@
3		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CheckTimeFrames(p_Frame1, p_Frame2 : INTEGER)
Group : GSM_Specific/
Objective :
Default : IntersystemDef
Comments : tcv_RFN2 and tcv_RR_RFN are expected to contain the correct values before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GetFNFromRFN(tcv_RR_RFN, tcv_FN1)			
2		+ts_GetFNFromRFN(tcv_RFN2, tcv_FN2)			
3		[tcv_FN2 − tcv_FN1 = p_Frame1]		(P)	
4		[tcv_FN2 − tcv_FN1 = p_Frame2]		(P)	
5		[TRUE]		(F)	has to match passed in frame no.s

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSB1_MulRatOrBMC(p_SB: SysInfoTypeSB1; p_CellId : INTEGER; p_Timing : INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SysInfoTypeSB1 to SS
Default : InitOtherwiseFail
Comments : for two S−CCPCH or two PRACH (MBC) configuration or multi−Rat handover configuration.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sB1 : p_SB)))			1.
2		[tcv_Segs.segCount >2]		I	2.
3		[tcv_Segs.segCount <=2]			
4		[tcv_Segs.segCount = 1]			
5		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
6		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
7		+lt_CompleteSIB(schedulingBlock1)			4.
8		+ts_Scheduling(p_CellId, 4, 2, p_Timing)			5.
9		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
11		+ts_ChangeSB1_ValueTag			
12		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul1, tcv_SB1_ValueTagChanged := FALSE)			
13		[tcv_Segs.segCount = 2]			
14		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
15		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(schedulingBlock1, 2, tcv_Segs.seg1))		4.
17		+ts_Scheduling(p_CellId, 4, 2, p_Timing)			5.
18		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
20		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(schedulingBlock1, 1, tcv_Segs.seg2))		7.
21		+ts_ChangeSB1_ValueTag			
22		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul2, tcv_SB1_ValueTagChanged := FALSE)			
23		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(scheduling Block1, 1, tcv_Segs.seg2))		7.
25		+ts_ChangeSB1_ValueTag			
26		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul2, tcv_SB1_ValueTagChanged := FALSE)			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
27		[LENGTH_OF(tcv_Segs.seg1) = 226]			
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
29		[LENGTH_OF(tcv_Segs.seg1) <> 226]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments :
1. Unaligned PER encoding of the SB1 then segmentation.
2. The result of segmentation shall be less than three segments for the SB1 (current assumption).
3. Send the scheduling info for first segment to SS.(one segment; REP=16; POS=1).
4. Construct the first system information message containing first segment of SB1 and send it to SS.
5. Send the scheduling info for second segment to SS.(one segment; REP=16; POS=2).
6. Send no segment system information message to SS.
7. Construct the second system information message containing second segment of SB1 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB11_MulRatOrBMC(p_SIB: SysInfoType11; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIBType11 to SS
Default : InitOtherwiseFail
Comments : maximum two segments, scheduled according 3GPP TS 34.123−3 clause 8.4.4.1 and 8.4.4.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation (o_SIB_PER_Encoding (sIB11 : p_SIB)))			1.
2		[tcv_Segs.segCount >3]		I	2.
3		[tcv_Segs.segCount <=3]			
4		[tcv_Segs.segCount = 1]			
5		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul1_MulRatOrBMC)			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		+lt_CompleteSIB(systemInformationBlockType11)			4.
10		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
11		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
13		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
14		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
16		[tcv_Segs.segCount = 2]			
17		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul2_MulRatOrBMC)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
20		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
21		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType11, 2, tcv_Segs.seg1))		4.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
26		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
29		[TRUE]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
31		[tcv_Segs.segCount = 3]			
32		(tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[1].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[1].scheduling := c_SIB11_Schedul3_MulRatOrBMC)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 7, 29, p_Timing)			3.
35		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInformationBlockType11, 3, tcv_Segs.seg1))		4.
37		+ts_Scheduling(p_CellId, 7, 30, p_Timing)			5.
38		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
39		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
40		+ts_Scheduling(p_CellId, 7, 31, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg2) <= 214]			

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType11, 2, tcv_Segs.seg3))		9.
44		[TRUE]			
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType11, 2, tcv_Segs.seg3))		9.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
46		[LENGTH_OF(tcv_Segs.seg1) = 226]			
47		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
48		[TRUE]			
49		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments :
1. Unaligned PER encoding of the SIB11 then segmentation.
2. The result of segmentation shall be one or two or three segments for the SIB11 (current assumption).
3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=29.
4. Construct the first system information message containing first segment of SIB11 and send it to SS.
5. Send the scheduling info for second segment to SS. one segment: REP=128, POS=30.
6. Send no segment system information message to SS.
7. Construct the second system information message containing second segment of SIB11 and send it to SS.
8. Send the scheduling info for third segment to SS. one segment: REP=128, POS=31.
9. Construct the third system information message containing third segment of SIB11 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB18_MulRatOrBMC (p_SIB: SysInfoType18; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB18 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB18 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 7, 6, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType18)			4.
7		(tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType18 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType18) MOD 4 + 1)			
8		+ts_ChangeSB1_ValueTag			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB7 then segmentation.
2. The result of segmentation shall be one segment for the SIB18 (current assumption).
3. Send the scheduling info to SS. one segment: REP=128, POS=6.
4. Construct the system information message containing SIB18 and sent to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB1_MulRatOrBMC(p_SIB: SysInfoType1; p_CellId : INTEGER; p_Timing: INTEGER)

Group : RRCM_SysInfo/RRCM_MRAT_BMC/

Objective : To deliver the SIBType1 to SS

Default : InitOtherwiseFail

Comments : system information on air changes imediatly if p_Timing => 512. change of system information on air starts at the frame number = p_Timing.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB1 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 7, 5, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType1)			4.
7		(tcv_MIB.sibSb_ReferenceList.[1].sibSb_Type.sysInfoType1 := (tcv_MIB.sibSb_ReferenceList.[1].sibSb_Type.sysInfoType1) MOD 256 + 1)			
8		+ts_ChangeMIB_ValueTag			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments :
1. Unaligned PER encoding of the SIB1 then segmentation.
2. The result of segmentation shall be one segment for the SIB1 (current assumption).
3. Send the scheduling info for first segment to SS. one segment: REP=128, POS=5.
4. Construct the first system information message containing segment of SIB1 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB2_MulRatOrBMC (p_SIB: SysInfoType2; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB2 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB2 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 7, 7, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType2)			4.
7		(tcv_MIB.sibSb_ReferenceList.[2].sibSb_Type.sysInfoType2 := (tcv_MIB.sibSb_ReferenceList.[2].sibSb_Type.sysInfoType2) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB2 then segmentation.
2. The result of segmentation shall be one segment for the SIB2 (current assumption).
3. Send the scheduling info to SS. one segment, REP=128, POS=7.
4. Construct the system information message containing SIB2 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB3_MulRatOrBMC (p_SIB: SysInfoType3; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB3 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB3 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType3)			4.
7		(tcv_MIB.sibSb_ReferenceList.[3].sibSb_Type.sysInfoType3 := (tcv_MIB.sibSb_ReferenceList.[3].sibSb_Type.sysInfoType3) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB3 then segmentation.
2. The result of segmentation shall be one segment for the SIB3 (current assumption).
3. Send the scheduling info to SS. one segment; REP=64, POS=13.
4. Construct the system information message containing SIB3 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB4_MulRatOrBMC (p_SIB: SysInfoType4; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB4 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB4 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType4)			4.
7		(tcv_MIB.sibSb_ReferenceList.[4].sibSb_Type.sysInfoType4 := (tcv_MIB.sibSb_ReferenceList.[4].sibSb_Type.sysInfoType4) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[TRUE]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB4 then segmentation.
2. The result of segmentation shall be one segment for the SIB4 (current assumption).
3. Send the scheduling info to SS. one segment; REP=64, POS=15.
4. Construct the system information message containing SIB4 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB7_MulRatOrBMC(p_SIB: SysInfoType7; p_CellId : INTEGER; p_Timing: INTEGER)
Group : RRCM_SysInfo/RRCM_MRAT_BMC/
Objective : To deliver the SIB7 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB7 : p_SIB)))			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 5, 11, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType7)			4.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
7		[LENGTH_OF(tcv_Segs.seg1) = 226]			
8		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
9		[TRUE]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the SIB7 then segmentation.
2. The result of segmentation shall be one segment for the SIB7 (current assumption).
3. Send the scheduling info to SS. one segment: REP=32, POS=11.
4. Construct the system information message containing SIB7 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_InitSimultaneousSCCPCH_DPCH_Reception
Group : RRCM_Steps/
Objective : To initialize tcv_SimultaneousSCCPCH_DPCH_Reception.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_SimultaneousSCCPCH_DPCH_Reception]			
2		(tcv_SimultaneousSCCPCH_DPCH_Reception := supported: { maxNoSCCPCH_RL px_MaxNoSCCPCH_RL, simultaneousSCCPCH_DPCH_DPDCH_Reception pc_SimultaneousSCCPCH_DPCH_DPDCH_Reception })			
3		[TRUE]			
4		(tcv_SimultaneousSCCPCH_DPCH_Reception := notSupported: NULL)			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_InitCapability
Group : RRCM_Steps/
Objective : To initialize local varaibles used in capability constraints.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitPDCP_Capability			
2		+ts_DL_InitTurboSupport			
3		+ts_UL_InitTurboSupport			
4		+ts_InitSimultaneousSCCPCH_DPCH_Reception			
5		+ lt_InitUE_PowerClassExt			@sic VB R5s050167 sic@
		lt_InitUE_PowerClassExt			
6		[px_UE_PowerClass = 1]			
7		(tcv_UE_PowerClassExt := class1)			
8		[px_UE_PowerClass = 2]			
9		(tcv_UE_PowerClassExt := class2)			
10		[px_UE_PowerClass = 3]			
11		(tcv_UE_PowerClassExt := class3)			
12		[px_UE_PowerClass = 4]			
13		(tcv_UE_PowerClassExt := class4)			
14		[TRUE]			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_InitPDCP_Capability
Group : RRCM_Steps/
Objective : To initialize tcv_PDCP_Capability.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_PDCP_Capability.losslessSRNS_RelocationSupport := pc_LosslessSRNS_Reloc)			
2		[pc_RFC2507]			
3		(tcv_PDCP_Capability.supportForRfc2507 := supported: px_MaxHcContextSpace)			
4		[TRUE]			
5		(tcv_PDCP_Capability.supportForRfc2507 := notSupported: NULL)			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_UL_InitTurboSupport
Group : RRCM_Steps/
Objective : To initialize tcv_UL_TurboSupport.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_UL_TC]			
2		(tcv_UL_TurboSupport := supported: px_UL_MaxTC_TB_Bits)			
3		[TRUE]			
4		(tcv_UL_TurboSupport := notSupported: NULL)			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_DL_InitTurboSupport
Group : RRCM_Steps/
Objective : To initialize tcv_DL_TurboSupport.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_DL_TC]			
2		(tcv_DL_TurboSupport := supported: px_DL_MaxTC_TB_Bits)			
3		[TRUE]			
4		(tcv_DL_TurboSupport := notSupported: NULL)			

Detailed Comments : Note: To be called prior to the test body.

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MT_ForMultiRAT (p_ConfigType : RB_Type)

Group : RRCM_CC_StepsForMultiRAT/

Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MT calls.
To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
To assigne the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
To assign the tcv_ActiveService test case variable, that contains the service used for the CC call
To assign the tcv_PagingCau test case variable, that contains the paging cause value used in the PAGING REQUEST message to be sent by SS to initiate the call.
To assign the tcv_TI_S and tcv_TI_R with the value 0.

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B)			
2		[p_ConfigType = speech_12_2k]			
3		(tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall, tcv_ActiveService := tsc_SrvTelephony)			
4		+ ts_CC_BasicServMT (tcv_ActiveService)			
5		[(p_ConfigType = streamUnknown_57_6k) OR (p_ConfigType = streamUnknown_14_4k) OR (p_ConfigType = streamUnknown_28_8k)]			
6		(tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			@sic RASH ER1395 sic@
7		+ lt_AssignStreamingSrv			
8		[px_BcapSyncAsync = tsc_BcapASync]			
9		+ ts_CC_BS20_MT (tcv_ActiveService)			
10		+ ts_UT_ConfigUE_MT (tcv_ActiveService)			
11		[px_BcapSyncAsync = tsc_BcapSync]			
12		+ ts_CC_BS30_MT (tcv_ActiveService)			
13		+ ts_UT_ConfigUE_MT (tcv_ActiveService)			
14	ERR1	[TRUE]		I	
15	ERR2	[TRUE]		I	
		lt_AssignStreamingSrv			
16		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV120_9600]			
17		(tcv_ActiveService := tsc_SrvV120)			
18		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV120_14400]			
19		(tcv_ActiveService := tsc_SrvV120)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV120_19200]			
21		(tcv_ActiveService := tsc_SrvV120)			
22		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV120_28800]			
23		(tcv_ActiveService := tsc_SrvV120)			
24		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV120_38400]			
25		(tcv_ActiveService := tsc_SrvV120)			
26		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_AsyncV120_48000]			
27		(tcv_ActiveService := tsc_SrvV120)			
28		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncV120_56000]			
29		(tcv_ActiveService := tsc_SrvV120)			
30		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_AsyncPIAFS_32000]			
31		(tcv_ActiveService := tsc_SrvPIAFS)			
32		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncPIAFS_64000]			
33		(tcv_ActiveService := tsc_SrvPIAFS)			
34		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncFTM_56000]			
35		(tcv_ActiveService := tsc_SrvFTM)			
36		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncFTM_64000]			
37		(tcv_ActiveService := tsc_SrvFTM)			
38		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV110_9600]			
39		(tcv_ActiveService := tsc_SrvV110)			
40		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV110_14400]			
41		(tcv_ActiveService := tsc_SrvV110)			
42		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV110_19200]			
43		(tcv_ActiveService := tsc_SrvV110)			
44		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV110_38400]			
45		(tcv_ActiveService := tsc_SrvV110)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
46		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Async31kHz_9600]			
47		(tcv_ActiveService := tsc_Srv31kHz)			
48		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Async31kHz_14400]			
49		(tcv_ActiveService := tsc_Srv31kHz)			
50		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Async31kHz_19200]			
51		(tcv_ActiveService := tsc_Srv31kHz)			
52		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Async31kHz_28800]			
53		(tcv_ActiveService := tsc_Srv31kHz)			
54		[(px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapModemType = tsc_BcapMT_Autobaud1) AND pc_Async31kHz_AutoBanding1]			
55		(tcv_ActiveService := tsc_Srv31kHz)			
56		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncV120_9600]			
57		(tcv_ActiveService := tsc_SrvV120)			
58		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncV120_14400]			
59		(tcv_ActiveService := tsc_SrvV120)			
60		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncV120_19200]			
61		(tcv_ActiveService := tsc_SrvV120)			
62		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV120_28800]			
63		(tcv_ActiveService := tsc_SrvV120)			
64		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncV120_38400]			
65		(tcv_ActiveService := tsc_SrvV120)			
66		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV120_48000]			
67		(tcv_ActiveService := tsc_SrvV120)			
68		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV120_56000]			
69		(tcv_ActiveService := tsc_SrvV120)			
70		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncX31_9600]			
71		(tcv_ActiveService := tsc_SrvX31)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
72		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncX31_14400]			
73		(tcv_ActiveService := tsc_SrvX31)			
74		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200]			
75		(tcv_ActiveService := tsc_SrvX31)			
76		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800]			
77		(tcv_ActiveService := tsc_SrvX31)			
78		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncX31_38400]			
79		(tcv_ActiveService := tsc_SrvX31)			
80		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncX31_48000]			
81		(tcv_ActiveService := tsc_SrvX31)			
82		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncX31_56000]			
83		(tcv_ActiveService := tsc_SrvX31)			
84		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Sync31kHzA_9600]			
85		(tcv_ActiveService := tsc_SrvX31)			
86		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Sync31kHzA_14400]			
87		(tcv_ActiveService := tsc_SrvX31)			
88		[(px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Sync31kHzA_19200]			
89		(tcv_ActiveService := tsc_SrvX31)			
90	ERR3	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CreateCell_GSM_Comb (p_CellId : CellId)
Group : M_RAT_HO_CellConfig/
Objective :
Default : SS_Def,IntersystemDef
Comments : Create a GERAN cell which contains a physical channel corrying FCCH, SCH, BCCH, CCCH and SDCCH4 logical channels (CCCH and SDCCH combined). All parameters, except CellId, are taken from tcv_G_CellConfigInfo.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SetBS_IdCode(p_CellId, tcv_G_CellConfigInfo.ncc, tcv_G_CellConfigInfo.bcc, tcv_G_CellConfigInfo.timingAdvance)			@sic t1−040055 sic@
3		(tcv_G_CellConfigInfo.cipherMode.startingCiph := ’0’B)			@sic G3t050018 sic@
4		+ts_SS_CreatePhyChOfCombType5(p_CellId, tsc_PhyCh0)			
5		+ts_SendGSMSACCHSysInfo(p_CellId, tsc_PhyCh0, 5)			@sic T1s040275 sic@ Make sure SI5 & 6 are sent on SACCH

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SetBS_IdCode(p_CellId : CellId;p_NCC, p_BCC : B3; p_TA :O1)
Group : M_RAT_HO_CellConfig/
Objective :
Default : SS_Def,IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateCell_REQ	ca_CellId(p_CellId, p_NCC, p_BCC, p_TA)		
2		G_CL1?G_CL1_CreateCell_CNF	ca_CellIdCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GERANCreateCell(p_CellId : CellId; b_PBCCH : GPRSCellConfiguration; b_SI2quater : SI2quaterConfiguration; b_PSI5 : PSI5Configuration)

Group : M_RAT_HO_CellConfig/

Objective :

Default :

Comments : Expects variables to already be initialised.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_CreateCell(c_PacketChDescr(tcv_ARFCN))			
2		[b_PSI5 = psi5]			@sic ER1893 sic@
3		(tcv_PSI_LowRate := INT_TO_BIT((1 + BIT_TO_INT(tcv_PSI_LowRate)), 6))			Increment LR Count if PSI5 sent
4		+lt_SendSysInfo			
5		[TRUE]			@sic ER1893 sic@
6		+lt_SendSysInfo			
		lt_SendSysInfo			
7		+ts_SendGSMSysInfo(p_CellId, tsc_PhyCh0, gprs, b_PBCCH, b_SI2quater)			
8		[b_PBCCH = pbcch]			
9		+ts_SendDefPacketSysInfo(p_CellId, tsc_PhyCh1, c_PBCCH_Info_Def(tcv_PSI_LowRate), tcv_PCCCHParams, tcv_G_CellConfigInfo, tcv_RAC, b_PSI5)			This creates the RLCMAC Entity first @sic ER1893 sic@
10		+ts_Create_LLE_Entity(p_CellId, tsc_LLEEntity)			
11		[b_PBCCH = bcch]			
12		+ts_CreateRLC_MAC_Entity(p_CellId)			Need to ensure RLCMAC Entity created before doing GPRS Attach
13		+ts_Create_LLE_Entity(p_CellId, tsc_LLEEntity)			
		lt_CreateCell(p_PacketChDescr : PacketChDescr)			
14		+ts_CreateCell_GSM_Comb (p_CellId)			GSM Control Channel
15		[b_PBCCH = pbcch]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
16		+ts_SS_CreatePhyChOfCombType11(p_CellId , tsc_PhyCh1, tcv_PBCCHFreqInfo, p_PacketChDescr.tN, p_PacketChDescr.tSC, tcv_PCCCHParams, c_PBCCH_Info_Def(tcv_PSI_LowRate))			@sic ER1893 sic@
17		[b_PBCCH = bcch]			
18		+ts_SS_CreatePhyChOfCombType13(p_CellId , tsc_PhyCh1, c_FreqInfoBCCH(tcv_ARFCN), p_PacketChDescr.tN, p_PacketChDescr.tSC)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	:	ts_SS_CreatePhyChOfCombType11(p_CellId : CellId; p_PhyChId : PhysicalChId; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC; p_PCCHParams : PCCCH_OrganisationParameters; p_PBCCHInfo : PBCCH_Info)			
Group	:	M_RAT_HO_ChannelConfig/			
Objective	:				
Default	:	SS_Def,IntersystemDef			
Comments	:	PBCCH + PCCCH + PDTCH/F + PACCH/F + PTCCH/F			
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType11 (p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_FreqInfo, p_TimeSlot, p_Tsc, p_PCCHParams, p_PBCCHInfo)		
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhyChId)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfCombType5 (p_CellId : CellId; p_PhyChId : PhysicalChId)
Group : M_RAT_HO_ChannelConfig/
Objective :
Default : SS_Def,IntersystemDef
Comments : FCCH + SCH + BCCH + CCCH + SDCCH/4(0..3) + SACCH/C4(0..3)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType5(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, tcv_AuthKcGSM)		@sic G3t050 015 sic@
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhyChId)		
3		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 5, 0, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
4		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
5		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 5, 1, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
6		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
7		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 5, 2, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
8		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
9		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 5, 3, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
10		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfTrafficChType(p_CellId : CellId; p_PhyChId : PhysicalChId; p_TimeSlot: TN; p_ChMode:ChMode; p_ChannelType:ChannelCombination)

Group : M_RAT_HO_ChannelConfig/

Objective :

Default : SS_Def,IntersystemDef

Comments : TCH/F + FACCH/F + SACCH/F or
TCH/H(0,1) + FACCH/H(0,1) + SACCH/TH(0,1) or
TCH/F + FACCH/F + SACCH/M or
TCH/F + SACCH/M or
TCH/F + SACCH/MD or
TCH/F + SACCH/MD or
E−TCH/F + E−IACCH/F + E−FACCH/F + E−SACCH/TF or
E−TCH/F + E−IACCH/F + E−FACCH/F + E−SACCH/M or
E−TCH/F + E−IACCH/F + E−SACCH/M or
E−TCH/F + E−IACCH/F + E−SACCH/MD

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		[p_ChannelType = tsc_BasicPhyChCombType1]			
3		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType1(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode, tcv_AuthKcGSM)		@sic G3t050 015 sic@
4		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhyChId)		
5		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 10)			@sic T1s0405 40 sic@
6		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 10, 0, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
7		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		
8		[p_ChannelType = tsc_BasicPhyChCombType2]			
9		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType2(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode, tcv_AuthKcGSM)		@sic G3t050 015 sic@
10		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhyChId)		
11		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 13)			@sic T1s0405 40 sic@
12		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl _REQ(p_CellId, p_PhyChId, 13, 0, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
13		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl _CNF(?, ?)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 13, 1, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
15		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
16		[p_ChannelType = tsc_BasicPhyChCombType8]			
17		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType8(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
18		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
19		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			@sic T1s040540 sic@
20		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
21		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
22		[p_ChannelType = tsc_BasicPhyChCombType9]			
23		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType9(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
24		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
25		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			@sic T1s040540 sic@
26		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off @sic T1−041 010 sic@
27		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
28		[p_ChannelType = tsc_BasicPhyChCombType10]			
29		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType10(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
30		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
31		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 25)			@sic T1s040540 sic@
32		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 25, 0, FALSE)		Turn Meas Rpts Off @sic T1−041010 sic@
33		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
34		[p_ChannelType = tsc_BasicPhyChCombType18]			
35		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType18(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
36		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
37		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 10)			@sic T1s040540 sic@
38		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 10, 0, FALSE)		Turn Meas Rpts Off @sic T1−041010 sic@
39		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
40		[p_ChannelType = tsc_BasicPhyChCombType19]			
41		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType19(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
42		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
43		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			@sic T1s040540 sic@
44		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off @sic T1−041010 sic@
45		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
46		[p_ChannelType = tsc_BasicPhyChCombType20]			
47		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType20(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
48		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
49		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 24)			@sic T1s040540 sic@
50		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 24, 0, FALSE)		Turn Meas Rpts Off @sic T1−041010 sic@
51		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
52		[p_ChannelType = tsc_BasicPhyChCombType21]			
53		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType21(p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_TimeSlot, p_ChMode)		
54		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId, p_PhyChId)		
55		+ts_SendGSMSACCHSysInfo(p_CellId, p_PhyChId, 25)			@sic T1s040540 sic@
56		G_CL2 ! G_CL2_MeasRptControl_REQ	ca_G_CL2_MeasRptControl_REQ(p_CellId, p_PhyChId, 25, 0, FALSE)		Turn Meas Rpts Off @sic T1−041010 sic@
57		G_CL2 ? G_CL2_MeasRptControl_CNF	ca_G_CL2_MeasRptControl_CNF(?, ?)		
58		[TRUE]		I	the traffic channel types not supported by this test step.
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreatePhyChOfCombType13(p_CellId : CellId; p_PhyChId : PhysicalChId; p_FreqInfo : FreqInfo; p_TimeSlot : TN; p_Tsc : TSC)

Group : M_RAT_HO_ChannelConfig/

Objective :

Default : SS_Def,IntersystemDef

Comments : PDTCH/F + PACCH/F + PTCCH/F

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1!G_CL1_CreateBasicPhyCh_REQ	ca_BasicPhyChCombType13 (p_CellId, p_PhyChId, tcv_G_CellConfigInfo, p_FreqInfo, p_TimeSlot, p_Tsc)		
2		G_CL1?G_CL1_CreateBasicPhyCh_CNF	ca_BasicPhyChCnf(p_CellId , p_PhyChId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendGSMSysInfo(p_CellId: INTEGER; p_PhyCh : PhysicalChId; b_GPRS : GSM_GPRSConfiguration; b_PBCCH :GPRSCellConfiguration; b_SI2quater : SI2quaterConfiguration)

Group : M_RAT_HO_SysInfoBroadcastGSM/

Objective :

Default : IntersystemDef

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType1 (p_CellId, p_PhyCh)			
3		+ts_SendSysInfoType2 (p_CellId, p_PhyCh)			
4		+lt_SendOthers			SI2 Quarter giving 3G neighbour cell information
5		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
6		+ts_SendSysInfoType2bis(p_CellId, p_PhyCh, 0)			Send a SI2bis if PGSM or EGSM only
7		[TRUE]			
		lt_SendOthers			
8		[b_GPRS = gprs]			
9		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_GPRS)			
10		+lt_SendSI13			
11		[b_SI2quater = si2quater]			
12		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3RO_GPRS_SI2quater)			
13		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			SI2 Quarter giving 3G neighbour cell information @sic ER1994, R5−050 980 sic@
14		[b_SI2quater = nosi2quater]			
15		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_GPRS)			
16		[b_GPRS = gsmonly]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_Spare)			
18		[b_SI2quater = si2quater]			
19		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quater('0'B))			no GPRS, only SI2quater
20		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			SI2quater giving 3G neighbour cell information @sicER1994, R5−050980 sic@
21		[b_SI2quater = si2ter]			@sicT1s040275 sic@
22		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2ter)			SI2ter giving neighbour cell info (SI2ter sent outside of this test step)
23		[b_SI2quater = si2terand2quater]			@sicT1s040275 sic@
24		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quater('1'B))			SI2ter and SI2quater giving neighbour cell info (SI2ter sent outside of this test step)
25		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			@sicT1s040615, R5−050980 sic@
26		[b_SI2quater = nosi2quater]			
27		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_Spare)			nothing

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_SendSI13			
28		[b_PBCCH = pbcch]			
29		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			DCS and PCS have sized GPRS Allocation
30		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_DCS)			@sic R5−050980 sic@
31		[TRUE]			All the other bands have another
32		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_GSM)			@sic R5−050980 sic@
33		[b_PBCCH = bcch]			
34		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_GPRS(tcv_RAC, tcv_NMO))			@sic R5−050980 sic@
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendGSMSysInfo_SI2qBCCHExt(p_CellId: INTEGER; p_PhyCh : PhysicalChId; b_GPRS : GSM_GPRSConfiguration; b_PBCCH :GPRSCellConfiguration; b_SI2quater : SI2quaterConfiguration)

Group : M_RAT_HO_SysInfoBroadcastGSM/

Objective :

Default : IntersystemDef

Comments : Created for 20.25.3 which requires SI2quater sent on BCCH Extended @sic G3t050006 sic@

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType1 (p_CellId, p_PhyCh)			
3		+ts_SendSysInfoType2 (p_CellId, p_PhyCh)			
4		+lt_SendOthers			SI2 Quarter giving 3G neighbour cell information
5		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
6		+ts_SendSysInfoType2bis(p_CellId, p_PhyCh, 0)			Send a SI2bis if PGSM or EGSM only
7		[TRUE]			
		lt_SendOthers			
8		[b_GPRS = gprs]			
9		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_GPRS)			
10		+lt_SendSI13			
11		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3RO_GPRS_SI2quater)			
12		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '0'B, tcv_SI2quaterRO)			SI2 Quarter giving 3G neighbour cell information @sic ER1994, R5−050980 sic@
13		[b_GPRS = gsmonly]			
14		+ts_SendSysInfoType4 (p_CellId, p_PhyCh, c_SI4_RO_Spare)			
15		[b_SI2quater = si2quater]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
16		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quaterBCCHExt('0'B))			no GPRS, only SI2quater
17		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '1'B, tcv_SI2quaterRO)			SI2quater giving 3G neighbour cell information @sicER1994, R5−050980 sic@
18		[b_SI2quater = si2terand2quater]			@sicT1s040275 sic@
19		+ts_SendSysInfoType3 (p_CellId, p_PhyCh, c_SI3_RO_SI2quaterBCCHExt('1'B))			SI2ter and SI2quater giving neighbour cell info (SI2ter sent outside of this test step)
20		+ts_SendSysInfoType2quater(p_CellId, p_PhyCh, 0, '1'B, tcv_SI2quaterRO)			@sicT1s040615, R5−050980 sic@
21		[TRUE]		(I)	This step must send SI2quater
		lt_SendSI13			
22		[b_PBCCH = pbcch]			
23		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			DCS and PCS have sized GPRS Allocation
24		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_DCS)			@sicR5−050980 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
25		[TRUE]			All the other bands have another
26		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_PBCCH_GSM)			@sic R5−050 980 sic@
27		[b_PBCCH = bcch]			
28		+ts_SendSysInfoType13 (p_CellId, p_PhyCh, '0'B, c_SI13_RO_GPRS(tcv_RAC, tcv_NMO))			@sic R5−050 980 sic@
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	: ts_SendGSMSACCHSysInfo (p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType)				
Group	: M_RAT_HO_SysInfoBroadcastGSM/				
Objective	:				
Default	: IntersystemDef				
Comments	: To send SI5 & SI6 on SACCH				
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_SendSysInfoType5 (p_CellId, p_PhyCh, p_LogicChType)			
3		+ts_SendSysInfoType6 (p_CellId, p_PhyCh, p_LogicChType, c_SI6_RO_Spare(tcv_G_CellConfigInfo.bandIndicator))			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType1(p_CellId: INTEGER; p_PhyCh : PhysicalChId)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments : no NCH position, all other parameters are taken from tcv_CellConfigInfo.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo1(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.cellAllocation, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1), tcv_G_CellConfigInfo.bandIndicator)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType13(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_BCCHExt : B1; p_SI13RO : SI13RO)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments : @sic R5−050980 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo13(p_CellId, p_PhyCh, p_BCCHExt, p_SI13RO)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType2(p_CellId: INTEGER; p_PhyCh : PhysicalChId)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.neighBCCHFreqList, tcv_G_CellConfigInfo.nccPermitted, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1))		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType2bis(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_InstanceIndex : INTEGER)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2bis(p_CellId, p_PhyCh, p_InstanceIndex, tcv_G_CellConfigInfo.extNeighBCCHFreqList, c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1))		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType2quater(p_CellId: INTEGER; p_PhyCh : PhysicalChId;p_InstanceIndex : INTEGER; p_BCCHExt : B1; p_SI2quaterRO: SI2quaterRO)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments : @sic R5−050980 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo2quater(p_CellId, p_PhyCh, p_InstanceIndex, p_BCCHExt, p_SI2quaterRO)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType3(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_SI3RO : SI3RO)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo3(p_CellId, p_PhyCh, tcv_G_CellConfigInfo.cellIdentity, c_LAI(o_ConvtPLMN(tcv_G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_ControlChDescr(tcv_G_CellConfigInfo.attFlag, tcv_G_CellConfigInfo.bS_AG_BLKS_RES, tcv_G_CellConfigInfo.cCCH_CONF, tcv_G_CellConfigInfo.bS_PA_MFRMS, tcv_G_CellConfigInfo.cellBarQualify2, tcv_G_CellConfigInfo.t3212), c_CellOptionBCCH(tcv_G_CellConfigInfo.dN_Ind, tcv_G_CellConfigInfo.pwrc, tcv_G_CellConfigInfo.dTX, tcv_G_CellConfigInfo.radioLinkTimeout), c_CellSelParam(tcv_G_CellConfigInfo.cELL_RESELECT_HYSTERESIS, tcv_G_CellConfigInfo.mS_TXPWR_MAX_CCH, tcv_G_CellConfigInfo.aCS, tcv_G_CellConfigInfo.nECI, tcv_G_CellConfigInfo.rXLEV_ACCESS_MIN), c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1), p_SI3RO)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType4(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_SI4RO: SI4RO)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo4(p_CellId, p_PhyCh, c_LAI(o_ConvtPLMN(tcv_G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_CellSelParam(tcv_G_CellConfigInfo.cELL_RESELECT_HYSTERESIS, tcv_G_CellConfigInfo.mS_TXPWR_MAX_CCH, tcv_G_CellConfigInfo.aCS, tcv_G_CellConfigInfo.nECI, tcv_G_CellConfigInfo.rXLEV_ACCESS_MIN), c_RACH_ControlParam(tcv_G_CellConfigInfo.maxRetrans, tcv_G_CellConfigInfo.txInteger, tcv_G_CellConfigInfo.cell_BAR_ACCESS, tcv_G_CellConfigInfo.callReestab, tcv_G_CellConfigInfo.accessControlClass2, tcv_G_CellConfigInfo.emergencyCall, tcv_G_CellConfigInfo.accessControlClass1), p_SI4RO)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType5(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType)
Group : M_RAT_HO_SysInfoBroadcastGSM/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo5(p_CellId, p_PhyCh, p_LogicChType, tcv_G_CellConfigInfo.neighBCCHFreqList)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSysInfoType6(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_LogicChType: G_LogicChType; p_SI6RO : SI6RO)

Group : M_RAT_HO_SysInfoBroadcastGSM/

Objective :

Default :

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2!G_L2_SYSINFO_REQ	ca_SysInfo6(p_CellId, p_PhyCh, p_LogicChType, tcv_G_CellConfigInfo.cellIdentity, c_LAI(o_ConvtPLMN(tcv_G_CellConfigInfo.mcc, tcv_G_CellConfigInfo.mnc), tcv_G_CellConfigInfo.lac), c_CellOptionSACCH(tcv_G_CellConfigInfo.dtx8, tcv_G_CellConfigInfo.pwrc, tcv_G_CellConfigInfo.dtx65, tcv_G_CellConfigInfo.radioLinkTimeout), tcv_G_CellConfigInfo.nccPermitted, p_SI6RO)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendDefPacketSysInfo(p_CellId: INTEGER ; p_PhyCh : PhysicalChId; p_PBCCHInfo : PBCCH_Info; p_PCCCHParams : PCCCH_OrganisationParameters; p_CellCnfgInfo : G_CellConfigInfo; p_RAC : O1; p_MeasOrder : PSI5Configuration)

Group : M_RAT_HO_SysInfoBroadcastGPRS/

Objective :

Default :

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_CreateRLC_MAC_Entity(p_CellId)			
2		+lt_SendPSI5and1			
3		+lt_SendPSI2_1st			@sic ER1893 sic@
4		+ts_SendPacketSysInfoType(p_CellId, p_PhyCh, tsc_HR_Category, tsc_Position1, c_PacketSysInfoType2_2nd (tcv_PSI2_Instance2.rFL_Contents_Len, tcv_PSI2_Instance2.rFL_Contents, tcv_PSI2_Instance2.mALen, tcv_PSI2_Instance2.mABitmap))			PSI2 2nd Instance
5		+ts_SendPacketSysInfoType(p_CellId, p_PhyCh, tsc_HR_Category, tsc_Position2, c_PacketSysInfoType2_3rd(tcv_PSI2_Instance3.rFL_Contents_Len, tcv_PSI2_Instance3.rFL_Contents, tcv_PSI2_Instance3.mALen, tcv_PSI2_Instance3.mABitmap))			PSI2 3rd Instance
6		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position3, c_PacketSysInfoType3(tcv_PSI3_Instance1.startFreq, tcv_PSI3_Instance1.freqDiffLen, tcv_PSI3_Instance1.freqDiff))			PSI3
7		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position0, c_PacketSysInfoType3bis(INT_TO_BIT(tsc_Position0, 4), tcv_PSI3_Instance2.startFreq, tcv_PSI3_Instance2.freqDiffLen, tcv_PSI3_Instance2.freqDiff))			PSI3bis 1st Instance
8		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position1, c_PacketSysInfoType3bis(INT_TO_BIT (tsc_Position1, 4), tcv_PSI3_Instance3.startFreq, tcv_PSI3_Instance3.freqDiffLen, tcv_PSI3_Instance3.freqDiff))			PSI3bis 2nd Instance
9		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position2, c_PacketSysInfoType3bis(INT_TO_BIT(tsc_Position2, 4), tcv_PSI3_Instance4.startFreq, tcv_PSI3_Instance4.freqDiffLen, tcv_PSI3_Instance4.freqDiff))			PSI3bis 3rd Instance

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_SendPSI5and1			
10		[p_MeasOrder = psi5]			
11		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_LR_Category, tsc_Position3, c_PacketSysInfoType5)			PSI5 @sic ER1893 sic@
12		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, 0, 31, c_PacketSysInfoType1(p_PBCCHInfo, p_PCCCHParams, p_CellCnfgInfo, tcv_NMO, '1'B))			Send PSI1 Message For PSI1, PositionInList is not applicable and set to 31.
13		[p_MeasOrder = nopsi5]			
14		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh,0, 31, c_PacketSysInfoType1(p_PBCCHInfo, p_PCCCHParams, p_CellCnfgInfo, tcv_NMO, '0'B))			Send PSI1 Message For PSI1, PositionInList is not applicable and set to 31.
		lt_SendPSI2_1st			
15		[tcv_AddPSIMsgs]			
16		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position0, c_PacketSysInfoType2_1st(p_CellCnfgInfo.mcc, p_CellCnfgInfo.mnc, p_CellCnfgInfo.lac, p_RAC, '1'B, c_AddPSI3quater))			PSI2 1st instance
17		[TRUE]			
18		+ts_SendPacketSysInfoType(p_CellId , p_PhyCh, tsc_HR_Category, tsc_Position0, c_PacketSysInfoType2_1st(p_CellCnfgInfo.mcc, p_CellCnfgInfo.mnc, p_CellCnfgInfo.lac, p_RAC, '0'B, OMIT))			PSI2 1st instance
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendPacketSysInfoType(p_CellId: INTEGER; p_PhyCh : PhysicalChId; p_Category : PSI_Category; p_Index : PositionInList; p_PSI : PDU)

Group : M_RAT_HO_SysInfoBroadcastGPRS/

Objective :

Default :

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_RLC ! G_RLC_PSI_REQ	ca_G_RLC_PSI_REQ(p_CellId , p_PhyCh, p_Category, p_Index, p_PSI)		Send a PSI Message

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GERANIdleUpdated(p_CellId : INTEGER; b_PBCCH : GPRSCellConfiguration)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Expects GERANCreateCell to be called first
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_PwrOrUSIM_On(FALSE)			
2		[pc_G_operation_mode_C]			
3		[pc_AutomaticAttachSwitchON]			
4		+ts_GPRSAttach(tsc_GSM_CellA, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports mode C, do normal Attach
5		[NOT pc_AutomaticAttachSwitchON]			
6		+ts_AT_TriggerGMM_Attach			
7		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports mode C, do normal Attach
8		[NOT pc_G_operation_mode_C]			
9		[pc_GPRS]			
10		[pc_AutomaticAttachSwitchON]			
11		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports GPRS (not mode C), do combined Attach
12		[NOT pc_AutomaticAttachSwitchON]			
13		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
14		START t_WaitS(1)			
15		?TIMEOUT t_WaitS			wait for UE to relax
16		+ts_AT_TriggerGMM_Attach			
17		+ts_GPRSAttach(p_CellId, tsc_PhyCh1, tsc_RlcMacEntity1, b_PBCCH)			if it supports GPRS (not mode C), do combined Attach
18		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		+ts_G_LocationUpdate (p_CellId)			must support GSM CS only
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GPRSAttach(p_CellId : CellId; p_PhysicalChId : PhysicalChId; p_RLCMAC_Entity : INTEGER; b_PBCCH : GPRSCellConfiguration)

Group : M_RAT_HO_GPRS_Specific/

Objective :

Default : IntersystemGPRS

Comments : Assumes GPRS channel already configured, RLCMAC Entity created, PSI messages sent (if combination 11) and User asked to turn phone on

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_UplinkTBF			
2		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAttachReqPDU := G_LLC_UNITDATA_IND.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_SplitPGCycle := tcv_TmpAttachReqPDU.drxParameter)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		Receive GPRS Attach Request Message @sic G3t050 013 sic@
3		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketControlAcknowledgement)		All PCAs will be forwarded up to the TTCN. Ignore those not handled within test steps @sic G3t040 005 Comments3 sic@
4		+ts_GPRS_Authentication (p_CellId, p_PhysicalChId, b_PBCCH)			
5		(tcv_AssignedTMSI :=tsc_G_TMSI_Def, tcv_AssignedPTMSI :=px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values @sic G3t040 005 sic@
6		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, b_PBCCH)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, px_GSM_CipheringOnOff, cs_G_AttachAcc (c_GMM_AttachResult(tcv_TmpB3), c_RAI_v(tcv_G_CellInfoA.mcc, tcv_G_CellInfoA.mnc, tcv_G_CellInfoA.lac, tsc_RAC_Def), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_GMM_MobileIdTMSI(tcv_AssignedTMSI)))		ATTACH Accept @sic G3t040 005 sic@
8		+lt_UplinkTBF			
9		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AttachComplete)		Receive GPRS Attach Complete Message
10		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketControlAcknowledgement)		All PCAs will be forwarded up to the TTCN. Ignore those not handled within test steps @sic G3t040 005 Comments3 sic@
		lt_UplinkTBF			
11		[b_PBCCH = pbcch]			
12		+ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId, p_PhysicalChId)			
13		[b_PBCCH = bcch]			
14		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GPRS_Authentication(p_CellId : INTEGER; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration)

Group : M_RAT_HO_GPRS_Specific/

Objective : Generate authentication parameters and run the GMM Authentication

Default : IntersystemGPRS

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Compute all relevant authentication parameters.
2		(tcv_GPRS_CipherAlg := px_GPRS_CipherAlg)			@sic G3t050015 sic@
3		+ts_DownlinkTBFEstablishment(p_CellId, p_PhysicalChId, b_PBCCH)			
4		G_LLC ! G_LLC_UNITDATA_REQ	cas_G_LLC_UnitData_Req(tsc_LLEEntity, tcv_TLLI, tsc_LLCSapi_GMM, tsc_LLC_PM, tsc_LLC_NoCiph, cs_G_AuthAndCiphReq (c_GMM_AuthRAND(tcv_AuthRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), tcv_GPRS_CipherAlg, c_GMM_AuthAUTN(tcv_AuthAUTN)))		AUTHENTICATION AND CIPHERING REQUEST using relevant PS keys computed before.
5		+lt_UplinkTBF			
6		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, c_AuthCiphRspExtAny))		AUTHENTICATION AND CIPHERING RESPONSE including both Authentication Response paramters (RES and RES ext)

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketControlAcknowledgement)		All PCAs will be forwarded up to the TTCN. Ignore those not handled within test steps @sic G3t040005 Comments3 sic@
8		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the ciphering algorithm @sic G3t050013 sic@
9		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authentication Response parameters match expected response.
10	TSF1	[tcv_Res = FALSE]		(F)	
11	TSP1	[tcv_Res = TRUE]		(P)	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
12		G_LLC ? G_LLC_UNITDATA_IND (tcv_TmpAuthAndCiphRspPDU := G_LLC_UNITDATA_IND.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value)	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphRsp (c_AuthRspAny_tv, −))		AUTHENTICATION AND CIPHERING RESPONSE including only one Authentication Response paramters (RES)
13		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketControlAcknowledgement)		All PCAs will be forwarded up to the TTCN. Ignore those not handled within test steps @sic G3t040005 Comments3 sic@
14		+ts_LLC_TLLI_Assign(p_CellId, tcv_TLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			don't change the TLLI, only the ciphering algorithm @sic G3t050013 sic@
15		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, −, tcv_AuthK, tcv_AuthRAND, FALSE))			Verify that the received Authentication Response parameters match expected response.
16	TSF2	[tcv_Res = FALSE]		(F)	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17	TSP2	[tcv_Res = TRUE]		(P)	
18		G_LLC ? G_LLC_UNITDATA_IND	car_G_LLC_UnitData_IND(tsc_LLEEntity, cr_AuthAndCiphFailureAny)	I	AUTHENTICATION AND CIPHERING Failure, then stop execution by assigning INCONCLUSIVE verdict @sic G3t050025 sic@
		lt_UplinkTBF			
19		[b_PBCCH = pbcch]			
20		+ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId, p_PhysicalChId)			
21		[b_PBCCH = bcch]			
22		+ts_UplinkTBFOnePhase(p_CellId, p_PhysicalChId)			
Detailed Comments : See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of authentication paramters for Test USIM) See also the detailed description in test Step ts_MM_Authentication, on which this test Step is based.					

Test Step Dynamic Behaviour

Test Step Name : ts_ULTBFOnePhase_PBCCH(p_CellId : CellId; p_PhysicalChId : PhysicalChId)

Group : M_RAT_HO_GPRS_Specific/

Objective :

Default : IntersystemGPRS

Comments : Ensure tcv_GPRS_CiphAlg, tcv_RR_RA and tcv_RR_RFN are set to the correct value before entering this test step

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_UL_TBF_Config_REQ	ca_ActivateTBF_UplinkDyn (p_CellId, tsc_RlcMode_Ack, 1)		Configure the Uplink TBF for Dynamic Allocation, USF 0 on timeslot 4
2		G_CRLC ? G_CRLC_UL_TBF_Config_CNF	ca_Activate_UL_TBF_CNF		
3		(tcv_RR_RA := (BIT_TO_INT (tcv_PacketChRequest.estCauRandomRef)))			
4		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_PAGCH(p_CellId, p_PhysicalChId, tsc_uplinkTFI, '1'B, c_G_RFN_Omit, c_PacketUplinkAssignment_Dynamic_OnePhase(c_PacketRequestReference(tcv_RR_RA, tcv_RR_RFN)))		Set S/P bit so that a PCA is received
5		G_RLC ? G_RLC_ControlMsg_IND (tcv_TmpPktCtrlAckPdu := G_RLC_ControlMsg_IND.msg)	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		Extract the TLLI
6		[tcv_TmpPktCtrlAckPdu.tLLI = tcv_TLLI]			if the TLLI hasn't changed, don't bother calling LLCAssignReq
7		[TRUE]			this TLLI is new
8		(tcv_oldTLLI := tcv_TLLI, tcv_Count := 0, tcv_TLLI := tcv_TmpPktCtrlAckPdu.tLLI)			
9		+ts_LLC_TLLI_Assign(p_CellId, tcv_oldTLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			Assign the value received from the MS

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_UplinkTBFOnePhase_MMProc_PBCCH(p_CellId : CellId; p_PhysicalChId : PhysicalChId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemGPRS
Comments : Ensure tcv_GPRS_CiphAlg is set to the correct value before entering this test step
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_RLC?G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, cr_11BitPRACH_MMProc)		
2		+lt_createULTBF			
3		G_RLC?G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, cr_8BitPRACH_MMProc)	(F)	Don't the PSI messages say 11 bits?
4		+lt_createULTBF			
5		G_RLC ? G_RLC_ACCESS_IND (tcv_RR_RFN := G_RLC_ACCESS_IND.rfn , tcv_PacketChRequest := G_RLC_ACCESS_IND.burst)	ca_PRACH(p_CellId, p_PhysicalChId, tsc_PRACH, ?, ?, ?)	(F)	Must be requesting some other sort of procedure
6		+lt_createULTBF lt_createULTBF			
7		(tcv_RR_RA := (BIT_TO_INT (tcv_PacketChRequest.estCauRandomRef)))			
8		+ts_ULTBFOnePhase_PBCCH(p_CellId, p_PhysicalChId)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ULTBFOnePhase(p_CellId : CellId; p_PhysicalChId : PhysicalChId)

Group : M_RAT_HO_GPRS_Specific/

Objective :

Default : IntersystemGPRS

Comments : Ensure tcv_GPRS_CiphAlg, tcv_RR_RA and tcv_RR_RFN are set to the correct value before entering this test step

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_ComingFN_REQ	c_G_CL1_ComingFN_REQ(p_CellId, tsc_PhyCh1, tsc_PACCH_F)		@sic G3t050 017 sic@
2		G_CL1 ? G_CL1_ComingFN_CNF (tcv_StartingTime := G_CL1_ComingFN_CNF.rfn)	c_G_CL1_ComingFN_CNF		@sic T1s0405 36 sic@
3		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId, tsc_PhyCh0, tsc_AGCH, 15, c_G_RFN_Omit, cs_P_ImmediateAssignment ('0'B, tcv_ARFCN , tcv_RR_RA , tcv_RR_RFN, c_IARO_PUA(tcv_Gamma, o_BitstringConcat(o_BitstringConcat(tcv_StartingTime.t1_, tcv_StartingTime.t3, 5, 6), tcv_StartingTime.t2, 11, 5))))		Set Poll bit so that a PCA is received
4		G_CRLC ! G_CRLC_UL_TBF_Config_REQ	ca_ActivateTBF_UplinkDyn (p_CellId, tsc_RlcMode_Ack, 1)		Configure the Uplink TBF for Dynamic Allocation, USF 0 on timeslot 4 @sic T1s0406 33 sic@
5		G_CRLC? G_CRLC_UL_TBF_Config_CNF	ca_Activate_UL_TBF_CNF		
6		G_RLC ? G_RLC_ControlMsg_IND (tcv_TmpPktCtrlAckPdu := G_RLC_ControlMsg_IND.msg)	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		Extract the TLLI
7		[tcv_TmpPktCtrlAckPdu.tLLI = tcv_TLLI]			if the TLLI hasn't changed, don't bother calling LLCAssignReq
8		[TRUE]			this TLLI is new

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
9		(tcv_oldTLLI := tcv_TLLI, tcv_Count := 0, tcv_TLLI := tcv_TmpPktCtrlAckPdu.tLLI)			
10		+ts_LLC_TLLI_Assign(p_CellId, tcv_oldTLLI, tcv_TLLI, tcv_GPRS_CipherAlg)			Assign the value received from the MS
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	:	ts_UplinkTBFOnePhase(p_CellId : CellId; p_PhysicalChId : PhysicalChId)			
Group	:	M_RAT_HO_GPRS_Specific/			
Objective	:				
Default	:	IntersystemGPRS			
Comments	:	Ensure tcv_GPRS_CiphAlg is set to the correct value before entering this test step			
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst)	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , cr_ChanReqOnePhase)		Receive CHANNEL REQUEST message
2		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			
3		[(tcv_RR_RA > 119) AND (tcv_RR_RA < 127)]		(P)	establishment cause = one phase packet access
4		+ts_ULTBFOnePhase(tsc_GSM_CellA, tsc_PhyCh1)			@sic T1s040642 sic@
5		[TRUE]		(F)	Wrong establishment cause
6		+ts_ULTBFOnePhase(tsc_GSM_CellA, tsc_PhyCh1)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_DownlinkTBFEstablishment(p_CellId : CellId; p_PhysicalChId : PhysicalChId; b_PBCCH : GPRSCellConfiguration)

Group : M_RAT_HO_GPRS_Specific/

Objective :

Default : IntersystemGPRS

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_DL_TBF_Config_REQ	ca_ActivateTBF_Downlink(p_CellId, p_PhysicalChId, tsc_RlcMode_Ack, tcv_USFRate)		
2		G_CRLC ? G_CRLC_DL_TBF_Config_CNF	ca_Activate_DL_TBF_CNF		
3		[b_PBCCH = pbcch]			
4		(tcv_M := (12 − BIT_TO_INT(tcv_PCCCHParams.bS_PAG_BLKS_RES) − BIT_TO_INT(tcv_PCCCHParams.bS_PBCCH_BLKS))*64)			for PCCCH
5		G_RLC ! G_RLC_ControlMsg_REQ	cas_G_RLC_ControlMsg_REQ_Paging(p_CellId, p_PhysicalChId, tsc_downlinkTFI, '1'B, px_IMSI_Def, 1, tcv_M, 1, 0, tcv_SplitPGCycle.splitPGcycleCode, c_PacketDownlinkAssignment(tcv_TLLI, tsc_downlinkTFI, tcv_Gamma))		p_KC_Conf = 1 − only one GPRS physical channel, N = 1 for PCCCH Request PCA
6		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(p_CellId, p_PhysicalChId, cr_PacketControlAcknowledgement)		
7		[b_PBCCH = bcch]			
8		[(tcv_SplitPGCycle.splitPGcycleCode = '00000000'B) OR (tcv_SplitPGCycle.splitOnCCCH = '0'B)]			
9		(tcv_K := o_PagingGroupCalculate(px_IMSI_Def, tcv_G_CellConfigInfo.cCCH_CONF, 6))			use calculation in clause 6.5.2 @sic T1s040684 sic@
10		+lt_SendIA			
11		[TRUE]			use calculation in 6.5.6

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
12		(tcv_M := (3 − BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_BLKS_RES))*64)			for CCCH/ SDCCH combined
13		(tcv_K := o_PacketPagingGroupCalculate(px_IMSI_Def, BIT_TO_INT(tcv_G_CellConfigInfo.cCCH_CONF), tcv_M, (3 − BIT_TO_INT(tcv_G_CellConfigInfo.bS_AG_BLKS_RES))* BIT_TO_INT(tcv_G_CellConfigInfo.bS_PA_MFRMS), tcv_SplitPGCycle.splitPGcycleCode))			for CCCH/ SDCCH combined
14		+lt_SendIA lt_SendIA			
15		G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ (p_CellId , tcv_K, cs_P_ImmediateAssignment ('1'B, tcv_ARFCN , 0, c_RFN_0, c_IARO_PDA(tcv_TLLI, tcv_Gamma)))		Send immediate assignment message in slot corresponding to appropriate CCCH or PCCCH group @sic T1s040615 sic@
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_Delete_GPRS_Entities (p_CellId : CellId; p_PhyChId : PhysicalChId; p_LLMEEntity : LLMEId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_DeleteRLC_MAC_REQ	ca_G_CRLC_DeleteRLC_MAC_REQ(p_CellId)		
2		G_CRLC ? G_CRLC_DeleteRLC_MAC_CNF	ca_G_CRLC_DeleteRLC_MAC_CNF		
3		G_CLLC ! G_CLLC_DeleteLLE_REQ	ca_G_CLLC_DeleteLLE_REQ(p_LLMEEntity)		
4		G_CLLC ? G_CLLC_DeleteLLE_CNF	ca_G_CLLC_DeleteLLE_CNF		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : po_GPRS_SS_CellRelease (p_CellId : CellId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , tsc_PhyCh0)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_CNF (p_CellId , tsc_PhyCh0)		
3		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , tsc_PhyCh1)		
4		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_CNF (p_CellId , tsc_PhyCh1)		
5		G_CL1 ! G_CL1_DeleteCell_REQ	ca_G_CL1_DeleteCell_REQ (p_CellId)		
6		G_CL1 ? G_CL1_DeleteCell_CNF	ca_G_CL1_DeleteCell_CNF (p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CreateRLC_MAC_Entity(p_cellId: CellId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CRLC ! G_CRLC_CreateRLC_MAC_REQ	ca_G_CRLC_CreateRLC_MAC_REQ(p_cellId)		
2		G_CRLC ? G_CRLC_CreateRLC_MAC_CNF	ca_G_CRLC_CreateRLC_MAC_CNF(p_cellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_Create_LLE_Entity(p_cellId : CellId; p_LLMEId: LLMEId)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CLLC ! G_CLLC_CreateLLE_REQ	ca_G_CLLC_CreateLLE_REQ(p_LLMEId, p_cellId)		
2		G_CLLC ? G_CLLC_CreateLLE_CNF	ca_G_CLLC_CreateLLE_CNF(p_LLMEId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_LLC_TLLI_Assign(p_cellId : CellId; p_oldTLLI, p_newTLLI: TLLI; p_CipherAlg : GPRS_CipherAlg)
Group : M_RAT_HO_GPRS_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CLLC ! G_CLLC_Assign_REQ	ca_G_CLLC_Assign_Req(p_cellId , p_oldTLLI, p_newTLLI, p_CipherAlg, tcv_AuthKcGSM)		@sic G3t050 015 sic@
2		G_CLLC ? G_CLLC_Assign_CNF	ca_G_CLLC_Assign_CNF(?)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Assignment (p_GCellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Assignment of Traffic Channel
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_GCellId, 0, tsc_PhyCh0 , tcv_RR_ChannelType , tcv_RR_Subchannel, c_G_RFN_Omit, tcv_AssignmentCommand)		Send Assignment Command @sic ER1612, ER1878 sic@
2		START t_ReceiveMessageTimer(33)			
3		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType2 := G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel2 := G_L2_L2Estab_IND.subChannel) CANCEL t_ReceiveMessageTimer	cabr_G_L2_L2Estab_IND (p_GCellId , ? , ? , ? , ?)	(P)	Receive Establish Indication @sic ER1878 sic@
4		START t_ReceiveMessageTimer(33)			
5		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	car_G_L2_DATA_IND_Gen (p_GCellId, ?, tsc_G_TrchId1, ? ,?, ? , cr_G_AssignmentComplete)	(P)	Receive Assignment Complete
6		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	Assignment failed
7		?TIMEOUT t_ReceiveMessageTimer		(F)	
8		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU1 (p_GCellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_GCellId)			
2		+ ts_AT_InitCallCS			
3		+ts_G_RR_Con_Est (p_GCellId)			
4		+ts_G_CMServiceReq_MO(p_GCellId)			
5		START t_ReceiveMessageTimer (5)			
6		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChangeAny)		SI messages indicate early classmark sending
7		+lt_ReceiveUTRANClassmark			
8		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, ?))			@sicG3t050031sic@
9		(tcv_StartList.[0].cn_DomainIdentity := tsc_CS_Domain, tcv_StartList.[0].start_Value := tcv_ResAndStartValue.start)			@sicG3t050031sic@
10		+lt_Continue			
11		?TIMEOUT t_ReceiveMessageTimer			
12		[pc_GPRS]		(F)	UEs which support GPRS have to send classmark here
13		+lt_Continue			
14		[NOT pc_GPRS]		(F)	CS only UEs
15		+lt_Continue			
		lt_Continue			
16		+ts_G_Authentication (p_GCellId)			
17		[px_GSM_CipheringOnOff='1'B]			Ciphering
18		+ts_G_Ciphering_Mode_Setting (p_GCellId, tsc_PhyCh0)			
19		+ts_G_Rcv_SetUp (p_GCellId)			Then wait for Setup
20		[TRUE]			No Ciphering

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_GCellId, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, c_CM_ServAcp)		Send CM Service Accept because not doing cipherin g here @sic ER1878 sic@
22		+ts_G_Rcv_SetUp (p_GCellId)			Then wait for Setup
		lt_ReceiveUTRANClassmark			
23		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChan ge)	(P)	can receive these in either order @sic G3t050 031 sic@
24		+ts_G_ReceiveOptSuspend(tsc_PhyCh0, ?)			
25		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, tsc_PhyCh0, ? ,?, ? , cr_GPRS_SUSPENSIONR EQ(?,?,?))		to Receive Suspensi on Msg if Mode B UE
26		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChan ge)		@sic G3t050 031 sic@
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU10_MT(p_CellId : CellId)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		G_L2 ! G_L2_Paging_REQ	ca_G_Paging_REQ_PCH (p_CellId , px_IMSI_Def, tcv_G_CellConfigInfo.cCCH_CONF, 6 , c_G_PagingRequest1_TMSI_Def)		@sic G3t040005 sic@
3		START t_CampResponseTimer(33)			
4		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst) CANCEL t_CampResponseTimer	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , c_G_ChannelReq_Any)		Receive CHANNEL REQUEST message MS camped on cell1.
5		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			
6		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId, tsc_PhyCh0, 3, 15,c_G_RFN_Omit, cs_ImmediateAssignment (tcv_G_CellConfigInfo.bCCH_Freq, tcv_G_CellConfigInfo.bcc, tcv_RR_RA , tcv_RR_RFN))		Send immediate assignment message @sic ER1612, T1s040536 sic@
7		START t_T3101			Stat 33 secs timer for camping.
8		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType := G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel) CANCEL t_T3101	cabr_G_L2_L2Estab_IND (p_CellId, ? , ? , ?, c_PagRsp (?, c_G_MobileIdTMSI_lv))	(P)	paging response @sic ER1878, T1s040695, G3t040005 sic@
9		START t_ReceiveMessageTimer (5)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
10		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChangeAny)		SI messages indicate early classmark sending
11		+lt_ReceiveUTRANClassmark			
12		(tcv_ResAndStartValue := o_CheckUtranClassmark(tcv_G_UtranClassmarkChange.uTRANPreConfigInfo.value, ?))			@sicG3t050018sic@
13		(tcv_StartList.[0].cn_DomainIdentity := tsc_CS_Domain, tcv_StartList.[0].start_Value := tcv_ResAndStartValue.start)			@sicG3t050018sic@
14		+lt_Continue			
15		?TIMEOUT t_ReceiveMessageTimer			
16		[pc_GPRS]		(F)	UEs which support GPRS have to send classmark here
17		+lt_Continue			
18		[NOT pc_GPRS]		(F)	CS only UEs
19		+lt_Continue			
20		G_L2?OTHERWISE CANCEL t_T3101		(F)	
21		?TIMEOUT t_CampResponseTimer		(F)	
		lt_Continue			
22		+ts_G_Authentication (p_CellId)			
23		+ts_G_Ciphering_Mode_Setting (p_CellId, tsc_PhyCh0)			
24		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_PhyCh0, tcv_RR_ChannelType , tcv_RR_Subchannel , c_G_RFN_Omit, tcv_SetupMT)		@sicER1878sic@
25		START t_ReceiveMessageTimer (2)			
26		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_CallConfAny)		@sicT1s040695, G3t050025sic@
27		+ts_G_Assignment (p_CellId)			
28		+ lt_ReceiveConnectOrAlerting			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
29		G_L2 ! G_L2_Release_REQ	cas_G_L2_Release_REQ(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)		@sic G3t040005 sic@
30		G_L2 ? G_L2_Release_CNF	ca_G_L2_Release_CNF		@sic G3t040005 sic@
31		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_G_TrchId1, tcv_RR_ChannelType2 , tcv_RR_Subchannel2 , c_G_RFN_Omit, cs_ConnAck (tcv_TI_S))		@sic ER1878 sic@
32		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
33		?TIMEOUT t_ReceiveMessageTimer		(F)	
		lt_ReceiveConnectOrAlerting			
34		START t_ReceiveMessageTimer(20)			
35		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_Alert (?))		
36		+ts_AT_AnswerCall			
37		START t_ReceiveMessageTimer(60)			
38		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_Connect (?))		
39		G_L2 ? G_L2_DATA_IND CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId, cr_Connect (?))		
		lt_ReceiveUTRANClassmark			
40		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)	(P)	can receive these in either order @sic G3t050018 sic@
41		+ts_G_ReceiveOptSuspend(tsc_PhyCh0, ?)			
42		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, tsc_PhyCh0, ? ,?, ? , cr_GPRS_SUSPENSIONREQ(?,?,?))		to Receive Suspension Msg if Mode B UE
43		G_L2 ? G_L2_DATA_IND (tcv_G_UtranClassmarkChange := G_L2_DATA_IND.msg)	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)		@sic G3t050018 sic@
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_CC_EnterU10_MT_Speech (p_CellId : CellId)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MT_ForMultiRAT (speech_12_2k)			
2		+ts_G_CC_EnterU10_MT (p_CellId)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_CMServiceReq_MO (p_CellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Receive CM Service Request for MO
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[TRUE]			@sic R5s050178 sic@
2	LAB	START t_T3101			
3		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType,tcv_RR_Subchannel:= G_L2_L2Estab_IND.subChannel) CANCEL t_T3101	car_G_L2_L2Estab_IND (p_CellId, cb_CM_ServReqAny(?))	(P)	Receive CM Service Request @sic ER1878 sic@
4		G_L2 ? G_L2_ACCESS_IND CANCEL t_T3101	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , ?)		skip any further channel request message by discarding Random Access Indication
5		−>LAB			
6		G_L2?OTHERWISE CANCEL t_T3101		(F)	
7		?TIMEOUT t_T3101		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Rcv_SetUp (p_CellId : INTEGER)
Group : M_RAT_HO_GSM_Specific/
Objective : Call Initiation and User Alert
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_ReceiveMessageTimer (33)			Start 33 secs timer for receiving message . If the timer expires before any respons e give FAIL verdict
2		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType := G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_DATA_IND.subChannel, tcv_SetupMOr := G_L2_DATA_IND.msg) CANCEL t_ReceiveMessageTimer	c_G_L2_DATA_IND (p_CellId , cr_G_SetupUL_MO)	(P)	Receive SETUP and determin e the value of Transacti on Id and sets the flag of the TI in the other direction is set to 1. @sic ER1878, T1s0500 54 sic@
3		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
4		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_InitAssigmentCmd (p_ChMode : ChMode)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
2		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
3		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]			
4		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 9) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_9, tcv_G_CellInfoA.cipherMode))			
5		[(px_GSM_BandUnderTest = tsc_GSM_450Band_Test)]			
6		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
7		[(px_GSM_BandUnderTest =tsc_GSM_480Band_Test)]			
8		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 12) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_12, tcv_G_CellInfoA.cipherMode))			
9		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
10		(tcv_AssignmentCommand := cs_G_AssignmentCommand (p_ChMode , c_ChannelDescr2_FH ('00001'B, tsc_G_TimeSlot, tcv_G_CellInfoA.tSC, INT_TO_BIT ((tsc_G_MAIO MOD 9) , 6) , INT_TO_BIT(tsc_G_HSN , 6)) , c_G_FreqListOmit, c_G_CellChDesOmit, c_G_MultislotAlloc_Omit, c_G_MobileAlloc_9, tcv_G_CellInfoA.cipherMode))			
11		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	:	ts_G_DisableCiphering(p_CellId : INTEGER; p_PhyCh : PhysicalChId; p_ChType : G_LogicChType; p_SubCh : SubChannelNumber)			
Group	:	M_RAT_HO_GSM_Specific/			
Objective	:				
Default	:	IntersystemDef			
Comments	:	@sic G3t050036 sic@			
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		G_CL1 ! G_CL1_CipherModeModify_REQ	ca_G_CL1_CipherModeModify_REQ(tsc_GSM_CellA, tsc_PhyCh0, p_ChType, p_SubCh, c_CipherModeSetting('0'B))		
2		G_CL1 ? G_CL1_CipherModeModify_CNF	ca_G_CL1_CipherModeModify_CNF		
3		G_CL1 ! G_CL1_CipherModeModify_REQ	ca_G_CL1_CipherModeModify_REQ(tsc_GSM_CellA, tsc_PhyCh0, (p_ChType +1), p_SubCh, c_CipherModeSetting('0'B))		
4		G_CL1 ? G_CL1_CipherModeModify_CNF	ca_G_CL1_CipherModeModify_CNF		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_Disconnect(p_CellId : INTEGER; p_PhyCh : PhysicalChId)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments : @sic ER1825, G3t050031 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cs_Disc (tcv_TI_S))		@sic ER1878 sic@
2	TSP	G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (p_CellId, ? , p_PhyCh, ?, ?, ?, cr_Rel (tcv_TI_R))	(P)	
3		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit, cs_RelCmpl (tcv_TI_S))		@sic ER1878 sic@

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_SetChPowerLevel(p_CellId : CellId ; p_PhyChId : PhysicalChId ; p_txPow : TX_Power)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_ChangePowerLevel_REQ	c_G_CL1_ChangePowerLevel_REQ (p_CellId , p_PhyChId , p_txPow)		
2		G_CL1 ? G_CL1_ChangePowerLevel_CNF	c_G_CL1_ChangePowerLevel_CNF (p_CellId , p_PhyChId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_SetTmpCellConfigInfo (p_CellId : CellId)
Group : M_RAT_HO_GSM_Specific/
Objective : To Set global variable tcv_G_CellConfigInfo to the table corresponding to given cell
Default : SS_Def
Comments : This Step helps the programmer when he/she needs to access cell information in a generic test Step.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_GSM_CellA]			
2		(tcv_G_CellConfigInfo := tcv_G_CellInfoA)			
3		[p_CellId = tsc_GSM_CellB]			
4		(tcv_G_CellConfigInfo := tcv_G_CellInfoB)			
5		[p_CellId = tsc_GSM_CellC]			
6		(tcv_G_CellConfigInfo := tcv_G_CellInfoC)			
7	ERR	[TRUE]		I	Fatal error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_ReceiveOptSuspend(p_PhyId :PhysicalChId ; p_LogType :G_LogicChType)
Group : M_RAT_HO_GSM_Specific/
Objective : This step waits for some time to receive the Suspend Message from UE
Default : IntersystemGPRS
Comments : @sic T1s040638 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitS(5)			start timer for 5 seconds
2	TBP1	G_L2 ? G_L2_DATA_IND CANCEL t_WaitS	cr_G_L2_DATA_IND (tsc_GSM_CellA, 0, p_PhyId, p_LogType ,?, ? , cr_GPRS_SUSPENSIONREQ(?,?,?))	(P)	to Receive Suspension Msg
3		? TIMEOUT t_WaitS		(P)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_ChannelRelease (p_CellId : CellId; p_PhyChId : PhysicalChId)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , p_PhyChId)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF CANCEL t_Release	ca_G_CL1_DeleteChannel_CNF (p_CellId , p_PhyChId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : po_GSM_SS_CellRelease (p_CellId : CellId)
Group : M_RAT_HO_GSM_Specific/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_CL1 ! G_CL1_DeleteChannel_REQ	ca_G_CL1_DeleteChannel_REQ (p_CellId , tsc_PhyCh0)		
2		G_CL1 ? G_CL1_DeleteChannel_CNF	ca_G_CL1_DeleteChannel_CNF (p_CellId , tsc_PhyCh0)		
3		G_CL1 ! G_CL1_DeleteCell_REQ	ca_G_CL1_DeleteCell_REQ (p_CellId)		
4		G_CL1 ? G_CL1_DeleteCell_CNF	ca_G_CL1_DeleteCell_CNF (p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Authentication (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : @sic G3t050013 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_AuthenticationInit			
2		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId , 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit , c_AuthReq(tcv_CS_KeySeq , tcv_AuthRAND, c_AUTN(tcv_AuthAUTN)))		Send Authenticaton Request @sic ER1878 sic@
3		START t_ReceiveMessageTimer (33)			
4		G_L2 ? G_L2_DATA_IND (tcv_AuthRspPDU := G_L2_DATA_IND.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp, tcv_AuthRspExt := tcv_AuthRspPDU.authRspExt) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthRspAnyExt)	(P)	Receive Authentication Response with extension
5		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			
6		[tcv_Res = FALSE]		(F)	
7		[tcv_Res = TRUE]			
8		G_L2 ? G_L2_DATA_IND (tcv_AuthRspPDU := G_L2_DATA_IND.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthRspAnyNoExt)	(P)	Receive Authentication Response without extension
9		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, FALSE))			
10		[tcv_Res = FALSE]		(F)	
11		[tcv_Res = TRUE]			
12		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (p_CellId, ?, tsc_PhyCh0, ?, ?, ?, c_AuthFailAny)	(F)	
13		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_ChannelRelease (p_CellId : INTEGER; p_PhyId :PhysicalChId)

Group : IdleUpdate/

Objective :

Default : IntersystemDef

Comments : @sic ER1825 sic@ send Channel Release ti UE on appropriate channel @sic R5s050094 sic@ removed optional G_L2_Release_IND − now handled in default behaviour

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_PhyId = tsc_PhyCh0]			
2		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyId, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit , c_G_ChReleaseNormal)		Send Channel Release @sic ER1878 sic@
3		+ts_G_DisableCiphering(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel)			@sic G3t050 036 sic@
4		[TRUE]			
5		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyId, tcv_RR_ChannelType2, tcv_RR_Subchannel2, c_G_RFN_Omit , c_G_ChReleaseNormal)		Send Channel Release @sic ER1878 sic@
6		+ts_G_DisableCiphering(tsc_GSM_CellA, tsc_PhyCh0, tcv_RR_ChannelType2, tcv_RR_Subchannel2)			@sic G3t050 036 sic@

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Ciphering_Mode_Setting (p_CellId : INTEGER; p_PhyCh : PhysicalChId)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : Currently turns ciphering on if px_CipheringOnOff is set to TRUE
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_GSM_CipheringOnOff='1'B]			@sic T1s040638 sic@
2		G_CL1 ! G_CL1_CipheringControl_REQ	ca_G_CL1_CipheringControl_REQ(p_CellId, p_PhyCh, '1'B)		Turn Ciphering On @sic G3t050018 sic@
3		G_CL1 ? G_CL1_CipheringControl_CNF	ca_G_CL1_CipheringControl_CNF(p_CellId, p_PhyCh)		@sic G3t050018 sic@
4		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, p_PhyCh, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_CipheringModeCommand('1'B))		Turn Ciphering ON − algorithm set to px_CiphAlg @sic ER1878 sic@
5		START t_ReceiveMessageTimer(33)			
6		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType:= G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel:= G_L2_DATA_IND.subChannel) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ? , p_PhyCh, ?, ?, ?, cr_G_CipheringModeComplete)	(P)	Receive Ciphering Mode Complete @sic ER1878 sic@
7		G_L2?OTHERWISE CANCEL t_ReceiveMessageTimer		(F)	
8		?TIMEOUT t_ReceiveMessageTimer		(F)	
9		[TRUE]			no Ciphering

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Loc_UpdatingAccept (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		G_L2 ! G_L2_DATA_REQ	cas_G_L2_DATA_REQ (p_CellId, 0, tsc_PhyCh0, tcv_RR_ChannelType, tcv_RR_Subchannel, c_G_RFN_Omit, cs_G_LocationUpdatingAccept (tcv_G_CellConfigInfo, c_MM_MS_Identity))		Send Location Updating Accept @sic ER1878 sic@
2		START t_ReceiveMessageTimer(33)			
3		G_L2 ? G_L2_DATA_IND (tcv_RR_ChannelType:= G_L2_DATA_IND.g_LogicChType, tcv_RR_Subchannel:= G_L2_DATA_IND.subChannel) CANCEL t_ReceiveMessageTimer	cr_G_L2_DATA_IND (p_CellId, ?, ? ,?, ?, ?, c_TMSI_ReallocCmpl)	(P)	Receieve TMSI Reallocation Complete
4		?TIMEOUT t_ReceiveMessageTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_Loc_UpdatingRequest (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_T3101			
2		G_L2 ? G_L2_L2Estab_IND (tcv_RR_ChannelType:= G_L2_L2Estab_IND.g_LogicChType, tcv_RR_Subchannel := G_L2_L2Estab_IND.subChannel) CANCEL t_T3101	car_G_L2_L2Estab_IND (p_CellId, cb_LocUpdReqAny(?))	(P)	Service Request (Location Updating Request) @sic ER1878 sic@
3		G_L2?OTHERWISE CANCEL t_T3101		(F)	
4		?TIMEOUT t_T3101		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_G_LocationUpdate (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments : MS performs a location update
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_G_SetTmpCellConfigInfo (p_CellId)			
2		+ts_G_RR_Con_Est (p_CellId)			Establish RR Connection and Receieve Service Request
3		+ts_G_Loc_UpdatingRequest (p_CellId)			Receive Location Updating Request
4		+ts_G_Authentication (p_CellId)			Send Authentication Request and receive Authentication Response
5		+ts_G_Ciphering_Mode_Setting (p_CellId, tsc_PhyCh0)			Send Ciphering Mode Command and receive Ciphering Mode Complete
6		+ts_G_Loc_UpdatingAccept (p_CellId)			Send Location Updating Accept and receive TMSI Reallocation Complete

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		+ts_G_ChannelRelease (p_CellId, tsc_PhyCh0)			Send Channel Release and receive Release Data Link Indication
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_G_RR_Con_Est (p_CellId : INTEGER)
Group : IdleUpdate/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_CampResponseTimer(120)			Start 2min timer for camping to ensure don't just wait for t_Guard in UE doesn't respond. @sic ER2025 sic@
2		G_L2 ? G_L2_ACCESS_IND (tcv_RR_RFN := G_L2_ACCESS_IND.rfn , tcv_ChRequest := G_L2_ACCESS_IND.burst) CANCEL t_CampResponseTimer	cabr_G_L2_ACCESS_IND (p_CellId , tsc_PhyCh0 , 1 , ? , ? , c_G_ChannelReq_Any)		Receive CHANNEL REQUEST message MS camped on cell1. @sic T1s040347 sic@
3		(tcv_RR_RA := (BIT_TO_INT (tcv_ChRequest.estCauRandomRef)))			
4		G_L2 ! G_L2_UNITDATA_REQ	cas_G_L2_UNITDATA_REQ (p_CellId, tsc_PhyCh0, 3, 15,c_G_RFN_Omit , cs_ImmediateAssignment (tcv_G_CellConfigInfo.bCCH_Freq , tcv_G_CellConfigInfo.bcc, tcv_RR_RA , tcv_RR_RFN))		Send immediate assignment message @sic ER1612, T1s040536 sic@
5		?TIMEOUT t_CampResponseTimer		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesSpecific26_6_5_1_2 (p_CellId : CellId)

Group : Other/

Objective :

Default : IntersystemDef

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
2		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_900_26_6_5_1_2), tcv_G_CellInfoA.cellAllocation := c_CellAllocGSM900HO)			
3		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]			
4		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (9, tsc_G_HSN, c_G_FreqList_GSM_1800_26_6_5_1_2) , tcv_G_CellInfoA.cellAllocation := c_CellAllocGSM1800HO_256F, tcv_G_CellInfoA.bCCH_Freq:='1011101011'B)			
5		[(px_GSM_BandUnderTest = tsc_GSM_450Band_Test)]			
6		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_450_26_6_5_1_2) , tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM450HO_128F)			
7		[(px_GSM_BandUnderTest =tsc_GSM_480Band_Test)]			
8		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (12, tsc_G_HSN, c_G_FreqList_GSM_480_26_6_5_1_2) , tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM480HO_128F)			
9		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
10		(tcv_G_CellInfoA.tCH_Freq := c_G_TrCHFreqInfoHop (9, tsc_G_HSN, c_G_FreqList_GSM_1900_26_6_5_1_2) , tcv_G_CellInfoA.cellAllocation :=c_CellAllocGSM1900HO_256F, tcv_G_CellInfoA.bCCH_Freq:='1010000111'B)			
11		[TRUE]		(I)	Inconclusive

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesDef
Group : Other/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SI2quaterRO := c_SI2quaterRO('1'B, c_SI2quater_3G_1NCell(INT_TO_BIT(tcv_CellInfoA.frequencyInfo. modeSpecificInfo.fdd.uarfcn_DL, 14), INT_TO_BIT(tcv_CellInfoA.priScrmCode, 10)), '1'B, c_SI2quaterMeasParams3G_ISHO, '0'B, OMIT))			Set up default value of SI2quater @sic ER1801 sic@
2		+ts_MM_AuthenticationInit			To initialise tcv_AuthKcGSM to correct value @sic G3t050015 sic@
3		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
4		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM900)			
5		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test)]			
6		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM1800)			
7		[(px_GSM_BandUnderTest = tsc_GSM_450Band_Test)]			
8		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM450)			
9		[(px_GSM_BandUnderTest = tsc_GSM_480Band_Test)]			
10		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM480)			
11		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
12		(tcv_G_CellInfoA := c_G_CellConfigInfoGSM1900)			
13		[TRUE]		(I)	Inconclusive

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GSM_InitVariablesSpecific40

Group : Other/

Objective :

Default : IntersystemDef

Comments : Defaults specific to section 40 tests, from 51.010 clause 40.2.1 Assumed tcv_CellInfoA already using c_G_CellConfigInfoGSM900

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_G_CellInfoA.nECI := '1'B, tcv_G_CellInfoA.bS_AG_BLKS_RES := '010'B, tcv_G_CellInfoA.bS_PA_MFRMS := '100'B)			None freq dependant parameters
2		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
3		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS900, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS900)			
4		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
5		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS1800, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS1800_1900)			
6		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
7		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS1900)			
8		[(px_GSM_BandUnderTest = tsc_GSM_700Band_Test)]			
9		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS700, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS700)			
10		[(px_GSM_BandUnderTest =tsc_GSM_850Band_Test)]			
11		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS850, tcv_G_CellInfoA.cellAllocation := c_CellAllocGPRS850)			
12		[(px_GSM_BandUnderTest =tsc_GSM_450Band_Test)]			
13		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS450)			
14		[(px_GSM_BandUnderTest =tsc_GSM_480Band_Test)]			
15		(tcv_G_CellInfoA.neighBCCHFreqList := c_NeighBCCH_FreqListGPRS480)			
16		[TRUE]		(I)	Inconclusive

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GPRS_InitVariablesDef
Group : Other/
Objective :
Default : IntersystemDef
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_PSI2_Instance3 := tcv_PSI2_Instance2, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM, tcv_PBCCHFreqInfo := c_PBCCHFreqInfo(c_PBCCHHoppingFreqList_GSM900))			Instance 3 same as instance 2 except RFL. If changing PBCCH params, check PSI13, SI13 and Channel Config
2		[(px_GSM_BandUnderTest = tsc_GSM_P_900Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_E_900Band_Test)]			
3		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_5, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_75, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_90, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_100, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_122, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_2bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_2)			
4		[(px_GSM_BandUnderTest = tsc_GSM_DCS1800Band_Test) OR (px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
5		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_DCSPCS, tcv_PSI2_Instance2.mALen := tsc_MALen_7, tcv_PSI2_Instance2.mABitmap := tsc_PSI2_MABitmap2_DCSPCS)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
6		(tcv_PSI2_Instance3.rFL_Contents_Len := tsc_RFLContentsLen_6, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_DCSPCS, tcv_PSI2_Instance3.mALen := tsc_MALen_3, tcv_PSI2_Instance2.mABitmap := tsc_PSI2_MABitmap3_DCSPCS)			
7		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_515, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_85, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_700, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_8bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_170, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_780, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_875, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_10)			
8		(tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_DCSPCS, tcv_ARFCN := INT_TO_BIT(650, 10))			
9		(tcv_Gamma := '00011'B)			
10		[(px_GSM_BandUnderTest = tsc_GSM_PCS1900Band_Test)]			
11		(tcv_PSI3_Instance2.startFreq := tsc_StartFreq_655, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_155, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_700, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_7bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_80, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_875, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_30)			Most parameters are same as DCS, only these are different
12		[(px_GSM_BandUnderTest = tsc_GSM_700Band_Test)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_GSM700, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM700)			Everything is same as GSM except RFLs
14		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_437, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_467, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_477, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFreq_502, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_3bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_5)			
15		(tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_GSM700, tcv_ARFCN := INT_TO_BIT(467,10))			
16		[(px_GSM_BandUnderTest =tsc_GSM_850Band_Test)]			
17		(tcv_PSI2_Instance2.rFL_Contents := tsc_PSI2_INST2_RFL_Contents_GSM850, tcv_PSI2_Instance3.rFL_Contents := tsc_PSI2_INST3_RFL_Contents_GSM850)			Everything is same as GSM except RFLs
18		(tcv_PSI3_Instance1.startFreq := tsc_StartFreq_137, tcv_PSI3_Instance1.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance1.freqDiff := tsc_FreqDiff_20, tcv_PSI3_Instance2.startFreq := tsc_StartFreq_207, tcv_PSI3_Instance2.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance2.freqDiff := tsc_FreqDiff_30, tcv_PSI3_Instance3.startFreq := tsc_StartFreq_217, tcv_PSI3_Instance3.freqDiffLen := tsc_FreqDiffLen_4bits, tcv_PSI3_Instance3.freqDiff := tsc_FreqDiff_10, tcv_PSI3_Instance4.startFreq := tsc_StartFr			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		eq_177, tcv_PSI3_Instance4.freqDiffLen := tsc_FreqDiffLen_5bits, tcv_PSI3_Instance4.freqDiff := tsc_FreqDiff_20)			
19		(tcv_PBCCHFreqInfo.hoppingFreqList :=c_PBCCHHoppingFreqList_GSM850, tcv_ARFCN := INT_TO_BIT(157,10))			
20		[TRUE]		(I)	Inconclusive
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name : ts_GSM_InitVariablesAllBands					
Group : Other/					
Objective :					
Default : IntersystemDef					
Comments :					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		[(px_GSM_BandUnderTest = tsc_GSM_700Band_Test)]			
2		(tcv_G_CellInfoA := c_G_CellConfigInfoGPRS700_CellA(tsc_CCCH Conf_Combined))			
3		[(px_GSM_BandUnderTest = tsc_GSM_850Band_Test)]			
4		(tcv_G_CellInfoA := c_G_CellConfigInfoGPRS850_CellA(tsc_CCCH Conf_Combined))			
5		[TRUE]			
6		+ts_GSM_InitVariablesDef			This initialises the other bands
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_GetFNFromRFN(p_RFN : RFN; p_FN : INTEGER)
Group : Other/
Objective :
Default : IntersystemGPRS
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(p_FN := (51*((BIT_TO_INT(p_RFN.t3) − BIT_TO_INT(p_RFN.t2)) MOD 26) + BIT_TO_INT(p_RFN.t3) + (51*26*BIT_TO_INT(p_RFN.t1_))))			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BS20_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate an MT SETUP message with appropriate Bcap for BS20 service.

Default : NAS_OtherwiseFail

Comments : 3G TS 27.001 clause B.1.2
3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvPIAFS]			
4		+ lt_PIAFS			
5		[p_Serv = tsc_SrvFTM]			
6		+ lt_FTM			
7		[p_Serv = tsc_SrvV110]			
8		+ lt_V110			
9		[p_Serv = tsc_SrvV120]			
10		+ lt_V120			
11	ERR1	[TRUE] lt_31kHz		I	
12		[px_BcapFNUR = tsc_Bcap28800]			
13		+ lt_31kHz_T			
14		[px_BcapFNUR <> tsc_Bcap28800]			
15		+ lt_31kHz_NT lt_31kHz_NT			
16		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
17		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.2
18		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
19		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.2
20		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType)))			see 3G TS 27.001 cl B.1.2.2
22	ERR2	[TRUE]		I	
		lt_31kHz_T			
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType)))			see 3G TS 27.001 cl B.1.2.2
		lt_PIAFS			
24		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_UDI , tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare , tsc_BcapOtherRA_PIAFS , tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone , tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.4
		lt_FTM			
25		[px_BcapITC = tsc_BcapITC_IntUDI]			
26		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31 ,tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3
27		[px_BcapITC = tsc_BcapITC_IntRDI]			
28		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_Other, tsc_BcapRA_X31, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3
29	ERR3	[(px_BcapITC <> tsc_BcapITC_IntRDI) AND (px_BcapITC <> tsc_BcapITC_IntUDI)]		I	
		lt_V110			
30		[px_BcapFNUR = tsc_Bcap28800]			
31		+ lt_V110_T			
32		[px_BcapFNUR <> tsc_Bcap28800]			
33		+ lt_V110_NT			
		lt_V110_NT			
34		[px_BcapUeFlowControl = tsc_BcapFlowInband]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
35		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.1
36		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1
38		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None , tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.1
40	ERR4	[TRUE] lt_V110_T		I	
41		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None))) lt_V120			27.001 cl B.1.2.1
42		[(px_BcapITC = tsc_BcapITC_IntUDI)]			
43		+ lt_V120_UDI_RDI (tsc_BcapITC_UDI, tsc_BcapOtherITC_Spare)			
44		[px_BcapITC = tsc_BcapITC_IntRDI]			
45		+ lt_V120_UDI_RDI (tsc_BcapITC_Other, tsc_BcapOtherITC_RDI)			seeTS 27.001 cl B.1.2.1
46	ERR5	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)] lt_V120_UDI_RDI (p_ItcLt : B3 ; p_OtherItcLt : B2)		I	
47		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
48		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ItcLt, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.1
49		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ItcLt, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1
51		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			
52		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab_AsyncNT (p_ItcLt, tsc_BcapRA_Other, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapOtherRA_V120, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity)))			see 3G TS 27.001 cl B.1.2.1
53	ERR6	[TRUE]		I	

Detailed Comments : The algorithm for derivation of BS20 Bearer Capabilities:

```
IF  service = 31kHz
      IF  rate = 28800
        Use coding of BACP BS20 3.1kHz  (see TS 27.001 B.1.2.2)  with T
      ELSE
        IF FlowControl = Inband
            Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2)  with NT UIL2P=ISO6429
        IF FlowControl = NoFlowControl
           Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2)  with NT UIL2P=COPnoFlct
         IF FlowControl = Outband
           Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2)  with NT  without UIL2P

IF service = PIAFS
          Use coding of BCAP BS20 PIAFS NT (see TS 27.001 B.1.2.4)

IF service = FTM
          IF itc = UDI
               Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with UDI
          IF itc = RDI
               Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with RDI
          IF itc <> RDI AND itc <> UDI
               ERROR

IF service = V110
   IF  rate = 28800
       Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V110 T UDI
   ELSE
       IF FlowControl = Inband
           Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110  NT UDI UIL2P=ISO6429

       IF FlowControl = NoFlowControl
          Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110  NT UDI
UIL2P=COPnoFlct
        IF FlowControl = Outband
          Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110  NT UDI  without UIL2P


IF service = V120
      IF itc = UDI
            IF FlowControl = Inband
              use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI UIL2P=ISO6429
            IF FlowControl = NoFlowControl
              use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI
UIL2P=COPnoFlct
             IF FlowControl = Outband
               use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI without UIL2P
```

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Test Step Dynamic Behaviour
Detailed Comments : ... IF itc = RDI use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI IF FlowControl = Inband use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=ISO6429 IF FlowControl = NoFlowControl use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=COPnoFlct IF FlowControl = Outband use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI without UIL2P

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BS30_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate an MT SETUP message with appropriate Bcap for BS30 service.

Default : NAS_OtherwiseFail

Comments : 3G TS 27.001 clause B.1.3
3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvV110]			
4		+ lt_V110			
5		[p_Serv = tsc_SrvX31]			
6		+ lt_X31			
7		[p_Serv = tsc_SrvV120]			
8		+ lt_V120			
9		[p_Serv = tsc_SrvBTM]			
10		+ lt_BTM			
11		[p_Serv = tsc_SrvMmediaCall]			
12		+ lt_Mmedia			
13	ERR1	[TRUE] lt_31kHz		I	
14		[px_BcapSACP = tsc_BcapSACP_I440450]			non X.32
15		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2.1
16		[px_BcapSACP = tsc_BcapSACP_X32]			X.32
17		[px_BcapFNUR = tsc_Bcap28800]			
18		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2.2
19		[px_BcapFNUR <> tsc_Bcap28800]			
20		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.2.2
21	ERR2	[TRUE]		I	
22	ERR3	[(px_BcapSACP <> tsc_BcapSACP_I440450) AND (px_BcapSACP <> tsc_BcapSACP_X32)] lt_V110		I	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.1
		lt_X31			
24		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
25		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
26		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
27		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
28	ERR4	[TRUE]		I	
		lt_V120			
29		[px_BcapITC = tsc_BcapITC_IntUDI]			
30		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
31		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
32		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
33		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
34	ERR5	[TRUE]		I	
35		[px_BcapITC = tsc_BcapITC_IntRDI]			
36		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.2
38		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.2
40	ERR6	[TRUE]		I	
41	ERR7	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)]		I	
		lt_BTM			
42		[px_BcapFNUR = tsc_Bcap56000]			
43		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.7
44		[(px_BcapFNUR = tsc_Bcap64000)]			
45		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.7
46	ERR8	[TRUE]		I	
		lt_Mmedia			
47		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap33600)]			
48		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_V34)))			see TS 27.001 cl. B.1.3.2.3
49		[(px_BcapFNUR = tsc_Bcap32000) OR (px_BcapFNUR = tsc_Bcap64000)]			
50		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.6
51		[(px_BcapFNUR = tsc_Bcap56000)]			
52		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.6

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
53	ERR9	[TRUE]		I	

Detailed Comments : The algorithm for derivation of BS30 Bearer Capabilities

IF service = 31Khz
IF sacp = I.440
Use coding of with BCAP BS30 31kHz nonX32 (see TS 27.001 cl. B.1.3.2.1)
IF sacp = X.32
IF rate = 28800
Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with T
ELSE
Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with NT

IF service = V110
Use coding of BACP BS30 UDI nonX32 (see TS 27.001 cl. B.1.3.1.1)

IF service = X31
Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with X31

IF service = V120
IF itc = UDI
Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT
IF itc = RDI
Use coding of BCAP BS30 RDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT
ELSE
ERROR

IF service = BTM
IF itc = UDI
Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with UDI
IF itc = RDI
Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with RDI
ELSE
ERROR

IF service = Sync_MmediaCall_
IF rate = 28800 OR rate = 33600
Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with T
IF rate = 32000 OR rate = 64000
Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with UDI
IF rate = 56000
Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with RDI

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BasicServMO (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate a Bcap and a MO SETUP message based on the service, as well as on several IXIT parameters.

Default : NAS_OtherwiseFail

Comments : 1. This test step generates an appropriate MO SETUP message according to the IXIT parameters of Bearer services/Teleservices for an MO call.
2. The detailed algorithms for Bcap derivation for each Bearer service/Teleservice are described in test steps ts_CC_BS20_MO, ts_CC_BS30_MO, ts_CC_TS61_MO, ts_CC_TelephonyMO.

Affected variables: tcv_ESetup, tcv_Setup MO, tcv_RB_ConfigType, tcv_EstCause, tcv_BcapCE, tcv_ActiveService

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MO (p_Serv)			
2		+ ts_UT_ConfigUE_MO (p_Serv)			

Detailed Comments : 1. invalid service

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BasicServMT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate a Bcap and a MT SETUP message based on the service, as well as on several IXIT parameters.

Default : NAS_OtherwiseFail

Comments : 1. This test step generates an appropriate MT SETUP message according to the IXIT parameters of Bearer services/Teleservices for an MT call.
2. The detailed algorithms for Bcap derivation for each Bearer service/Teleservice are described in test steps ts_CC_BS20_MT, ts_CC_BS30_MT, ts_CC_TS61_MT, and ts_CC_TelephonyMT.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MT (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		(tcv_SetupMT := cs_SetupMT (cs_BcapSpeechMT))			
4		+ ts_UT_ConfigUE_MT (p_Serv)			
5		[p_Serv = tsc_SrvAltSpeechFax]			
6		+ ts_CC_TS61_MT (p_Serv)			
7		+ ts_UT_ConfigUE_MT (p_Serv)			
8		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
9		[px_BcapSyncAsync = tsc_BcapASync]			
10		+ ts_CC_BS20_MT (p_Serv)			
11		+ ts_UT_ConfigUE_MT (p_Serv)			
12		[px_BcapSyncAsync = tsc_BcapSync]			
13		+ ts_CC_BS30_MT (p_Serv)			
14		+ ts_UT_ConfigUE_MT (p_Serv)			
15	ERR1	[TRUE]		I	1
16	ERR2	[TRUE]		I	

Detailed Comments : 1. Invalid service

Test Step Dynamic Behaviour

Test Step Name : ts_CC_CheckServSupported (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To check wether the Basic Service p_Serv is supported against PICS answers.

Default : NAS_OtherwiseFail

Comments : In PICS, if the p_Serv is declared supported, the test case variable tcv_Res is set to TRUE, otherwise FALSE.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Res := FALSE)			
2		[(p_Serv = tsc_SrvTelephony) AND pc_Speech]			
3		(tcv_Res := TRUE)			
4		[(p_Serv = tsc_SrvEmgCall) AND pc_EmergSpeech]			
5		(tcv_Res := TRUE)			
6		[(p_Serv = tsc_SrvAltSpeechFax) AND pc_AltSpeechFax_TS61]			
7		(tcv_Res := TRUE)			
8		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Async31kHz_9600]			
9		(tcv_Res := TRUE)			
10		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Async31kHz_14400]			
11		(tcv_Res := TRUE)			
12		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Async31kHz_19200]			
13		(tcv_Res := TRUE)			
14		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Async31kHz_28800]			
15		(tcv_Res := TRUE)			
16		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapModemType = tsc_BcapMT_Autobaud1) AND pc_Async31kHz_AutoBanding1]			
17		(tcv_Res := TRUE)			
18		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV110_9600]			
19		(tcv_Res := TRUE)			
20		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV110_14400]			
21		(tcv_Res := TRUE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV110_19200]			
23		(tcv_Res := TRUE)			
24		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV110_28800]			
25		(tcv_Res := TRUE)			
26		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV110_38400]			
27		(tcv_Res := TRUE)			
28		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV120_9600]			
29		(tcv_Res := TRUE)			
30		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV120_14400]			
31		(tcv_Res := TRUE)			
32		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV120_19200]			
33		(tcv_Res := TRUE)			
34		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV120_28800]			
35		(tcv_Res := TRUE)			
36		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV120_38400]			
37		(tcv_Res := TRUE)			
38		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_AsyncV120_48000]			
39		(tcv_Res := TRUE)			
40		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncV120_56000]			
41		(tcv_Res := TRUE)			
42		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_AsyncPIAFS_32000]			
43		(tcv_Res := TRUE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
44		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncPIAFS_64000]			
45		(tcv_Res := TRUE)			
46		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncFTM_56000]			
47		(tcv_Res := TRUE)			
48		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncFTM_64000]			
49		(tcv_Res := TRUE)			
50		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Sync31kHzA_9600]			
51		(tcv_Res := TRUE)			
52		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Sync31kHzA_14400]			
53		(tcv_Res := TRUE)			
54		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Sync31kHzA_19200]			
55		(tcv_Res := TRUE)			
56		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Sync31kHzA_28800]			
57		(tcv_Res := TRUE)			
58		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV110_28800]			
59		(tcv_Res := TRUE)			
60		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV110_48000]			
61		(tcv_Res := TRUE)			
62		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV110_56000]			
63		(tcv_Res := TRUE)			
64		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncX31_9600]			
65		(tcv_Res := TRUE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
66		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncX31_14400]			
67		(tcv_Res := TRUE)			
68		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200]			
69		(tcv_Res := TRUE)			
70		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800]			
71		(tcv_Res := TRUE)			
72		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncX31_38400]			
73		(tcv_Res := TRUE)			
74		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncX31_48000]			
75		(tcv_Res := TRUE)			
76		[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncX31_56000]			
77		(tcv_Res := TRUE)			
78		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncV120_9600]			
79		(tcv_Res := TRUE)			
80		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncV120_14400]			
81		(tcv_Res := TRUE)			
82		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncV120_19200]			
83		(tcv_Res := TRUE)			
84		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV120_28800]			
85		(tcv_Res := TRUE)			
86		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncV120_38400]			
87		(tcv_Res := TRUE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
88		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV120_48000]			
89		(tcv_Res := TRUE)			
90		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV120_56000]			
91		(tcv_Res := TRUE)			
92		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncBTM_56000]			
93		(tcv_Res := TRUE)			
94		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncBTM_64000]			
95		(tcv_Res := TRUE)			
96		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncMmediaCall_28800]			
97		(tcv_Res := TRUE)			
98		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_SyncMmediaCall_32000]			
99		(tcv_Res := TRUE)			
100		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap33600) AND pc_SyncMmediaCall_33600]			
101		(tcv_Res := TRUE)			
102		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncMmediaCall_56000]			
103		(tcv_Res := TRUE)			
104		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncMmediaCall_64000]			
105		(tcv_Res := TRUE)			
106		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MO (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MO calls.
To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
To assign the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
To assign the tcv_ActiveService test case variable, that contains the service used for the CC call.

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_ActiveService := p_Serv, tcv_CN_Domain := cs_domain)			
2		[(p_Serv = tsc_SrvEmgCall)]			
3		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := emergencyCall)			
4		[(p_Serv = tsc_SrvTelephony) OR (p_Serv = tsc_SrvAltSpeechFax)]			
5		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
6		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
7		[px_BcapSyncAsync = tsc_BcapASync]			
8		+ lt_Asynchronous			
9		[px_BcapSyncAsync = tsc_BcapSync]			
10		+ lt_Synchronous			
11	ERR4	[TRUE]		I	
12	ERR5	[TRUE]		I	
		lt_Asynchronous			
13		[(p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvV120)]			
14		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
15		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_Srv31kHz)]			
16		[(p_Serv = tsc_Srv31kHz) AND (px_BcapModemType = tsc_BcapMT_Autobaud1)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := originatingConversationalCall)			
18		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap48000) OR (px_BcapFNUR = tsc_Bcap56000)]			
19		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
20		[TRUE]			
21		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := originatingConversationalCall)			
22	ERR1	[TRUE]		I	
		lt_Synchronous			
23		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
24		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
25		[(p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvX31)]			
26		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
27		[p_Serv = tsc_Srv31kHz]			
28		[px_BcapFNUR = tsc_Bcap28800]			
29		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := originatingConversationalCall)			
30		[px_BcapFNUR <> tsc_Bcap28800]			
31		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := originatingConversationalCall)			
32	ERR2	[TRUE]		I	
33	ERR3	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CC_InitTCV_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the radio bearer for MT calls.
To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.
To assigne the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.
To assign the tcv_ActiveService test case variable, that contains the service used for the CC call
To assign the tcv_PagingCau test case variable, that contains the paging cause value used in the PAGING REQUEST message to be sent by SS to initiate the call.
To assign the tcv_TI_S and tcv_TI_R with the value 0.

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_ActiveService := p_Serv, tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B, tcv_CN_Domain := cs_domain)			
2		[(p_Serv = tsc_SrvTelephony) OR (p_Serv = tsc_SrvAltSpeechFax)]			
3		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
4		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
5		[px_BcapSyncAsync = tsc_BcapASync]			
6		+ lt_Asynchronous			
7		[px_BcapSyncAsync = tsc_BcapSync]			
8		+ lt_Synchronous			
9	ERR4	[TRUE]		I	
10	ERR5	[TRUE]		I	
		lt_Synchronous			
11		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
12		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
13		[(p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvX31)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
15		[p_Serv = tsc_Srv31kHz]			
16		[px_BcapFNUR = tsc_Bcap28800]			
17		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
18		[px_BcapFNUR <> tsc_Bcap28800]			
19		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)			
20	ERR2	[TRUE]		I	
21	ERR3	[TRUE]		I	
		lt_Asynchronous			
22		[(p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvV120)]			
23		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
24		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_Srv31kHz)]			
25		[(p_Serv = tsc_Srv31kHz) AND (px_BcapModemType = tsc_BcapMT_Autobaud1)]			
26		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)			
27		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap48000) OR (px_BcapFNUR = tsc_Bcap56000)]			
28		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
29		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
30		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)			
31	ERR1	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	: ts_CC_TS61_MT (p_Serv : Services)				
Group	: L3M_CC_Steps/				
Objective	: To generate an MT SETUP message with appropriate Bcap for TS61 service.				
Default	: NAS_OtherwiseFail				
Comments	: 3G TS 27.001 cl.s B.1.8 and B.1.10.3 The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re−usable, so the key fields of the BCAP shall be parametrised. This implies that more than 5 parameters are used for the BCAP constraints.				
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		[(px_BcapFNUR = tsc_Bcap9600) OR (px_BcapFNUR = tsc_Bcap14400)]			
2		(tcv_SetupMT := cs_SetupMT_2_Bcap (cs_BcapSpeechMT, cs_BcapMT_AsyncNT (tsc_BcapITC_Fax3, tsc_BcapRA_No , tsc_BcapSACP_I440450, tsc_BcapStopBitSpare , tsc_BcapDataB8 , tsc_BcapParityNone , tsc_BcapMT_None , tsc_BcapOtherMT_None)))			1. see 3G TS 27.001 B.1.8 B.1.10.3
3	ERR1	[(px_BcapFNUR <> tsc_Bcap9600) AND (px_BcapFNUR <> tsc_Bcap14400)]		I	2.
Detailed Comments :		1. The first bearer capability for TS61 (Alternate Speech / Fascimile) is: SPEECH. The second berarer capability for TS 61 (Alternate Speech / Facsimile) is: FAX 2. The FNUR for TS61 can be 9600 bit/s or 14400 bit/s only			

Test Step Dynamic Behaviour

Test Step Name : ts_CC_Disconnect (p_CellId :INTEGER)
Group : L3M_CC_Steps/
Objective : To disconnect the cative CC call.
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Disc (tcv_TI_S))		
2	TSP	Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Rel (tcv_TI_R))	(P)	
3		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_RelCmpl (tcv_TI_S))		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MM_IMSI_Detach (p_CellId: INTEGER; p_USIM_Rmvd : BOOLEAN)

Group : L3M_MM_GMM_Steps/

Objective : Force the UE to execute the IMSI Detach procedure

Default : NAS_OtherwiseFail

Comments : To achieve this, deactivate the UE depending upon its properties (USIM removal, switching off or powering off).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv) AND (pc_DetachOnUSIM_Rmv)]			USIM needs to be removed .
2		+ts_MMI_USIM_Remove			remove USIM card
3		+lt_IMSI_Detach			
4		[pc_SwitchOnOff]			
5		+ts_MMI_UE_SwitchOff			switch off the UE
6		+lt_IMSI_Detach			
7		[pc_DetachOnPwrDn]			
8		+ts_MMI_UE_PwrOff			power off the UE
9		+lt_IMSI_Detach			
10		[(((NOT p_USIM_Rmvd) OR (NOT pc_USIM_Rmv) OR (NOT pc_DetachOnUSIM_Rmv)) AND (NOT pc_SwitchOnOff) AND (NOT pc_DetachOnPwrDn))]			
11		+ts_MMI_UE_PwrOff lt_IMSI_Detach			power off the UE
12		+ts_RRC_ConnEst (p_CellId, est_MO, detach)			Connection Establishment MO
13	TSP1	Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	
14		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
15		+ts_RRC_ConnRel(p_CellId, cell_Dch)			Connection Release
16		+ ts_RRC_ConnRejectGMM_Detach (p_CellId)			

Detailed Comments : There are 2 types of deactivation required for testing:
1. USIM removal or switching off or removal of the power source
2. Switching off or removal of the power source
Parameter p_USIM_Rmvd controls the variant to be applied:

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Test Step Dynamic Behaviour	
Detailed Comments :	... 1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be removed if possible 2. tsc_USIM_In(=FALSE): variant 2 is to be used, the USIM must not be removed. Finally the IMSI Detach procedure is performed after the deactivation has been done.

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_DetachOnSwitchOff (p_CellId : INTEGER)

Group : L3M_MM_GMM_Steps/

Objective : Turn off UE and execute GMM Detach procedure for properly detach PS or combined PS/CS services on the cell referenced by p_CellId.
Additionaly, if Attach Flag is set, and the UE is in Operation Mode A, then IMSI DETACH INDICATION shall be send by the UE.

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_Delay(5000)			Wait before switching off (e.g. in case ATT flag has been previously changed) to allow UE to re−read new SysInfos
2		[pc_SwitchOnOff]			UE can actually be switched off
3		+ts_SetTmpCellInfo (p_CellId)			Get CellInfo to be used later
4		+lt_Init_RRC_RelStatus			
5		+ts_MMI_UE_SwitchOff			
6		+ts_RRC_ConnEst(p_CellId, est_MO, detach)			
7		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_I)]			If UE is in operation mode A and network mode of operation is I, then run combined PS/CS procedures.
8		+lt_Detach_NMO_I			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
9		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
10		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_II)]			If UE is in operation mode A and network mode of operation is II, then run first CS and PS independently
11		+lt_Detach_NMO_II			SS shall accept either PS detach first or IMSI detach first, since this is not clear in the core spec
12		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
13		[tcv_UE_OpMode = opModeC]			If UE is in operation mode C, then run GMM procedure (for PS only detach).
14		+lt_Detach_PSonly			
15		+ts_RRC_ConnRel_AfterSwitchOff(p_CellId, tcv_RRC_RelStatus)			
16		[TRUE]			UE power supply must be removed
17		+ts_MMI_UE_PwrOff lt_Init_RRC_RelStatus			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCP			@sic T1s0406 22 sic@ @sic VB R5s050 221 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		CH_StandAlonePCH_2a_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)]			
19		(tcv_RRC_RelStatus := cell_Fach_Dcch)			Get CellInfo to be used later
20		[TRUE]			
21		(tcv_RRC_RelStatus := cell_Dch)			Get CellInfo to be used later
		lt_Detach_NMO_I			
22		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '011'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST – 'power switched off, GPRS/IMSI combined detach'
		lt_Detach_PSonly			
23		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST – 'power switched off, PS detach'
		lt_Detach_NMO_II			
24		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST – 'power switched off, GPRS detach'
25		[tcv_TmpCellInfo.attFlag = tsc_AttOn]			If ATTflag is ON

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		Dc ? RRC_DataInd	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	IMSI DETACH INDICATION
27		[TRUE]			
28		Dc ? RRC_DataInd	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_IMSI_DetachInd)	(P)	IMSI DETACH INDICATION
29		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_DetachReq (c_DetachType('1'B, '001'B), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_PTMSI_Signature_tlv (tcv_Assigned_PTMSI_Sig)))	(P)	DETACH REQUEST – 'power switched off, GPRS detach'
Detailed Comments : See 3GPP 24.008 / 4.7.4					

Test Step Dynamic Behaviour

Test Step Name : ts_RegistrationOnCS (p_CellId : INTEGER; p_TMSI : OCTETSTRING)

Group : L3M_MM_GMM_Steps/

Objective : Register to CS services according to 3GPP 34.108 clause 7.2.2.1.

Default : NAS_OtherwiseFail

Comments : Note that it is assumed that the UE has already a DCCH connection. Connection establishment and release have to be managed by the user of this test step.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch SS_Cell _Info table correpo nding to the cell
2		+lt_ReceiveLocUpdate			@sic t1s−040 773 sic@ LOCATI ON UPDATI NG REQUE ST
3		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
4		+ts_MM_Authentication(p_CellId)			AUTHE NTICATI ON REQUE ST AUTHE NTICATI ON RESPO NSE
5		+ts_RRC_Security(p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE
6		Dc!RRC_DataReq (tcv_AssignedTMSI := p_TMSI)	ca_DataReq(tsc_CellDedicated, tsc_RB3, cs_LocUpdAcpTMSI_2(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, p_TMSI))		LOCATI ON UPDATI NG ACCEP T
7		Dc?RRC_DataInd	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLO CATION COMPL ETE

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_ReceiveLocUpdate			
8		[tcv_UE_Id_IMSI]			Check for UE ID used is IMSI
9		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, c_LocUpdReqAny_IMSI (*))		LOCATION UPDATING REQUEST
10		[TRUE]			
11		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		LOCATION UPDATING REQUEST
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	:	ts_RRC_ConnRejectGMM_Detach (p_CellId : INTEGER)			
Group	:	L3M_RRC_Steps/			
Objective	:	To reject an RRC Connection request with the cause set to 'detach'. If the RRC connection request message is not sent by UE then no action shall be performed.			
Default	:	RRC_DefConnEst			
Comments	:				
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		START t_Dly (tsc_WaitDetach)			
2		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity) CANCEL t_Dly	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (detach))		
3		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRej(p_CellId, tsc_RB0, cs_108_RRC_ConnRej (tcv_InitialUE_Id, tcv_RRC_Ti, unspecified, 0))		
4		? TIMEOUT t_Dly			
Detailed Comments	:	1. Update the cell configuration 2. A RRC connection has already been established.			

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel_AfterSwitchOff (
p_CellId: INTEGER;
p_RRC_RelStatus : RRC_Rel_Status
)

Group : L3M_RRC_Steps/

Objective : To release RRC connection to be used in cases where the UE has been switched off (adapted from test step ts_RRC_ConnRel)

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ lt_Send_RRC_ConnectionRelease			
4		+ lt_RestartCRLC_ForNextConnection			
5		+ ts_SS_ResetSecurityKey			
		lt_RestartCRLC_ForNextConnection			
6		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB]			
7		+ ts_CRLC_RelReconfSRB (p_CellId)			
8		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
9		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
10		+ ts_CRLC_RelReconfSRB (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC]			
13		+ ts_CRLC_RelReconfSRB (p_CellId)			
14		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC_NoConn)			
15		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH]			
16		+ ts_CRLC_RelReconfSRB (p_CellId)			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH_NoConn)			
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH]			
19		+ ts_CRLC_RelReconfSRB (p_CellId)			
20		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH_NoConn)			
21		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
22		+ ts_CRLC_RelReconfSRB (p_CellId)			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_NoConn)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1]			
25		+ ts_CRLC_RelReconfSRB (p_CellId)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn)			
27		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2]			
28		+ ts_CRLC_RelReconfSRB (p_CellId)			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn)			
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH]			
31		+ ts_CRLC_RelReconfSRB (p_CellId)			
32		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)			
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			@sic T1s040622 sic@
34		+ ts_CRLC_RelReconfSRB (p_CellId)			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)			
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)]			@sic T1s040624 sic@
37		+ ts_CRLC_RelReconfSRB (p_CellId)			
38		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn)			
39		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			@sic T1s040624 sic@
40		+ ts_CRLC_RelReconfSRB (p_CellId)			
41		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn)			
42		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			@sic T1s040626 sic@
43		+ ts_CRLC_RelReconfSRB (p_CellId)			
44		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
45		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)]			
46		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
47		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
48	ERR1	[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn)]		I	1.
49	ERR2	[TRUE]		I	
		lt_Send_RRC_ConnectionRelease			
50		[p_RRC_RelStatus= cell_Dch]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
51		(tcv_N308 := 1, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
52		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
53		START t_Dly(1000)			
54		? TIMEOUT t_Dly		(P)	UE may not send RRC CONNECTION RELEASE COMPLETE
55	TSP1	UM ? RLC_UM_DATA_IND CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
56		REPEAT lt_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
57		[p_RRC_RelStatus = cell_Fach_Dcch]			
58		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT))		

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
59		START t_Dly(1000)			
60		? TIMEOUT t_Dly		(P)	UE may not send RRC CONNECTION RELEASE COMPLETE
61	TSP2	AM ? RLC_AM_DATA_IND CANCEL t_Dly	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
62		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			@sic T1040XXXDelayAfterRRCConRel sic@
63		[p_RRC_RelStatus = cell_Fach_Ccch]			
64		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0, cs_108_RRC_ConnRelCCCH (c_U_RNTI, tcv_RRC_Ti))		
65		[TRUE] lt_RptRcvConnRel		I	Programming error
66		START t_Dly			
67	TSF2	? TIMEOUT t_Dly		(P)	
68		(tcv_K := tcv_N308 + 1)			To stop the loop
69	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	Retransmission

Detailed Comments : Note: Test step copied from original test step ts_RRC_ConnRel and then adapted to consider UEs which do not send RRC CONNECTION RELEASE COMPLETE after switch off.

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB10_TM_Cfg (p_PayLoad: INTEGER)
Group : L3M_SS_ConfigSteps/
Objective : setup radio bearers : RB10. default values from 34.123−1Table 7.2/3A
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info (tsc_CellDedicated , tsc_RB10, p_PayLoad, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers : RB10 (TM + DTCH) note: set UE to AM mode correspo ndingly
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated , tsc_RB10)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB10_ToRB12_TM_Cfg
Group : L3M_SS_ConfigSteps/
Objective : setup radio bearers : RB10, RB11, RB12 for radio beaer subflow#1, subflow#2, subflow#3
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB10, 81, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers : RB10 for AMR subflow #1
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB10)		
3		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB11, 103, {uLlogicalChannelIdentity tsc_UL_DTCH2, dLlogicalChannelIdentity tsc_DL_DTCH2})		cofigure radio bearers : RB11 for AMR subflow #2
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB11)		
5		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB12, 60, {uLlogicalChannelIdentity tsc_UL_DTCH3, dLlogicalChannelIdentity tsc_DL_DTCH3})		cofigure radio bearers : RB12 for AMR subflow #3
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB12)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_SwitchBackCellOn (p_CellId : INTEGER)

Group : L3M_SS_ConfigSteps/

Objective : To switch the power of the cell back from with special Attenuation value of 123, to the value stored in respective Cell Info record

Default : SS_Def

Comments : p_DedicCh shall be set to TRUE if the cell contains dedicated channel, otherwise FALSE

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch table correponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	Fatal error: cell not configured (programming error)
3		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
4		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, tcv_TmpCellInfo.attenuationLevel)		
5		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_SwitchCellOff (p_CellId : INTEGER)

Group : L3M_SS_ConfigSteps/

Objective : To switch the power of the cell to very low value, with special Attenuation value of 123. This value is not stored in the respective cell record.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Fetch table correponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	Fatal error: cell not configured (programming error)
3		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
4		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, tsc_AttenuationCellOFF)		
5		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_AT_InitCallCS
Group : L3M_UT_Steps/
Objective : This Step requests the UE to initiate an originating call (CS)
Default : UT_OtherwiseFail
Comments : the AT Dial command D is used: See TS27.007 clause 6.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_InitAT_Command			@sic ER1449 sic@
2		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
3		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		lt_InitAT_Command			
4		[(px_CC_Serv = "Telephony") OR (px_CC_Serv ="EmergencyCall")]			if Telephony or Emergency call append ';' for px_CC_CallDiallingDigits
5		(tcv_AT_Cmd := o_ConcatStrg ("ATD", px_CC_CallDiallingDigits),tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd, ";"), tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , "<CR>"))			@sic ER1469 sic@
6		[TRUE]			for other no ';'
7		(tcv_AT_Cmd := o_ConcatStrg ("ATD", px_CC_CallDiallingDigits), tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , "<CR>"))			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_AT_AnswerCall
Group : L3M_UT_Steps/
Objective : To request the UE to answer to a call
Default : UT_OtherwiseFail
Comments : The A AT command is used (see TS 27.007 clause 6.25)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("ATA<CR>")		
2		Ut ? AT_CmdCnf	ca_AT_CmdCnfWithString		@sic ER1795 sic@

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_AT_CmdCBST (p_Serv : Services)

Group : L3M_UT_Steps/

Objective : To configure the UE for the selected bearer service, using AT commands.

Default : UT_OtherwiseFail

Comments : First, the UE shall be configured for teh single mode (using the +CMOD AT command see 3G TS 27.007 clause 6.4).
Then, the UE is configured for the selected bearer service, the AT command line shall be created following this syntax: "AT+CBST=<speed>,<name>,<ce>" (See 3G TS 27.001 clause 6.7).
Before calling this test step the tcv_BcapCE test case variables has to be set to correct value.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		0
2		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
3		+ lt_BuildAT_Cmd			
4		Ut ! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1
5		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		lt_BuildAT_Cmd			
6		+ lt_Speed			2
7		+ lt_Name			
8		+ lt_Ce			
		lt_Speed			
9		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvFTM)]			
10		[px_BcapFNUR = tsc_Bcap9600]			
11		(tcv_AT_Cmd := "AT+CBST=71")			
12		[px_BcapFNUR = tsc_Bcap14400]			
13		(tcv_AT_Cmd := "AT+CBST=75")			
14		[px_BcapFNUR = tsc_Bcap19200]			
15		(tcv_AT_Cmd := "AT+CBST=79")			
16		[px_BcapFNUR = tsc_Bcap28800]			
17		(tcv_AT_Cmd := "AT+CBST=80")			
18		[px_BcapFNUR = tsc_Bcap38400]			
19		(tcv_AT_Cmd := "AT+CBST=81")			
20		[px_BcapFNUR = tsc_Bcap48000]			
21		(tcv_AT_Cmd := "AT+CBST=82")			
22		[px_BcapFNUR = tsc_Bcap56000]			
23		(tcv_AT_Cmd := "AT+CBST=83")			
24		[px_BcapFNUR = tsc_Bcap64000]			
25		(tcv_AT_Cmd := "AT+CBST=84")			
26		[p_Serv = tsc_SrvBTM]			
27		[px_BcapFNUR = tsc_Bcap56000]			
28		(tcv_AT_Cmd := "AT+CBST=115")			
29		[px_BcapFNUR = tsc_Bcap64000]			
30		(tcv_AT_Cmd := "AT+CBST=116")			
31		[p_Serv = tsc_SrvPIAFS]			
32		[px_BcapFNUR = tsc_Bcap32000]			
33		(tcv_AT_Cmd := "AT+CBST=120")			
34		[px_BcapFNUR = tsc_Bcap64000]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
35		(tcv_AT_Cmd := "AT+CBST=121")			
36		[p_Serv = tsc_SrvV120]			
37		[px_BcapFNUR = tsc_Bcap9600]			
38		(tcv_AT_Cmd := "AT+CBST=39")			
39		[px_BcapFNUR = tsc_Bcap14400]			
40		(tcv_AT_Cmd := "AT+CBST=43")			
41		[px_BcapFNUR = tsc_Bcap19200]			
42		(tcv_AT_Cmd := "AT+CBST=47")			
43		[px_BcapFNUR = tsc_Bcap28800]			
44		(tcv_AT_Cmd := "AT+CBST=48")			
45		[px_BcapFNUR = tsc_Bcap38400]			
46		(tcv_AT_Cmd := "AT+CBST=49")			
47		[px_BcapFNUR = tsc_Bcap48000]			
48		(tcv_AT_Cmd := "AT+CBST=50")			
49		[px_BcapFNUR = tsc_Bcap56000]			
50		(tcv_AT_Cmd := "AT+CBST=51")			
51		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvMmediaCall)]			
52		[px_BcapModemType = tsc_BcapMT_Autobaud1]			
53		(tcv_AT_Cmd := "AT+CBST=0")			
54		[px_BcapFNUR = tsc_Bcap9600]			
55		[px_BcapModemType = tsc_BcapMT_V32]			
56		(tcv_AT_Cmd := "AT+CBST=7")			
57		[px_BcapOtherModemType = tsc_BcapOtherMT_V34]			
58		(tcv_AT_Cmd := "AT+CBST=12")			
59		[px_BcapFNUR = tsc_Bcap14400]			
60		(tcv_AT_Cmd := "AT+CBST=14")			
61		[px_BcapFNUR = tsc_Bcap19200]			
62		(tcv_AT_Cmd := "AT+CBST=15")			
63		[px_BcapFNUR = tsc_Bcap28800]			
64		(tcv_AT_Cmd := "AT+CBST=16")			
65		[px_BcapFNUR = tsc_Bcap38400]			
66		(tcv_AT_Cmd := "AT+CBST=17")			
		lt_Name			
67		[(px_BcapITC = tsc_BcapITC_IntUDI) OR (px_BcapITC = tsc_BcapITC_Int31kHzA)]			
68		[px_BcapSyncAsync = tsc_BcapASync]			
69		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",0"))			
70		[px_BcapSyncAsync = tsc_BcapSync]			
71		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",1"))			
72		[px_BcapITC = tsc_BcapITC_IntRDI]			
73		[px_BcapSyncAsync = tsc_BcapASync]			
74		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",4"))			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
75		[px_BcapSyncAsync = tsc_BcapSync]			
76		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",5"))			
		lt_Ce			
77		[tcv_BcapCE = tsc_BcapCE_T]			
78		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",0<CR>"))			
79		[tcv_BcapCE = tsc_BcapCE_NT]			
80		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",1<CR>"))			
Detailed Comments : 0. Configure UE for a single mode 1. configure the UE for the selected bearer service using the AT command 2. build the AT +CBST command line +CBST=<speed>,<name>,<ce>. See 3G TS 27.001 clause 6.7					

Test Step Dynamic Behaviour

Test Step Name : ts_UT_ConfigUE_MO (p_Serv : Services)
Group : L3M_UT_Steps/
Objective : Configure UE for MO call using AT or MMI commands.
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_CheckServSupported (p_Serv)			
2		[p_Serv = tsc_SrvEmgCall]			
3		[tcv_Res]			1
4		+ lt_ConfigEmergencyCall			
5		[NOT tcv_Res]			
6		[p_Serv = tsc_SrvTelephony]			
7		[tcv_Res]			
8		+ lt_ConfigTelephony			
9		[NOT tcv_Res]			
10		[p_Serv = tsc_SrvAltSpeechFax]			
11		[tcv_Res]			
12		+ lt_ConfigTS61			
13		[NOT tcv_Res]			
14		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
15		[tcv_Res]			
16		+ ts_AT_CmdCBST (p_Serv)			
17		[NOT tcv_Res]			
18	ERR1	[TRUE]		I	0
		lt_ConfigTelephony			
19		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		1
20		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
21		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MO Telephony call")		
22		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigEmergencyCall			
23		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		
24		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
25		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an Emergency call")		
26		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigTS61			
27		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=1<CR>")		2

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
28		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
29		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MO Telephony call")		3
30		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments : 0. invalid service
1. Configure UE for a single mode (see 3G TS 27.007 clause 6.4)
2. Configure UE for an alternating voice/fax mode (see 3G TS 27.007 clause 6.4)
3. For TS61, the UE is first configured for Voice

Test Step Dynamic Behaviour

Test Step Name : ts_UT_ConfigUE_MT (p_Serv : Services)
Group : L3M_UT_Steps/
Objective : Configure UE for MT call using AT or MMI commands.
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_CheckServSupported (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		[tcv_Res]			
4		+ lt_ConfigTelephony			
5		[NOT tcv_Res]			
6		[p_Serv = tsc_SrvAltSpeechFax]			
7		[tcv_Res]			
8		+ lt_ConfigTS61			
9		[NOT tcv_Res]			
10		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
11		[tcv_Res]			
12		+ ts_AT_CmdCBST (p_Serv)			
13		[NOT tcv_Res]			
14	ERR1	[TRUE]		I	0
		lt_ConfigTelephony			
15		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0<CR>")		1
16		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
17		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		
18		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigTS61			
19		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=1<CR>")		2
20		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
21		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		3
22		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments : 0. invalid service
1. Configure UE for a single mode (see 3G TS 27.007 clause 6.4)
2. Configure UE for an alternating voice/fax mode (see 3G TS 27.007 clause 6.4)
3. For TS61, the UE is first configured for Voice

Test Step Dynamic Behaviour

Test Step Name : ts_AssignCN_Domain

Group : BasicM_General_Steps/

Objective : To assign tcv_CN_Domain based on PICS and PIXIT values. This Steps is to be used by test cases written for both cs and ps domains.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_CS AND (px_CN_DomainTested = cs_domain)]			
2		(tcv_CN_Domain := cs_domain)			
3		[pc_PS AND (px_CN_DomainTested = ps_domain)]			
4		(tcv_CN_Domain :=ps_domain)			
5		[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CalculateActTime (p_CellId: INTEGER)

Group : BasicM_General_Steps/

Objective : To calculate the activation time with the tti value corresponding to the actual SS configuration.

Default : SS_Def

Comments : The tti value passed as parameter to ts_CPHY_ActTime is equal to tti/10 (e.g. tti 40 −> 4)
Based on 34.108 on SRB tti.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_Init)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_Init)]			An RRC connection is established. Use DCCH on DL DPCH1 @sic New RAB sic@ @sic T1s040688 sic@ @sic R5s050114 sic@
3		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 4)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
4		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn)]			No RRC connection is established Use CCCH configuration
5		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
6		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			One RRC connection established on FACH
7		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			One RRC connection established on FACH BMC
9		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)]			@sic New RAB sic@
11		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 2)			@sic changed from 1 to 2 sic@
12		[(tcv_TmpCellInfo.cellConfig = cell_DCH_HS_DSCH)]			@sic R5s050159 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 4)			@sic R5s050 159 sic@
14		[(tcv_TmpCellInfo.cellConfig = cell_NotConfigured)]		I	
15		[TRUE]			@sic New RAB sic@
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	: ts_CountConfiguredCell				
Group	: BasicM_General_Steps/				
Objective	: Assign tcv_NumCfgCell to the number of cells already configured.				
Default	: SS_Def				
Comments	: When a cell is configured, the corresponding receod.cellConfig is set to a different value than cell_NotConfigured				
Description	:				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		(tcv_NumCfgCell := 0)			
2		+ lt_CheckOneCell (tcv_CellInfoA)			
3		+ lt_CheckOneCell (tcv_CellInfoB)			
4		+ lt_CheckOneCell (tcv_CellInfoC)			
5		+ lt_CheckOneCell (tcv_CellInfoD)			
6		+ lt_CheckOneCell (tcv_CellInfoE)			
7		+ lt_CheckOneCell (tcv_CellInfoF)			
8		+ lt_CheckOneCell (tcv_CellInfoG)			
9		+ lt_CheckOneCell (tcv_CellInfoH)			
		lt_CheckOneCell (p_CellInfo : CellInfoCfg)			
10		[p_CellInfo.cellConfig <> cell_NotConfigured]			
11		(tcv_NumCfgCell := tcv_NumCfgCell + 1)			
12		[p_CellInfo.cellConfig = cell_NotConfigured]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_InitVariables
Group : BasicM_General_Steps/
Objective : Initialisation of the test case variables tcv_CellInfoX, tcv_SF_Pilot and tcv_SF512.
Default : SS_Def
Comments : tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE and tcv_CellInfoF : contains the cell information used to configure SS.
tcv_SF_Pilot and tcv_SF512 are assigned based on the capability of the UE. @sic Er1854 changed parameter order for lt_CheckFreqSeperation sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ lt_CalculateFrequencyInfo			
2		+lt_Init_SSInfo_CellA			
3		+lt_Init_SSInfo_CellB			
4		+lt_Init_SSInfo_CellC			
5		+lt_Init_SSInfo_CellD			
6		+lt_Init_SSInfo_CellE			
7		+lt_Init_SSInfo_CellF			
8		+lt_Init_SSInfo_CellG			
9		+lt_Init_SSInfo_CellH			
		lt_CalculateFrequencyInfo			
10		+ lt_CalculateFreqMid			
11		+ lt_CalculateFreqHigh			
12		+ lt_CalculateFreqLow			
		lt_CalculateFreqMid			
13		+ lt_CheckFreqSeperation(px_UARFCN_D_Mid, px_UARFCN_U_Mid)			@sic ER1763 sic@
14		[NOT tcv_Res]			
15		(tcv_FreqInfoMid := c_FreqInfo (px_UARFCN_U_Mid, px_UARFCN_D_Mid))			
16		[tcv_Res]			
17		(tcv_FreqInfoMid := c_FreqInfo (OMIT, px_UARFCN_D_Mid))			Uplink UARFCN is OMITTED when the distance of 190 MHz is used (distance of 950 in UARFCN)
		lt_CalculateFreqHigh			
18		+ lt_CheckFreqSeperation(px_UARFCN_D_High, px_UARFCN_U_High)			@sic ER1763 sic@
19		[NOT tcv_Res]			
20		(tcv_FreqInfoHigh := c_FreqInfo (px_UARFCN_U_High, px_UARFCN_D_High))			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		[tcv_Res]			
22		(tcv_FreqInfoHigh := c_FreqInfo (OMIT, px_UARFCN_D_High))			Uplink UARFCN is OMITTED when the distance of 190 MHz is used (distance of 950 in UARFCN)
		lt_CalculateFreqLow			
23		+ lt_CheckFreqSeperation(px_UARFCN_D_Low, px_UARFCN_U_Low)			@sic ER1763 sic@
24		[NOT tcv_Res]			
25		(tcv_FreqInfoLow := c_FreqInfo (px_UARFCN_U_Low, px_UARFCN_D_Low))			
26		[tcv_Res]			
27		(tcv_FreqInfoLow := c_FreqInfo (OMIT, px_UARFCN_D_Low))			Uplink UARFCN is OMITTED when the distance of 190 MHz is used (distance of 950 in UARFCN)
		lt_CheckFreqSeperation(p_UARFCN_D, p_UARFCN_U:INTEGER)			
28		[px_FDD_OperationBand = 1]			Operation Band 1 under test
29		[((p_UARFCN_D − p_UARFCN_U) = 950)]			Default seperation
30		(tcv_Res := TRUE)			
31		[TRUE]			Non default seperation
32		(tcv_Res := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
33		[px_FDD_OperationBand = 2]			Operation Band 2 under test
34		[((p_UARFCN_D − p_UARFCN_U) = 400)]			Default seperation
35		(tcv_Res := TRUE)			
36		[TRUE]			Non default seperation
37		(tcv_Res := FALSE)			
38		[px_FDD_OperationBand = 3]			Operation Band 3 under test
39		[((p_UARFCN_D − p_UARFCN_U) = 475)]			Default seperation
40		(tcv_Res := TRUE)			
41		[TRUE]			Non default seperation
42		(tcv_Res := FALSE)			
43		[(px_FDD_OperationBand = 5) OR (px_FDD_OperationBand = 6)]			Operation Band 5 0r 6 under test @sic T1s−041874 sic@
44		[((p_UARFCN_D − p_UARFCN_U) = 225)]			Default seperation
45		(tcv_Res := TRUE)			
46		[TRUE]			Non default seperation
47		(tcv_Res := FALSE)			
48		[TRUE] lt_Init_SSInfo_CellA		I	@sic T1s−041874 sic@
49		(tcv_CellInfoA := c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, tcv_FreqInfoMid , px_UL_ScramblingCode)) lt_Init_SSInfo_CellB			1.

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
50		(tcv_CellInfoB := c_CellInfoDef (tsc_CellB, ((px_PriScrmCode + 50) MOD 512) , tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, tcv_FreqInfoMid , ((px_UL_ScramblingCode +1000) MOD 16777216)))			2.
		lt_Init_SSInfo_CellC			
51		(tcv_CellInfoC := c_CellInfoDef (tsc_CellC, ((px_PriScrmCode + 100) MOD 512), tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, tcv_FreqInfoMid , ((px_UL_ScramblingCode +2000) MOD 16777216)))			3.
		lt_Init_SSInfo_CellD			
52		(tcv_CellInfoD := c_CellInfoDef (tsc_CellD, ((px_PriScrmCode + 150) MOD 512), tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +3000) MOD 16777216)))			4.
		lt_Init_SSInfo_CellE			
53		(tcv_CellInfoE := c_CellInfoDef (tsc_CellE, ((px_PriScrmCode + 200) MOD 512), tsc_URA_IdCellE, px_TCellE,tsc_SFN_OffsetE, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +4000) MOD 16777216)))			5.
		lt_Init_SSInfo_CellF			
54		(tcv_CellInfoF := c_CellInfoDef (tsc_CellF, ((px_PriScrmCode + 250) MOD 512), tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +5000) MOD 16777216)))			6.
		lt_Init_SSInfo_CellG			
55		(tcv_CellInfoG := c_CellInfoDef (tsc_CellG, ((px_PriScrmCode + 300) MOD 512), tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, tcv_FreqInfoMid , ((px_UL_ScramblingCode +6000) MOD 16777216)))			
		lt_Init_SSInfo_CellH			
56		(tcv_CellInfoH := c_CellInfoDef (tsc_CellH, ((px_PriScrmCode + 350) MOD 512), tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, tcv_FreqInfoMid , ((px_UL_ScramblingCode +7000) MOD 16777216)))			.

Detailed Comments :
1. The primary scrambling code of cell A is equal to the pixit value
2. The primary scrmabling code of cell B is equal to the pixit value + 50
3. The primary scrmabling code of cell B is equal to the pixit value + 100
4. Cell A and D do not have the same frequency, the primary scrambling code of cell D is equal to the one of cell A
5. Cell B and E do not have the same frequency, the primary scrambling code of cell E is equal to the one of cell B
6. Cell C and F do not have the same frequency, the primary scrambling code of cell F is equal to the one of cell C

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Delay (p_Dly: INTEGER)
Group : BasicM_General_Steps/
Objective : Realization of a Delay
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly(p_Dly)			
2		?TIMEOUT t_Dly			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariables(p_CellToBeCreated : CellToBeCreated)
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase and Testsuite variables for RRC testcases
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_AssignCN_Domain			
2		[tcv_CN_Domain = cs_domain]			
3		+ ts_RRC_InitVariablesCS			
4		[tcv_CN_Domain = ps_domain]			
5		+ ts_RRC_InitVariablesPS (p_CellToBeCreated)			
6	ERR1	[TRUE]		I	Programming error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariablesCS
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase and Testsuite variables for RRC testcases
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitVariables			
2		(tcv_CN_Domain := cs_domain, tcv_RAB_Id := tsc_RAB_DefCS)			
3		+ lt_RRC_InitServVarCS lt_RRC_InitServVarCS			
4		[(px_RRC_CS_ServTested = speech) AND pc_Conversational]			
5		(tcv_RRC_RAB_Type := cell_DCH_Speech, tcv_RRC_PagingCau := terminatingConversationalCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingConversationalCall)			
6		[(px_RRC_CS_ServTested = conversational_64k) AND pc_Conversational]			
7		(tcv_RRC_RAB_Type := cell_DCH_64kCS_RAB_SRB, tcv_RRC_PagingCau := terminatingConversationalCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingConversationalCall)			
8		[(px_RRC_CS_ServTested = streaming_57_6k) AND pc_Streaming]			@sic T1S040 363 sic@
9		(tcv_RRC_RAB_Type := cell_DCH_57_6kCS_RAB_SRB, tcv_RRC_PagingCau := terminatingStreamingCall, tcv_RRC_EstCauMO := originatingConversationalCall, tcv_RRC_EstCauMT := terminatingStreamingCall)			@sic T1S040 363 sic@
10	ERR1	[TRUE]		I	Programming or parameter error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_InitVariablesPS (p_CellToBeCreated : CellToBeCreated)
Group : BasicM_General_Steps/
Objective : Initialisation of Testcase variables for RRC testcases in the PS_domain
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitVariables			
2		(tcv_CN_Domain := ps_domain, tcv_RAB_Id := tsc_RAB_DefPS)			
3		[p_CellToBeCreated = cell_FACH]			1.
4		(tcv_RRC_RAB_Type := cell_FACH_PS)			
5		+ lt_RRC_InitServVarPS			
6		[p_CellToBeCreated = cell_DCH]			
7		(tcv_RRC_RAB_Type := cell_DCH_64kPS_RAB_SRB)			
8		+ lt_RRC_InitServVarPS			
		lt_RRC_InitServVarPS			
9		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
10		(tcv_RRC_PagingCau := terminatingInteractiveCall, tcv_RRC_EstCauMO := originatingInteractiveCall, tcv_RRC_EstCauMT := terminatingInteractiveCall)			
11		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
12		(tcv_RRC_PagingCau := terminatingBackgroundCall, tcv_RRC_EstCauMO := originatingBackgroundCall, tcv_RRC_EstCauMT := terminatingBackgroundCall)			
13	ERR1	[TRUE]		I	Parameter error

Detailed Comments : 1. In the ps_domain with a cell_FACH configuration, the RAB configuration to be used is cell_FACH_PS

Test Step Dynamic Behaviour

Test Step Name : ts_SaveCellInfo (p_CellId : INTEGER)
Group : BasicM_General_Steps/
Objective : To save in the variable dedicated to the cell p_CellID, the value contained in tcv_TmpCellInfo.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_CellInfoA := tcv_TmpCellInfo)			
3		[p_CellId = tsc_CellB]			
4		(tcv_CellInfoB:= tcv_TmpCellInfo)			
5		[p_CellId = tsc_CellC]			
6		(tcv_CellInfoC:= tcv_TmpCellInfo)			
7		[p_CellId = tsc_CellD]			
8		(tcv_CellInfoD:= tcv_TmpCellInfo)			
9		[p_CellId = tsc_CellE]			
10		(tcv_CellInfoE := tcv_TmpCellInfo)			
11		[p_CellId = tsc_CellF]			
12		(tcv_CellInfoF := tcv_TmpCellInfo)			
13		[p_CellId = tsc_CellG]			
14		(tcv_CellInfoG := tcv_TmpCellInfo)			
15		[p_CellId = tsc_CellH]			
16		(tcv_CellInfoH := tcv_TmpCellInfo)			
17		[TRUE]		I	programming error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SetAttenuationLevel (p_CellId: INTEGER; p_Attenuation : INTEGER)
Group : BasicM_General_Steps/
Objective : Set attenuation level and also update SSCellInfo of the corresponding cell.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_CellInfoA.attenuationLevel := p_Attenuation)			
3		+lt_SetAttLev			
4		[p_CellId = tsc_CellB]			
5		(tcv_CellInfoB.attenuationLevel := p_Attenuation)			
6		+lt_SetAttLev			
7		[p_CellId = tsc_CellC]			
8		(tcv_CellInfoC.attenuationLevel := p_Attenuation)			
9		+lt_SetAttLev			
10		[p_CellId = tsc_CellD]			
11		(tcv_CellInfoD.attenuationLevel := p_Attenuation)			
12		+lt_SetAttLev			
13		[p_CellId = tsc_CellE]			
14		(tcv_CellInfoE.attenuationLevel := p_Attenuation)			
15		+lt_SetAttLev			
16		[p_CellId = tsc_CellF]			
17		(tcv_CellInfoF.attenuationLevel := p_Attenuation)			
18		+lt_SetAttLev			
19		[p_CellId = tsc_CellG]			
20		(tcv_CellInfoG.attenuationLevel := p_Attenuation)			
21		+lt_SetAttLev			
22		[p_CellId = tsc_CellH]			
23		(tcv_CellInfoH.attenuationLevel := p_Attenuation)			
24		+lt_SetAttLev			
25	ERR	[TRUE] lt_SetAttLev		I	Fatal error
26		CPHY!CPHY_Cell_TxPower_Modify_REQ	ca_CellTxPowerModiReq(p_CellId, p_Attenuation)		
27		CPHY?CPHY_Cell_TxPower_Modify_CNF	ca_CellTxPowerModiCnf(p_CellId)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SetCellCfg (p_CellId : INTEGER ; p_CellConfig : RB_ConfigType)
Group : BasicM_General_Steps/
Objective : To assign the field cellConfig of the cell given as parameter to the value 'p_CellConfig'.
(tcv_CellInfo[p_CellId] := p_CellConfig)
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_TmpCellInfo.cellConfig := p_CellConfig)			
3		+ ts_SaveCellInfo (p_CellId)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SetTmpCellInfo (p_CellId : INTEGER)
Group : BasicM_General_Steps/
Objective : To Set global variable tcv_TmpCellInfo to the table corresponding to given cell
Default : SS_Def
Comments : This Step helps the programmer when he/she needs to access cell information in a generic test Step.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CellA]			
2		(tcv_TmpCellInfo := tcv_CellInfoA)			
3		[p_CellId = tsc_CellB]			
4		(tcv_TmpCellInfo := tcv_CellInfoB)			
5		[p_CellId = tsc_CellC]			
6		(tcv_TmpCellInfo := tcv_CellInfoC)			
7		[p_CellId = tsc_CellD]			
8		(tcv_TmpCellInfo := tcv_CellInfoD)			
9		[p_CellId = tsc_CellE]			
10		(tcv_TmpCellInfo := tcv_CellInfoE)			
11		[p_CellId = tsc_CellF]			
12		(tcv_TmpCellInfo := tcv_CellInfoF)			
13		[p_CellId = tsc_CellG]			
14		(tcv_TmpCellInfo := tcv_CellInfoG)			
15		[p_CellId = tsc_CellH]			
16		(tcv_TmpCellInfo := tcv_CellInfoH)			
17	ERR	[TRUE]		I	Fatal error

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_Authentication (p_CellId : INTEGER)
Group : BasicM_MM_GMM_Steps/
Objective : Generate authentication paramters and run the GMM Authentication procedure
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Compute all relevant authentication parameters.
2		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated , tsc_RB3, cs_AuthAndCiphReq (c_GMM_AuthRAND(tcv_AuthRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), c_GMM_AuthAUTN(tcv_AuthAUTN)))		AUTHENTICATION AND CIPHERING REQUEST using relevant PS keys computed before.
3		Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv,c_AuthCiphRspExtAny))		AUTHENTICATION AND CIPHERING RESPONSE including both Authentication Response paramters (RES and RES ext)
4		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authentication Response paramters match expected response.
5	TSF1	[tcv_Res = FALSE]		(F)	

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
6	TSP1	[tcv_Res = TRUE]		(P)	
7		Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv, −))		AUTHENTICATION AND CIPHERING RESPONSE including only one Authentication Response paramters (RES)
8		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, −, tcv_AuthK, tcv_AuthRAND, FALSE))			Verify that the received Authentication Response paramters match expected response.
9	TSF2	[tcv_Res = FALSE]		(F)	
10	TSP2	[tcv_Res = TRUE]		(P)	
11		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphFailureAny)	I	AUTHENTICATION AND CIPHERING Failure, then stop execution by assigning INCONCLUSIVE verdict as this might be a USIM issue. @sic R5s050146 sic@

Detailed Comments : See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of authentication paramters for Test USIM)

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Test Step Dynamic Behaviour	
Detailed Comments :	... See also the detailed description in test Step ts_MM_Authentication, on which this test Step is based.

Test Step Dynamic Behaviour

Test Step Name : ts_GMM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/
Objective : Computation of variables related to the Authentication and Key Agreement procedure for PS domain
Default : NAS_OtherwiseFail
Comments : Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			
2		+lt_AuthCalcAUTN			1. Calculation of AUTN needed for Authentication Request
3		+lt_AuthCalcUMTS_Others			2. Calculation of other authentication information needed (IK, CK, XRES)
4		+lt_AuthCalcKcGSM			3. Calculation of Kc GSM, using IK and CK
		lt_IncrementCiphKeySeqNum			
5		[tcv_PS_KeySeq = '000'B]			
6		(tcv_PS_KeySeq := '001'B)			
7		[tcv_PS_KeySeq = '001'B]			
8		(tcv_PS_KeySeq := '010'B)			
9		[tcv_PS_KeySeq = '010'B]			
10		(tcv_PS_KeySeq := '011'B)			
11		[tcv_PS_KeySeq = '011'B]			
12		(tcv_PS_KeySeq := '100'B)			
13		[tcv_PS_KeySeq = '100'B]			
14		(tcv_PS_KeySeq := '101'B)			
15		[tcv_PS_KeySeq = '101'B]			
16		(tcv_PS_KeySeq := '110'B)			
17		[TRUE]			
18		(tcv_PS_KeySeq := '000'B)			
		lt_AuthCalcAUTN			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		(tcv_AuthXDOUT := o_BitstringXOR(tcv_AuthRAND, tcv_AuthK, 128))			XDOUT := RAND XOR K
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN || AMF
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24
23		(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))			AUTN1 := SQN XOR AK
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT
25		(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))			AUTN2 := AMF || MAC
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80))			AUTN := AUTN1 || AUTN2
		lt_AuthCalcUMTS_Others			
27		(tcv_PS_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrapping)

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
28		(tcv_PS_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrapping)
29		(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))			XRES := (n+1) bits of XDOUT starting from offset 0
		lt_AuthCalcKcGSM			
30		(tcv_AuthCK_1 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64
34		(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))			CK_XOR := CK1 XOR CK2
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XOR XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)
Detailed Comments : (see ts_MM_AuthenticationInit)					

Test Step Dynamic Behaviour

Test Step Name : ts_MM_Authentication (p_CellId: INTEGER)
Group : BasicM_MM_GMM_Steps/
Objective : Normal authentication
Default : NAS_OtherwiseFail
Comments : To be used after the synchronization of the authentication in both SS and UE has been achieved.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_AuthenticationInit			1.
2		Dc!RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, c_AuthReq (tcv_CS_KeySeq, tcv_AuthRAND, c_AUTN(tcv_AuthAUTN)))		Authentication Request
3		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp, tcv_AuthRspExt := tcv_AuthRspPDU.authRspExt)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyExt)		Authentication Response with extension
4		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			
5	TSF1	[tcv_Res = FALSE]		(F)	
6		[tcv_Res = TRUE]			
7		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyNoExt)		Authentication Response without extension
8		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, FALSE))			
9	TSF2	[tcv_Res = FALSE]		(F)	
10		[tcv_Res = TRUE]			
11	TSF3	Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthFailAny)	(F)	2.

Detailed Comments : Normal authentication to be used after the synchronization between SS and UE has been performed successfully.
1. Authentication request is sent by the network. Key Sequence and RAND as provided by the corresponding variables tcv_KeySeq and tcv_AuthRAND.
2. If the UE generates a response, this response may consist of 2 parts which have to be extracted from the received message.
3. The response is checked against an expected response calculated using a test suite operation.
4. If the comparison of expected and calculated response is not ok, then authentication fails.
5. Otherwise authentication is granted.
6. If the UE sends an Authentication Failure the authentication fails.
Steps:

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Test Step Dynamic Behaviour
Detailed Comments : ... 1. Initialization of the authentication variables (see 34.108 cl. 8.1.2) 2. Authentication Failure: should not happen because the synchronization has been done already

Test Step Dynamic Behaviour

Test Step Name : ts_MM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/
Objective : Initialization of variables related to authentication.
Default : NAS_OtherwiseFail
Comments : Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			
2		+lt_AuthCalcAUTN			1. Calculation of AUTN needed for Authentication Request
3		+lt_AuthCalcUMTS_Others			2. Calculation of other authentication information needed (IK, CK, XRES)
4		+lt_AuthCalcKcGSM			3. Calculation of Kc GSM, using IK and CK
		lt_IncrementCiphKeySeqNum			
5		[tcv_CS_KeySeq = '000'B]			
6		(tcv_CS_KeySeq := '001'B)			
7		[tcv_CS_KeySeq = '001'B]			
8		(tcv_CS_KeySeq := '010'B)			
9		[tcv_CS_KeySeq = '010'B]			
10		(tcv_CS_KeySeq := '011'B)			
11		[tcv_CS_KeySeq = '011'B]			
12		(tcv_CS_KeySeq := '100'B)			
13		[tcv_CS_KeySeq = '100'B]			
14		(tcv_CS_KeySeq := '101'B)			
15		[tcv_CS_KeySeq = '101'B]			
16		(tcv_CS_KeySeq := '110'B)			
17		[TRUE]			
18		(tcv_CS_KeySeq := '000'B)			
		lt_AuthCalcAUTN			
19		(tcv_AuthXDOUT := o_BitstringXOR(tcv_AuthRAND, tcv_AuthK, 128))			XDOUT := RAND XOR K

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN || AMF
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24
23		(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))			AUTN1 := SQN XOR AK
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT
25		(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))			AUTN2 := AMF || MAC
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80))			AUTN := AUTN1 || AUTN2
		lt_AuthCalcUMTS_Others			
27		(tcv_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrapping)

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
28		(tcv_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrapping)
29		(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))			XRES := (n+1) bits of XDOUT starting from offset 0
		lt_AuthCalcKcGSM			
30		(tcv_AuthCK_1 := o_BitstringXtract(tcv_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64
34		(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))			CK_XOR := CK1 XOR CK2
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XOR XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)
Detailed Comments : Initialization of the variables needed for authentication. The calculation is done according to the prescription of TS 34.108 cl. 8.1.2. and TS 33.102 cl. 6.8.1.2 The AUTN calculated is used as parameter of the Authentication Request. CK, IK and Kc GSM are used by RRC. XRES is used to check the RES contained in Authentication Response.					

Test Step Dynamic Behaviour

Test Step Name : ts_MM_PwrOrUSIM_Off (p_USIM_Rmvd : BOOLEAN)
Group : BasicM_MM_GMM_Steps/
Objective : Deactivation of the UE
Default : NAS_OtherwiseFail
Comments : Depending upon UE's properties (USIM removal, switching off or powering off)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv)]			SIM needs to be removed . @SICEW T1−...SIC@ @sic T1s040289 sic@
2		+ts_MMI_USIM_Remove			remove SIM card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOff			switch off the UE
5		[TRUE]			@sic T1s040289 sic@
6		+ts_MMI_UE_PwrOff			power off the UE

Detailed Comments : There are 2 types of deactivation required for testing:
1. USIM removal or switching off or removal of the power source
2. Switching off or removal of the power source
Parameter p_USIM_Rmvd controls the variant to be applied:
1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be removed if possible

Test Step Dynamic Behaviour

Test Step Name : ts_MM_PwrOrUSIM_On (p_USIM_Rmvd : BOOLEAN)
Group : BasicM_MM_GMM_Steps/
Objective : Activation of the UE
Default : NAS_OtherwiseFail
Comments : Depending upon the UE's properties (USIM insertion, switching on or powering on)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv)]			USIM has been removed
2		+ts_MMI_USIM_Insert			insert USIM card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOn			switch on the UE
5		[(((NOT p_USIM_Rmvd) OR (NOT pc_USIM_Rmv)) AND (NOT pc_SwitchOnOff))]			
6		+ts_MMI_UE_PwrOn			power on the UE

Detailed Comments : There are 2 types of activation required for testing:
1. USIM insertion or switching on or restoration of the power source
2. Switching on or restoration of the power source
Parameter p_USIM_Rmvd controls the variant to be applied:
1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be inserted if possible
This test Step is the counterpart to ts_MM_PwrOrUSIM_Off resp ts_MM_IMSI_Detach.

Test Step Dynamic Behaviour

Test Step Name : po_ConnectionAndSS_Rel (p_CellId : INTEGER)
Group : BasicM_Postambles/
Objective : To release the existing RRC connection and release the channels that are configured in the SS.
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
3		+ lt_Send_RRC_ConnectionRelease			
4		+ ts_SS_Rel (p_CellId)			
5		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured] lt_Send_RRC_ConnectionRelease		I	0.
6		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn)]			3. @sic T1s040622,624 & 626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		[TRUE]			4.
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)OR (tcv_TmpCellInfo.cellConfig=cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			1.@sic Draft 14.4.2.1 sic@ @sic t1s−040801 sic@
9		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT))		
10		AM?RLC_AM_DATA_IND	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
11		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			@sic T1040XXXDelayAfterRRCConRel sic@
12		[TRUE]			2.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		(tcv_N308 := 1, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
14		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
15		UM?RLC_UM_DATA_IND	car_RRC_ConnRelCmplUM(tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
16		REPEAT lt_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
		lt_RptRcvConnRel			
17		START t_Dly			
18	TSF2	? TIMEOUT t_Dly		(F)	
19		(tcv_K := tcv_N308 + 1)			To stop the loop
20	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	Retransmission

Detailed Comments : 0. The cell has not been configured, it shall not be released
1. cell_FACH state
2. cell_DCH state
3. No RRC connection is established
4. An RRC connection is established

Test Step Dynamic Behaviour

Test Step Name : po_ConnectionAndSS_Rels

Group : BasicM_Postambles/

Objective : To release the existing RRC connection and release the channels that are configured in the SS for all cells.

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ lt_ReleaseCell (tsc_CellA)			
2		+ lt_ReleaseCell (tsc_CellB)			
3		+ lt_ReleaseCell (tsc_CellC)			
4		+ lt_ReleaseCell (tsc_CellD)			
5		+ lt_ReleaseCell (tsc_CellE)			
6		+ lt_ReleaseCell (tsc_CellF)			
7		+ lt_ReleaseCell (tsc_CellG)			
8		+ lt_ReleaseCell (tsc_CellH)			
		lt_ReleaseCell (p_CellId : INTEGER)			
9		+ ts_SetTmpCellInfo (p_CellId)			
10		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			1.
11		+ po_ConnectionAndSS_Rel (p_CellId)			
12		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			2.

Detailed Comments : 1. The cell has been configured, then it shall be released
2. The cell has not been configured

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnEst (
p_CellId : INTEGER;
p_MO_Reg : RegOr_MO;
p_EstCause : EstablishmentCause
)

Group : BasicM_RRC_Steps/

Objective : The generic Step to establish RRC Connection and bring UE to CELL_FACH or CELL_DCH state.

Default : RRC_DefConnEst

Comments : In this Step , 5 Signalling Radio Bearers with 3.4kbps DL & UL is setup (RB#0, 1, 2, 3,4)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+lt_RcvConnReq			
4		+lt_Send_ConnSetUp			
5		+ ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
		lt_RcvConnReq			
6		[p_MO_Reg = est_Reg]			
7		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (registration))		
8		[(p_MO_Reg = est_MO) OR (p_MO_Reg = est_MT)]			
9		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (p_EstCause))		
		lt_Send_ConnSetUp			
10		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_N			@sic T1s040622,624,626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		oConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_N oConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn)]			
11		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetupF ACH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCo de , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo. cRNTI, tcv_TmpCellInfo.uL_Scrambl ingCode))		
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn]			
13		+ ts_SetCellCfg (p_CellId, cell_FACH)			1.
14		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn]			
15		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC)			1.
16		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn]			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH)			1.
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn]			
19		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH)			1.
20		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoC onn]			
21		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH)			
22		[tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn]			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_MAC_SRB)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn]			
25		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn]			
27		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2)			
28		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn]			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH)			@sic T1s040622 sic@
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn]			@sic T1s040622 sic@
31		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a)			@sic T1s040624sic@
32		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn]			@sic T1s040624sic@
33		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)			@sic T1s040624sic@
34		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn]			@sic T1s040624sic@
35		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)			@sic T1s040624sic@
36		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn]			@sic T1s040626sic@
37		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)			@sic T1s040626sic@
38		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
39		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetupDCH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_ScramblingCode))		
40		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
41		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			
42		[tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn]			
43		+ ts_SetCellCfg (p_CellId, cell_DCH_MAC_SRB)			
44	ERR	[TRUE]		I	2.
Detailed Comments : 1. Update the cell configuration 2. A RRC connection has already been established.					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnRel (
p_CellId: INTEGER;
p_RRC_RelStatus : RRC_Rel_Status
)

Group : BasicM_RRC_Steps/

Objective : To bring the UE from state CELL_DCH/ CELL_FACH to idle state by releasing the RRC connection

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ lt_Send_RRC_ConnectionRelease			
4		+ lt_RestartCRLC_ForNextConnection			
5		+ ts_SS_ResetSecurityKey lt_RestartCRLC_ForNextConnection			
6		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB]			
7		+ ts_CRLC_RelReconfSRB (p_CellId)			
8		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
9		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
10		+ ts_CRLC_RelReconfSRB (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC]			
13		+ ts_CRLC_RelReconfSRB (p_CellId)			
14		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC_NoConn)			
15		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH]			
16		+ ts_CRLC_RelReconfSRB (p_CellId)			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH_NoConn)			
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH]			
19		+ ts_CRLC_RelReconfSRB (p_CellId)			
20		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH_NoConn)			
21		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
22		+ ts_CRLC_RelReconfSRB (p_CellId)			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_NoConn)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1]			
25		+ ts_CRLC_RelReconfSRB (p_CellId)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn)			
27		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2]			
28		+ ts_CRLC_RelReconfSRB (p_CellId)			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn)			
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH]			
31		+ ts_CRLC_RelReconfSRB (p_CellId)			
32		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)			
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			@sic T1s040622 sic@
34		+ ts_CRLC_RelReconfSRB (p_CellId)			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)			
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)]			@sic T1s040624 sic@
37		+ ts_CRLC_RelReconfSRB (p_CellId)			
38		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn)			
39		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			@sic T1s040624 sic@
40		+ ts_CRLC_RelReconfSRB (p_CellId)			
41		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn)			
42		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			@sic T1s040626 sic@
43		+ ts_CRLC_RelReconfSRB (p_CellId)			
44		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
45		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			@sic T1s040468 sic@
46		+ ts_SS_ReconfigRAB_ToSRB (p_CellId)			
47		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB_NoConn)			
48	ERR1	[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn)]		I	1.
49	ERR2	[TRUE]		I	
		lt_Send_RRC_ConnectionRelease			
50		[p_RRC_RelStatus= cell_Dch]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
51		(tcv_N308 := 1, tcv_K := 1)			Maximum number of retransmissions of the RRC CONNECTION RELEASE COMPLETE message
52		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH(tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, tcv_N308))		
53	TSP1	UM ? RLC_UM_DATA_IND	car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	
54		REPEAT lt_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connection Release Complete for N308 times
55		[p_RRC_RelStatus = cell_Fach_Dcch]			
56		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCCH (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, OMIT))		
57	TSP2	AM ? RLC_AM_DATA_IND	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
58		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			@sic T1s040XXXDelayAfterRRCConnRel sic@
59		[p_RRC_RelStatus = cell_Fach_Ccch]			
60		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0, cs_108_RRC_ConnRelCCCH (c_U_RNTI, tcv_RRC_Ti))		
61		[TRUE] lt_RptRcvConnRel		I	Programming error
62		START t_Dly			
63	TSF2	? TIMEOUT t_Dly		(F)	
64		(tcv_K := tcv_N308 + 1)			To stop the loop
65	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1, cbr_108_RRC_ConnRelCmpl (tcv_RRC_Ti))	(P)	Retransmission
Detailed Comments : 1. No RRC connection is established					

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ReceiveConnSetupCmpl (p_CellId : INTEGER)

Group : BasicM_RRC_Steps/

Objective : To receive RRC CONNECTION SETUP COMPLETE message and download SS security keys according to the received information element.

Default : RRC_DefConnEst,RRC_Def1

Comments : @sic T1−031944 sic@sic ER1814 sic@

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS)]			
3		START t_WaitMS			
4	TSF1	? TIMEOUT t_WaitMS		(F)	
5	TSP1	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.rrcConnectionSetupComplete.startList, tcv_CellIndInfo.cipheringAlgorithmCapability := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.rrcConnectionSetupComplete.ue_RadioAccessCapability.securityCapability.cipheringAlgorithmCap) CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl (tcv_RRC_Ti, ?))	(P)	UE capability ie is present in a DCH comfiguration
6		+ lt_GetHFN			
7		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR			@sic Draft 14.4.2.1 sic@ @sic T1s040622,624 & 626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
8		START t_WaitMS			
9	TSF2	? TIMEOUT t_WaitMS		(F)	
10	TSP2	AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.rrcConnectionSetupComplete.startList) CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl (tcv_RRC_Ti, ?))	(P)	UE capability ie is not present in a FACH configuration
11		+ lt_GetHFN			
12		[TRUE]		I	
		lt_GetHFN			
13		(tcv_Count := NUMBER_OF_ELEMENTS (tcv_StartList))			
14		[tcv_Count = 1]			
15		+ lt_FirstValue			
16		[tcv_Count = 2]			
17		+ lt_FirstValue			
18		+ lt_SecondValue			
19	ERR1	[TRUE]		F	
		lt_FirstValue			
20		[tcv_StartList.[0].cn_DomainIdentity = tsc_CS_Domain]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		(tcv_CellIndInfo.start_CS := tcv_StartList.[0].start_Value)			
22		[tcv_StartList.[0].cn_DomainIdentity = tsc_PS_Domain]			
23		(tcv_CellIndInfo.start_PS := tcv_StartList.[0].start_Value)			
24	ERR2	[TRUE]		F	
		lt_SecondValue			
25		[tcv_StartList.[1].cn_DomainIdentity = tsc_CS_Domain]			
26		(tcv_CellIndInfo.start_CS := tcv_StartList.[1].start_Value)			
27		[tcv_StartList.[1].cn_DomainIdentity = tsc_PS_Domain]			
28		(tcv_CellIndInfo.start_PS := tcv_StartList.[1].start_Value)			
29	ERR3	[TRUE]		F	
Detailed Comments : 1. Download the START value to SS					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_GetRLC_SeqNumSecurity (p_CellId : INTEGER)

Group : BasicM_Security_Steps/

Objective : To assign the variables to the current RLC sequnce number of its corresponding SRB and RAB if configured.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
3		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB1 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
4		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
5		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB2 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
6		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
7		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB3 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
8		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
9		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB4 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
10		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR ((tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)) OR ((tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH			@sic T1s040622 and 626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH _2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlon ePCH_2a)) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
11		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
12		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
13		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB)AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
14		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
15		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
17		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
18		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
19		CRLC ! CRLC_SequenceNumber_RE Q	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB22)		
20		CRLC ? CRLC_SequenceNumber_C NF (tcv_RLC_SeqNumDL_RB22 := CRLC_SequenceNumber_C NF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB22)		
21		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
23		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
24		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
25		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_CNF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
26		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_InitSystemSpecificCap
Group : BasicM_Security_Steps/
Objective : If UE supports GSM, this step initialises tcv_UE_SystemSpecificCap based on PICS
Default : RRC_Def1
Comments : @sic RASH T1−031470 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_UMTS_GSM]			IF GSM is supported
2		(tcv_UE_SystemSpecificCap := 0)			
3		+lt_A57			
4		+lt_A56			
5		+lt_A55			
6		+lt_A54			
7		+lt_A53			
8		+lt_A52			
9		+lt_A51			
10		[TRUE]			IF GSM not Supported
11		(tcv_UE_SystemSpecificCap := 0) lt_A57			
12		[pc_MS_ClsmkA5_7='1'B]			A5_7 Supported
13		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+64)			
14		[TRUE] lt_A56			
15		[pc_MS_ClsmkA5_6='1'B]			A5_6 Supported
16		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+32)			
17		[TRUE] lt_A55			
18		[pc_MS_ClsmkA5_5='1'B]			A5_5 Supported
19		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+16)			
20		[TRUE] lt_A54			
21		[pc_MS_ClsmkA5_4='1'B]			A5_4 Supported
22		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+8)			
23		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_A53			
24		[pc_MS_ClsmkA5_3='1'B]			A5_3 Supported
25		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+4)			
26		[TRUE]			
		lt_A52			
27		[pc_MS_ClsmkA5_2='1'B]			A5_2 Supported
28		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+2)			
29		[TRUE]			
		lt_A51			
30		[pc_MS_ClsmkA5_1='0'B]			A5_1 Supported
31		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+1)			
32		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	**:**	ts_CMAC_DL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER; p_IncrDcr : Increment_Mode)			
Group	**:**	BasicM_Security_Steps/			
Objective	**:**	Configure ciphering on the MAC layer for DL RBs. This step shal be called when required.			
Default	**:**	SS_Def			
Comments	**:**				
Description	**:**				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMAC_DL_CipherActReq (tsc_CellDedicated, tsc_DL_DPCH1, p_CipherMode, p_ActTime, p_IncrDcr)		start, restart or stop ciphering for TM RB
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMAC_CipherActCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_UL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER; p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective : Configure ciphering on the MAC layer for UL RBs.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMAC_UL_CipherActReq (tsc_CellDedicated, tsc_UL_DPCH1, p_CipherMode, p_ActTime , p_IncrDcr)		start, restart or stop ciphering
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMAC_CipherActCnf (tsc_CellDedicated, tsc_UL_DPCH1)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_DL_CipherCfgRB (p_CipherMode: CipheringModeCommand; p_RbType : RB_ConfigType ;p_IncMode : RLC_IncMode)

Group : BasicM_Security_Steps/

Objective : Configure ciphering for RLC layer for configured AM/UM RAB's

Default : SS_Def

Comments : CRLC is configured with cellId −1 (tsc_CellDedicated) @sic RASH ER1905 sic@

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_RbType = cell_DCH_64kPS_RAB_SRB) OR (p_RbType = cell_FACH_PS) OR (p_RbType = cell_Two_DTCH_CS_PS) OR (p_RbType = cell_Four_DTCH_CS_PS) OR (p_RbType = cell_PDCP_AM_RAB)OR (p_RbType = cell_PDCP_UM_RAB)OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (p_RbType = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (p_RbType = cell_DCH_DSCH_PS) OR (p_RbType = cell_DCH_DSCH_CS_PS) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH)]			@sic New RAB config sic@
2		+ lt_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
3		[(p_RbType = cell_PDCP_UM_RAB)]			
4		+ lt_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
5		[(p_RbType = cell_PDCP_AM_UM_RAB)]			@sic New RAB config sic@ @sic T1s0406 24 sic@
6		+ lt_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
7		+ lt_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
8		[(p_RbType = cell_DCH_2AM_PS) OR (p_RbType = cell_DCH_2_PS_Call)]			
9		+ lt_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
10		+ lt_RLC_Activate (tsc_RB22, tcv_RLC_SeqNumDL_RB22)			
11		[(p_RbType = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			@sic New RAB config sic@ @sic T1s0406 24 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
12		+ lt_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
13		+ lt_RLC_Activate (tsc_RB24, tcv_RLC_SeqNumDL_RB24)			
14		[TRUE] lt_RLC_Activate (p_rbId : INTEGER ; p_SeqNum : RLC_SequenceNumber)			
15		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated , ps_domain , p_rbId , p_CipherMode, p_SeqNum , p_IncMode)		configure ciphering for signaling radio bearers @sic T1−031732 sic@ @sic R5s050236 sic@
16		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_DL_CipherCfgSRB (p_CipherMode: CipheringModeCommand;p_IncMode : RLC_IncMode)

Group : BasicM_Security_Steps/

Objective : Configure ciphering for RLC layer for RB1, RB2, RB3 and RB4

Default : SS_Def

Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ lt_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1)			@sic RASH Er1433 sic@
2		+ lt_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2+2)			
3		+ lt_RLC_Activate (tsc_RB3 , tcv_RLC_SeqNumDL_RB3)			@sic RASH Er1433 sic@
4		+ lt_RLC_Activate (tsc_RB4 , tcv_RLC_SeqNumDL_RB4) lt_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber)			@sic RASH Er1433 sic@
5		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActReq (tsc_CellDedicated ,tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq,p_IncMode)		configure ciphering for signaling radio bearers @sic T1−01732 sic@
6		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_DL_Integrity (p_IntegrityProtectionModeInfo : IntegrityProtectionModeInfo)
Group : BasicM_Security_Steps/
Objective : To start the integrity protection
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_DL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_IntegrityProtectionModeInfo)		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_UL_CipherCfg (p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList ;p_IncMode : RLC_IncMode)
Group : BasicM_Security_Steps/
Objective : Configure ciphering for RLC layer
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_UL_CipherActReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_RB_ActivationTimeInfoList ,p_IncMode)		configure cipherin g for signaling radio bearers @sic T1−031 732 sic@
2		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_UL_Integrity (p_IntegrityProtActivationInfo : IntegrityProtActivationInfo)
Group : BasicM_Security_Steps/
Objective : To start the integrity protection
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, c_RestRB_IntegrityProtActivationInfoList(p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[0], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[1], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[3], p_IntegrityProtActivationInfo.rrc_MessageSequenceNumberList.[4]))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Security (
p_CellId : INTEGER;
p_KC : KeyCiphering;
p_IK : IntegrityKey;
p_GSM_ck : GSM_CipheringKey;
p_NewKey : BOOLEAN;
p_CN_Domain : CN_DomainIdentity)

Group : BasicM_Security_Steps/

Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ lt_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId, p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ lt_ActivateSecurity_DL_SS			To Start Integrity on the UL RB2
5		+lt_RB2_UL_IntegrityActivate			
6		+ lt_StartSecurity_UE			
7		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain = ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain = cs_domain))]			
8		+ ts_CRLC_ResumeSecurity (p_CellId)			
9		[TRUE]			
		lt_RB2_UL_IntegrityActivate			
10		[tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
11		+ ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_RB2_UL)			
12		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
13		+ ts_RB2_UL_IntegrityActivate(0)			
		lt_ActivateSecurity_DL_SS			
14		+ lt_InitialiseRRC_MSN			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		+ ts_CRLC_DL_Integrity (tcv_CellIndInfo.dL_Integrity)			
16		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain))]			
17		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
18		+ lt_AssignRB_ActivationTimeInfoList			
19		+ ts_CRLC_SuspendSecurity (p_CellId)			Suspend SRBs 1, 3 and 4
20		+ ts_CRLC_DL_CipherCfgSRB (tcv_CellIndInfo.dL_CipherMode,notInc)			Configure ciphering for RLC (RBs 1, 2, 3 and 4)@sic T1−01732 sic@
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			@sic T1−01732 sic@
22		+ ts_CMAC_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[TRUE]			If no New Ciphering config
		lt_InitialiseRRC_MSN			
24		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_MSN to 0, else skipt it.
25		+ ts_SetDL_RRC_MessageSN (p_CellId)			
26		[tcv_Int_ModifyFlag]			
		lt_StartSecurity_UE			
27		+ lt_SendSecurityModeCommand			
28		[px_CipheringOnOff]			Ciphering and Integrity

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
29	TSP1	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.ul_IntegProtActivationInfo, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.rb_UL_CiphActivationTimeInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , ?))	(P)	UL ciphering information is present
30		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode ,notInc)			@sic T1−01732 sic@
31		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)			
32	TSF1	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti, ?))	(F)	
33		[NOT (px_CipheringOnOff)]			Integrity only no ciphering
34	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.securityModeComplete.ul_IntegProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCmpl (tcv_RRC_Ti , OMIT))	(P)	No UL Ciphering information
35		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)			
36	TSF2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti, ?))	(F)	
		lt_SendSecurityModeCommand			
37		[pc_UMTS_GSM]			@sic RASH T1−031470 sic@ Branching if GSM Supported
38		[px_CipheringOnOff]			Ciphering ON and integrity ON

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
39		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)]			Ciphering on TM RAB present, hence include Ciphering activation time
40		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Ciphering for signalling RBs 1 to 4 @sic RASH T1−031 470 sic@
41		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
42		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Ciphering for signalling RBs 1 to 4 @sic RASH T1−031470 sic@
43		[NOT (px_CipheringOnOff)]			Integrity ON and ciphering OFF
44		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		@sic RASH T1−031470 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
45		[NOT pc_UMTS_GSM]			@sic RASH T1−031 470 all this tree sic@ Branching if GSM Not Supported
46		[px_CipheringOnOff]			Ciphering ON and integrity ON
47		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =cs_domain)]			Ciphering on TM RAB present, hence include Ciphering activation time
48		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT		Ciphering for signalling RBs 1 to 4

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
			)))		
49		[TRUE]			
50		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdCiphInt (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherMode, tcv_RB_ActivationTimeInfoList , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT)))		Ciphering for signalling RBs 1 to 4
51		[NOT (px_CipheringOnOff)]			Integrity ON and ciphering OFF
52		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_IntegrityCheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlgorithmCapability,OMIT)))		
		lt_RRC_InitVariables			
53		+ lt_InitCipherMode			
54		+ lt_InitIntegrity			
55		+ ts_InitSystemSpecificCap			@sic RASH T1−031 470 sic@
56		+ ts_SaveCellInfo (p_CellId)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
57		[p_NewKey = TRUE]			Authentication was done, reset HFN
58		(tcv_HFN := '00000000000000000000'B)			
59		[p_CN_Domain = cs_domain]			
60		(tcv_CellIndInfo.start_CS := '00000000000000000000'B)			
61		[p_CN_Domain = ps_domain]			
62		(tcv_CellIndInfo.start_PS := '00000000000000000000'B)			
63		[p_NewKey = FALSE]			
64		[p_CN_Domain = cs_domain]			
65		(tcv_HFN := tcv_CellIndInfo.start_CS)			
66		[p_CN_Domain = ps_domain]			
67		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		lt_InitCipherMode			
68		[px_CipheringOnOff = TRUE]			
69		[pc_UEA1_Supp]			
70		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			Swithch On ciphering
71		[p_CN_Domain = cs_domain]			
72		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
73		[p_CN_Domain = ps_domain]			
74		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
75		[NOT (pc_UEA1_Supp)]			
76		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			Swithch On ciphering
77		[p_CN_Domain = cs_domain]			
78		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
79		[p_CN_Domain = ps_domain]			
80		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
81		[NOT (px_CipheringOnOff)]			
82		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			
83		[pc_UEA1_Supp]			
84		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
85		[NOT (pc_UEA1_Supp)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
86		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
		lt_InitIntegrity			
87		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
88		[tcv_CellIndInfo.integrityStarted]			
89		+ts_GetRRC_MessageSN (p_CellId)			
90		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_P(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3, tcv_RRC_MSN_RB4) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
91		[NOT tcv_CellIndInfo.integrityStarted]			
92		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
		lt_AssignRB_ActivationTimeInfoList			
93		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (p_CN_Domain = ps_domain)]			@sic T1s−040697 sic@
94		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20))			
95		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (p_CN_Domain = ps_domain)]			
96		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB21))			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
97		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) AND (p_CN_Domain = ps_domain)]			
98		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB21))			
99		[((tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call))AND (p_CN_Domain = ps_domain)]			
100		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_22 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB22))			
101		[TRUE]			
102		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2 +2, tcv_RLC_SeqNumDL_RB3 , tcv_RLC_SeqNumDL_RB4))			
Detailed Comments : 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_ResetSecurityKey					
Group : BasicM_Security_Steps/					
Objective : To download all security keys to CMAC (for DCH cell configurations only) and CRLC.					
Default : SS_Def					
Comments :					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		(tcv_CellIndInfo:=c_CellIndInfoDef)			
2		[pc_UEA1_Supp]			
3		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
4		[NOT (pc_UEA1_Supp)]			
5		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000001'B)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_DownloadSecurityKey (p_CellId : INTEGER; p_KC : KeyCiphering; p_IK : IntegrityKey;p_GSM_ck : GSM_CipheringKey; p_CN_Domain : CN_DomainIdentity)

Group : BasicM_Security_Steps/

Objective : To download all security keys to CMAC (for DCH cell configurations only) and CRLC.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_CipheringOnOff]			
3		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR			Cell FACH @sic T1s040622,624 & 626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
4		+ lt_DownloadKeyCRLC (tcv_HFN, p_KC, p_IK)			
5		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]			Cell DCH no TM RAB @sic T1s040688 sic@
6		+ lt_DownloadKeyCRLC (tcv_HFN, p_KC,p_IK)			
7		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			cell DCH with TM RAB @sic T1s−040677 sic@ @sic R5s050086 sic@
8		+ lt_DownloadKeyCRLC (tcv_HFN,p_KC,p_IK)			
9		+ lt_DownloadKeyCMAC (tcv_HFN, p_KC)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
10		[TRUE]			
11		[NOT px_CipheringOnOff]			
12		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			Cell FACH @sic ER1926 sic@ @sic T1s040622,624 & 626 sic@
13		+ lt_DownloadKeyCRLC (tcv_HFN,OMIT,p_IK)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]			Cell DCH no TM RAB @sic ER1926 T1s040688 sic@
15		+ lt_DownloadKeyCRLC (tcv_HFN ,OMIT, p_IK)			
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			cell DCH with TM RAB
17		+ lt_DownloadKeyCRLC (tcv_HFN,OMIT, p_IK)			
18		[TRUE] lt_DownloadKeyCMAC (p_HFN : B20; p_KC_LT : KeyCiphering)			@sic RASH T1−031723 sic@
19		CMAC ! CMAC_SecurityMode_Config_REQ	ca_CMAC_SecurityModeCfgReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, OMIT, OMIT)		Download security keys for MAC
20		CMAC ? CMAC_SecurityMode_Config_CNF lt_DownloadKeyCRLC (p_HFN : B20; p_KC_LT : KeyCiphering; p_IK_LT : IntegrityKey)	ca_CMAC_SecurityModeCfgCnf (tsc_CellDedicated)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		CRLC ! CRLC_SecurityMode_Config_REQ	ca_CRLC_SecurityModeCfgReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, p_IK_LT, OMIT)		Download security keys for RLC. CRLC is configured with cellId −1 (tsc_CellDedicated)
22		CRLC ? CRLC_SecurityMode_Config_CNF	ca_CRLC_SecurityModeCfgCnf (tsc_CellDedicated)		
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	**:**	ts_SS_SecurityDownloadStart (p_domain : CN_DomainIdentity ; p_StartValue : B20)			
Group	**:**	BasicM_Security_Steps/			
Objective	**:**	To download a new START value In the cell Independent Record			
Default	**:**	SS_Def			
Comments	**:**				
Description	**:**				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		[p_domain = cs_domain]			
2		(tcv_CellIndInfo.start_CS := p_StartValue)			
3		[p_domain = ps_domain]			
4		(tcv_CellIndInfo.start_PS := p_StartValue)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SetDL_RRC_MessageSN (p_ActCell : INTEGER)
Group : BasicM_Security_Steps/
Objective : To Set the Message sequence number in DL to all 0 for RB0 to RB4
Default : SS_Def
Comments : This step to be used when Integrity is to be started
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ (p_ActCell, tsc_RB0, 0)		
2		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (p_ActCell, tsc_RB0)		
3		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB1, 0)		
4		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB2, 0)		
6		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB3, 0)		
8		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB3)		
9		CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MSN_REQ(tsc_CellDedicated, tsc_RB4, 0)		
10		CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_CNF (tsc_CellDedicated, tsc_RB4)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RB2_UL_IntegrityActivate(p_RRCSN : RRC_MessageSequenceNumber)
Group : BasicM_Security_Steps/
Objective :
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActivateReq (tsc_CellDedicated , tcv_CellIndInfo.recentSecureDomain, c_RB2_IntegrityProtActivationInfoList(p_RRCSN))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivateCnf (tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_CipherCfg (p_CellId : INTEGER;p_CalcNewActTime : BOOLEAN; p_CipherMode: CipheringModeCommand; p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective : To Configuare the MAC Layer with the

Default :

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			@sic Anite Commen t sic@
2		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain)]			@sic Antie Commen t sic@ @sic New RAB sic@
3		+lt_CalcActivationTime			
4		+ts_CMAC_DL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)			
5		+ts_CMAC_UL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)			
6		[TRUE]		(P)	No TM RAB configur ed
		lt_CalcActivationTime			
7		[p_CalcNewActTime = TRUE]			
8		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
9		CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber)	car_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
10		(tcv_CipherActTime := (256 + tcv_FrameNumber− (tcv_FrameNumber MOD 8 +8)) MOD 256)			Calculate the Cipherin g Activatio n Time
11		[p_CalcNewActTime = FALSE]			

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Test Step Dynamic Behaviour
Detailed Comments :

Test Step Dynamic Behaviour					
Test Step Name : ts_GetRRC_MessageSN(p_CellId : INTEGER)					
Group : BasicM_Security_Steps/					
Objective : To Calculate the Message sequence numbers for RB0 to RB4 and store in TCV's.					
Default :					
Comments :					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB0)		
2		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB0 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB0)		
3		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB1)		
4		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB1 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB2)		
6		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB2 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL, tcv_RRC_MSN_RB2_UL := CRLC_RRC_MessageSN_CNF.count_I_LSB_UL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB3)		
8		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB3 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB3)		
9		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageSN_REQ (tsc_CellDedicated, tsc_RB4)		
10		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB4 := CRLC_RRC_MessageSN_CNF.count_I_LSB_DL)	car_CRLC_RRC_MessageSN_CNF (tsc_CellDedicated, tsc_RB4)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_Rel (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Config_REQ	cas_MAC_Rel (p_CellId , p_PhyCH)		
2		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId , p_PhyCH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CPHY_ActTime (p_CellId: INTEGER; p_PhysicalChannelIdentity : PhysicalChannelIdentity; p_ttiValue : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To calculate the activation time based on CHY frame number
Default : SS_Def
Comments : p_ttiValue : is equal to tti/10

The following tcv are assigned: tcv_FrameNumber, tcv_ActTime
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
2		CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber)	car_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
3		(tcv_ActTime := (256 + tcv_FrameNumber− (tcv_FrameNumber MOD 8 +8)) MOD 256, tcv_TGCFN := (tcv_FrameNumber+(256−p_ttiValue)) MOD 256)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CPHY_TrChRelDCH_NoSHO (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqDCH_NoSHO (p_CellId , p_PhyCH)		
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CPHY_TrChRelNonDch (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqNonDch (p_CellId , p_PhyCH)		
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_Rel (p_CellId : INTEGER; p_RB_Id : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To release RLC entity.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_CRLC_RB_RelReq (p_CellId, p_RB_Id)		release radio bearer
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (p_CellId, p_RB_Id)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_RelReconfSRB (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To release RLC counter sequence number for SRB 1 to 4, by first releasing them and then setting them up again.

Default : SS_Def

Comments : This step is used only in conjonction with the RRC Connestion Release step. The configuration for SRBs 1 to 4 is the same as the one used for cell_DCH and cell_FACH.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
2		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
3		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
4		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
5		+ ts_SS_RB1_ToRB4_Cfg			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_ResumeSecurity (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : resume radio bearers for the security procedure
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Swithch On cipherin g
2		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB1)		
3		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB1)		
4		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB3)		
5		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB3)		
6		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB4)		
7		CRLC ? CRLC_Resume_CNF (tcv_RB_SigResumed := TRUE)	car_ResumeRB(tsc_CellDedicated , tsc_RB4)		
8		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS))AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			@sic T1s−040677 sic@
9		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
10		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
11		[tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB]			
12		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB21)		
13		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]			
15		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
16		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
17		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB21)		
18		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB21)		
19		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)]			
20		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
21		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
22		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB22)		
23		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB22)		
24		[TRUE]			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_SuspendSecurity (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : suspend radio bearers for the security procedure
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Swithch On cipherin g
2		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB1, tcv_RLC_SeqNumDL_RB1)		2
3		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB1)		
4		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB3, tcv_RLC_SeqNumDL_RB3)		2
5		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB3)		
6		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB4, tcv_RLC_SeqNumDL_RB4)		2
7		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB4)		
8		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAloneP CH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CT			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		CH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
9		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
10		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
11		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
12		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
13		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
15		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
16		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
17		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
18		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
19		[((tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
20		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
22		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB22, tcv_RLC_SeqNumDL_RB22)		2
23		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB22)		
24		[TRUE]			
Detailed Comments : 1. Get the RLC sequence number 2. suspend the SRB at the current RLC sequence number					

Test Step Dynamic Behaviour

Test Step Name : ts_ReconfigFACH_ToNoDedicated (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To reconfig the cell from cell_FACH to cell_FACH_NoDedicated.

Default : SS_Def

Comments : In cell_FACH_NoDedicated, no DCCH/DTCH are configured: no C−RNTI nor U−RNTI are downloaded to CMAC.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		+ lt_RelBCCH_FACH			@sic Rash implied due to T1s040385 4.12 , t1s040698sic@
4		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow (p_CellId, tsc_S_CCPCH1, c_UE_Info(OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FACH_CellDCH)		map PCCH to PCH, CCCH to FACH
5		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
6		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH
7		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
8	ERR1	[px_RAT = tdd]		I	
9	ERR2	[TRUE]		I	
		lt_RelBCCH_FACH			
10		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			@sic t1s040698 sic@
11		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
12		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : to configure physical channel DPCH1and connect DCH5 to the physical channel,then map DCCH1−4 on to the DCH5 transport channel. Used for setting up stand−alone UL:13.6 DL:13.6 kbps SRBs

Default : SS_Def

Comments : The transport channel DCH5 carries only dedicated control channels.
MAC−d is configured with cellId −1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_RL_Setup_REQ	ca_DL_DPCH_Info (p_CellId, tsc_DL_DPCH1, cb_DL_DPCH_SRB_StandAloneDPCH_Offset (tcv_TmpCellInfo.dl_DPCH_2ndScrCode))		1.
5		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_DL_DPCH1)		
6		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId, tsc_DL_DPCH1)		2.
7		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
8		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_13_6_StandAlone, c_TrLogMappingDL_4DCCH)		3. C−RNTI and U−RNTI are not needed on DPCH
9		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
10		CPHY!CPHY_RL_Setup_REQ	ca_UL_DPCH_Info(p_CellId, tsc_UL_DPCH1, c_UL_DPCH_13_6_StandAlone(tcv_TmpCellInfo.uL_ScramblingCode))		1.
11		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_UL_DPCH1)		
12		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId, tsc_UL_DPCH1)		2.
13		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
14		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_13_6_StandAlone, c_TrLogMappingUL_4DCCH)		3. C−RNTI and U−RNTI are not needed on DPCH

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
16	ERR1	[px_RAT = tdd]		I	
17	ERR2	[TRUE]		I	
Detailed Comments : 1. configure physical channel DPCH1. 2. connect DCH5 to DPCH1. 3. map logical channels: DCCH1−4 to DCH5. MAC−d is to be configured with cellId −1.					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_2DCH_Modify (p_CellId : INTEGER; p_UL_TrChConfig: CphyTrchConfigReq; p_DL_TrChConfig: CphyTrchConfigReq; p_UL_TrCHInfo, p_DL_TrCHInfo: TrCHInfo; p_UL_TrLogMapping, p_DL_TrLogMapping: TrCH_LogCHMappingList1; p_ActTime: ActivationTime; p_DL_DPCHInfo : DL_DPCHInfo; p_UL_DPCH_Info : UL_DPCH_Info)

Group : BasicM_SS_Configuration_Steps/

Objective : to modify physical channel DPCH1and connect DCH1and DCH5 to the physical channel, then map DCCH1−4 on to the DCH5 transport channel and map DTCH1 to the DCH1 transport channel. used for RLC testing.

Default : SS_Def

Comments : SS is in TM mode different from the mode of UE.
Transport channel configuration is parameter (of type: CphyTrchConfigReq); DPCH is 64 kbps physical channel.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, p_DL_DPCHInfo,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_TrChCfgInfo(p_CellId, tsc_DL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_DL_TrChConfig)		3.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated , tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), p_DL_TrCHInfo, p_DL_TrLogMapping,p_ActTime)		4. U−RNTI and C−RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo(p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info,p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_TrChCfgInfo (p_CellId, tsc_UL_DPCH1, c_TrChConfigTypeDCH_NoSHO, p_UL_TrChConfig)		2.
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_UL_DPCH1)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated , tsc_UL_DPCH1, c_UE_Info(OMIT, OMIT), p_UL_TrCHInfo, p_UL_TrLogMapping,p_Act Time)		4. U−RNTI and C−RNTI are not needed on DPCH
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_UL_DPCH1)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	
Detailed Comments : 1. configure DPCH1supporting 64 kspb data rate. 2. connect uplink DCH1and DCH5 to DPCH1. 3. connect downlink DCH1and DCH5 to DPCH1. 4. map logical channels: DCCH1−4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and send relevant transport channel configuration information to MAC.					

Test Step Dynamic Behaviour					
Test Step Name : ts_SS_AddDPCH (p_CellId : INTEGER)					
Group : BasicM_SS_Configuration_Steps/					
Objective : To reconfigure the cell p_CellId from cell_NoDPCH to cell_DCH_StandaloneSRB_NoConn.					
Default : SS_Def					
Comments : The following channels need to be created: physical channels: DPCH; transport channesl: DCH logical channels: DCCH; and signalling radio bearer: signalling bearer RB1, RB2, RB3, RB4 on DCH.					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
2		+ts_SS_RB1_ToRB4_Cfg			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_BCH_SCH_CPICH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure P−CCPCH, P−SCH, S−SCH and P−CPICH physical channels. To map BCH to P−PCCPCH, then to map logical channel BCCH to transport channel BCH.

Default : SS_Def

Comments : To configre P−CCPCH, P−SCH, S−SCH and P−CPICH physical channels and map BCH to P−PCCPCH, then to map logical channel BCCH to transport channel BCH.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_pCPICH_Info (p_CellId, (tcv_TmpCellInfo.powerpCPICH))		p−CPICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CPICH)		
5		CPHY!CPHY_RL_Setup_REQ	ca_pSCH_Info (p_CellId, (tcv_TmpCellInfo.powerpSCH))		p−SCH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_SCH)		
7		CPHY!CPHY_RL_Setup_REQ	ca_sSCH_Info (p_CellId, (tcv_TmpCellInfo.powersSCH))		s−SCH
8		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_S_SCH)		
9		CPHY!CPHY_RL_Setup_REQ	ca_pCCPCH_Info (p_CellId, (tcv_TmpCellInfo.powerpCCPCH))		p−CCPCH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CCPCH)		
11		CPHY!CPHY_TrCH_Config_REQ	ca_BCH_InfoActNow (p_CellId)		BCH connected to p−CCPCH
12		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_P_CCPCH)		
13		CMAC!CMAC_Config_REQ	ca_CMAC_CfgInfo(p_CellId , tsc_P_CCPCH, c_UE_Info (OMIT, OMIT) , c_TrChInfoBCH1, c_TrLogMappingBCH1)		mapping BCCH to BCH. C−RNTI and U−RNTI are not needed on P−CCPCH
14		CMAC?CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId, tsc_P_CCPCH)		
15	ERR1	[px_RAT = tdd]		I	
16	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CellCfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To setup the cell parameter in CPHY, if the cell 'p_CellId' is the first one to be created, then CPHY shall be initialised using CHY_INIT_REquest ASP.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch table correponding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]		I	Fatal error: cell already configured
3		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			Cell not yet configured
4		+ lt_CellIsAlreadyStarted			
5		[px_RAT = fdd]			
6		CPHY!CPHY_Cell_Config_REQ	ca_CellCfgReq(p_CellId, tcv_TmpCellInfo.tCell, tcv_TmpCellInfo.frequencyInfo, tcv_TmpCellInfo.priScrmCode, tcv_TmpCellInfo.attenuationLevel, tcv_TmpCellInfo.sfnOffset, tcv_TmpCellInfo.cellTxPowerLevel)		
7		CPHY?CPHY_Cell_Config_CNF	ca_CellCfgCnf(p_CellId)		
8		+ ts_SaveCellInfo (p_CellId)			
9	ERR2	[px_RAT = tdd]		I	
10	ERR3	[TRUE]		I	
		lt_CellIsAlreadyStarted			
11		+ ts_CountConfiguredCell			
12		[tcv_NumCfgCell = 0]			1.
13		+ts_MM_PwrOrUSIM_Off(tsc_USIM_NeedRmv)			1. Deactivate the UE
14		[tcv_DefaultRadioCnf = TRUE]			3.
15		CPHY ! CPHY_Ini_REQ	cas_InitReqDef		
16		CPHY ? CPHY_Ini_CNF	car_IniCnf		
17		(tcv_TmpCellInfo.tCell := 0)			
18		[tcv_DefaultRadioCnf = FALSE]			4.
19		CPHY ! CPHY_Ini_REQ	cas_InitReqNonDef		
20		CPHY ? CPHY_Ini_CNF	car_IniCnf		
21		(tcv_TmpCellInfo.tCell := 0)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		[tcv_NumCfgCell <> 0]			2.

Detailed Comments : 1. The cell 'p_CellId' is the first one to be created
2. The cell 'p_CellId' is not the first one to be created
3. CPHY_Init_Request is sent with a defaultRadioEnvironment value
4. CPHY_Init_Request is sent with a nonDefaultMultiCell value

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreateCellFACH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To setup a baseline cell which consists of the following:
For a first cell_FACH cell
physical channels: p−SCH, s−SCH, p−CPICH, p−CCPCH, s−CCPCH and PRACH;
transport channesl: BCH, FACH, PCH, RACH;
logical channels: BCCH, CCCH, PCCH, DCCH; and
signalling radio bearer RB0(CCCH), RB1(UM DCCH), RB2(AM DCCH), RB3(AM DCCH for NAS high priority), RB4(AM DCCH for NAS low priority) on FACH and RACH, RB−3(TM BCCH FACH) on FACH, RB20(AM DTCH) on FACH and RACH, RB−1 (TM, BCCH) on BCH, RB−2 (TM, PCCH, PCH)

For cells other than the first cell
Same physical channels as for the first cell (p−SCH, s−SCH, p−CPICH, p−CCPCH, s−CCPCH and PRACH);
Same transport channels as for the first cell (BCH, FACH, PCH, RACH);
Logical channels: BCCH, CCCH, PCCH, no DCCH
Signalling radio bearer RB0(CCCH), RB−3(TM BCCH FACH) on FACH, RB−1 (TM, BCCH) on BCH, RB−2 (TM, PCCH, PCH)

Default : InitOtherwiseFail

Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ ts_CountConfiguredCell			
4		[tcv_NumCfgCell = 0]			First cell to be created
5		+ts_SS_PCH_2FACH_CCCH_DCCH_BCCH_DTCH_Cfg (p_CellId)			
6		+ts_SS_RACH_CCCH_DCCH_DTCH_Cfg (p_CellId)			
7		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
8		+ts_SS_RB_PCCH_Cfg(p_CellId)			
9		+ts_SS_RB0_Cfg(p_CellId)			
10		+ts_SS_RB1_ToRB4_Cfg			
11		+ts_SS_RB_BCCH_FACH_Cfg(p_CellId)			RB9 is on BCCH−FACH
12		+ts_SS_RB20_AM_PS_Cfg (320)			
13		+ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
14		[tcv_NumCfgCell <> 0]			Not first cell to be created
15		+ts_SS_PCH_FACH_CCCH_Cfg (p_CellId)			
16		+ ts_SS_RACH_CCCH_Cfg (p_CellId)			
17		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
18		+ts_SS_RB_PCCH_Cfg(p_CellId)			
19		+ts_SS_RB0_Cfg(p_CellId)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		+ ts_SetCellCfg (p_CellId, cell_FACH_NoDedicated)			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PCH_2FACH_CCCH_DCCH_BCCH_DTCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure a secondary CCPCH (tsc_S_CCPCH1), then connect PCH and 2 FACH's to the secondary CCPCH . finally to map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH1 and DTCH to FACH2.

Default : SS_Def

Comments : one secondary CCPCH(tsc_S_CCPCH1) for PCH and FACH. PCCH mapping to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH, BCCH(for BCCH_FACH) to FACH1, and DTCH to FACH2.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_sCCPCH_Info(p_CellId, tsc_S_CCPCH1, tsc_S_CCPCH_2ndScrCode, tsc_S_CCPCH1_ChC, tcv_TmpCellInfo.slotFormatsCCPCH1, (tcv_TmpCellInfo.powersCCPCH1), tcv_TmpCellInfo.timingsCCPCH1)		s−CCPCH1
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_S_CCPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_PCH_2_FACH_InfoActNow (p_CellId, tsc_S_CCPCH1)		connect PCH and FACH to s−CCPCH1
6		CPHY ? CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_S_CCPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH_PS , c_TrLogMappingPCH_FACH_PS)		map PCCH to PCH, and map CCCH, BCCH, DTCH and DCCH's to FACH. C−RNTI and U−RNTI are needed when DCCH/ DTCH are mapped on S−CCPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
9		CPHY!CPHY_RL_Setup_REQ	ca_PICH_Info (p_CellId, c_PichInfo, (tcv_TmpCellInfo.powerPICH),tsc_S_CCPCH1)		PICH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PICH1)		
11	ERR1	[px_RAT = tdd]		I	
12	ERR2	[TRUE]		I	
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PCH_FACH_CCCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure a secondary CCPCH (tsc_S_CCPCH1), then connect PCH and FACH to the secondary CCPCH .(34.108 cl. 4.2.1), finally to map PCCH to PCH and CCCH to FACH.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_sCCPCH_Info(p_CellId, tsc_S_CCPCH1, tsc_S_CCPCH_2ndScrCode, tsc_S_CCPCH1_ChC, tcv_TmpCellInfo.slotFormatsCCPCH1, (tcv_TmpCellInfo.powersCCPCH1), tcv_TmpCellInfo.timingsCCPCH1)		s−CCPCH1
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_S_CCPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_PCH_2_FACH_InfoActNow (p_CellId, tsc_S_CCPCH1)		connect PCH and FACH to s−CCPCH1
6		CPHY ? CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_S_CCPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_S_CCPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FACH_CellDCH)		map PCCH to PCH. U−RNTI and C−RNTI are not needed (no DCCH/ DTCH)
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
9		CPHY!CPHY_RL_Setup_REQ	ca_PICH_Info(p_CellId, c_PichInfo, (tcv_TmpCellInfo.powerPICH),tsc_S_CCPCH1)		PICH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PICH1)		
11	ERR1	[px_RAT = tdd]		I	
12	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_PrepareCellRRC_ConnEst (
p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To reconfigure the cell if it is not ready for an RRC connection establishment.
4 cases are handled:
1> the cell is already configure (cell_DCH_StandAloneSRB_NoConn OR cell_FACH_NoConn OR cell_FACH_BMC_NoConn OR cell_FACH_2PRACH_NoConn OR cell_FACH_2_SCCPCH_NoConn)
2> the cell is configured to cell_NoDPCH, then remove the DPCH from the 'old' cell and configure the DPCH in the cell p_CellId
3> the cell is configured to cell_FACH_NoDedicated , then reconfigure the old cell where the
4> the configuration of the cell to not allow an RRC connection establishment −> error case

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn)OR (tcv_TmpCellInfo.cellConfig =cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn)OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)]			0 @sic T1s040622,624,626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
3		[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB)]			1 @sic RASH T1s040602 sic@
4		+ lt_ReconfOldDPCH_Cell			
5		+ ts_SS_AddDPCH(p_CellId)			
6		(tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_NoConn, tcv_TmpCellInfo.DL_DPCH_SHO := TRUE, tcv_TmpCellInfo.UL_DPCH_SHO := TRUE)			
7		+ ts_SaveCellInfo (p_CellId)			
8		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			2
9		+ lt_ReconfOldFACH_Cell			
10		+ ts_SS_ReconfNoDedicatedToCellFACH (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12	ERR	[TRUE]		I	Programming error
		lt_ReconfOldFACH_Cell			
13		[(tcv_CellInfoA.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoA.cellConfig = cell_FACH) OR (tcv_CellInfoA.cellConfig = cell_FACH_PS)]			
14		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellA)			
15		(tcv_CellInfoA.cellConfig := cell_FACH_NoDedicated)			
16		[(tcv_CellInfoB.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoB.cellConfig = cell_FACH) OR (tcv_CellInfoB.cellConfig = cell_FACH_PS)]			
17		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellB)			
18		(tcv_CellInfoB.cellConfig := cell_FACH_NoDedicated)			
19		[(tcv_CellInfoC.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoC.cellConfig = cell_FACH) OR (tcv_CellInfoC.cellConfig = cell_FACH_PS)]			
20		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellC)			
21		(tcv_CellInfoC.cellConfig := cell_FACH_NoDedicated)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		[(tcv_CellInfoD.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoD.cellConfig = cell_FACH) OR (tcv_CellInfoD.cellConfig = cell_FACH_PS)]			
23		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellD)			
24		(tcv_CellInfoD.cellConfig := cell_FACH_NoDedicated)			
25		[(tcv_CellInfoE.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoE.cellConfig = cell_FACH) OR (tcv_CellInfoE.cellConfig = cell_FACH_PS)]			
26		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellE)			
27		(tcv_CellInfoE.cellConfig := cell_FACH_NoDedicated)			
28		[(tcv_CellInfoF.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoF.cellConfig = cell_FACH) OR (tcv_CellInfoF.cellConfig = cell_FACH_PS)]			
29		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellF)			
30		(tcv_CellInfoF.cellConfig := cell_FACH_NoDedicated)			
31		[(tcv_CellInfoG.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoG.cellConfig = cell_FACH) OR (tcv_CellInfoG.cellConfig = cell_FACH_PS)]			
32		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellG)			
33		(tcv_CellInfoG.cellConfig := cell_FACH_NoDedicated)			
34		[(tcv_CellInfoH.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoH.cellConfig = cell_FACH) OR (tcv_CellInfoH.cellConfig = cell_FACH_PS)]			
35		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellH)			
36		(tcv_CellInfoH.cellConfig := cell_FACH_NoDedicated)			
37	ERR1	[TRUE] lt_ReconfOldDPCH_Cell		I	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
38		[(tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_UM_RAB)]			
39		+ ts_SS_RelDPCH (tsc_CellA)			
40		(tcv_CellInfoA.cellConfig := cell_NoDPCH, tcv_CellInfoA.DL_DPCH_SHO := FALSE, tcv_CellInfoA.UL_DPCH_SHO := FALSE)			
41		[(tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_UM_RAB)]			
42		+ ts_SS_RelDPCH (tsc_CellB)			
43		(tcv_CellInfoB.cellConfig := cell_NoDPCH , tcv_CellInfoB.DL_DPCH_SHO := FALSE, tcv_CellInfoB.UL_DPCH_SHO := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
44		[(tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoC.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoC.cellConfig = cell_PDCP_AM_UM_RAB)]			
45		+ ts_SS_RelDPCH (tsc_CellC)			
46		(tcv_CellInfoC.cellConfig := cell_NoDPCH, tcv_CellInfoC.DL_DPCH_SHO := FALSE, tcv_CellInfoC.UL_DPCH_SHO := FALSE)			
47		[(tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_UM_RAB)]			
48		+ ts_SS_RelDPCH (tsc_CellD)			
49		(tcv_CellInfoD.cellConfig := cell_NoDPCH, tcv_CellInfoD.DL_DPCH_SHO := FALSE, tcv_CellInfoD.UL_DPCH_SHO := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
50		[(tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoE.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoE.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoE.cellConfig = cell_PDCP_AM_UM_RAB)]			
51		+ ts_SS_RelDPCH (tsc_CellE)			
52		(tcv_CellInfoE.cellConfig := cell_NoDPCH, tcv_CellInfoE.DL_DPCH_SHO := FALSE, tcv_CellInfoE.UL_DPCH_SHO := FALSE)			
53		[(tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_UM_RAB)]			
54		+ ts_SS_RelDPCH (tsc_CellF)			
55		(tcv_CellInfoF.cellConfig := cell_NoDPCH, tcv_CellInfoF.DL_DPCH_SHO := FALSE, tcv_CellInfoF.UL_DPCH_SHO := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
56		[(tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoG.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoG.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoG.cellConfig = cell_PDCP_AM_UM_RAB)]			
57		+ ts_SS_RelDPCH (tsc_CellG)			
58		(tcv_CellInfoG.cellConfig := cell_NoDPCH, tcv_CellInfoG.DL_DPCH_SHO := FALSE, tcv_CellInfoG.UL_DPCH_SHO := FALSE)			
59		[(tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_UM_RAB)]			
60		+ ts_SS_RelDPCH (tsc_CellH)			
61		(tcv_CellInfoH.cellConfig := cell_NoDPCH, tcv_CellInfoH.DL_DPCH_SHO := FALSE, tcv_CellInfoH.UL_DPCH_SHO := FALSE)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
62		[TRUE]			@sic ER2062 sic@

Detailed Comments : 0. No reconfiguration of the cell is needed before RRC connection establishment
1. Reconfigure the cell p_CellId to cell_DCH_StandAloneSRB_NoConn and reconfigure the cell set to cell_DCH_StandAloneSRB_NoConn to cell_NoDPCH
2. Reconfigure the cell p_CellId to cell_FACH_NoConn and reconfigure the cell set to cell_FACH_NoConn to cell_FACH_NoDedicated

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RACH_CCCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure AICH and PRACH physical channels and connect RACH onto PRACH, then map one logical channel (CCCH) to RACH

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_AichInfo (p_CellId, tsc_AICH1, c_AICH_Info, tcv_TmpCellInfo.powerAICH)		AICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_AICH1)		
5		CPHY!CPHY_RL_Setup_REQ	ca_PRACH_Info (p_CellId, tsc_PRACH1, tsc_PRACH1_Signatures, tsc_PRACH1_ScrC, tcv_TmpCellInfo.puncLimit, tcv_TmpCellInfo.sf_PRACH, tcv_SubChNum)		PRACH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_PRACH1)		
7		CPHY!CPHY_TrCH_Config_REQ	cab_RACH_InfoActNow (p_CellId, tsc_PRACH1)		connect RACH to PRACH
8		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_PRACH1)		
9		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_PRACH1, c_UE_Info (OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH. C−RNTI and U−RNTI are not needed on
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId, tsc_PRACH1)		
11	ERR1	[px_RAT = tdd]		I	
12	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RACH_CCCH_DCCH_DTCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To configure AICH and PRACH physical channels and connect RACH onto PRACH, then map five logical channels (CCCH, DCCH1, DCCH2, DCCH3, DCCH4) to RACH

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CPHY!CPHY_RL_Setup_REQ	ca_AichInfo(p_CellId, tsc_AICH1, c_AICH_Info, (tcv_TmpCellInfo.powerAICH))		AICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_AICH1)		
5		CPHY!CPHY_RL_Setup_REQ	ca_PRACH_Info(p_CellId, tsc_PRACH1, tsc_PRACH1_Signatures, tsc_PRACH1_ScrC, tcv_TmpCellInfo.puncLimit, tcv_TmpCellInfo.sf_PRACH, tcv_SubChNum)		PRACH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PRACH1)		
7		CPHY!CPHY_TrCH_Config_REQ	cab_RACH_InfoActNow (p_CellId, tsc_PRACH1)		connect RACH to PRACH
8		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_PRACH1)		
9		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo(p_CellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DTCH)		CCCH, DCCH1, DCCH2, DCCH3, DCCH4 to RACH. Only C−RNTI is used for DCCH/ DTCH on PRACH
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId, tsc_PRACH1)		
11	ERR1	[px_RAT = tdd]		I	
12	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB0_Cfg(p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : to setup radio bearers : RB0 (the downlink is UM + CCCH + FACH + sCCPCH1 and uplink is TM + CCCH + RACH + PRACH).The configuration is adapted from 34.108 cl. 6.10.2.4.3 and 6.10.2.4.4

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_DL_Info(p_CellId, tsc_RB0, { dLlogicalChannelIdentity tsc_DL_CCCH5})		cofigure radio bearers (downlink): RB0 (UM + CCCH + FACH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		
3		CRLC ! CRLC_Config_REQ	ca_RB_TM_UL_Info(p_CellId, tsc_RB0, 166, {uLlogicalChannelIdentity tsc_UL_CCCH5})		cofigure radio bearers (uplink): RB0 (TM + CCCH + RACH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB1_ToRB4_Cfg
Group : BasicM_SS_Configuration_Steps/
Objective : To setup radio bearers : RB1, RB2, RB3, RB4. default values from 34.123−1
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_Info (tsc_CellDedicated , tsc_RB1, {uLlogicalChannelIdentity tsc_UL_DCCH1, dLlogicalChannelIdentity tsc_DL_DCCH1})		cofigure radio bearers : RB1 (UM + DCCH) and (UM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB1)		
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB2, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH2, dLlogicalChannelIdentity tsc_DL_DCCH2}, 128)		cofigure radio bearers : RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		
5		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB3, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3},128)		cofigure radio bearers : RB3 (AM + DCCH) and (AM + DCCH)
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		
7		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB4, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH4, dLlogicalChannelIdentity tsc_DL_DCCH4},128)		cofigure radio bearers : RB4(AM + DCCH) and (AM + DCCH)
8		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB4)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB20_AM_PS_Cfg (p_Payloadsize: INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : setup radio bearers : RB20. default values from 34.108 cl. 6.10.2.4.4 and 6.10.2.4.3.3
Default : SS_Def
Comments : CRLC is configured with cellId −1 (tsc_CellDedicated)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_RAB (tsc_CellDedicated, tsc_RB20, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1},p_Payload size)		cofigure radio bearers : RB20 (AM + DTCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB20)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB_BCCH_BCH_Cfg(p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : to setup the radio bearer (RB_BCCH) which is used for sending system information blocks.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC!CRLC_Config_REQ	ca_RB_BCCH_Info(p_CellId, tsc_RB_BCCH, {dLlogicalChannelIdentity tsc_BCCH1})		configure radio bearer (RB_BCCH) for BCCH on TM + BCCH + BCH, used for sending system information blocks
2		CRLC?CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB_BCCH_FACH_Cfg (p_CellId: INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : setup radio bearers : RB9 (downlink only) this bearer is for BCCH−FACH (TM + BCCH + FACH + sCCPCH1). The configuration is adapted from 34.108 cl. 6.10.2.4.3.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_DL_InfoNoSeg (p_CellId, tsc_RB_BCCH_FACH, 166, {dLlogicalChannelIdentity tsc_BCCH6})		configure radio bearers (downlink): RB9 (TM + BCCH + FACH) @sic R5s050192 sic@
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH_FACH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB_PCCH_Cfg(p_CellId: INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : to setup radio bearer (RB_PCCH) used for paging message sending
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_PCCH_Info(p_CellId, tsc_RB_PCCH, {dLlogicalChannelIdentity tsc_PCCH1})		configure radio bearer(RB_PCCH) on TM + PCCH + PCH, used for sending paging message
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_PCCH)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_ReconfigRAB_ToSRB (p_CellId: INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To reconfigure SS from a configuration including RABS to cell_DCH.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_SS_RelDPCH (p_CellId)			
3		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
4		+ ts_SS_RB1_ToRB4_Cfg			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_ReconfNoDedicatedToCellFACH (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To reconfig the cell from cell_FACH_NoDedicated to cell_FACH.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow (p_CellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH_PS, c_TrLogMappingPCH_FACH_PS)		map PCCH to PCH, and map CCCH, BCCH, DTCH and DCCH's to FACH
4		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId, tsc_S_CCPCH1)		
5		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DTCH)		CCCH, DCCH1, DCCH2, DCCH3, DCCH4 to RACH
6		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId, tsc_PRACH1)		
7		+ lt_RB_BCCH_FACH_Cfg			@sic RASH T1s040385 sic@
8	ERR1	[px_RAT = tdd]		I	
9	ERR2	[TRUE]		I	
		lt_RB_BCCH_FACH_Cfg			
10		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			
11		+ts_SS_RB_BCCH_FACH_Cfg(p_CellId)			Config BCCH on FACH
12		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_Rel (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To release all channels that are configured in the SS.
Default : SS_Def
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
3		+ ts_SS_RelDPCH (p_CellId)			1.
4		+ lt_ReleaseCommonCh			
5		+ lt_Release_BCCH			
6		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
7		[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH)]			
8		+ lt_ReleaseCommonCh			
9		+ lt_Release_BCCH			
10		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
11		[(tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn)]			
12		+ lt_RelSRB1_4			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
14		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
15		+ lt_ReleaseCommonCh			
16		+ lt_Release_BCCH			
17		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)]			
19		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
20		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
21		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_FACH_MAC)			
22		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
23		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
24		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
25		+ lt_ReleaseCommonCh			
26		+ lt_Release_BCCH			
27		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
28		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn)]			
29		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
30		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
31		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
32		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
33		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
34		+ ts_CRLC_Rel (p_CellId, tsc_RB_CCCH_FACH_MAC)			
35		+ lt_ReleaseCommonCh			
36		+ lt_Release_BCCH			
37		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
38		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			
39		+ lt_RelSRB1_4			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
40		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
42		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
43		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
44		+ lt_ReleaseCommonCh			
45		+ lt_Release_BCCH			
46		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
47		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH)]			
48		+ lt_RelSRB1_4			
49		+ ts_CRLC_Rel (p_CellId , tsc_RB_2ndCCCH)			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
52		+ lt_ReleaseCommonCh			
53		+ ts_CMAC_Rel (p_CellId, tsc_PRACH2)			
54		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH2)			
55		+ ts_SS_StopRL (p_CellId , tsc_PRACH2)			
56		+ ts_SS_StopRL (p_CellId , tsc_AICH2)			
57		+ lt_Release_BCCH			
58		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
59		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)]			
60		+ lt_RelSRB1_4			
61		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
62		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
63		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
64		+ ts_CRLC_Rel (p_CellId, tsc_RB31)			
65		+ ts_CRLC_Rel (p_CellId, tsc_RB_2ndPCCH)			
66		+ lt_ReleaseCommonCh			
67		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
68		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
69		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
70		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
71		+ lt_Release_BCCH			
72		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
73		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)]			
74		+ lt_ReleaseCommonCh			
75		+ lt_Release_BCCH			
76		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
77		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			@sic RASH T1s040430 sic@
78		+ lt_RelSRB1_4			
79		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
80		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
81		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
82		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
83		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
84		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
85		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
86		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
87		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
88		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
89		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
90		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
91		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
92		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
93		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
94		+ lt_Release_BCCH			
95		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
96		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			@sicRASHT1s0404622sic@
97		+ lt_RelSRB1_4			
98		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
99		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
100		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
101		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
102		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
103		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
104		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
105		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
106		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
107		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
108		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
109		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
110		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
111		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
112		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
113		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
114		+ lt_Release_BCCH			
115		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
116		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_Cnfg2)]			
117		+ lt_RelSRB1_4			
118		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			@sic t1−050201 sic@
119		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic RASH t1s040462 sic@
120		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
121		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
122		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
123		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
124		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
125		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
126		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
127		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
128		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
129		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
130		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
131		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
132		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
133		+ ts_CPHY_TrChRel NonDch (p_CellId , tsc_S_CCPCH2)			
134		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
135		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH 3)			
136		+ ts_CPHY_TrC hRelNonDch (p_CellId , tsc_S_CCPC H3)			
137		+ ts_SS_Stop RL (p_CellId , tsc_S_CCP CH3)			
138		+ lt_Release_ BCCH			
139		+ ts_SetCe llCfg (p_CellId, cell_Not Configur ed)			
140		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)]			
141		+ lt_RelSRB1_4			
142		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
143		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			@sic RASH ERq926 sic@
144		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic RASH ERq926 sic@
145		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
146		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
147		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
148		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
149		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
150		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
151		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
152		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
153		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
154		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
155		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
156		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
157		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
158		+ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH2)			
159		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
160		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			
161		+ ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH3)			
162		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			
163		+ lt_Release_BCCH			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
164		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
165		[tcv_TmpCellInfo.cellConfig = cell_Two_DTCH]			
166		+ lt_RelSRB1_4			
167		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
168		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
169		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
170		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
171		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
172		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
173		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
174		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
175		+ lt_ReleaseCommonCh			
176		+ lt_Release_BCCH			
177		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
178		[tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS]			
179		+ lt_RelSRB1_4			
180		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
181		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
182		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
183		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB13)			
184		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
185		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
186		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
187		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
188		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
189		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
190		+ lt_ReleaseCommonCh			
191		+ lt_Release_BCCH			
192		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
193		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)]			@sic New RAB sic@
194		+ lt_RelSRB1_4			
195		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
196		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
197		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
198		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
199		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
200		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
201		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
202		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
203		+ lt_ReleaseCommonCh			
204		+ lt_Release_BCCH			
205		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
206		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			@sic New RAB sic@
207		+ lt_RelSRB1_4			
208		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
209		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
210		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
211		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
212		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
213		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
214		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
215		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
216		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
217		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
218		+ lt_ReleaseCommonCh			2.
219		+ lt_Release_BCCH			
220		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
221		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS)]			
222		+ lt_RelSRB1_4			
223		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
224		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
225		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
226		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
227		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
228		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
229		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
230		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
231		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_DL_PDSCH1)			
232		+ ts_SS_StopRL (p_CellId , tsc_DL_PDSCH1)			
233		+ lt_ReleaseCommonCh			
234		+ lt_Release_BCCH			
235		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
236		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)]			
237		+ lt_RelSRB1_4			
238		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
239		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
240		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
241		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
242		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
243		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
244		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
245		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
246		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
247		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
248		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
249		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_DL_PDSCH1)			
250		+ ts_SS_StopRL (p_CellId , tsc_DL_PDSCH1)			
251		+ lt_ReleaseCommonCh			
252		+ lt_Release_BCCH			
253		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
254		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH)]			@sic New RAB complete addition sic@
255		+ lt_RelSRB1_4			
256		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
257		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
258		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
259		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
260		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
261		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
262		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
263		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
264		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
265		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
266		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
267		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
268		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
269		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
270		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
271		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
272		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
273		+ lt_ReleaseCommonCh			
274		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
275		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
276		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
277		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
278		+ lt_Release_BCCH			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
279		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
280		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			@sic New RAB complete addition sic@
281		+ lt_RelSRB1_4			
282		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			@sic t1−050201 sic@
283		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
284		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic T1s040624 sic@
285		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
286		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
287		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
288		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
289		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
290		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
291		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
292		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
293		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
294		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
295		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
296		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
297		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
298		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
299		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)			
300		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H3)			
301		+ ts_CPHY_Tr ChRelNonDc h (p_CellId , tsc_S_CCP CH3)			
302		+ ts_SS_Sto pRL (p_CellId , tsc_S_CC PCH3)			
303		+ lt_Releas e_BCCH			
304		+ ts_Set CellCfg (p_CellI d, cell_No tConfig ured)			
305		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_N oConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			@sic New RAB complete addition sic@
306		+ lt_RelSRB1_4			
307		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
308		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
309		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			@sic T1s040626 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
310		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic T1s040626 sic@
311		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
312		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
313		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
314		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
315		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
316		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
317		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
318		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
319		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
320		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
321		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
322		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
323		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
324		+ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH2)			
325		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
326		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
327		+ ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH3)			
328		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			
329		+ lt_Release_BCCH			
330		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
331		[TRUE]			
		lt_Release_BCCH			
332		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH)			
333		+ ts_CMAC_Rel (p_CellId, tsc_P_CCPCH)			
334		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_P_CCPCH)			
335		+ ts_SS_StopRL (p_CellId, tsc_S_SCH)			
336		+ ts_SS_StopRL (p_CellId, tsc_P_SCH)			
337		+ ts_SS_StopRL (p_CellId , tsc_P_CCPCH)			
338		+ ts_SS_StopRL (p_CellId, tsc_P_CPICH)			
339		CPHY ! CPHY_Cell_Release_REQ	ca_CPHY_Cell_Release_REQ(p_CellId)		@sic T1s040681 sic@
340		CPHY ? CPHY_Cell_Release_CNF	ca_CPHY_Cell_Release_CNF(p_CellId)		@sic T1s040681 sic@
		lt_ReleaseCommonCh			
341		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
342		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
343		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
344		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
345		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
346		+ ts_CRLC_Rel (p_CellId, tsc_RB_PCCH)			3.
347		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
348		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
349		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
350		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
		lt_RelSRB1_4			
351		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
352		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
353		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
354		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
Detailed Comments : 1. Release DPCH 2. Release PRACH 3. Release S−CCPCH					

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RelDPCH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To release the DPCH channel.

Default : SS_Def

Comments : The following channels need to be removed:
physical channels: DPCH;
transport channesl: DCH
logical channels: DCCH; and
signalling radio bearer: signalling bearers on DCH radio access bearer on DCH.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)]			
3		+ lt_RelSRB1_4			
4		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
5		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
6		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
7		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
8		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
9		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech)]			
11		+ lt_RelSRB1_4			
12		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
13		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
14		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
15		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
16		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
17		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
18		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_UL_DPCH1)			
19		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
20		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
21		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
22		+ lt_RelSRB1_4			
23		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
24		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
25		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
26		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
27		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
28		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
29		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
30		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB)]			
31		+ lt_RelSRB1_4			
32		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
33		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
34		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
35		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
36		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
37		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
38		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
39		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB)]			
40		+ lt_RelSRB1_4			
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)			
42		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
43		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
44		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
45		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
46		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
47		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
48		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
49		+ lt_RelSRB1_4			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)			
52		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
53		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
54		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
55		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
56		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
57		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
58		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
59		+ lt_RelSRB1_4			
60		+ lt_ReleaseRLC_RB			
61		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
62		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
63		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
64		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
65		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
66		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
67		[(tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
68		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
69		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
70		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_DCH_MAC)			
71		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
72		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
73		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
74		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_DL_DPCH1)			
75		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
76		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
77		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
78		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_2_PS_Call)]			
79		+ lt_RelSRB1_4			
80		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
81		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB22)			
82		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
83		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
84		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
85		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
86		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
87		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
88		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			@sic Rash ER1923, added tree sic@
89		+ lt_RelSRB1_4			
90		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
91		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
92		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
93		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
94		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
95		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_UL_DPCH1)			
96		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
97		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
98		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)]			@sic Rash T1s040370, added tree sic@
99		+ lt_RelSRB1_4			
100		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
101		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
102		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
103		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
104		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
105		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
106		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
107		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
108		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
109		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
110		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB_HS)]			@sic VB R5s050212 sic@
111		+ lt_RelSRB1_4			
112		+ts_CRLC_Rel (tsc_CellDedicated, tsc_RB25)			
113		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
114		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
115		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
116		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
117		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
118		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
119	ERR	[TRUE]		I	
		lt_ReleaseRLC_RB			
120		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
121		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_15_RLC)			
122		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis)]			
123		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_7_RLC)			
124		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)]			
125		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_15_RLC)			
126		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
127		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_7_RLC)			
		lt_RelSRB1_4			
128		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
129		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
130		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
131		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
Detailed Comments :					

Test Step Dynamic Behaviour					
Test Step Name	**:** ts_SS_StopRL(p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)				
Group	**:** BasicM_SS_Configuration_Steps/				
Objective	**:** To stop transmission and receiving on the specified physical channel				
Default	**:** SS_Def				
Comments	**:** To release (stop transmission and receiving) the specified physical channel				
Description	**:**				
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		CPHY!CPHY_RL_Release_REQ	ca_RL_RelReq(p_CellId, p_PhyCH)		
2		CPHY?CPHY_RL_Release_CNF	ca_RL_RelCnf(p_CellId, p_PhyCH)		
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_CellDependentPara (p_CellID : INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective : To set cell dependent parameters
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellID)			
2		[p_CellID = tsc_CellA]			
3		(tcv_SIB3.cellIdentity := tsc_CellIdCellA, tcv_SIB4.cellIdentity := tsc_CellIdCellA)			
4		[p_CellID = tsc_CellB]			
5		(tcv_SIB3.cellIdentity := tsc_CellIdCellB, tcv_SIB4.cellIdentity := tsc_CellIdCellB)			
6		[p_CellID = tsc_CellC]			
7		(tcv_SIB3.cellIdentity := tsc_CellIdCellC, tcv_SIB4.cellIdentity := tsc_CellIdCellC)			
8		[p_CellID = tsc_CellD]			
9		(tcv_SIB3.cellIdentity := tsc_CellIdCellD, tcv_SIB4.cellIdentity := tsc_CellIdCellD)			
10		[p_CellID = tsc_CellE]			
11		(tcv_SIB3.cellIdentity := tsc_CellIdCellE, tcv_SIB4.cellIdentity := tsc_CellIdCellE)			
12		[p_CellID = tsc_CellF]			
13		(tcv_SIB3.cellIdentity := tsc_CellIdCellF, tcv_SIB4.cellIdentity := tsc_CellIdCellF)			
14		[p_CellID = tsc_CellG]			
15		(tcv_SIB3.cellIdentity := tsc_CellIdCellG, tcv_SIB4.cellIdentity := tsc_CellIdCellG)			
16		[p_CellID = tsc_CellH]			
17		(tcv_SIB3.cellIdentity := tsc_CellIdCellH, tcv_SIB4.cellIdentity := tsc_CellIdCellH)			
18		[TRUE]		I	no such cell

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ChangeMIB_ValueTag
Group : BasicM_SysInfoHandling_Steps/
Objective : To increment MIBValueTag if tcv_MIB_ValueTagChanged = FALSE.
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_MIB_ValueTagChanged = FALSE]			
2		(tcv_MIB.mib_ValueTag := (tcv_MIB.mib_ValueTag) MOD 8 + 1, tcv_MIB_ValueTagChanged := TRUE)			
3		[tcv_MIB_ValueTagChanged = TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ChangeSB1_ValueTag
Group : BasicM_SysInfoHandling_Steps/
Objective : To increment SB1ValueTag if tcv_SB1_ValueTagChanged = FALSE.
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_SB1_ValueTagChanged = FALSE]			
2		(tcv_SB1_ValueTag := (tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sysInfoTypeSB1) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sysInfoTypeSB1 := tcv_SB1_ValueTag, tcv_SB1_ValueTagChanged := TRUE)			
3		+ts_ChangeMIB_ValueTag			
4		[TRUE]			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_Scheduling(p_CellId: INTEGER; p_REP : INTEGER; p_POS : INTEGER; p_Timing : INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective :
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_BCCH_ModifyTime := p_Timing)			
2		[p_Timing >= 512]			
3		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulNow (p_CellId, p_REP, p_POS)		
4		[p_Timing <= 511]			
5		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulLater(p_CellId, p_REP, p_POS, p_Timing)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendMIB(p_MIB: MasterInformationBlock; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective : To deliver the MIB to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mcc := o_HexToDigitsMCC (tcv_TmpCellInfo.mcc), tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mnc := o_HexToDigitsMNC (tcv_TmpCellInfo.mnc))			
3		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (mIB : tcv_MIB)))			1.
4		[tcv_Segs.segCount <>1]		I	2.
5		[tcv_Segs.segCount =1]			
6		+ts_Scheduling(p_CellId, 3, 0, p_Timing)			3.
7		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf (p_CellId, tsc_RB_BCCH)		
8		+lt_CompleteSIB(masterInformationBlock)			4.
9		(tcv_MIB_ValueTagChanged := FALSE)			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226]			
11		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl (p_SIBType, tcv_Segs.seg1))		4.
12		[TRUE]			
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments : 1. Unaligned PER encoding of the MIB then segmentation.
2. The result of segmentation shall be one segment for the MIB (current assumption).
3. Send the scheduling info to SS.(one segment; REP=8; POS=0)
4. Construct the system information message containing MIB and sent to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_UTRAN_GERAN_ParaInit (p_CellId: INTEGER)
Group : BasicM_SysInfoHandling_Steps/
Objective : Initialize default parameters for different region
Default : InitOtherwiseFail
Comments : currently only UTRAN and UTRAN/GERAN are defined
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_UTRAN_GERAN = "UTRAN and GERAN"]			
3		(tcv_SIB3 := cb_SIB3_DefUTRAN_GERAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN_GERAN (tcv_TmpCellInfo))			
4		[px_UTRAN_GERAN = "UTRAN only"]			
5		(tcv_SIB3 := cb_SIB3_DefUTRAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN (tcv_TmpCellInfo))			
6		[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_AT_TriggerGMM_Attach
Group : BasicM_UT_Steps/
Objective : Trigger UE to start GMM Attach procedure via AT command +CGATT
Default : UT_OtherwiseFail
Comments : (see 3GPP 27.007 / 10.1.9)
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CGATT=1<CR>")		
2		Ut ? AT_CmdCnf	ca_AT_CmdCnf		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_PwrOff
Group : BasicM_UT_Steps/
Objective : To make the operator power off the UE
Default : UT_OtherwiseFail
Comments : @sic Rash ER1915 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please power off the UE")		@sic t1s−050 063 sic@
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_PwrOn
Group : BasicM_UT_Steps/
Objective : To make the operator power on the UE
Default : UT_OtherwiseFail
Comments : @sic RASH ER1915 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please power on the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON
5		[TRUE]			UE is Already ON

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_SwitchOff
Group : BasicM_UT_Steps/
Objective : To make the operator switch off the UE
Default : UT_OtherwiseFail
Comments : @sic RASH sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please switch off the UE")		@sic t1s−050 063 sic@
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_SwitchOn
Group : BasicM_UT_Steps/
Objective : To make the operator switch on the UE
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please switch on the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON
5		[TRUE]			UE is Already ON

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_USIM_Insert
Group : BasicM_UT_Steps/
Objective : To make the operator insert the USIM card
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please insert the USIM card into the UE")		
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_USIM_Remove
Group : BasicM_UT_Steps/
Objective : To make the operator remove the USIM card
Default : UT_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("Please remove the USIM card from the UE")		
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SS_CreateCellDCH_DPCH_Offset (p_CellId : INTEGER)

Group :

Objective : This test Step sets up a cell with stand−alone UL:3.4 DL:3.4 kbps SRBs for DCCH which consists of the following:
For a first cell:
physical channels: p−SCH, s−SCH, p−CPICH, p−CCPCH, s−CCPCH, PRACH and DPCH;
transport channesl: BCH, FACH, PCH, RACH, DCH;
The DPCH Offset/DPCH FrameOffset is configured with special value
logical channels: BCCH, CCCH, PCCH, DCCH; and
signalling radio bearer RB0 on FACH and RACH; signalling bearer RB1, RB2, RB3, RB4 on DCH.

For cells other than the first cell
physical channels: p−SCH, s−SCH, p−CPICH, p−CCPCH, s−CCPCH, PRACH (no DPCH)
transport channesl: BCH, FACH, PCH, RACH (no DCH)
logical channels: BCCH, CCCH, PCCH (no DCCH)
signalling radio bearer RB0 on FACH and RACH (not RB1 RB2 RB3 RB4 on DCH)

Default : InitOtherwiseFail

Comments : Cell configuration supporting UL:3.4 DL:3.4 kbps stand−alone signalling RB.
CRLC is configured with cellId −1 (tsc_CellDedicated)
CMAC for DCCH (MAC−d) is configured with cellId −1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ts_SS_PCH_FACH_CCCH_Cfg(p_CellId)			
4		+ts_SS_RACH_CCCH_Cfg(p_CellId)			
5		+ ts_CountConfiguredCell			
6		[tcv_NumCfgCell = 0]			First cell to be created
7		+ts_SS_1DCH_DCCH_Cfg_DPCH_Offset(p_CellId)			
8		+ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
9		+ts_SS_RB_PCCH_Cfg(p_CellId)			
10		+ts_SS_RB0_Cfg (p_CellId)			
11		+ts_SS_RB1_ToRB4_Cfg			
12		(tcv_TmpCellInfo.DL_DPCH_SHO := TRUE, tcv_TmpCellInfo.UL_DPCH_SHO := TRUE, tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_NoConn)			
13		+ ts_SaveCellInfo (p_CellId)			1.
14		[tcv_NumCfgCell <> 0]			Next cell to be created
15		+ ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
16		+ ts_SS_RB_PCCH_Cfg(p_CellId)			
17		+ ts_SS_RB0_Cfg(p_CellId)			
18		+ ts_SetCellCfg (p_CellId, cell_NoDPCH)			1.

Detailed Comments : 1. Set the cell configuration in the CellInfoCfg record

Test Step Dynamic Behaviour

Test Step Name : ts_SS_1DCH_DCCH_Cfg_DPCH_Offset (p_CellId : INTEGER)

Group :

Objective : to configure physical channel DPCH1and connect DCH5 to the physical channel,then map DCCH1−4 on to the DCH5 transport channel. Used for setting up stand−alone UL:13.6 DL:13.6 kbps SRBs

Default : SS_Def

Comments : The transport channel DCH5 carries only dedicated control channels.
MAC−d is configured with cellId −1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_RL_Setup_REQ	ca_DL_DPCH_Info (p_CellId, tsc_DL_DPCH1, cd_DL_DPCH_SRB_StandAloneDPCH_Offset2 (tcv_TmpCellInfo.dl_DPCH_2ndScrCode))		1.
5		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_DL_DPCH1)		
6		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId, tsc_DL_DPCH1)		2.
7		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
8		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_13_6_StandAlone, c_TrLogMappingDL_4DCCH)		3. C−RNTI and U−RNTI are not needed on DPCH
9		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
10		CPHY!CPHY_RL_Setup_REQ	ca_UL_DPCH_Info(p_CellId, tsc_UL_DPCH1, c_UL_DPCH_13_6_StandAlone(tcv_TmpCellInfo.uL_ScramblingCode))		1.
11		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_UL_DPCH1)		
12		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId, tsc_UL_DPCH1)		2.
13		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
14		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_13_6_StandAlone, c_TrLogMappingUL_4DCCH)		3. C−RNTI and U−RNTI are not needed on DPCH

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)		
16	ERR1	[px_RAT = tdd]		I	
17	ERR2	[TRUE]		I	
Detailed Comments : 1. configure physical channel DPCH1. 2. connect DCH5 to DPCH1. 3. map logical channels: DCCH1−4 to DCH5. MAC−d is to be configured with cellId −1.					

Default Dynamic Behaviour

Default Name : IntersystemDef
Group : InterSystem/
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1	DFF1	CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail	(F)	
2		RETURN			
3		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
4		RETURN			
5		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
6		RETURN			
7		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
8		RETURN			
9		G_L2 ? G_L2_ACCESS_IND[tcv_TestBody = TRUE]	cabr_G_L2_ACCESS_IND (?, ?, ?, ?, ?, ?)		
10		RETURN			
11		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
12		RETURN			
13		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?, tsc_RB0, cr_RRC_RrcConnReqAny)		
14	DFF2	[tcv_TestBody = TRUE]		(F)	
15		RETURN			
16		[tcv_TestBody = FALSE]			
17		RETURN			
18		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
19		RETURN			
20		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
21		RETURN			
22		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_Unitdata_Ind_ChannelReq(?,?, 1 , ?, c_G_ChannelReq_Any)	(P)	Physical channel ID, RFN to be filled
23		RETURN			
24		G_L2 ?G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(?,?,?, ?, ?, c_G_MeasReport_Any)		3. @sic R5s050146 sic@
25		RETURN			

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		G_L2 ? G_L2_Release_IND	cr_G_L2_Release_IND (?)		@sic T1s−04332 sic@ − This may be received from the SS when deleting the cell @sic T1−041010 sic@
27		RETURN			
28		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_ClassmarkChangeAny)		
29		RETURN			
30		G_L2 ? G_L2_DATA_IND	cr_G_L2_DATA_IND (tsc_GSM_CellA, ? , tsc_PhyCh0, ?, ?, ?, cr_G_UtranClassmarkChange)		@sic ER2012 sic@
31		RETURN			
32		G_L2 ?OTHERWISE			4.
33	L_1032	CANCEL		F	5.
34		?TIMEOUT t_Guard			
35	DFI1	CANCEL		(I)	
36		AM?OTHERWISE			
37	DFI2	CANCEL		(I)	
38		UM?OTHERWISE			
39	DFI3	CANCEL		(I)	
40		TM?OTHERWISE			
41	DFI4	CANCEL		(I)	
42		CRLC?OTHERWISE			
43	DFI5	CANCEL		(I)	
44		CMAC?OTHERWISE			
45	DFI6	CANCEL		(I)	
46		CPHY?OTHERWISE			
47	DFI7	CANCEL		(I)	

Detailed Comments : 2. To throw away any irrelevant channel request.
3. To throw away any measurement report.
4. Other unexpected events, fail.
5. Cancel of all running timers.

Default Dynamic Behaviour

Default Name : IntersystemGPRS
Group : InterSystem/
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1	DFF1	CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail	(F)	
2		RETURN			
3		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
4		RETURN			
5		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
6		RETURN			
7		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
8		RETURN			
9		G_L2 ? G_L2_ACCESS_IND	cabr_G_L2_ACCESS_IND (?, ?, ?, ?, ?, ?)		@sic T1s040644 sic@
10		RETURN			
11		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketControlAcknowledgement)		All PCAs will be forwarded up to the TTCN. Ignore those not handled within test steps
12		RETURN			
13		G_RLC ? G_RLC_ControlMsg_IND	car_G_RLC_ControlMsg_IND(?, ?, cr_PacketEnhancedMeasRpt (?, ?))		PEMRs will be sent whenever they're turned on. Ignore those not handled in the test case @sic GP−042160 sic@

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		RETURN			
15		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
16		RETURN			
17		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?, tsc_RB0, cr_RRC_RrcConnReqAny)		
18	DFF2	[tcv_TestBody = TRUE]		(F)	
19		RETURN			
20		[tcv_TestBody = FALSE]			
21		RETURN			
22		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
23		RETURN			
24		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
25		RETURN			
26		G_L2 ? G_L2_UNITDATA_IND	ca_G_L2_Unitdata_Ind_ChannelReq(?,?, 1 , ?, c_G_ChannelReq_Any)	(P)	Physical channel ID, RFN to be filled
27		RETURN			
28		G_L2 ?G_L2_UNITDATA_IND	ca_G_L2_UnitDataInd_MeasReport(?,?,?, ?, ?, c_G_MeasReport_Any)		3. @sic R5s050146 sic@
29		RETURN			
30		G_L2 ? G_L2_Release_IND	cr_G_L2_Release_IND (?)		@sic T1s−04332 sic@ − This may be received from the SS when deleting the cell @sic T1−041010 sic@
31		RETURN			

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Default Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
32		G_L2 ? G_L2_DATA_IND [(tcv_SetupExpected = TRUE)] (tcv_SetupExpected := FALSE)	c_G_L2_DATA_IND (tsc_GSM_CellA , cr_G_SetupUL_MO)	(P)	SETUP expected if in 8.3.7.13 , operation mode A @sic T1s040638, ER2056 sic@
33		RETURN			
34		G_L2 ?OTHERWISE			4.
35	L_1032	CANCEL		F	5.
36		?TIMEOUT t_Guard			
37	DFI1	CANCEL		(I)	
38		AM?OTHERWISE			
39	DFI2	CANCEL		(I)	
40		UM?OTHERWISE			
41	DFI3	CANCEL		(I)	
42		TM?OTHERWISE			
43	DFI4	CANCEL		(I)	
44		CRLC?OTHERWISE			
45	DFI5	CANCEL		(I)	
46		CMAC?OTHERWISE			
47	DFI6	CANCEL		(I)	
48		CPHY?OTHERWISE			
49	DFI7	CANCEL		(I)	
50		G_RLC?OTHERWISE			@sic G3t050013 sic@
51	DF18	CANCEL		(I)	
52		G_LLC?OTHERWISE			@sic G3t050013 sic@
53	DF19	CANCEL		(I)	

Detailed Comments : 2. To throw away any irrelevant channel request.
3. To throw away any measurement report.
4. Other unexpected events, fail.
5. Cancel of all running timers.

Default Dynamic Behaviour

Default Name : InitOtherwiseFail
Group : Init_Defaults/
Objective :
Comments : Handle any irrelevant sync/outsync indications during cell setup
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
2		RETURN			
3		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
4		RETURN			
5		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
6	DFF1	[tcv_CellIndInfo.integrityStarted]		(F)	
7		RETURN			
8		[NOT tcv_CellIndInfo.integrityStarted]			
9		RETURN			
10		?TIMEOUT			
11		[tcv_TestBody = FALSE]			
12	DFI8	CANCEL		(I)	
13		[tcv_TestBody = TRUE]			
14	DFF8	CANCEL		(F)	

Detailed Comments :

Default Dynamic Behaviour

Default Name : NAS_OtherwiseFail
Group : NAS_Defaults/
Objective : To match unexpected events and fail the test case.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			1.
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI1	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF1	CANCEL		(F)	
8		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		6. @sic R&S T1−031 835 and Anite T1−03xt c2 sic@
9		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		7.
10		RETURN			
11		?TIMEOUT t_TimeoutInDefault			
12		(tcv_TimeoutInDefault := TRUE)			
13		RETURN			
14		?TIMEOUT			
15		[tcv_TestBody = FALSE]			
16	DFI8	CANCEL		(I)	
17		[tcv_TestBody = TRUE]			
18	DFF8	CANCEL		(F)	
19		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST − Extract Attach type requested @sic R&S T1−031 835 and Anite T1−03xt c2 sic@
20		RETURN			

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
22		RETURN			
23		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v, ?))		ROUTING AREA UPDATE REQUEST @sicEW T1s040041 sic@
24		RETURN			
25		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETACH REQUEST @sicEW T1s040243 and T1s040244 sic@
26		RETURN			
27	DFI2	Dc?OTHERWISE [tcv_TestBody = FALSE]		(I)	2.
28		CANCEL			3.
29	DFF2	Dc?OTHERWISE [tcv_TestBody = TRUE]		(F)	5.
30		CANCEL			3.
31		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
32	DFF3	[tcv_CellIndInfo.integrityStarted]		(F)	
33		RETURN			
34		[NOT tcv_CellIndInfo.integrityStarted]			
35		RETURN			

Detailed Comments :
1. The guard timer times out, inconclusive.
2. If unexpectied data is received in the preambles or postambles, a preliminary inconclusive verdict is assigned, and the test case is terminated.
3. Cancel of all running timers.
4. Depending upon the context appropriate measures may differ: the guard timer duration may be increased, operator action during a test may be speeded up, ...
5. If unexpected data is received in the test body, a preliminary failure verdict is assigned, and the test case is terminated.
6. ATTACH REQUEST with any contents received during MM_TestExecution
7. ATTACH REJECT with cause 'GPRS services not allowed'
8. DETACH REQUEST received during MM_TestExecution
9. DETACH ACCEPT

Default Dynamic Behaviour

Default Name : RRC_Def1
Group : RRC_Defaults/
Objective : To match unexpected events and fail the test case.
Comments : @sic RASH ER1935 sic@
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RxStatus [tcv_RLC_IgnoreStatus = TRUE]	car_StatusInd(tsc_RB_AM_7_RLC)		
2		RETURN			
3		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUEST − Extract Attach type requested @sic T1−031835 and T1−03xtc2 sic@
4		RETURN			
5		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v, ?))		ROUTING AREA UPDATE REQUEST @sic EW T1s040041 sic@
6		RETURN			
7		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETACH REQUEST @sic EW T1s040243 and T1s040244 sic@
8		RETURN			
9		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
10		RETURN			
11		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
12		RETURN			
13		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
14		RETURN			

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
15		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
16		RETURN			
17		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
18		RETURN			
19		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
20		RETURN			
21		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
22	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
23		RETURN			
24		[NOT tcv_CellIndInfo.integrityStarted]			
25		RETURN			
26		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		@sic ER1440 sic@
27		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		@sic ER1440 sic@
28		RETURN			@sic ER1440 sic@
29		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
30		RETURN			
31		?TIMEOUT t_Guard			
32		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
33		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
34		[tcv_TestBody = FALSE]			
35	DFI1	CANCEL		(I)	
36		[tcv_TestBody = TRUE]			
37	DFF1	CANCEL		(F)	
38		?TIMEOUT t_TimeoutInDefault			
39		(tcv_TimeoutInDefault := TRUE)			
40		RETURN			
41		?TIMEOUT			
42		[tcv_TestBody = FALSE]			
43	DFI8	CANCEL		(I)	

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
44		[tcv_TestBody = TRUE]			
45	DFF8	CANCEL		(F)	
46		AM?OTHERWISE [tcv_TestBody = FALSE]			
47	DFI2	CANCEL		(I)	
48		UM?OTHERWISE [tcv_TestBody = FALSE]			
49	DFI3	CANCEL		(I)	
50		TM?OTHERWISE [tcv_TestBody = FALSE]			
51	DFI4	CANCEL		(I)	
52		Dc?RRC_DataInd [tcv_TestBody = FALSE]	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextReq_MO(?))	(I)	2. @sic ER1935 T1s040569 T1s040731 sic@
53	DFI5	CANCEL			3. @sic ER1935 T1s040569 sic@
54		AM?OTHERWISE [tcv_TestBody = TRUE]			
55	DFF2	CANCEL		(F)	
56		UM?OTHERWISE [tcv_TestBody = TRUE]			
57	DFF3	CANCEL		(F)	
58		TM?OTHERWISE [tcv_TestBody = TRUE]			
59	DFF4	CANCEL		(F)	
60		Dc?RRC_DataInd [tcv_TestBody = TRUE]	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextReq_MO(?))	(F)	5.@sic ER1935 T1s040569 t1s−050028 sic@
61	DFF5	CANCEL			3.@sic ER1935 T1s040569 sic@
62		CRLC?OTHERWISE			
63	DFI6	CANCEL		(I)	
64		CMAC?OTHERWISE			
65	DFI7	CANCEL		(I)	
66		CPHY?OTHERWISE			
67	DFI9	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : RRC_DefConnEst

Group : RRC_Defaults/

Objective : To match unexpected events during an RRC connection establishment i.e to match the repetition of RRC CONNECTION REQUEST.

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?, tsc_RB0, cr_RRC_RrcConnReqAny)		
2		RETURN			
3		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
4		RETURN			
5		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
6		RETURN			
7		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
8		RETURN			
9		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
10		RETURN			
11		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
12		RETURN			
13		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
14		RETURN			
15		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
16	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
17		RETURN			
18		[NOT tcv_CellIndInfo.integrityStarted]			
19		RETURN			
20		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
21		RETURN			
22		?TIMEOUT t_Guard			
23		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
24		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
25		[tcv_TestBody = FALSE]			
26	DFI1	CANCEL		(I)	
27		[tcv_TestBody = TRUE]			

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
28	DFF1	CANCEL		(F)	
29		?TIMEOUT t_TimeoutInDefault			
30		(tcv_TimeoutInDefault := TRUE)			
31		RETURN			
32		?TIMEOUT			
33		[tcv_TestBody = FALSE]			
34	DFI8	CANCEL		(I)	
35		[tcv_TestBody = TRUE]			
36	DFF8	CANCEL		(F)	
37		AM?OTHERWISE [tcv_TestBody = FALSE]			
38	DFI2	CANCEL		(I)	
39		UM?OTHERWISE [tcv_TestBody = FALSE]			
40	DFI3	CANCEL		(I)	
41		TM?OTHERWISE [tcv_TestBody = FALSE]			
42	DFI4	CANCEL		(I)	
43		AM?OTHERWISE [tcv_TestBody = TRUE]			
44	DFF2	CANCEL		(F)	
45		UM?OTHERWISE [tcv_TestBody = TRUE]			
46	DFF3	CANCEL		(F)	
47		TM?OTHERWISE [tcv_TestBody = TRUE]			
48	DFF4	CANCEL		(F)	
49		CRLC?OTHERWISE			
50	DFI5	CANCEL		(I)	
51		CMAC?OTHERWISE			
52	DFI6	CANCEL		(I)	
53		CPHY?OTHERWISE			
54	DFI7	CANCEL		(I)	
Detailed Comments :					

Default Dynamic Behaviour

Default Name : UT_OtherwiseFail
Group : UT_Defaults/
Objective : To match unexpected events and fail the test case at the UtT PCO.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut?OTHERWISE			1.
2	DFI1	CANCEL		I	2.
3		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
4	DFF2	[tcv_CellIndInfo.integrityStarted]		(F)	
5		RETURN			
6		[NOT tcv_CellIndInfo.integrityStarted]			
7		RETURN			
8		?TIMEOUT			
9		[tcv_TestBody = FALSE]			
10	DFI8	CANCEL		(I)	
11		[tcv_TestBody = TRUE]			
12	DFF8	CANCEL		(F)	

Detailed Comments : 1. Unexpected UT MMI events, fail.
2. Cancel of all running timers.

Default Dynamic Behaviour

Default Name : SS_Def
Group : SS_Defaults/
Objective : To match unexpected events during SS configuration/reconfiguration steps.
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			
2		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI5	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF7	CANCEL		(F)	
8		?TIMEOUT t_TimeoutInDefault			
9		(tcv_TimeoutInDefault := TRUE)			
10		RETURN			
11		?TIMEOUT			
12		[tcv_TestBody = FALSE]			
13	DFI8	CANCEL		(I)	
14		[tcv_TestBody = TRUE]			
15	DFF8	CANCEL		(F)	
16		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
17		RETURN			
18		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
19		RETURN			
20		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		@sic ER1440 sic@
21		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		@sic ER1440 sic@
22		RETURN			@sic ER1440 sic@
23		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
24		RETURN			

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
25		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST − Extract Attach type requested @sic T1−031835 and T1−03xtc2 sic@
26		RETURN			
27		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		@sic R5s050078 sic@
28	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)	
29		RETURN			
30		[NOT tcv_CellIndInfo.integrityStarted]			
31		RETURN			
32		CPHY?OTHERWISE			@sic t1s−050061 sic@
33	DFI2	CANCEL		(I)	
34		CMAC?OTHERWISE			
35	DFI3	CANCEL		(I)	
36		CRLC?OTHERWISE			
37	DFI4	CANCEL		(I)	
Detailed Comments :					