MACv370

I

Test Suite Overview

Test Suite Structure

Suite Name : MACv370
Standards Ref :
PICS Ref :
PIXIT Ref :
Test Method(s) :
Comments :

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MAC/			452
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MAC/PriorityHandlingBetweenDataFlowsOfOneUE/			465

Detailed Comments :

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Detailed Comments :

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Declarations Part

Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
CT_Field	BITSTRING[4]		The C/T field within a MAC PDU. When a MAC PDU is transmitted, the TTCN constraint will determine if this field is present. The Direct Encoding encoder shall use the number of bits provided by the TTCN, even if the current SS logical channel to transport channel mapping indicates that the field should not be present. When a MAC PDU is received, the Direct Encoding decoder shall determine if the field is present based on the current SS logical channel to transport channel mapping, and shall always use 4 bits for this field.
RLC_Padding	BITSTRING [0..32768]		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 to accomodate the failure cases where padding need not be Octet bound.
TCTF	BITSTRING[2..8]		The TCTF field may be either 2 or 8 bits for FDD, or 3 or 5 bits for TDD. Bitstrings of length 4, 6, or 7 are invalid for this type. When a MAC PDU is transmitted, the TTCN constraint will determine if this field is present, and how many bits are used. The Direct Encoding encoder shall use the number of bits provided by the TTCN, even if the current SS logical channel to transport channel mapping indicates that the TCTF length should be different. For example, the constraint may specify a 2 bit TCTF value for CCCH mapped to FACH, even though the correct value for this mappin

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
			g is 8 bits. The encoder shall use the given 2 bits for the TCTF field, followed directly by the next field in the PDU. When a MAC PDU is received, the Direct Encoding decoder shall determine if the field is present, and the appropriate number of bits to use for the TCTF based on the current SS logical channel to transport channel mapping. For example, for a MAC PDU received on a DCCH mapped to FACH in FDD, 2 bits will be used for the TCTF field. Reference 3G TS 25.321 tables 9.2.1.1 to 9.2.1.5
UE_Id	BITSTRING[16..32]		The UE Id used within a MAC PDU. This field will be either 16 or 32 bits (if present), depending on the UE Id Type field in the same MAC PDU. Bit strings of length 17 to 31 are invalid for this field. When a MAC PDU is transmitted, the TTCN constraint will determine if this field is present, and how many bits are used. The Direct Encoding encoder shall use the number of bits provided by the TTCN, even if the UE Id type field and / or current SS logical channel to transport channel mapping indicates otherwise. When a MAC PDU is received, The Direct Encoding decoder shall determine the number of bits to be used for the UE Id field based on the current SS logical channel to transport channel mapping, and by inspecting the UE Id Type field within the same MAC PDU.

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
UE_IdType	BITSTRING[2]		The type of UE Id used within a MAC PDU. When a MAC PDU is transmitted, the TTCN constraint will determine if this field is present. The Direct Encoding encoder shall use the number of bits provided by the TTCN, even if the current SS logical channel to transport channel mapping indicates that the field should not be present. When a MAC PDU is received, the Direct Encoding decoder shall determine if the field is present based on the current SS logical channel to transport channel mapping, and shall always use 2 bits for this field. Ref 3G TS 25.321 table 9.2.1.6
MAC_UM_Data	BITSTRING[0..32767]		Data content for a RLC UM PDU with 7 or 15 bit length indicators. Ref 3G TS 25.322 clause 9.2.2.9, Even though the UM Data will be octet bound this is definied as BitString so as to accomadate the Failure test cases, with non statndard MAC header.
AM_Data	OCTETSTRING[0..4095]		Data content for a RLC AM PDU with 7 or 15 bit length indicators. Ref 3G TS 25.322 clause 9.2.2.9
AM_SeqNum	BITSTRING[12]		Sequence number for an AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.3
AccessPtN	OCTETSTRING		This is the DNS name. This can take values as per 24.008, 10.5.6.1
AddressInfo	OCTETSTRING[0..20]		Address information, this is the DNS server name. this will be converted into
AuthRsp	BITSTRING [32]		Authentication Response Prarameter 3G TS 24.008 cl. 10.5.3.2
O0_8	OCTETSTRING[0..8]		Generic type for 0 to 8 byte value

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
O3	OCTETSTRING [3]		Generic type for 3 byte value
B80	BITSTRING [80]		Generic type for 80 bit value
B48	BITSTRING [48]		Generic type for 48 bit value
B128	BITSTRING [128]		Generic type for 128 bit value
B1	BITSTRING [1]		Generic type for 1 bit value
B16	BITSTRING [16]		Generic type for 16 bits value
B18	BITSTRING [18]		Generic type for 18 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
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
BitRate	OCTETSTRING[1]		Maximum bit rates supported
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
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
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
CtrlPDU_Type	BITSTRING[3]		PDU type for AM STATUS PDUs. Ref 3G TS 25.322 clause 9.2.2.2
DC_Field	BITSTRING[1]		Control / Data type indicator for AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.1
ExtBit	BITSTRING[1]		Used to indicate if the next octet will be data, or a length indicator and E bit. Ref 3G TS 25.322 clause 9.2.2.5
FollowOnProceed	IEI8		Follow On Proceed 3G TS 24.008 cl. 10.5.3.7 value "10100001"B

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
Fresh	BITSTRING[32]		
GSM_CipheringKey	BITSTRING [64]		
HeaderExt	BITSTRING[2]		Used to indicate if the next octet will be data, or a length indicator and E bit. Ref 3G TS 25.322 clause 9.2.2.7
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
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
LenInd15	BITSTRING[15]		15 bit length indicator for AM or UM RLC PDU. Ref 3G TS 25.322 9.2.2.8
LenInd7	BITSTRING[7]		7 bit length indicator for AM or UM RLC PDU. Ref 3G TS 25.322 9.2.2.8
Length	OCTETSTRING [1]		IE length
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
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
MaxBitRate	OCTETSTRING[1]		Gaurented Bit rate
MaxSDU_Size	OCTETSTRING[1]		Maximum SDU size
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
PDP_TypeNo	OCTETSTRING[1]		PDP Type number, this will take values 00000001: PDP Type PPP 00000010: PDP Type IHOSS 01000001: IPv5 01010111: IPv6 This can take values as per 24.008, clause 10.5.6.4

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Simple Type Definitions			
Type Name	**Type Definition**	**Type Encoding**	**Comments**
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.
PollingBit	BITSTRING[1]		Polling bit used to request a status report from the receiveing RLC AM entitiy. Ref 3G TS 25.322 clause 9.2.2.4
ProtoIdContents	OCTETSTRING		
ProtocolDiscriminator	B4		Protocol Discriminator 3G TS 24.008 cl. 10.2
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
RejCau	OCTETSTRING[1]		Reject Cause 3G TS 24.008 cl. 10.5.3.6
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
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
SapId	OCTETSTRING [1]		SAP Identifier ??? defined in several places GERAN 04.06 and 3G TS 24.008 as bitstring[2] ?
SkipIndicator	B4		Skip Indicator 3G TS 24.008 cl. 10.3.1
UE_TestLoopMode	OCTETSTRING[1]		UETestLoopMode 3G TS 34.109 cl. 6.2
UM_SeqNum	BITSTRING[7]		Sequence number for an UM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.3
UTRAN_GERAN	IA5String ("UTRAN and GERAN", "UTRAN only")		

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Simple Type Definitions

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

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
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 : AccessPtName
Encoding Variation :
Comments : 24.007, section 10.5.6.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
length	Length		
accessPtName	AccessPtN		

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 : AuthFailParam
Encoding Variation :
Comments : Authentication Failure parameter
3G TS 24.008 cl. 10.5.3.2.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00100010’B
iel	Length		
aUTS	BITSTRING[112]		Authentication Parameter AUTS

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

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		’00100001’B
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 : 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 : 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 : CellNotification			
Encoding Variation :			
Comments : Cell notification 3GPP 24.008 / 10.5.5.21			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
iei	IEI8		’10001100’B (8C hex)
unit	B3		Unit
value	B5		Timer value
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 : 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 : 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 : 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 : 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_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 : LB_SetupRB_IE
Encoding Variation :
Comments : LB Setup RAB Subflow
3G TS 34.109 cl. 6.2

Element Name	Type Definition	Field Encoding	Comments
rLC_SDU_Size	BITSTRING [16]		RLC SDU size
spare_2	BITSTRING [3]		
rB_Identity	BITSTRING[5]		

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 : LLC_SAPI_v			
Encoding Variation :			
Comments : 24.007, clause 10.5.6.9			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
spare	B4		
nSAPI_Value	B4		
Detailed Comments :			

Structured Type Definition			
Type Name : LenInd15AndE_Bit			
Encoding Variation :			
Comments : This type is used to represent a 15 bit length indicator and an extension bit, used in both AMD and UMD PDUs. Ref 3G TS 25.322 clauses 9.2.1.3 and 9.2.1.4.			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
lenInd	LenInd15		
extBit	ExtBit		
Detailed Comments :			

Structured Type Definition			
Type Name : LenInd7AndE_Bit			
Encoding Variation :			
Comments : This type is used to represent a 7 bit length indicator and an extension bit, used in both AMD and UMD PDUs. Ref 3G TS 25.322 clauses 9.2.1.3 and 9.2.1.4.			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
lenInd	LenInd7		
extBit	ExtBit		
Detailed Comments :			

Structured Type Definition

Type Name : LenInds

Encoding Variation :

Comments : This type is used to represent a Length Indicator group.

Note that this type definitions supports up to 5 seven bit length indicators, or up to 3 fifteen bit length indicators. If any test cases require more LIs than this, the test suite will need to be updated.

LI groups using this type definition shall never contain both 15 and 7 bit length indicators.

When transmitting an AMD PDU, the TTCN author is responsible for ensuring that the PDU either:

1. Contains no length indicators, by using c_LIsEmpty, and setting the headerExt field in the AMD_PDU constraint to tsc_HE_Data.

2. Contains 1 to 5 seven bit length indicators, by using one of the constraints c_LIs1_7BitLI, c_LIs2_7BitLIs, c_LIs3_7BitLIs, or c_LIs5_7BitLIs and setting the headerExt field in the AMD_PDU to tsc_HE_LI_AndE_Bit.Note that use of these constraints ensures that that the fields lenInd15_1, lenInd15_2, and lenInd15_3 are omitted.

3. Contains 1 to 3 fifteen bit length indicators, by using one of the constraints c_LIs1_15BitLI, c_LIs2_15BitLIs, or c_LIs3_15BitLIs, and setting the headerExt field in the AMD_PDU to tsc_HE_LI_AndE_Bit. Note that use of these constraints ensures that that the fields lenInd7_1, lenInd7_2, and lenInd7_3 are omitted.

When receiving an AMD PDU, the SS is responsible for the following:

1. Examining the headerExt field in the AMD PDU header to decide if any length indicators are present.

2. Deciding whether 7 or 15 bit length indicators are being used for received PDUs based on the currently configured RLC PDU size.

3. Examining the E−bit following each LI that is present to determine if any further LIs are present. If more than 3 resp. 5 LIs are present, a test case error shall be reported, and the test suite will need to be updated to support more than 3 resp. 5 length indicators.

4. Passing the received LI group back to the TTCN in such a way that it will match one of the following constraints:

c_LIsEmpty
c_LIs1_7BitLI
c_LIs2_7BitLIs
c_LIs3_7BitLIs
c_LIs5_7BitLIs
c_LIs1_15BitLI
c_LIs2_15BitLIs
c_LIs3_15BitLIs

Reference 3G TS 25.322 clause 9.2.2.8

Element Name	Type Definition	Field Encoding	Comments
lenInd7_1	LenInd7AndE_Bit		
lenInd7_2	LenInd7AndE_Bit		
lenInd7_3	LenInd7AndE_Bit		
lenInd7_4	LenInd7AndE_Bit		
lenInd7_5	LenInd7AndE_Bit		
lenInd15_1	LenInd15AndE_Bit		

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Structured Type Definition			
Element Name	**Type Definition**	**Field Encoding**	**Comments**
lenInd15_2	LenInd15AndE_Bit		
lenInd15_3	LenInd15AndE_Bit		
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

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
value	OCTETSTRING[0..52]		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 : NSAPI_v
Encoding Variation :
Comments : 24.007, clause 10.5.6.2

Element Name	Type Definition	Field Encoding	Comments
spare	B4		
nSAPI_Value	B4		

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 : 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 : PktDataProtoAddr_lv
Encoding Variation :
Comments : 24.007, clause 10.5.6.4

Element Name	Type Definition	Field Encoding	Comments
length	Length		
spare	B4		
pDP_TypeOrg	B4		
pDP_TypeNo	PDP_TypeNo		
addrInfo	AddressInfo		

Detailed Comments :

Structured Type Definition

Type Name : ProtoCfgOpt
Encoding Variation :
Comments : 24.007, clause 10.5.6.3

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
length	Length		
ext	B1		
spare	B4		
configprotocol	B3		
protocolIdContents	ProtoIdContents		

Detailed Comments :

Structured Type Definition

Type Name : QualityOfService_lv
Encoding Variation :
Comments : 24.008, clause 10.5.6.5

Element Name	Type Definition	Field Encoding	Comments
length	Length		
spare	B2		
dlyClass	B3		
relabilityClass	B3		
peakThroughput	B4		
spare1	B1		
precedenceClass	B3		
spare2	B3		
meanThroughput	B5		
trafficClass	B3		
deliveryOrder	B2		
deliveryErrorSDU	B3		
maxSDUSize	MaxSDU_Size		
maxBitRateUplink	MaxBitRate		
maxBitRateDnlink	MaxBitRate		
residualBER	B4		
sduErrRatio	B4		
transDly	B6		
trafficHandpro	B2		
bitRateUplink	BitRate		
bitRateDnlink	BitRate		

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 : 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 : ResAndSUFIs
Encoding Variation :
Comments : This type is used as type of the RETURN value of TSO o_SUFI_Handler which provides:
− a BOOLEAN result
− a SUFI List of type SuperFields

Element Name	Type Definition	Field Encoding	Comments
result	BOOLEAN		1
sUFI_ListRec	SuperFields		2

Detailed Comments : 1. overall result of the operation of TSO o_SUFI_Handler
2. Super Fields received and transferred into the SuperFields structure according to the rules specified in TSO o_SUFI_Handler

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

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

Detailed Comments :

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_Params
Encoding Variation :
Comments : This type is a list of parameters to be used as input for TSO o_SUFI_Handler which treats a HEXSTRING containing received SUFIs.
Refer to this TSO and the description of the test methodolgy.

Element Name	Type Definition	Field Encoding	Comments
LB	AM_SeqNum		1
UB	AM_SeqNum		1
WSN_presence	BOOLEAN		1
MRW_presence	BOOLEAN		1
Nack1	AM_SeqNum		1
Nack2	AM_SeqNum		1
Nack3	AM_SeqNum		1

Detailed Comments : 1. ...

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

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		
spare	B3		
tdiflag	B1		

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 : UE_TestLoopMode1LB_Setup
Encoding Variation :
Comments : UE Test Loop Mode 1 LB Setup 3G TS 34.109 cl. 6.2

Element Name	Type Definition	Field Encoding	Comments
iel	Length		length
lB_SetupRB_IE1	LB_SetupRB_IE		LB Setup RB IE #1
lB_SetupRB_IE2	LB_SetupRB_IE		LB Setup RB IE #2
lB_SetupRB_IE3	LB_SetupRB_IE		LB Setup RB IE #3
lB_SetupRB_IE4	LB_SetupRB_IE		LB Setup RB IE #4

Detailed Comments : The maximum number of LB entities in the LB setup list is less than or equal to 4.

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 : RLC_IncMode
Encoding Variation :
Comments :

Type Definition

```
ENUMERATED {notInc(0), inc(1)}
```

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 : 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_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_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 : 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 : RRC_SequenceNumber
Encoding Variation :
Comments : 4 bits long

Type Definition

INTEGER (0..15)

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 : 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 : 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	: 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
  −− RACHTransmissionCtrlElements
  −− CPCHTransmissionControlElements
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CmacPagingConfigReq

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  pI_BitMapInfo CHOICE {
    e18 BIT STRING (SIZE (18)),
    e36 BIT STRING (SIZE (36)),
    e72 BIT STRING (SIZE (72)),
    e144 BIT STRING (SIZE (144))},
  dRX_CycleLength INTEGER (3..9),
  iMSI IMSI_GSM_MAP,
  t_pich_T_sccpch BOOLEAN −− T_pich > T_sccpch then FALSE
}
```

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 : 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 : 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 : CphyRlModifyReq

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  activationTime SS_ActivationTime,
  physicalChannelInfo
  CHOICE {
    dpch_CompressedModeStatusInfo DPCH_CompressedModeStatusInfo,
    secondaryCCPCHInfo SecondaryCCPCHInfo,
    pRACHInfo PRACHInfo,
    dPCHInfo DPCHInfo
  }
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : CphyRlSetupReq

Encoding Variation :

Comments : To request to setup the Radio Link

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
    ,
    -- pCPCHInfo PCPCHInfo,
    -- aP_ICHInfo AP_AICHInfo,
    -- cD_ICHInfo CD_ICHInfo,
    -- cD_CA_ichInfo CD_CA_ICHInfo,
    -- cSICHInfo CSICHInfo,
    pDSCHInfo PDSCHInfo
    -- pUSCHInfo PUSCHinfo
  }
}
```

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.

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
}
```

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 : DPCHInfo

Encoding Variation :

Comments :

Type Definition

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

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 : 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 : 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_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_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_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_SHCCH_Message_short
Encoding Variation :
Comments :

Type Definition

CounterCheckResponse

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_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 : 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 : PRACH_MeasurementReport

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  usedPRACH_AcessSlot INTEGER (0..14),
  usedPRACH_Signature INTEGER (0..15) OPTIONAL
}
```

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 : PhysicalChannelIdentity
Encoding Variation :
Comments :

Type Definition

INTEGER (0..31)

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	: 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 : 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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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)

}
```

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 : 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_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 : 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 : 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 : 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 : SCCPCHSlotFormat

Encoding Variation :

Comments : Reference to TS25.211

Type Definition

```
INTEGER (0..17)
```

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.

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_DL_TransportChannelType

Encoding Variation :

Comments :

Type Definition

```
ENUMERATED {
  dch(0),
  fach(1),
  bch(2),
  pch(3),
  dsch(4)
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : SS_RLC_Info

Encoding Variation :

Comments :

Type Definition

```
SEQUENCE {
  sS_ul_RLC_Mode DL_RLC_Mode OPTIONAL,
  sS_dl_RLC_Mode SS_DL_RLC_Mode 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 : 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 : 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 : 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.

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
}
```

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_LogCHMappingList1

Encoding Variation :

Comments : maxulTrCH = maxdlTrCH = 16

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
}
```

Detailed Comments :

ASN.1 Type Definition

Type Name : TrCH_LogicalChannelMapping

Encoding Variation :

Comments :

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 : UE_Info

Encoding Variation :

Comments :

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	: 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 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		
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		
CellChangeOrderFromUTRAN	CellChangeOrderFromUTRAN	Class−definitions		
CellChangeOrderFromUTRAN_r3_IEs	CellChangeOrderFromUTRAN−r3−IEs	Class−definitions		
CellChangeOrderFromUTRANFailure	CellChangeOrderFromUTRANFailure	Class−definitions		
CellChangeOrderFromUTRANFailure_r3_IEs	CellChangeOrderFromUTRANFailure−r3−IEs	Class−definitions		
CellUpdate	CellUpdate	Class−definitions		
CellUpdateConfirm	CellUpdateConfirm	Class−definitions		
CellUpdateConfirm_r3_IEs	CellUpdateConfirm−r3−IEs	Class−definitions		
CellUpdateConfirm_v3a0ext	CellUpdateConfirm−v3a0ext	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
HandoverToUTRANComplete	HandoverToUTRANComplete	Class−definitions		
InitialDirectTransfer	InitialDirectTransfer	Class−definitions		
InitialDirectTransfer_v3a0ext	InitialDirectTransfer−v3a0ext	Class−definitions		
HandoverFromUTRANCommand_GSM	HandoverFromUTRANCommand−GSM	Class−definitions		
HandoverFromUTRANCommand_GSM_r3_IEs	HandoverFromUTRANCommand−GSM−r3−IEs	Class−definitions		
HandoverFromUTRANCommand_CDMA2000	HandoverFromUTRANCommand−CDMA2000	Class−definitions		
HandoverFromUTRANCommand_CDMA2000_r3_IEs	HandoverFromUTRANCommand−CDMA2000−r3−IEs	Class−definitions		
HandoverFromUTRANFailure	HandoverFromUTRANFailure	Class−definitions		
MeasurementControl	MeasurementControl	Class−definitions		
MeasurementControl_r3_IEs	MeasurementControl−r3−IEs	Class−definitions		
MeasurementControl_v390ext	MeasurementControl−v390ext	Class−definitions		
MeasurementControl_v3a0ext	MeasurementControl−v3a0ext	Class−definitions		
MeasurementControlFailure	MeasurementControlFailure	Class−definitions		
MeasurementReport	MeasurementReport	Class−definitions		
MeasurementReport_v390ext	MeasurementReport−v390ext	Class−definitions		
PagingType1	PagingType1	Class−definitions		
PagingType2	PagingType2	Class−definitions		
PhysicalChannelReconfiguration	PhysicalChannelReconfiguration	Class−definitions		
PhysicalChannelReconfiguration_r3_IEs	PhysicalChannelReconfiguration−r3−IEs	Class−definitions		
PhysicalChannelReconfiguration_v3a0ext	PhysicalChannelReconfiguration−v3a0ext	Class−definitions		
PhysicalChannelReconfigurationComplete	PhysicalChannelReconfigurationComplete	Class−definitions		
PhysicalChannelReconfigurationFailure	PhysicalChannelReconfigurationFailure	Class−definitions		
PhysicalSharedChannelAllocation	PhysicalSharedChannelAllocation	Class−definitions		
PhysicalSharedChannelAllocation_r3_IEs	PhysicalSharedChannelAllocation−r3−IEs	Class−definitions		
PUSCHCapacityRequest	PUSCHCapacityRequest	Class−definitions		
RadioBearerReconfiguration	RadioBearerReconfiguration	Class−definitions		
RadioBearerReconfiguration_r3_IEs	RadioBearerReconfiguration−r3−IEs	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RadioBearerReconfiguration_v3a0ext	RadioBearerReconfiguration−v3a0ext	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		
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		
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_CCCH	RRCConnectionRelease−CCCH	Class−definitions		
RRCConnectionRelease_CCCH_r3_IEs	RRCConnectionRelease−CCCH−r3−IEs	Class−definitions		
RRCConnectionReleaseComplete	RRCConnectionReleaseComplete	Class−definitions		
RRCConnectionRequest	RRCConnectionRequest	Class−definitions		
RRCConnectionRequest_v3d0ext_IEs	RRCConnectionRequest−v3d0ext−IEs	Class−definitions		
RRCConnectionSetup	RRCConnectionSetup	Class−definitions		
RRCConnectionSetup_r3_IEs	RRCConnectionSetup−r3−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		
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		
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		
UECapabilityInformation	UECapabilityInformation	Class−definitions		
UECapabilityInformation_v370ext	UECapabilityInformation−v370ext	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UECapabilityInformation_v380ext_IEs	UECapabilityInformation−v380ext−IEs	Class−definitions		
UECapabilityInformation_v3a0ext_IEs	UECapabilityInformation−v3a0ext−IEs	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		
URAUpdate	URAUpdate	Class−definitions		
URAUpdateConfirm	URAUpdateConfirm	Class−definitions		
URAUpdateConfirm_r3_IEs	URAUpdateConfirm−r3−IEs	Class−definitions		
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		
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_InformationInfoFull	CN−InformationInfoFull	Class−definitions		
CN_InformationInfo	CN−InformationInfo	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
IntraDomainNasNode Selector	IntraDomainNasNode Selector	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_SystemInformati onGSM_MAP	NAS−SystemInformati onGSM−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		
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		
CellSelectReselectInfo SIB_3_4	CellSelectReselectInfo SIB−3−4	Class−definitions		
MapParameter	MapParameter	Class−definitions		
Mapping	Mapping	Class−definitions		
MappingFunctionPara meter	MappingFunctionPara meter	Class−definitions		
MappingFunctionPara meterList	MappingFunctionPara meterList	Class−definitions		
MappingFunctionType	MappingFunctionType	Class−definitions		
MappingInfo	MappingInfo	Class−definitions		
Q_Hyst_S	Q−Hyst−S	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		
UpperLimit	UpperLimit	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
URA_Identity	URA−Identity	Class−definitions		
URA_IdentityList	URA−IdentityList	Class−definitions		
ActivationTime	ActivationTime	Class−definitions		
BackoffControlParams	BackoffControlParams	Class−definitions		
C_RNTI	C−RNTI	Class−definitions		
CapabilityUpdateRequirement	CapabilityUpdateRequirement	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		
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_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_TransChCapability	DL−TransChCapability	Class−definitions		
DRAC_SysInfo	DRAC−SysInfo	Class−definitions		
DRAC_SysInfoList	DRAC−SysInfoList	Class−definitions		
DSCH_RNTI	DSCH−RNTI	Class−definitions		
ESN_DS_41	ESN−DS−41	Class−definitions		
EstablishmentCause	EstablishmentCause	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
FailureCauseWithProtErr	FailureCauseWithProtErr	Class−definitions		
FailureCauseWithProtErrTrId	FailureCauseWithProtErrTrId	Class−definitions		
GSM_Measurements	GSM−Measurements	Class−definitions		
AccessStratumReleaseIndicator	AccessStratumReleaseIndicator	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		
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		
MaxNumberOfTFC_DL	MaxNumberOfTFC−DL	Class−definitions		
MaxNumberOfTFC_UL	MaxNumberOfTFC−UL	Class−definitions		
MaxPhysChPerFrame	MaxPhysChPerFrame	Class−definitions		
MaxPhysChPerTimeslot	MaxPhysChPerTimeslot	Class−definitions		
MaxPhysChPerTS	MaxPhysChPerTS	Class−definitions		
MaxSimultaneousCCTrCH_Count	MaxSimultaneousCCTrCH−Count	Class−definitions		
MaxSimultaneousTransChsDL	MaxSimultaneousTransChsDL	Class−definitions		
MaxSimultaneousTransChsUL	MaxSimultaneousTransChsUL	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
MaxTransportBlocksDL	MaxTransportBlocksDL	Class−definitions		
MaxTransportBlocksUL	MaxTransportBlocksUL	Class−definitions		
MaxTS_PerFrame	MaxTS−PerFrame	Class−definitions		
MeasurementCapability	MeasurementCapability	Class−definitions		
MeasurementCapabilityExt	MeasurementCapabilityExt	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		
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_313	N−313	Class−definitions		
N_315	N−315	Class−definitions		
N_315ext	N−315ext	Class−definitions		
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		
PagingRecordList	PagingRecordList	Class−definitions		
PDCP_Capability	PDCP−Capability	Class−definitions		
PhysicalChannelCapability	PhysicalChannelCapability	Class−definitions		
ProtocolErrorCause	ProtocolErrorCause	Class−definitions		
ProtocolErrorIndicator	ProtocolErrorIndicator	Class−definitions		
ProtocolErrorIndicatorWithMoreInfo	ProtocolErrorIndicatorWithMoreInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ProtocolErrorMoreInformation	ProtocolErrorMoreInformation	Class−definitions		
RadioFrequencyBandFDD	RadioFrequencyBandFDD	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		
ReleaseCause	ReleaseCause	Class−definitions		
RF_Capability	RF−Capability	Class−definitions		
RLC_Capability	RLC−Capability	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		
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		
SystemSpecificCapUpdateReq	SystemSpecificCapUpdateReq	Class−definitions		
SystemSpecificCapUpdateReqList	SystemSpecificCapUpdateReqList	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
T_315	T−315	Class−definitions		
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		
TransmissionProbability	TransmissionProbability	Class−definitions		
TransportChannelCapability	TransportChannelCapability	Class−definitions		
TurboSupport	TurboSupport	Class−definitions		
TxRxFrequencySeparation	TxRxFrequencySeparation	Class−definitions		
U_RNTI	U−RNTI	Class−definitions		
UE_ConnTimersAndConstants	UE−ConnTimersAndConstants	Class−definitions		
UE_ConnTimersAndConstants_v3a0ext	UE−ConnTimersAndConstants−v3a0ext	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_v380ext	UE−RadioAccessCapability−v380ext	Class−definitions		
UE_RadioAccessCapability_v3a0ext	UE−RadioAccessCapability−v3a0ext	Class−definitions		
UE_PositioningCapabilityExt_v380	UE−PositioningCapabilityExt−v380	Class−definitions		
UE_PositioningCapabilityExt_v3a0	UE−PositioningCapabilityExt−v3a0	Class−definitions		
UE_RadioAccessCapability_v370ext	UE−RadioAccessCapability−v370ext	Class−definitions		
UE_RadioAccessCapabBandFDDList	UE−RadioAccessCapabBandFDDList	Class−definitions		
UE_RadioAccessCapabBandFDD	UE−RadioAccessCapabBandFDD	Class−definitions		
UL_PhysChCapabilityFDD	UL−PhysChCapabilityFDD	Class−definitions		
UL_PhysChCapabilityTDD	UL−PhysChCapabilityTDD	Class−definitions		
UL_TransChCapability	UL−TransChCapability	Class−definitions		
UE_Positioning_Capability	UE−Positioning−Capability	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
URA_UpdateCause	URA−UpdateCause	Class−definitions		
UTRAN_DRX_CycleLengthCoefficient	UTRAN−DRX−CycleLengthCoefficient	Class−definitions		
WaitTime	WaitTime	Class−definitions		
AlgorithmSpecificInfo	AlgorithmSpecificInfo	Class−definitions		
COUNT_C	COUNT−C	Class−definitions		
COUNT_C_MSB	COUNT−C−MSB	Class−definitions		
DL_AM_RLC_Mode	DL−AM−RLC−Mode	Class−definitions		
DL_CounterSynchronisationInfo	DL−CounterSynchronisationInfo	Class−definitions		
DL_LogicalChannelMapping	DL−LogicalChannelMapping	Class−definitions		
DL_LogicalChannelMappingList	DL−LogicalChannelMappingList	Class−definitions		
DL_RLC_Mode	DL−RLC−Mode	Class−definitions		
DL_RLC_StatusInfo	DL−RLC−StatusInfo	Class−definitions		
DL_TM_RLC_Mode	DL−TM−RLC−Mode	Class−definitions		
DL_TransportChannelType	DL−TransportChannelType	Class−definitions		
ExpectReordering	ExpectReordering	Class−definitions		
ExplicitDiscard	ExplicitDiscard	Class−definitions		
HeaderCompressionInfo	HeaderCompressionInfo	Class−definitions		
HeaderCompressionInfoList	HeaderCompressionInfoList	Class−definitions		
LogicalChannelIdentity	LogicalChannelIdentity	Class−definitions		
LosslessSRNS_RelocSupport	LosslessSRNS−RelocSupport	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_InfoReconfig	PDCP−InfoReconfig	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PredefinedRB_Configuration	PredefinedRB−Configuration	Class−definitions		
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_InformationSetup	RAB−InformationSetup	Class−definitions		
RAB_InformationSetupList	RAB−InformationSetupList	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_InformationAffectedList	RB−InformationAffectedList	Class−definitions		
RB_InformationReconfig	RB−InformationReconfig	Class−definitions		
RB_InformationReconfigList	RB−InformationReconfigList	Class−definitions		
RB_InformationReleaseList	RB−InformationReleaseList	Class−definitions		
RB_InformationSetup	RB−InformationSetup	Class−definitions		
RB_InformationSetupList	RB−InformationSetupList	Class−definitions		
RB_MappingInfo	RB−MappingInfo	Class−definitions		
RB_MappingOption	RB−MappingOption	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		
RLC_Info	RLC−Info	Class−definitions		
RLC_InfoChoice	RLC−InfoChoice	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
RLC_SequenceNumber	RLC−SequenceNumber	Class−definitions		
RLC_SizeInfo	RLC−SizeInfo	Class−definitions		
RLC_SizeExplicitList	RLC−SizeExplicitList	Class−definitions		
SRB_InformationSetup	SRB−InformationSetup	Class−definitions		
SRB_InformationSetupList	SRB−InformationSetupList	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_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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
CommonDynamicTF_InfoList_DynamicTTI	CommonDynamicTF−InfoList−DynamicTTI	Class−definitions		
CommonTransChTFS	CommonTransChTFS	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_AddReconfTransChInformation	DL−AddReconfTransChInformation	Class−definitions		
DL_AddReconfTransChInformation2	DL−AddReconfTransChInformation2	Class−definitions		
DL_CommonTransChInfo	DL−CommonTransChInfo	Class−definitions		
DL_DeletedTransChInfoList	DL−DeletedTransChInfoList	Class−definitions		
DL_TransportChannelIdentity	DL−TransportChannelIdentity	Class−definitions		
DL_TrCH_Type	DL−TrCH−Type	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		
GainFactor	GainFactor	Class−definitions		
GainFactorInformation	GainFactorInformation	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		
NumberOfTbSizeAndTTIList	NumberOfTbSizeAndTTIList	Class−definitions		
MessType	MessType	Class−definitions		
Non_allowedTFC_List	Non−allowedTFC−List	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
SemistaticTF_Information	SemistaticTF−Information	Class−definitions		
SignalledGainFactors	SignalledGainFactors	Class−definitions		
SplitTFCI_Signalling	SplitTFCI−Signalling	Class−definitions		
SplitType	SplitType	Class−definitions		
TFC_Subset	TFC−Subset	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		
UL_AddReconfTransChInfoList	UL−AddReconfTransChInfoList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UL_AddReconfTransChInformation	UL−AddReconfTransChInformation	Class−definitions		
UL_CommonTransChInfo	UL−CommonTransChInfo	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		
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		
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		
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		
CCTrCH_PowerControlInfo	CCTrCH−PowerControlInfo	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		
CSICH_PowerOffset	CSICH−PowerOffset	Class−definitions		
DefaultDPCH_OffsetValueFDD	DefaultDPCH−OffsetValueFDD	Class−definitions		
DefaultDPCH_OffsetValueTDD	DefaultDPCH−OffsetValueTDD	Class−definitions		
DeltaPp_m	DeltaPp−m	Class−definitions		
DeltaSIR	DeltaSIR	Class−definitions		
DL_CCTrCh	DL−CCTrCh	Class−definitions		
DL_CCTrChList	DL−CCTrChList	Class−definitions		
DL_CCTrChListToRemove	DL−CCTrChListToRemove	Class−definitions		
DL_ChannelisationCode	DL−ChannelisationCode	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DL_ChannelisationCodeList	DL−ChannelisationCodeList	Class−definitions		
DL_CommonInformation	DL−CommonInformation	Class−definitions		
DL_CommonInformationPredef	DL−CommonInformationPredef	Class−definitions		
DL_CompressedMode Method	DL−CompressedMode Method	Class−definitions		
DL_DPCH_InfoCommon	DL−DPCH−InfoCommon	Class−definitions		
DL_DPCH_InfoCommonPredef	DL−DPCH−InfoCommonPredef	Class−definitions		
DL_DPCH_InfoPerRL	DL−DPCH−InfoPerRL	Class−definitions		
DL_DPCH_PowerControlInfo	DL−DPCH−PowerControlInfo	Class−definitions		
DL_FrameType	DL−FrameType	Class−definitions		
DL_InformationPerRL	DL−InformationPerRL	Class−definitions		
DL_InformationPerRL_List	DL−InformationPerRL−List	Class−definitions		
DL_PDSCH_Information	DL−PDSCH−Information	Class−definitions		
Dl_rate_matching_restriction	Dl−rate−matching−restriction	Class−definitions		
DL_TS_ChannelisationCode	DL−TS−ChannelisationCode	Class−definitions		
DL_TS_ChannelisationCodesShort	DL−TS−ChannelisationCodesShort	Class−definitions		
DownlinkAdditionalTimeslots	DownlinkAdditionalTimeslots	Class−definitions		
DownlinkTimeslotsCodes	DownlinkTimeslotsCodes	Class−definitions		
DPC_Mode	DPC−Mode	Class−definitions		
DPCCH_PowerOffset	DPCCH−PowerOffset	Class−definitions		
DPCH_CompressedModeInfo	DPCH−CompressedModeInfo	Class−definitions		
DPCH_CompressedModeStatusInfo	DPCH−CompressedModeStatusInfo	Class−definitions		
TGPS_Reconfiguration_CFN	TGPS−Reconfiguration−CFN	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		
DurationTimeInfo	DurationTimeInfo	Class−definitions		
DynamicPersistenceLevel	DynamicPersistenceLevel	Class−definitions		
DynamicPersistenceLevelList	DynamicPersistenceLevelList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
DynamicPersistenceLevelTF_List	DynamicPersistenceLevelTF−List	Class−definitions		
FACH_PCH_Information	FACH−PCH−Information	Class−definitions		
FACH_PCH_InformationList	FACH−PCH−InformationList	Class−definitions		
FrequencyInfo	FrequencyInfo	Class−definitions		
FrequencyInfoFDD	FrequencyInfoFDD	Class−definitions		
FrequencyInfoTDD	FrequencyInfoTDD	Class−definitions		
IndividualTimeslotInfo	IndividualTimeslotInfo	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		
MaxTFCI_Field2Value	MaxTFCI−Field2Value	Class−definitions		
MidambleConfigurationBurstType1and3	MidambleConfigurationBurstType1and3	Class−definitions		
MidambleConfigurationBurstType2	MidambleConfigurationBurstType2	Class−definitions		
MidambleShiftAndBurstType	MidambleShiftAndBurstType	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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PCPICH_UsageForChannelEst	PCPICH−UsageForChannelEst	Class−definitions		
PDSCH_CapacityAllocationInfo	PDSCH−CapacityAllocationInfo	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		
PDSCH_Info	PDSCH−Info	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_SysInfoList	PDSCH−SysInfoList	Class−definitions		
PDSCH_SysInfoList_SFN	PDSCH−SysInfoList−SFN	Class−definitions		
PersistenceScalingFactor	PersistenceScalingFactor	Class−definitions		
PersistenceScalingFactorList	PersistenceScalingFactorList	Class−definitions		
PI_CountPerFrame	PI−CountPerFrame	Class−definitions		
PICH_Info	PICH−Info	Class−definitions		
PICH_PowerOffset	PICH−PowerOffset	Class−definitions		
PilotBits128	PilotBits128	Class−definitions		
PilotBits256	PilotBits256	Class−definitions		
PositionFixedOrFlexible	PositionFixedOrFlexible	Class−definitions		
PowerControlAlgorithm	PowerControlAlgorithm	Class−definitions		
PowerOffsetPilot_pdpdch	PowerOffsetPilot−pdpdch	Class−definitions		
PowerRampStep	PowerRampStep	Class−definitions		
PRACH_Midamble	PRACH−Midamble	Class−definitions		
PRACH_Partitioning	PRACH−Partitioning	Class−definitions		
PRACH_PowerOffset	PRACH−PowerOffset	Class−definitions		
PRACH_RACH_Info	PRACH−RACH−Info	Class−definitions		
PRACH_SystemInformation	PRACH−SystemInformation	Class−definitions		
PRACH_SystemInformationList	PRACH−SystemInformationList	Class−definitions		
PreambleRetransMax	PreambleRetransMax	Class−definitions		
PreambleScramblingCodeWordNumber	PreambleScramblingCodeWordNumber	Class−definitions		
PreDefPhyChConfiguration	PreDefPhyChConfiguration	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PrimaryCCPCH_Info	PrimaryCCPCH−Info	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_Identity	PUSCH−Identity	Class−definitions		
PUSCH_Info	PUSCH−Info	Class−definitions		
PUSCH_SysInfo	PUSCH−SysInfo	Class−definitions		
PUSCH_SysInfoList	PUSCH−SysInfoList	Class−definitions		
PUSCH_SysInfoList_SFN	PUSCH−SysInfoList−SFN	Class−definitions		
RACH_TransmissionParameters	RACH−TransmissionParameters	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_SystemInformation	SCCPCH−SystemInformation	Class−definitions		
SCCPCH_SystemInformationList	SCCPCH−SystemInformationList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ScramblingCodeChange	ScramblingCodeChange	Class−definitions		
ScramblingCodeType	ScramblingCodeType	Class−definitions		
SecondaryCCPCH_Info	SecondaryCCPCH−Info	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		
TDD_PICH_CCode	TDD−PICH−CCode	Class−definitions		
TDD_PRACH_CCode8	TDD−PRACH−CCode8	Class−definitions		
TDD_PRACH_CCode16	TDD−PRACH−CCode16	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		
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		
TimeslotNumber	TimeslotNumber	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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_CCTrCHList	UL−CCTrCHList	Class−definitions		
UL_CCTrCHListToRemove	UL−CCTrCHListToRemove	Class−definitions		
UL_CCTrChTPCList	UL−CCTrChTPCList	Class−definitions		
UL_ChannelRequirement	UL−ChannelRequirement	Class−definitions		
UL_ChannelRequirementWithCPCH_SetID	UL−ChannelRequirementWithCPCH−SetID	Class−definitions		
UL_CompressedMode Method	UL−CompressedMode Method	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_InfoPredef	UL−DPCH−InfoPredef	Class−definitions		
UL_DPCH_PowerControlInfo	UL−DPCH−PowerControlInfo	Class−definitions		
UL_DPCH_PowerControlInfoPredef	UL−DPCH−PowerControlInfoPredef	Class−definitions		
UL_Interference	UL−Interference	Class−definitions		
TDD_UL_Interference	TDD−UL−Interference	Class−definitions		
UL_ScramblingCode	UL−ScramblingCode	Class−definitions		
UL_TargetSIR	UL−TargetSIR	Class−definitions		
UL_TimingAdvance	UL−TimingAdvance	Class−definitions		
UL_TimingAdvanceControl	UL−TimingAdvanceControl	Class−definitions		
UL_TS_ChannelisationCode	UL−TS−ChannelisationCode	Class−definitions		
UL_TS_ChannelisationCodeList	UL−TS−ChannelisationCodeList	Class−definitions		
UplinkAdditionalTimeslots	UplinkAdditionalTimeslots	Class−definitions		
UplinkTimeslotsCodes	UplinkTimeslotsCodes	Class−definitions		
AcquisitionSatInfo	AcquisitionSatInfo	Class−definitions		
AcquisitionSatInfoList	AcquisitionSatInfoList	Class−definitions		
AdditionalMeasurementID_List	AdditionalMeasurementID−List	Class−definitions		
AlmanacSatInfo	AlmanacSatInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
CellIndividualOffset	CellIndividualOffset	Class−definitions		
CellInfo	CellInfo	Class−definitions		
CellInfoSI_RSCP	CellInfoSI−RSCP	Class−definitions		
CellInfoSI_ECN0	CellInfoSI−ECN0	Class−definitions		
CellInfoSI_HCS_RSCP	CellInfoSI−HCS−RSCP	Class−definitions		
CellInfoSI_HCS_ECN0	CellInfoSI−HCS−ECN0	Class−definitions		
CellMeasuredResults	CellMeasuredResults	Class−definitions		
CellMeasurementEventResults	CellMeasurementEventResults	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		
CellsForInterFreqMeasList	CellsForInterFreqMeasList	Class−definitions		
CellsForInterRATMeasList	CellsForInterRATMeasList	Class−definitions		
CellsForIntraFreqMeasList	CellsForIntraFreqMeasList	Class−definitions		
CellSynchronisationInfo	CellSynchronisationInfo	Class−definitions		
CellToReport	CellToReport	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
DeltaRRC	DeltaRRC	Class−definitions		
DGPS_CorrectionSatInfo	DGPS−CorrectionSatInfo	Class−definitions		
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		
Event1b	Event1b	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
FilterCoefficient	FilterCoefficient	Class−definitions		
FineSFN_SFN	FineSFN−SFN	Class−definitions		
ForbiddenAffectCell	ForbiddenAffectCell	Class−definitions		
ForbiddenAffectCellList	ForbiddenAffectCellList	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		
InterFreqCellID	InterFreqCellID	Class−definitions		
InterFreqCellInfoList	InterFreqCellInfoList	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		
InterFreqCellInfoSI_List_HCS_ECN0	InterFreqCellInfoSI−List−HCS−ECN0	Class−definitions		
InterFreqCellList	InterFreqCellList	Class−definitions		
InterFreqCellMeasuredResultsList	InterFreqCellMeasuredResultsList	Class−definitions		
InterFreqEvent	InterFreqEvent	Class−definitions		
InterFreqEventList	InterFreqEventList	Class−definitions		
InterFreqEventResults	InterFreqEventResults	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
InterFreqReportCriteria	InterFreqReportCriteria	Class−definitions		
InterFreqReportingCriteria	InterFreqReportingCriteria	Class−definitions		
InterFreqReportingQuantity	InterFreqReportingQuantity	Class−definitions		
InterFrequencyMeasurement	InterFrequencyMeasurement	Class−definitions		
InterRAT_TargetCellDescription	InterRAT−TargetCellDescription	Class−definitions		
InterRATCellID	InterRATCellID	Class−definitions		
InterRATCellInfoList	InterRATCellInfoList	Class−definitions		
InterRATCellInfoList_B	InterRATCellInfoList−B	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		
InterRATMeasurementSysInfo	InterRATMeasurementSysInfo	Class−definitions		
InterRATMeasurementSysInfo_B	InterRATMeasurementSysInfo−B	Class−definitions		
InterRATReportCriteria	InterRATReportCriteria	Class−definitions		
InterRATReportingCriteria	InterRATReportingCriteria	Class−definitions		
InterRATReportingQuantity	InterRATReportingQuantity	Class−definitions		
IntraFreqCellID	IntraFreqCellID	Class−definitions		
IntraFreqCellInfoList	IntraFreqCellInfoList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
IntraFreqEvent	IntraFreqEvent	Class−definitions		
IntraFreqEventCriteria	IntraFreqEventCriteria	Class−definitions		
IntraFreqEventCriteriaList	IntraFreqEventCriteriaList	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		
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		
IntraFreqReportCriteria	IntraFreqReportCriteria	Class−definitions		
IntraFreqReportingCriteria	IntraFreqReportingCriteria	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		
IODE	IODE	Class−definitions		
IP_Length	IP−Length	Class−definitions		
IP_Spacing	IP−Spacing	Class−definitions		
IS_2000SpecificMeasInfo	IS−2000SpecificMeasInfo	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
MaxNumberOfReportingCellsType1	MaxNumberOfReportingCellsType1	Class−definitions		
MaxNumberOfReportingCellsType2	MaxNumberOfReportingCellsType2	Class−definitions		
MaxNumberOfReportingCellsType3	MaxNumberOfReportingCellsType3	Class−definitions		
MaxReportedCellsOnRACH	MaxReportedCellsOnRACH	Class−definitions		
MeasuredResults	MeasuredResults	Class−definitions		
MeasuredResults_v390ext	MeasuredResults−v390ext	Class−definitions		
MeasuredResultsList	MeasuredResultsList	Class−definitions		
MeasuredResultsOnRACH	MeasuredResultsOnRACH	Class−definitions		
MeasurementCommand	MeasurementCommand	Class−definitions		
MeasurementControlSysInfo	MeasurementControlSysInfo	Class−definitions		
MeasurementIdentity	MeasurementIdentity	Class−definitions		
MeasurementQuantityGSM	MeasurementQuantityGSM	Class−definitions		
MeasurementReportingMode	MeasurementReportingMode	Class−definitions		
MeasurementType	MeasurementType	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		
NeighbourQuality	NeighbourQuality	Class−definitions		todo
NewInterFreqCell	NewInterFreqCell	Class−definitions		
NewInterFreqCellList	NewInterFreqCellList	Class−definitions		
NewInterFreqCellSI_RSCP	NewInterFreqCellSI−RSCP	Class−definitions		
NewInterFreqCellSI_ECN0	NewInterFreqCellSI−ECN0	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
NewInterFreqCellSI_HCS_RSCP	NewInterFreqCellSI−HCS−RSCP	Class−definitions		
NewInterFreqCellSI_HCS_ECN0	NewInterFreqCellSI−HCS−ECN0	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		
NewInterRATCell	NewInterRATCell	Class−definitions		
NewInterRATCell_B	NewInterRATCell−B	Class−definitions		
NewInterRATCellList	NewInterRATCellList	Class−definitions		
NewInterRATCellList_B	NewInterRATCellList−B	Class−definitions		
NewIntraFreqCell	NewIntraFreqCell	Class−definitions		
NewIntraFreqCellList	NewIntraFreqCellList	Class−definitions		
NewIntraFreqCellSI_RSCP	NewIntraFreqCellSI−RSCP	Class−definitions		
NewIntraFreqCellSI_ECN0	NewIntraFreqCellSI−ECN0	Class−definitions		
NewIntraFreqCellSI_HCS_RSCP	NewIntraFreqCellSI−HCS−RSCP	Class−definitions		
NewIntraFreqCellSI_HCS_ECN0	NewIntraFreqCellSI−HCS−ECN0	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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
PeriodicalWithReportingCellStatus	PeriodicalWithReportingCellStatus	Class−definitions		
PLMNIdentitiesOfNeighbourCells	PLMNIdentitiesOfNeighbourCells	Class−definitions		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
ReportingInterval	ReportingInterval	Class−definitions		
ReportingIntervalLong	ReportingIntervalLong	Class−definitions		
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_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_Offset_Validity	SFN−Offset−Validity	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_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		
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		
TimeslotInfoList	TimeslotInfoList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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		
UE_AutonomousUpdateMode	UE−AutonomousUpdateMode	Class−definitions		
UE_InternalEventParam	UE−InternalEventParam	Class−definitions		
UE_InternalEventParamList	UE−InternalEventParamList	Class−definitions		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
UE_InternalEventResults	UE−InternalEventResults	Class−definitions		
UE_InternalMeasQuantity	UE−InternalMeasQuantity	Class−definitions		
UE_InternalMeasuredResults	UE−InternalMeasuredResults	Class−definitions		
UE_InternalMeasurement	UE−InternalMeasurement	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_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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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_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_MeasurementEventResults	UE−Positioning−MeasurementEventResults	Class−definitions		
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_UEB	UE−Positioning−OTDOA−AssistanceData−UEB	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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_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_UEB	UE−Positioning−OTDOA−ReferenceCellInfo−UEB	Class−definitions		
UE_Positioning_PositionEstimateInfo	UE−Positioning−PositionEstimateInfo	Class−definitions		
UE_Positioning_ReportCriteria	UE−Positioning−ReportCriteria	Class−definitions		
UE_Positioning_ReportingQuantity	UE−Positioning−ReportingQuantity	Class−definitions		
UE_Positioning_ReportingQuantity_v390ext	UE−Positioning−ReportingQuantity−v390ext	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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
FrequencyInfoCDMA2000	FrequencyInfoCDMA2000	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		
InterRAT_UE_RadioAccessCapability	InterRAT−UE−RadioAccessCapability	Class−definitions		
InterRAT_UE_RadioAccessCapabilityList	InterRAT−UE−RadioAccessCapabilityList	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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
SIB_ReferenceListFACH	SIB−ReferenceListFACH	Class−definitions		
SIB_Type	SIB−Type	Class−definitions		
SIB_TypeAndTag	SIB−TypeAndTag	Class−definitions		
SIBSb_TypeAndTag	SIBSb−TypeAndTag	Class−definitions		
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		
SysInfoType4	SysInfoType4	Class−definitions		
SysInfoType5	SysInfoType5	Class−definitions		
SysInfoType6	SysInfoType6	Class−definitions		
SysInfoType7	SysInfoType7	Class−definitions		
SysInfoType8	SysInfoType8	Class−definitions		
SysInfoType9	SysInfoType9	Class−definitions		
SysInfoType10	SysInfoType10	Class−definitions		
SysInfoType11	SysInfoType11	Class−definitions		
SysInfoType12	SysInfoType12	Class−definitions		
SysInfoType13	SysInfoType13	Class−definitions		
SysInfoType13_v3a0ext_IEs	SysInfoType13−v3a0ext−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		
SysInfoType14	SysInfoType14	Class−definitions		
SysInfoType15	SysInfoType15	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		
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		

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ASN.1 Type Definitions By Reference				
Type Name	**Type Reference**	**Module Identifier**	**Encoding Variation**	**Comments**
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**
DirectEncoding PER_Unaligned	X.691		Packet encoding rules (X.691) unaligned and with adapted padding
Detailed Comments :			

Test Suite Operation Definition

Operation Name : o_PER_EncodeRRC_ConnSetup_MAC(p_PDU : DL_CCCH_Message)

Result Type : OCTETSTRING

Comments :

Description

This TSO Receives an RRC Connection Setup PDU.
It is expected to PER Encode with Octet Aligned.
It further PADS the encoded string with 0's so as to Make it a Bit string of length 120 Bytes.
The Result will be this 120 Byte OCTETSTRING

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_BitstringChange(p_Str: BITSTRING; p_Len, p_Offset: INTEGER)
Result Type : BITSTRING
Comments :

Description

Performs the manipulation of a bitstring by toggling the bit identified by p_Offset. The length of the string to be manipulated is specified in p_Len. This is only provided to help ensure that the p_Offset is less than p_Len.

Returns a resulting bitstring of length p_Len.

Examples:
o_BitstringChange('010101'B, 6, 5) produces '010100'B.
o_BitstringChange('010101'B, 6, 0) produces '110101'B.

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_ConvertPTMSI(p_PTMSI : OCTETSTRING)

Result Type : P_TMSI_GSM_MAP

Comments : The input parameter 'PTMSI' is a OCTETSTRING, the result is of type TMSI_GSM_MAP.

Description

The input parameter 'PTMSI' is a OCTETSTRING, the result is of type P_TMSI_GSM_MAP.

Detailed Comments :

Test Suite Operation Definition

Operation Name : o_ConvertTMSI(p_Tmsi : OCTETSTRING)
Result Type : TMSI_GSM_MAP
Comments : The input parameter ‘tmsi‘ is a OCTETSTRING, the result is of type TMSI_GSM_MAP.

Description

The input parameter p_Tmsi is a OCTETSTRING, the result is of type TMSI_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_GetPI (p_Imsi : HEXSTRING; p_Np: INTEGER)
Result Type : BITSTRING
Comments : The operation is used to calculate the PI (Page Indicator) from the given input parameters.

Description

The PI is calculated as following:
PI = drx_index mod np

The drx_index is calculated as described hereafter:
drx_index = (p_Imsi / 8192))

This calculation is defined in TS 25.304 clause 8.3.

NOTE: the IMSI is passed as HEXSTRING, the relevant conversion shall be done.

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_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_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:"1110010000000010000000011000100000000000000000010000100000000000000000011111111111111111
1111111110100101100011011011100110111111111101001010101110101001110100111011110010111101001 1"

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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 Operation Definition

Operation Name : o_SUFI_Handler(p_SUFI_Params: SUFI_Params; p_SUFI_String: HEXSTRING)

Result Type : ResAndSUFIs

Comments : "See TS−34.123−3 section 6.5.2.1 for the handling of SUFIs" @sic T1−031840 sic@

Description

Parameters

p_SUFI_Params
This parameter contains the list of checking criteria to be applied by the TSO

p_SUFI_String
This parameter contains the received string of SUFIs to be checked.

Description

This TSO is used to check that the received string of SUFIs contained in p_SUFI_String.
Checking criteria to be applied are contained in p_SUFI_Params.
.....

Output

− the BOOLEAN result of the TSO:
TRUE if all checking and the filling of the SuperFields structure were successful;
FALSE otherwise; in this case the TSO shall produce sufficient output to allow problem analysis
−The filled−in SuperFields structure

Detailed Comments :

Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
px_NumOfSegInPagResOrServReq	INTEGER		The Default value is 2. This Pixit is used in MAC test cases 7.1.1.2, 7.1.1.3, 7.1.1.4, 7.1.1.5 and 7.1.1.8 This indicates the number of RLC segments the Paging Response (CS Domain) or Service Request (PS domain will be segmented in.
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
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

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
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
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: ’00000000000000010000001000000001100000010000000101000000110000011100001000000000100100001010000010110000011000000110100000111000001111’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

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
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
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

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Test Suite Parameter Declarations			
Parameter Name	**Type**	**PICS/PIXIT Ref**	**Comments**
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
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**
AllUE	TRUE	Applicable for All UE's
Detailed Comments :		

Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_DataTx_7_1_3_1	OCTETSTRING	’01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567’O	The 39 byte data to be sent in test case 7.1.3.1
tsc_UL_SDU_Size7_1_3_1	INTEGER	(328 * 25) −8	UM payload size is 328, hence payload =UM_PL *50 −1 byte
tsc_SUFI_Ack	SUFI_Type	’0010’B	Value for SUFI type field within a SUFI in a STATUS PDU. Ref 9.2.2.11
tsc_Reserved3_OnFACH_FDD	TCTF	’01111111’B	Reserved TCTF value for logical channels mapped to FACH. Ref 3G TS 25.321 table 9.2.1.2
tsc_Reserved4_OnFACH_FDD	TCTF	’10111111’B	Reserved TCTF value for logical channels mapped to FACH. Ref 3G TS 25.321 table 9.2.1.2
tsc_DC_AMDPDU	DC_Field	’1’B	Value for D/C field within an AMD PDU. Ref 3G TS 25.322 clause 9.2.2.1
tsc_P_Poll	PollingBit	’1’B	Value for PollingBit field within an AMDPDU indicating that a status report is requested. Ref 3G TS 25.322 clause 9.2.2.4
tsc_E_Data	ExtBit	’0’B	Value for ExtBit in AMD and UMD PDU when the next field is data. Ref 3G TS 25.322 clause 9.2.2.5
tsc_E_LI_AndE_Bit	ExtBit	’1’B	Value for ExtBit in AMD and UMD PDU when the next field is Length Indicator and E bit. Ref 3G TS 25.322 clause 9.2.2.5
tsc_HE_LI_AndE_Bit	HeaderExt	’01’B	Value for headerExtField in AMD PDU when the succeeding octet contains a length indicator and E bit. Ref 3G TS 25.322 clause 9.2.2.7
tsc_DefaultCellId	INTEGER	tsc_CellA	The default cell identifier for all MAC testing.
tsc_AM_SN_Size	INTEGER	12	The number of bits used to represent an AM sequence number. Ref 3G TS 25.322 clause 9.2.2.3.
tsc_LI7_Padding	INTEGER	127	Value for 7 bit length indicator when the rest of the RLC PDU contains padding (’1111111’B). An INTEGER so that it can be passed to LI constraints. Ref 3G TS 25.322 clause 9.2.2.8
tsc_UE_IdTypeU_RNTI	UE_IdType	’00’B	Value for UE_IdType field in MAC PDU when a 32 bit U−RNTI is used. Ref 3G TS 25.321 table 9.2.1.7

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_UE_IdTypeC_RNTI	UE_IdType	’01’B	Value for UE_IdType field in MAC PDU when a 16 bit C−RNTI is used. Ref 3G TS 25.321 table 9.2.1.7
tsc_UE_IdTypeReserved1	UE_IdType	’10’B	Reserved value for UE_IdType field in MAC PDU. Ref 3G TS 25.321 table 9.2.1.7
tsc_UE_IdTypeReserved2	UE_IdType	’11’B	Reserved value for UE_IdType field in MAC PDU. Ref 3G TS 25.321 table 9.2.1.7
tsc_CT_LoCh3	CT_Field	’0010’B	C/T Field value for 3rd Logical channel mapped to a single transport channel. Ref 3G TS 25.321 Table 9.2.1.5a
tsc_CT_LoCh8	CT_Field	’0111’B	C/T Field value for 8th Logical channel mapped to a single transport channel. Ref 3G TS 25.321 Table 9.2.1.5a
tsc_CT_Reserved	CT_Field	’1111’B	Reserved C/T Field value. PDUs with this coding will be discarded by this version of the protocol. Ref 3G TS 25.321 Table 9.2.1.5a
tsc_DCCH_OnRACH_FDD	TCTF	’01’B	TCTF value for DCCH or DTCH mapped to RACH. Ref 3G TS 25.321 table 9.2.1.4
tsc_CCCH_OnFACH_FDD	TCTF	’01000000’B	TCTF value when CCCH is mapped to FACH. Ref 3G TS 25.321 table 9.2.1.29.2.1.2
tsc_Reserved1_OnFACH_FDD	TCTF	’01000001’B	Reserved TCTF value for logical channels mapped to FACH. Ref 3G TS 25.321 table 9.2.1.2
tsc_CTCH_OnFACH_FDD	TCTF	’10000000’B	TCTF value when CTCH is mapped to FACH. Ref 3G TS 25.321 table 9.2.1.29.2.1.2
tsc_Reserved2_OnFACH_FDD	TCTF	’10000001’B	Reserved TCTF value for logical channels mapped to FACH. Ref 3G TS 25.321 table 9.2.1.2
tsc_DCCH_OnFACH_FDD	TCTF	’11’B	TCTF value when DCCH or DTCH is mapped to FACH. Ref 3G TS 25.321 table 9.2.1.29.2.1.2
tsc_ExpectedPayloadSize	INTEGER	128	The RLC payload size in bits used for segmentation of the AM−RLC PDU without Standard AM header of 16 bits but included Length indicators and Padding.

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_DummyDL_DirectTransferMsg_CS	OCTETSTRING	’144013FFFFFFFFFFFFFFFFFFFFE’O	The pre−coded Dummy Dl direct Transfer Message, with Nas Message Ie set to ’FF’O and CN_Domain set to Cs−domain. 0−−−−−−− DL_DCCH_Message −00101−− DL_DCCH_MessageType 5−DownlinkDirectTransfer −−−−−−0− Choice r3 −−−−−−−0 OPTIONAL Non Critical extensions DownlinkDirectTransfer_r3_IEs 01−−−−−− RRC_TransactionIdentifier 1 −−0−−−−− CN_DomainIdentity 0 cs_domain −−−00000 NAS_Message 0 00010011Message length 9 (+1 Offset) 12 bits 11111111 11111111 11111111 11111111 11111111 11111111 11111111 11111111 11111111 1111111− − − − − − − −0 Padding
tsc_DummyDL_DirectTransferMsg_PS	OCTETSTRING	’146013FFFFFFFFFFFFFFFFFFFFE’O	The pre−coded Dummy Dl direct Transfer Message, with Nas Message Ie set to ’FF’O and CN_Domain set to Ps−domain. 0−−−−−−− DL_DCCH_Message −00101−− DL_DCCH_MessageType 5−DownlinkDirectTransfer −−−−−−0− Choice r3 −−−−−−−0 OPTIONAL Non Critical extensions DownlinkDirectTransfer_r3_IEs 01−−−−−− RRC_TransactionIdentifier 1 −−1−−−−− CN_DomainIdentity 1 ps_domain −−−00000 NAS_Message 0 00010011Message length 9 (+1 Offset) 12 bits 11111111 11111111

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
			11111111 11111111 11111111 11111111 11111111 11111111 11111111 1111111− −−−−−−−0 Padding
tsc_DummyDL_DirectTransferLen	INTEGER	13	the Number of bytes in the pre−coded, Dl direct Transfer message with Core Network set for ps domain.
tsc_RRC_ConnecSetupLen	INTEGER	960	the Number of bits in the pre−coded, RRC coection Setup Message
tsc_WaitNextRLC_Segment	INTEGER	200	Time in Milli Seconds, Value Taken Arbitrarily
tsc_UM_SN_Size	INTEGER	7	The number of bits used to represent an UM sequence number. Ref 3G TS 25.322 clause 9.2.2.3
tsc_UM_CCCH_Payloadsize	INTEGER	152	The RLC payload size in bits used for segmentation of the UM−RLC PDU on dl CCCH without Standard UM header of 8 bits but included Length indicators and Padding, if any.
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.
maxdlTrCH	INTEGER	16	
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
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_AttenuationServingCell	INTEGER	0	Value of attenuator to be used when setting a Serving Cell.
tsc_AttOn	INTEGER	1	Attach flag value On

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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_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	’00000000000000000000000000000000’B	
tsc_CellIdCellB	BITSTRING	’00000000000000000000000000000001’B	
tsc_CellIdCellC	BITSTRING	’00000000000000000000000000000010’B	
tsc_CellIdCellD	BITSTRING	’00000000000000000000000000000011’B	
tsc_CellIdCellE	BITSTRING	’00000000000000000000000000000100’B	
tsc_CellIdCellF	BITSTRING	’00000000000000000000000000000101’B	
tsc_CellIdCellG	BITSTRING	’00000000000000000000000000000110’B	
tsc_CellIdCellH	BITSTRING	’00000000000000000000000000000111’B	
tsc_CRNTI	C_RNTI	’0000000000000001’B	C RNTI. Default value: ’0000 0000 0000 0001’B
tsc_CS_Domain	CN_DomainIdentity	cs_domain	
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_DefaultDPCH_OffsetValue	DefaultDPCH_OffsetValueFDD	459	Default DPCH offset value. Actual value DefaultDPCH−OffsetValueFDD = IE value * 512 Default value : 459
tsc_DelayBeforeRRC_ConnRel	INTEGER	1000	Delay before sending RRC CONNECTION RELEASE (value in ms)
tsc_DL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped on FACH (downlink)

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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.
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_RLC_7_BitLI	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a 8 kbps CS/PS configuration used for 7 Bit LI RLC test cases
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_RLC_7BitLI	SF512_AndPilot	sfd128 : pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for RLC 7 bit LI configurations
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),

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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_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)
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_GMM_PD	ProtocolDiscriminator	’1000’B	GMM protocol discriminator 3GPP 24.008 clause 10.4
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_MaxAllowPwr	MaxAllowedUL_TX_Power	33	
tsc_MCC_Def	HEXSTRING	’001’H	
tsc_MessAuthCode	BITSTRING	’00000000000000000000000000000000’B	
tsc_MNC_Def	HEXSTRING	’01F’H	
tsc_MSN	INTEGER	0	
tsc_Mui	INTEGER	0	
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_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_PCCH1	INTEGER	1	Logical channel identity for logical channel PCCH

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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_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_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_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_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_PRACH1	INTEGER	8	Physical channel identity for first PRACH channel
tsc_PRACH1_ScrC	PreambleScramblingCodeWordNumber	0	Scrambling code for preamble of PRACH1
tsc_PRACH1_SF	SF_PRACH	sfpr64	Channelization code for UL DPDCH for PRACH1
tsc_PRACH1_Signatures	AvailableSignatures	’0000000011111111’B	available signatures for PRACH. (from 34.108 cl. 6.1 (SIB5))

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
tsc_PRACH2	INTEGER	9	Physical channel identity for second PRACH channel
tsc_PS_Domain	CN_DomainIdentity	ps_domain	
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_RAC_Def	OCTETSTRING	’05’O	Routing Area Code, 1 octet, 3GPP 24.008 clause 10.5.1.12.3
tsc_RACH1	INTEGER	15	transport channel identity for RACH
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_RB23	INTEGER	23	Second AM radio access bearer for PS
tsc_RB24	INTEGER	24	Second AM radio access bearer for PS
tsc_RB29	INTEGER	29	RB Id for Radio bearer that carries the 2nd CCCH in the DL

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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
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

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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.
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	−19	

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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.
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_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
tsc_sCCPCH_PowerOffset PILOT	INTEGER	6	Power offsett value of PILOT on sCCPCH
tsc_sCCPCH_PowerOffset TFCI	INTEGER	6	Power offsett value of TFCI on sCCPCH
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

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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_SlotFormatsCCPCH1	SCCPCHSlotFormat	8	channelization code for secondary CCPCH1 when spreading factor = 64, default value is 8. Default value: 8
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_T3212_Def	OCTETSTRING	’1E’O	infinite
tsc_TimingsCCPCH1	INTEGER	0	timing offset for secondary CCPCH1. default is 0. Default value: 0
tsc_TPC_CombinationIndex	TPC_CombinationIndex	0	
tsc_TpcStepSize	TPC_StepSizeFDD	0	@sic RASH T1S040468 sic@ Value 0 corresponds to 1 dB
tsc_TT01	INTEGER	5000	TC protocol Timer: 5 sec (shall be 2,5 sec)
tsc_TWaitSysInfo	INTEGER	5000	Wait for the completion of SysInfo sending
tsc_UE_TestLoopMode1	UE_TestLoopMode	’00’O	mode 1 with DCCH dummy transmission disabled
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

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Test Suite Constant Declarations			
Constant Name	**Type**	**Value**	**Comments**
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_RLC_7BitLI	SpreadingFactor	sf64	Channelization code for UL DPDCH for 7 Bit LI RLC configurations
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	
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_WaitBeforePaging	INTEGER	5000	Waiting time before PAGING (ms)
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	
maxASC	INTEGER	maxASC	Class−definitions	
maxASCmap	INTEGER	maxASCmap	Class−definitions	
maxASCpersist	INTEGER	maxASCpersist	Class−definitions	
maxAdditionalMeas	INTEGER	maxAdditionalMeas	Class−definitions	
maxCCTrCH	INTEGER	maxCCTrCH	Class−definitions	
maxCNdomains	INTEGER	maxCNdomains	Class−definitions	
maxCPCHsets	INTEGER	maxCPCHsets	Class−definitions	
maxCellMeas	INTEGER	maxCellMeas	Class−definitions	
maxCellMeas_1	INTEGER	maxCellMeas−1	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	
maxFreqBandsGSM	INTEGER	maxFreqBandsGSM	Class−definitions	
maxFreqBandsTDD	INTEGER	maxFreqBandsTDD	Class−definitions	
maxInterSysMessages	INTEGER	maxInterSysMessages	Class−definitions	
maxLoCHperRLC	INTEGER	maxLoCHperRLC	Class−definitions	
maxMeasEvent	INTEGER	maxMeasEvent	Class−definitions	
maxMeasIntervals	INTEGER	maxMeasIntervals	Class−definitions	
maxMeasParEvent	INTEGER	maxMeasParEvent	Class−definitions	
maxNumCDMA2000Freqs	INTEGER	maxNumCDMA2000Freqs	Class−definitions	
maxNumFDDFreqs	INTEGER	maxNumFDDFreqs	Class−definitions	
maxNumGSMFreqRanges	INTEGER	maxNumGSMFreqRanges	Class−definitions	
maxNumTDDFreqs	INTEGER	maxNumTDDFreqs	Class−definitions	
maxOtherRAT	INTEGER	maxOtherRAT	Class−definitions	
maxOtherRAT_16	INTEGER	maxOtherRAT−16	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	
maxPDSCH	INTEGER	maxPDSCH	Class−definitions	
maxPDSCH_TFCIgroups	INTEGER	maxPDSCH−TFCIgroups	Class−definitions	
maxPRACH	INTEGER	maxPRACH	Class−definitions	
maxPUSCH	INTEGER	maxPUSCH	Class−definitions	
maxPage1	INTEGER	maxPage1	Class−definitions	

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Test Suite Constant Declarations By Reference				
Constant Name	**Type**	**Value Reference**	**Module Identifier**	**Comments**
maxRABsetup	INTEGER	maxRABsetup	Class−definitions	
maxRAT	INTEGER	maxRAT	Class−definitions	
maxRB	INTEGER	maxRB	Class−definitions	
maxRBMuxOptions	INTEGER	maxRBMuxOptions	Class−definitions	
maxRBallRABs	INTEGER	maxRBallRABs	Class−definitions	
maxRBperRAB	INTEGER	maxRBperRAB	Class−definitions	
maxRL	INTEGER	maxRL	Class−definitions	
maxRL_1	INTEGER	maxRL−1	Class−definitions	
maxReportedGSMCells	INTEGER	maxReportedGSMCells	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	
maxSat	INTEGER	maxSat	Class−definitions	
maxSystemCapability	INTEGER	maxSystemCapability	Class−definitions	
maxTF	INTEGER	maxTF	Class−definitions	
maxTFC	INTEGER	maxTFC	Class−definitions	
maxTFCI_2_Combs	INTEGER	maxTFCI−2−Combs	Class−definitions	
maxTF_CPCH	INTEGER	maxTF−CPCH	Class−definitions	
maxTGPS	INTEGER	maxTGPS	Class−definitions	
maxTS	INTEGER	maxTS	Class−definitions	
maxTS_1	INTEGER	maxTS−1	Class−definitions	
maxTrCH	INTEGER	maxTrCH	Class−definitions	
maxTrCHpreconf	INTEGER	maxTrCHpreconf	Class−definitions	
maxURA	INTEGER	maxURA	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_SQN_Received	INTEGER	0	The SQN of the received PDU
tcv_ReceiveSigConnRelInd	BOOLEAN	FALSE	This tcv will be used in the MAC test cases 7.1.1.2, 3,4,5 & 8
tcv_StatusPDU	MAC_PDU_RCV_STATUS		This variable is used to store a received STATUS PDU. No default value is provided, because it is not possible to come up with a sensible default STATUS PDU.
tcv_MAC_PDU	MAC_PDU	cs_MAC_PDU_Def(−)	This variable is used in ts_SendAuthReq to store a MAC PDU containing the next Authentication Request segment to be transmitted. The MAC header fields are initialised to the values passed to the test step, and the data field is initialised to the appropriate Authentication Request segment during each iteration through the loop.
tcv_StatusMatchRes	ResAndSUFIs		To Store the Result send by the SUPEr TSO 0_SUFI_Handler
tcv_DummyDL_DirectTransferMsg	OCTETSTRING	tsc_DummyDL_DirectTransferMsg_PS	Used to store the Dummy dl Direct Transfer message for target Domain
tcv_MAC_Counter	INTEGER	0	Counter used in MAC Suite
tcv_RLC_UM_PDU	MAC_UMD_PDU		This variable is used to store an RLC UM PDU to be transmitted. Generally this variable is initialised by using the test step ts_GetRRC_ConnectionSetupSegment.
tcv_RRC_ConnecSetupSegmentNum	INTEGER	0	This variable is used to iterate through the 3 segments in the hand coded Authentication Request message.
tcv_RRC_ConnecSetupMsg	OCTETSTRING		to store the Precoded RRC Connection Setup 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)

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_AuthAMF	BITSTRING	px_AuthAMF	Authentication Management Field 16 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
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)

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_AuthRAND	BITSTRING	px_AuthRAND	Random Challenge 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)
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))	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
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))	
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))	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
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.
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_dRX_CycleLengthPaging	UTRAN_DRX_CycleLength Coefficient		DRX cycleLength value to be used for PAGING
tcv_E_PLMN	PLMN_List	c_PLMN_List1 (o_ConvtPLMN(tsc_MCC_ Def, tsc_MNC_Def))	
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@

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
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	
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_NumOfPLMN	INTEGER	1	This TCV is used to decide if the test case is a Single PLMN or Multi PLMN test case and based on it initialise SIB 11, 12 & 18 accordingly. Values 1>> 1 PLMN, 2 >> 2 PLMN, 3 >> 3 PLMN Rest Not defined
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.

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
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_RB_TestModeActivated	BOOLEAN	FALSE	Set to TRUE if RB test mode is activated. To be used in the postamble: when RB test mode has been used then NAS do not need to be released.
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.
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

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
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_Ti	RRC_TransactionIdentifier	0	To hold the RRC Transaction Identifier.
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_SIB1	SysInfoType1	cb_SIB1_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))	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_SIB11	SysInfoType11	cb_SIB11_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), 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), 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), 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), 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), 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), c_CellInfoDef (	

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
		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), 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))	
tcv_SIB12	SysInfoType12	cb_SIB12_Def	
tcv_SIB18	SysInfoType18		no initial value
tcv_SIB2	SysInfoType2		no initial value
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_SIB7	SysInfoType7	c_SIB7_Def	
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

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_TGCFN	TGCFN	0	
tcv_TimeoutInDefault	BOOLEAN	FALSE	Indication of a TimeoutInDefault having occurred
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

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Test Case Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
tcv_Use_E_PLMN	BOOLEAN	FALSE	The user of ts_IdleUpdated needs to set tcv_Use_E_PLMN to 'True' if he wants to send 'equivalent PLMN list' as set in tcv_E_PLMN during CS or PS registration
Detailed Comments :			

PCO Type Declarations		
PCO Type	**Role**	**Comments**
DSAP	LT	
CSAP	LT	
Dc_SAP	LT	
MMI	UT	
Detailed Comments :		

PCO Declarations			
PCO Name	**PCO Type**	**Role**	**Comments**
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_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_Poll	60000	ms	This timer is used to ensure that PDUs are received with the poll bit set. The duration of this timer must be longer than the duration of the test body. Expiry of this timer is handled in the RLC_Default behaviour table, and results in an inconclusive verdict.
t_Reset	5000	ms	This timer is used to ensure that RESET PDUs are received. The duration of this timer must be longer than the duration of the test body. Expiry of this timer is handled in the RLC_Default behaviour table, and results in an inconclusive verdict.
t_Status	10000	ms	This timer is used to ensure that STATUS PDUs are received. In general, it is started at the beginning of the test body. The duration of this timer must be longer than the duration of the test body. Expiry of this timer is handled in the RLC_Default behaviour table, and results in an inconclusive verdict.
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 : 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 : RLC_TR_TestDataReq		
PCO Type : DSAP		
Comments : To request the transmission of unstructered data using transparent mode in the downlink direction. TTCN writter is requires to send data according to the transport block size allowed.		
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_PAGING_Config_CNF **PCO Type :** CSAP **Comments :** To confirm to setup the Paging message
Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo
}

Detailed Comments :

ASN.1 ASP Type Definition
ASP Name : CMAC_PAGING_Config_REQ **PCO Type :** CSAP **Comments :** To request MAC layer to send the Paging message on the specified configuration.
Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo,
ratType RatType,
configMessage CmacPagingConfigReq
}

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_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_PRACH_Measurement_Report_IND

PCO Type : CSAP

Comments : SS indicates a PRACH parameters measurement report for each PRACH Preambles and Message received from the UE

Type Definition

```
SEQUENCE {
  cellId INTEGER(0..63),
  routingInfo RoutingInfo,
  ratType RatType,
  measurementReport PRACH_MeasurementReport
}
```

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 : RLC_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
superFields	SuperFields		3
superFieldsRec	HEXSTRING		4
padding	RLC_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 expected in the STATUS PDU.

4. The superfields to be sent in the STATUS PDU.

5. Must be present to ensure that the total size of this PDU is exactly equal to the current PU 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 : MAC_AMD_PDU
PCO Type : DSAP
Encoding Rule Name :
Encoding Variation :
Comments : Acknowledged mode RLC PDU with 7 bit length indicators. Ref 3G TS 25.322 clause 9.2.1.4

Field Name	Field Type	Field Encoding	Comments
dcField	DC_Field		1
seqNum	AM_SeqNum		2
pollingBit	PollingBit		3
headerExt	HeaderExt		4
lenInds	LenInds		5
data	AM_Data		6
piggybackedStatus	MAC_PiggyBackedSTATUS_PDU		7
padding	RLC_Padding		8

Detailed Comments :

1. Data / Control field. Always tsc_DC_AMDPDU for an AMD_PDU.

2. The sequence number for the PDU. Generally this field contains the value INT_TO_BIT(p_SN, tsc_AM_SN_Size), where p_SN is a parameter containing the current AM SN.

3. The pollingBit field may take on the values tsc_P_Poll, or tsc_P_NoPoll.

4. If the lenInds field is present, the headerExt field shall be tsc_HE_LI_AndE_Bit.
Otherwise, the headerExt field shall be tsc_HE_Data.

5. The length indicator group for the PDU. If this field present, this must be indicated by the headerExt field.

6. The data field contains the data to be sent, or the data expected to be received. Usually this data is created by using either ts_GetRxAM_PRBS, or ts_GetTxAM_PRBS.

7. The piggybackedStatus field is used to transmit or receive a piggybacked STATUS PDU within an RLC PDU. It is the callers responsibility to ensure that there is an LI present indicating that the piggybacked STATUS PDU is present.

8. The padding field must be present if the size of the LI group + the data size + the optional piggybacked status PDU is less than the current PU size.

PDU Type Definition

PDU Name : MAC_PiggyBackedSTATUS_PDU
PCO Type : DSAP
Encoding Rule Name :
Encoding Variation :
Comments : A piggybacked STATUS PDU within an AMD PDU. This type is identical to the STATUS PDU, except the D/C field is replaced with a reserved bit. Ref 3G TS 25.322 clause 9.2.1.6. If padding is required, the padding field in the PDU containing this piggy−backed STATUS PDU should be used.

Field Name	Field Type	Field Encoding	Comments
r	BITSTRING[1]		Reserved for future extensions.
type	CtrlPDU_Type		Always tsc_PDU_TypeStatus
superFields	SuperFields		

Detailed Comments :

PDU Type Definition

PDU Name : MAC_PDU
PCO Type : DSAP
Encoding Rule Name : DirectEncoding
Encoding Variation :
Comments : MAC layer PDU. Ref 3G TS 25.321 clause 9.1.2

Field Name	Field Type	Field Encoding	Comments
tctf	TCTF		1
ueIdType	UE_IdType		2
ueId	UE_Id		3
ctField	CT_Field		4
data	PDU		5

Detailed Comments : For a detailed description of the semantics and applicability of each of these fields, see 3G TS 25.321 clause 9.2.1.

1. Target Channel Type Field. Used to indicate which logical channel data should be routed to / from when mapped to RACH / FACH.

2. UE Id type field. Used to indicate if the UE_Id field contains a 16 bit C−RNTI or a 32 bit U−RNTI.

3. UE Id field. Contains the C−RNTI or the U−RNTI of the UE that this message is to or from.

4. C/T field. Used to multiplex / demultiplex when more than 1 logical channel of a specific type is mapped to the same transport channel.

5. The RLC PDU to be transmitted or received.

PDU Type Definition

PDU Name : MAC_PDU_RCV_STATUS
PCO Type : DSAP
Encoding Rule Name : DirectEncoding
Encoding Variation :
Comments : MAC layer PDU. Ref 3G TS 25.321 clause 9.1.2

Field Name	Field Type	Field Encoding	Comments
tctf	TCTF		1
ueIdType	UE_IdType		2
ueId	UE_Id		3
ctField	CT_Field		4
data	RLC_STATUS_PDU		5

Detailed Comments : For a detailed description of the semantics and applicability of each of these fields, see 3G TS 25.321 clause 9.2.1.

1. Target Channel Type Field. Used to indicate which logical channel data should be routed to / from when mapped to RACH / FACH.

2. UE Id type field. Used to indicate if the UE_Id field contains a 16 bit C−RNTI or a 32 bit U−RNTI.

3. UE Id field. Contains the C−RNTI or the U−RNTI of the UE that this message is to or from.

4. C/T field. Used to multiplex / demultiplex when more than 1 logical channel of a specific type is mapped to the same transport channel.

5. The RLC PDU to be transmitted or received.

PDU Type Definition

PDU Name : MAC_UMD_PDU
PCO Type : DSAP
Encoding Rule Name : DirectEncoding
Encoding Variation :
Comments : Unacknowledged mode RLC PDU. Ref 3G TS 25.322 clause 9.2.1.3

Field Name	Field Type	Field Encoding	Comments
seqNum	UM_SeqNum		1
eBit	ExtBit		2
lenInds	LenInds		3
data	MAC_UM_Data		4
padding	RLC_Padding		5

Detailed Comments :

1. The sequence number for the PDU. Generally this field contains the value INT_TO_BIT(p_SN, tsc_UM_SN_Size), where p_SN is a parameter containing the current UM SN.

2. If the lenInds field is present, the eBit field shall be tsc_E_LI_AndE_Bit. Otherwise, the eBit field shall be tsc_E_Data.

3. The length indicator group for the PDU. If this field present, this must be indicated by the eBit field.

4. The data field contains the data to be sent, or the data expected to be received. Usually this data is created by using either ts_GetRxUM_PRBS, or ts_GetTxUM_PRBS.

5. The padding field must be present if the size of the LI group + the data size is less than the current payload size.

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 : ACTIVATEPDPCONTEXTREQUESTul
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : Activate PDP Context Request
ue −> n
3GPP 24.008 clause, 9.5.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		
sM_ProtocolDiscriminator	ProtocolDiscriminator		
msgType	MsgType		
requestedNSAPI	NSAPI_v		
requestedLLC_SAPI	LLC_SAPI_v		
requestedQoS	QualityOfService_lv		
pDP_Address	PktDataProtoAddr_lv		
accessPtName	AccessPtName		
protocolConfOpts	ProtoCfgOpt		

Detailed Comments :

PDU Type Definition

PDU Name : ACTIVATERBTESTMODE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : ACTIVATE RB TEST MODE n −> ue 3G TS 34.109 V3.0.0 cl. 6.6

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]

Detailed Comments :

PDU Type Definition

PDU Name : ACTIVATERBTESTMODECOMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : ACTIVATE RB TEST MODE COMPLETE ue −> n 3G TS 34.109 V3.0.0 cl. 6.7

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]

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)

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
spare	B4		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 6−7 octets (? different IEI ?)
gmmCause	GMM_Cause		O 2 octets
t3302Value	GPRS_Timer		O 2 octets
cellNotification	CellNotification		O 1 octet
equivalentPLMN	PLMN_List		O 17 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)

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_Timer		O, TV 2 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)

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

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	AuthFailParam		Authentication Failure Paramter O AuthFail (128 bits)

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 : CLOSEUETESTLOOP
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CLOSE UE TEST LOOP n −> ue 3G TS 34.109 V3.0.0 cl. 6.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
uE_TestLoopMode	UE_TestLoopMode		UE test loop mode M UE_TestLoopMode
uE_TestLoopMode1LB_Setup	UE_TestLoopMode1LB_Setup		UE test loop mode 1 LB setup C UE_TestLoopMode1LB_Setup

Detailed Comments :

PDU Type Definition

PDU Name : CLOSEUETESTLOOPCOMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : CLOSE UE TEST LOOP ue −> n 3G TS 34.109 V3.0.0 cl. 6.3

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]

Detailed Comments :

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

Field Name	Field Type	Field Encoding	Comments
ti	TI		
sM_ProtocolDiscriminator	ProtocolDiscriminator		
msgType	MsgType		
sM_Cause	RejCau		
tearDwnInd	TearDwnInd_tv		

Detailed Comments :

PDU Type Definition

PDU Name : DEACTIVATERBTESTMODE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : DEACTIVATE RB TEST MODE n −> ue 3G TS 34.109 V3.0.0 cl. 6.8

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]

Detailed Comments :

PDU Type Definition

PDU Name : DEACTIVATERBTESTMODECOMPLETE
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : DEACTIVATE RB TEST MODE COMPLETE ue −> n 3G TS 34.109 cl. 6.9

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
tCProtocolDiscriminator	ProtocolDiscriminator		TC Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]

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 : 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

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

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 : ROUTINGAREAUPDATEREQUEST
PCO Type : Dc_SAP
Encoding Rule Name :
Encoding Variation :
Comments : 3GPP 24.008 V3.6.0 clause 9.4.14 (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 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

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)

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 6−9 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

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]
cLIR_Invocation	CLIR_Invocation		CLIR invocation O OCTETSTRING[1]

Continued on next page

Continued from previous page

PDU Type Definition			
Field Name	**Field Type**	**Field Encoding**	**Comments**
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]
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**
TxMAC	RLC_TR_TestDataReq	This alias is used to transmit a MAC PDU. Note that MAC PDUs are sent using the RLC Tr PCO, on a logical channel mapped to a transport channel operating in a special MAC mode that will not add any MAC header information. This means that the entire MAC PDU can be specified within the TTCN. This is described in detail in 34.123−3, clause (TBD?) (MAC test method).
RxMAC	RLC_TR_TestDataInd	This alias is used to receive a MAC PDU. Note that MAC PDUs are received using the RLC Tr PCO, on a logical channel mapped to a transport channel operating in a special MAC mode that will not remove any MAC header information. This means that the entire MAC PDU can be inspected by the TTCN. This is described in detail in 34.123−3, clause (TBD?) (MAC test method).
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 : cr_SUFI_Params(p_lb, p_ub: AM_SeqNum; p_wsnpres, p_mrwpres: BOOLEAN; p_nack_1, p_nack_2, p_nack_3: AM_SeqNum)

Structured Type : SUFI_Params

Derivation Path :

Encoding Variation :

Comments : This constraint initializes the list of parameters to be used as input for TSO o_SUFI_Handler which treats a HEXSTRING containing received SUFIs.
Refer to this TSO and the description of the test methodolgy.

Element Name	Element Value	Element Encoding	Comments
LB	p_lb		1
UB	p_ub		1
WSN_presence	p_wsnpres		1
MRW_presence	p_mrwpres		1
Nack1	p_nack_1		1
Nack2	p_nack_2		1
Nack3	p_nack_3		1

Detailed Comments : 1. ...

Structured Type Constraint Declaration

Constraint Name : c_LenInd7AndE_Bit(p_LI7:INTEGER; p_ExtBit: ExtBit)

Structured Type : LenInd7AndE_Bit

Derivation Path :

Encoding Variation :

Comments : This constraint is used to create a 7 bit length indicator followed by an extension bit.

Parameters:
p_LI7: An integer containing the required length indicator.
0 <= p_LI7 <= 127

p_ExtBit: Used to indicate whether the next octet contains a length inidicator and E bit, or data. p_ExtBit must be either tsc_LI_AndE_Bit or tsc_E_Data.

Element Name	Element Value	Element Encoding	Comments
lenInd	INT_TO_BIT(p_LI7, 7)		
extBit	p_ExtBit		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LIs1_7BitLI(p_LI1: INTEGER)

Structured Type : LenInds

Derivation Path :

Encoding Variation :

Comments : This constraint is used to send or receive a length indicator group within a PDU (AM or UM). This constraint is used when there is exactly one 7 bit LI in the group.

Parameters:
p_LI1:
An integer representing the first 7 bit length indicator. This parameter is used within a call to INT_TO_BIT, so a value must be provided.

Element Name	Element Value	Element Encoding	Comments
lenInd7_1	c_LenInd7AndE_Bit(p_LI1, tsc_E_Data)		
lenInd7_2	–		
lenInd7_3	–		
lenInd7_4	–		
lenInd7_5	–		
lenInd15_1	–		
lenInd15_2	–		
lenInd15_3	–		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LIs2_7BitLIs(p_LI1, p_LI2: INTEGER)
Structured Type : LenInds
Derivation Path :
Encoding Variation :
Comments : This constraint is used to send or receive a length indicator group within a PDU (AM or UM). This constraint is used when there are exactly two 7 bit LIs in the group.

Parameters:
p_LI1:
An integer representing the first 7 bit length indicator. This parameter is used within a call to INT_TO_BIT, so a value must be provided.

p_LI2:
An integer representing the second 7 bit length indicator. This parameter is used within a call to INT_TO_BIT, so a value must be provided.

Element Name	Element Value	Element Encoding	Comments
lenInd7_1	c_LenInd7AndE_Bit(p_LI1, tsc_E_LI_AndE_Bit)		
lenInd7_2	c_LenInd7AndE_Bit(p_LI2, tsc_E_Data)		
lenInd7_3	–		
lenInd7_4	–		
lenInd7_5	–		
lenInd15_1	–		
lenInd15_2	–		
lenInd15_3	–		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_Ack(p_LSN: INTEGER)
Structured Type : SUFI_Ack
Derivation Path :
Encoding Variation :
Comments : An ACK SUFI to be used in SuperFields constraints.

Parameters:
p_LSN: An integer containing the last sequence number to be acknowledged.
0 <= p_LSN <= 4095

Padding calculations:
4 half octets

Element Name	Element Value	Element Encoding	Comments
type	tsc_SUFI_Ack		4 bits
lsn	INT_TO_BIT(p_LSN, 12)		12 bits

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cs_SF_Ack(p_LSN:INTEGER)
Structured Type : SuperFields
Derivation Path :
Encoding Variation :
Comments : This constraint is used to represent a SUFI list within a STATUS PDU that positively acknowledges all PUs with SN < p_LSN.

Parameters:
p_LSN:
An integer representing LSN (last sequence number), which acknowledges all PUs with SN < LSN that are NOT indicated to be erroneous in earlier parts of the STATUS PDU. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

Padding calculation:
4 half octets

Element Name	Element Value	Element Encoding	Comments
windowSize	–		
list	–		
rList	–		
bitmap	–		
mRW	–		
mRW_Ack	–		
noMore	–		
ack	cs_Ack(p_LSN)		4 half octets

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_MS_NetworkCapAss_lv
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_TI_Any
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_MS_NetworkCap_tlv_Any
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_PDP_ContextStatusAny
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 : c_RepeatIndAny
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 : cr_GPRS_TimerAny
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_DRXparamter_tv_Any
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 : c_AuthCiphRspExtAny
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_AC_RefNum3
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_AUTN(p_AUTN: BITSTRING)
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_AttachTypeAny
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_AuthFailParamAny
Structured Type : AuthFailParam
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	’00100010’B		
iel	’0E’O		
aUTS	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_AuthRspAny_tv
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
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_CellIndInfoDef
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)

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)
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)
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_DRX_CycleLengthStrucDef
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
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_DetachTypeReAttNotRequiredGPRS
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_ForceToStandby(p_val : B3)
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)
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)
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)
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)
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)
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_UpdateType_v(p_for : B1; p_type : B3)
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_TimerAny
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_GPRS_Timer_v(p_unit : B3; p_value : B5)
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_LB_SetupRB_IE(p_LB_Size, p_RB_Identity: INTEGER)
Structured Type : LB_SetupRB_IE
Derivation Path :
Encoding Variation :
Comments : This constraint is used as an LB entry in an LB setup list.

Parameters:
p_LB_Size: The uplink RLC SDU size in bits. This value will be represented as a 14 bit value in the LB Setup IE, so the valid range is from 0..16383.

p_RB_Identity: The RB Id of the radio bearer that loopback is to be setup for. Valid range is 5..31, since RB 0−4 are used for signalling radio bearers.

Element Name	Element Value	Element Encoding	Comments
rLC_SDU_Size	INT_TO_BIT(p_LB_Size, 16)		
spare_2	'000'B		
rB_Identity	INT_TO_BIT(p_RB_Identity, 5)		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocAreaIdAny_v
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_LocAreaId_v(p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)
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_LocUpdTypeAny
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_MS_Clsmk1_Any
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_Clsmk2_Any
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
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
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_MobileIdAny_lv
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_MobileIdPTMSI (p_ptmsi : O0_8)
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
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_MobileIdPTMSI_lv (p_ptmsi : O0_8)
Structured Type : MS_Identity_lv
Derivation Path :
Encoding Variation :
Comments :

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 / P−TMSI
otherDigits	p_ptmsi		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdTMSI_Def
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	px_TMSI_Def		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_MobileIdTMSI_lv
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_PLMN_List1 (p_Plmn1 : OCTETSTRING)
Structured Type : PLMN_List
Derivation Path :
Encoding Variation :
Comments : equivalent PLMN list containing 1 PLMN (OCTETSTRING[3])

Element Name	Element Value	Element Encoding	Comments
iei	’01001010’B		’01001010’B
iel	’03’O		
plmn1	p_Plmn1		PLMN 1
plmn2	−		PLMN 2
plmn3	−		PLMN 3
plmn4	−		PLMN 4
plmn5	−		PLMN 5

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_Signature (p_ptmsi : OCTETSTRING)
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_SignatureAny
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_RAI_Any_v
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)
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_RadioPriority(p_val : B3)
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_ServiceType_v(p_type : B3)
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
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 : c_UE_TestLoopMode1_LB_Setup(p_LB_Size, p_RB_Identity: INTEGER)
Structured Type : UE_TestLoopMode1LB_Setup
Derivation Path :
Encoding Variation :
Comments : This constraint is used as a complete UE test loop mode 1 setup IE, with a single LB entity in the LB setup list.

Parameters:
p_LB_Size: The uplink RLC SDU size in bits. This value will be represented as a 14 bit value in the LB Setup IE, so the valid range is from 0..16383.

p_RB_Identity: The RB Id of the radio bearer that loopback is to be setup for. Valid range is 5..31, since RB 0−4 are used for signalling radio bearers.

Element Name	Element Value	Element Encoding	Comments
iel	’03’O		
lB_SetupRB_IE1	c_LB_SetupRB_IE(p_LB_Size, p_RB_Identity)		
lB_SetupRB_IE2	−		
lB_SetupRB_IE3	−		
lB_SetupRB_IE4	−		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cb_IMEISV_Request(p_value: B3)
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
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
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	*		
layer1Id	*		

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Structured Type Constraint Declaration			
Element Name	**Element Value**	**Element Encoding**	**Comments**
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_TI_MO			
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 : cs_TearDwnInd_tv
Structured Type : TearDwnInd_tv
Derivation Path :
Encoding Variation :
Comments : Tear down indicator used for the direction
n –> ue, indicating all the PDP Context must be released.

Element Name	Element Value	Element Encoding	Comments
iei	’1001’B		
spare	’000’B		
tdiflag	’1’B		Tear down all PDP Context

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoBelow64k
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
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
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 : cbs_DefaultRLC_InfoUM
ASN1 Type : RLC_Info
Derivation Path :
Encoding Variation :
Comments : This constraint is used within the radio bearer setup procedure as the default configuration for the UE UM RLC entity.

This constraint is intended to be used as a base constraint, and modified constraints can be used to alter specific fields as required by any test purposes that do not use the default configuration.

Constraint Value

```
{
  ul_RLC_Mode ul_UM_RLC_Mode: {
    transmissionRLC_Discard OMIT
  },
  dl_RLC_Mode dl_UM_RLC_Mode: NULL
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : C_TFC_RestrictUE_0_1_2
ASN1 Type : TFC_Subset
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

allowedTFC_List : { 0 , 1,2}

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMapping_Rach1TransRB3

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : This constraint is identical to c_TrLogMapping_PchRach1, except that the macHeaderManipulation field for RB3 is set to 'OmitMacHeader' for RB3. This allows the MAC header information to be inspected by the TTCN for received PDUs.

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           omitMacHeader ,
                                                ul_TransportChannelType         rach,
                                                logicalChannelIdentity          tsc_UL_DCCH3,
                                                logicalChannelType              dCCH
                                },
                                rB_Identity   tsc_RB_DCCH_FACH_MAC
                        },
                        {
                                logicalChannel_Mapping ul_LogicalChannelMapping : {
                                                macHeaderManipulation           normalMacHeader ,
                                                ul_TransportChannelType         rach,
                                                logicalChannelIdentity          tsc_UL_DCCH4,
                                                logicalChannelType              dCCH
                                },
                                rB_Identity tsc_RB4
                        },    --@sic T1s-040185 sic@
                         {
```

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ASN.1 Type Constraint Declaration
Constraint Value

logicalChannel_Mapping ul_LogicalChannelMapping : {
macHeaderManipulation normalMacHeader ,
ul_TransportChannelType rach,
logicalChannelIdentity tsc_UL_DTCH1,
logicalChannelType dTCH
},
rB_Identity tsc_RB20
}
}
}
},
dlconnectedTrCHList OMIT
}

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMapping_PchFach1TransRB3

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : This constraint is identical to c_TrLogMapping_PchFach1, except that the macHeaderManipulation field for RB3 is set to 'OmitMacHeader' for RB3. This allows the MAC header information to be specified by the TTCN for transmitted PDUs.

For FDD mode only. map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH and BCCH(for BCCH_FACH)

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,
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
                                        mac_LogicalChannelPriority        2
                        },
                        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        3
                        },
                        rB_Identity    tsc_RB2
                },
                {
                        logicalChannel_Mapping dl_LogicalChannelMapping : {
                                        macHeaderManipulation            omitMacHeader,
                                        dl_TransportChannelType    fach,
                                        logicalChannelIdentity          tsc_DL_DCCH3,
                                        logicalChannelType                dCCH,
                                        rlc_SizeList configured: NULL,
                                        mac_LogicalChannelPriority        4
                        },
                        rB_Identity   tsc_RB_DCCH_FACH_MAC
                },
                {
                        logicalChannel_Mapping dl_LogicalChannelMapping : {
                                        macHeaderManipulation            normalMacHeader,
                                        dl_TransportChannelType    fach,
                                        logicalChannelIdentity          tsc_DL_DCCH4,
                                        logicalChannelType                dCCH,
                                        rlc_SizeList configured: NULL,
                                        mac_LogicalChannelPriority        5
                        },
                        rB_Identity tsc_RB4
                }
            }
        },  --@sic T1s-040185 sic@
        {
                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_TrLogMappingDL_4DCCH_TransRB3

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : This constraint is identical to c_TrLogMappingDL_4DCCH, except that the macHeaderManipulation field for RB3 is set to 'OmitMacHeader' for RB3. This allows the MAC header information to be inspected by the TTCN for received PDUs.

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           omitMacHeader,
                                                dl_TransportChannelType         dch,
                                                logicalChannelIdentity          tsc_DL_DCCH3,
                                                logicalChannelType              dCCH,
                                                rlc_SizeList                    configured : NULL,
                                                mac_LogicalChannelPriority      3
                                },
                                rB_Identity    tsc_RB_DCCH_DCH_MAC
                        },
                        {
                                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
                        }
                }
        }
}
```

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ASN.1 Type Constraint Declaration
Constraint Value
}
Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH_TransRB3

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : This constraint is identical to c_TrLogMappingUL_4DCCH, except that the macHeaderManipulation field for RB3 is set to 'OmitMacHeader' for RB3. This allows the MAC header information to be inspected by the TTCN for received PDUs.

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           omitMacHeader,
                                                ul_TransportChannelType         dch,
                                                logicalChannelIdentity          tsc_UL_DCCH3,
                                                logicalChannelType              dCCH
                                },
                                rB_Identity tsc_RB_DCCH_DCH_MAC
                        },
                        {
                                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 : cd_TrLogMapping_PchFach1TransRB0

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : c_TrLogMappingPCH_FACH_PS.

Encoding Variation :

Comments : This constraint is identical c_TrLogMappingPCH_FACH_PS.except that the macHeaderManipulation field for RB0 is set to 'OmitMacHeader' for RB0. This allows the MAC header information to be specified by the TTCN for transmitted PDUs. and the changed special RB Id for the CCCH in DL.

For FDD mode only. map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH and BCCH(for BCCH_FACH)

Constraint Value

REPLACE dlconnectedTrCHList.[1].trCH_LogCHMappingList .[1].logicalChannel_Mapping.dl_LogicalChannelMapping.macHeaderManipulation BY omitMacHeader, −−@sic ER1657 sic@
REPLACE dlconnectedTrCHList.[1].trCH_LogCHMappingList .[1].rB_Identity BY tsc_RB_CCCH_FACH_MAC −−@sic ER1860 sic@

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_AICH_Info

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_148_TFS_DL
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
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
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
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

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_336_148_DL_InfoRLC_UM(p_ActTime : ActivationTime)

ASN1 Type : CphyTrchConfigReq

Derivation Path :

Encoding Variation :

Comments : SS CPHY DL transport channel configuration for RLC tests using 336 bit transport blocks.
Reference 3G TS 34.108, clause 6.11.1, and 6.11.3.
Note that the TFS for DCH1 is restricted to {0x336, 1x336} for RLC testing.

Constraint Value

```
{
  activationTime activationCFN : p_ActTime ,
  ulconnectedTrCHList OMIT,
  ulTFCS OMIT,
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH1,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_336_TFS_RLC_UM
    },
    {
      trchid tsc_DL_DCH5,
      dl_TransportChannelType dch,
      transportChannelInfo c_DCH_148_TFS_DL
    }
  },
  dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k )
}
```

Detailed Comments : For DCH5 (3G TS 34.108, 6.10.2.4.1.2)
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.
For DCH1 (3G TS 34.108 cl. 6.11.1 and 6.11.3):
TTI = 20 ms;
two transport formats: TransportBlocks = 1, TB size = 336 bits; TansportBlock = 0, Size = 336.
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_336_148_UL_InfoRLC_UM (p_ActTime : ActivationTime)

ASN1 Type : CphyTrchConfigReq

Derivation Path :

Encoding Variation :

Comments : SS UL transport channel configuration for RLC tests using 336 bit transport blocks.
Reference 3G TS 34.108, clause 6.11.1,
Note that the TFS for DCH1 is restricted to {0x336, 1x336} for RLC testing.

Constraint Value

```
{
  activationTime activationCFN : p_ActTime ,
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_336_TFS_RLC_UM
    },
    {
      trchid tsc_UL_DCH5,
      ul_TransportChannelType dch,
      transportChannelInfo c_DCH_148_TFS_UL
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_2_3_Rx, -- sent to SS
  dlconnectedTrCHList OMIT,
  dlTFCS OMIT
}
```

Detailed Comments : For DCH5 (3G TS 34.108, 6.10.2.4.1.2)
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.

For DCH1 (3G TS 34.108 cl. 6.11.1 and 6.11.3):
TTI = 20 ms;
two transport formats: TransportBlocks = 1, TB size = 336 bits; TansportBlock = 0, Size = 336 bits
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_336_TFS_RLC_UE_UM

ASN1 Type : DedicatedTransChTFS

Derivation Path :

Encoding Variation :

Comments : DCH1 Transport format set for RLC tests using 7 bit length indicators used in message sent to UE.
Reference 3G TS 34.108, clause 6.11.1, and 6.11.3.
Note that the TFS for DCH1 is restricted to {0x336, 1x336} for RLC testing with 7 bit length indicators.

Constraint Value

```
{
  tti tti40 :{
    {
      rlc_Size octetModeType1 :
      sizeType2 : {
        part1 2,
        part2 OMIT
      },
      numberOfTbSizeList{
        zero : NULL , one : NULL
      },
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional: third,
    rateMatchingAttribute 155,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 20 ms;
2 transport formats:
TB size always=336 bits; TransportBlocks = 0, and 1;
rlc_Size = TB_Size (DCH, w/o MUX)
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_336_TFS_RLC_UM

ASN1 Type : CommonOrDedicatedTFS

Derivation Path :

Encoding Variation :

Comments : DCH1 Transport format set for RLC UM tests using 7 bit length indicators.
Reference 3G TS 34.108, clause 6.11.1,
Note that the TFS for DCH1 is restricted to {0x336, 1x336} for RLC testing with 7 bit length indicators.

Constraint Value

```
{
  tti tti40 :{
    {
      tb_Size 336,
      numberOfTbSizeList{ zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
    }
  },
  semistaticTF_Information {
    channelCodingType convolutional: third,
    rateMatchingAttribute 155,
    crc_Size crc16
  }
}
```

Detailed Comments : TTI = 20 ms;
2 transport formats: TB size always=336 bits; TransportBlocks = 0, and 1;
coding = turbo;
CRCsize = 16;
RateMatching = 130

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_AddReconfTransChInfo (
p_DlTrChId:TransportChannelIdentity;
p_UlTrChId:TransportChannelIdentity
)

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
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_AddReconfTransChInfoListRLC
ASN1 Type : DL_AddReconfTransChInfoList
Derivation Path :
Encoding Variation :
Comments : DL transport channel information list for RLC tests.
DCH1 is used for the DTCH RAB for testing, and DCH5 is used for the RRC connection SRBs.
Reference 3G TS 34.108, clause 6.11.

Constraint Value

```
{
 c_DL_AddReconfTransChInfo(tsc_DL_DCH1, tsc_UL_DCH1),
 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)
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_CommonInformationRB_SetUp (p_Sf: SF512_AndPilot)
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_CommonTransChInfoSameAsUL
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
)

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_DL_InformationPerRL (p_ScrmbCode: PrimaryScramblingCode; p_Sf: SF512_AndCodeNumber; p_SecondaryScramblingCode : SecondaryScramblingCode)

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_SecondaryScramblingCode ,
        sf_AndCodeNumber p_Sf,
        scramblingCodeChange OMIT
     }},
     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
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
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
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
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)
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_MAC_PagingCfg(p_E18: B18; p_dRX : INTEGER)
ASN1 Type : CmacPagingConfigReq
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  pI_BitMapInfo e18: p_E18,
  dRX_CycleLength p_dRX,
  iMSI o_ConvertIMSI(px_IMSI_Def),
  t_pich_T_sccpch FALSE
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_MIB_Def (p_CellInfo : CellInfoCfg)

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_PagingType1_P_TMSI (
p_PagCause : PagingCause;
p_P_Tmsi : P_TMSI_GSM_MAP;
p_Domain : CN_DomainIdentity)

ASN1 Type : PagingType1

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  pagingRecordList {
    cn_Identity:{
      pagingCause p_PagCause,
      cn_DomainIdentity p_Domain,
      cn_pagedUE_Identity p_TMSI_GSM_MAP : p_P_Tmsi
    }
  },
  bcch_ModificationInfo OMIT,
  laterNonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PagingType1_TMSI (p_PagCause: PagingCause; p_Tmsi: TMSI_GSM_MAP;
p_Domain : CN_DomainIdentity)

ASN1 Type : PagingType1

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
{
  pagingRecordList {
    cn_Identity:{
      pagingCause p_PagCause,
      cn_DomainIdentity p_Domain,
      cn_pagedUE_Identity tmsi_GSM_MAP: p_Tmsi
    }
  },
  bcch_ModificationInfo OMIT,
  laterNonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_PCH_TFS
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
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
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_RAB_InfoListRLC (
p_RAB_Id: BITSTRING;
p_RLC_Info: RLC_Info;
p_Domain : CN_DomainIdentity;
p_RB_Id : RB_Identity
)
ASN1 Type : RAB_InformationSetupList
Derivation Path :
Encoding Variation :
Comments : RAB_InformationSetup for RLC tests on RB10. Reference 3G TS 34.108, clause 6.11.1 to 6.11.4

The corresponding SS entity should be configured as a TM entity, such that the RLC header information can be specified and / or verified from the TTCN.

Constraint Value

```
{
  {
    rab_Info {
      rab_Identity gsm_MAP_RAB_Identity: p_RAB_Id,
      cn_DomainIdentity p_Domain,
      re_EstablishmentTimer useT314
    },
    rb_InformationSetupList {{
        rb_Identity p_RB_Id ,
        pdcp_Info OMIT,
        rlc_InfoChoice rlc_Info :p_RLC_Info,
        rb_MappingInfo {{
            ul_LogicalChannelMappings oneLogicalChannel:{
              ul_TransportChannelType dch: tsc_UL_DCH1,
              logicalChannelIdentity tsc_UL_DTCH1,
              rlc_SizeList configured :NULL,
              mac_LogicalChannelPriority 7
            } ,
            dl_LogicalChannelMappingList {{
                dl_TransportChannelType dch: tsc_DL_DCH1,
                logicalChannelIdentity tsc_DL_DTCH1
            }}
        }}
    }}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_RACH_TFS
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
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)
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)
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)
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_SB1_Def

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_Schedul1
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_SIB11_Schedul1
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB11 of one segment, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    sib_Pos rep64 :29
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_Schedul2
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB11 of two segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep64 :29,
    sib_PosOffsetInfo {so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_Schedul3
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB11 of three segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :29,
    sib_PosOffsetInfo {so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB12_Schedul1
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB12 of one segment, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    sib_Pos rep64 :13
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB12_Schedul2
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB12 of two segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep64 : 13,
    sib_PosOffsetInfo {so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB12_Schedul3
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB12 of three segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :13,
    sib_PosOffsetInfo {so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB18_2PLMN (p_InterCellInfo : CellInfoCfg)
ASN1 Type : SysInfoType18
Derivation Path :
Encoding Variation :
Comments : The Cell Info will be of the cell of other PLMN

Constraint Value

```
{
  idleModePLMNIdentities
  {
    plmnsOfIntraFreqCellsList OMIT,
    plmnsOfInterFreqCellsList
    {{
        plmn_Identity {
          mcc o_HexToDigitsMCC ( p_InterCellInfo.mcc),
          mnc o_HexToDigitsMNC (p_InterCellInfo.mnc )
        }
     }},
    plmnsOfInterRATCellsList OMIT
  },
  connectedModePLMNIdentities OMIT,
  nonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB18_3PLMN (p_Inter1CellInfo, p_Inter2CellInfo : CellInfoCfg)

ASN1 Type : SysInfoType18

Derivation Path :

Encoding Variation :

Comments : The Cell Info will be of the one cell each of other PLMN's

Constraint Value

```
{
 idleModePLMNIdentities
 {
   plmnsOfIntraFreqCellsList OMIT,
   plmnsOfInterFreqCellsList
   {{
      plmn_Identity {
        mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
        mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc )
      }
    },{
      plmn_Identity {
        mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
        mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc )
      }
    },{
      plmn_Identity {
        mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
        mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc )
      }
    },{
      plmn_Identity {
        mcc o_HexToDigitsMCC ( p_Inter2CellInfo.mcc),
        mnc o_HexToDigitsMNC (p_Inter2CellInfo.mnc )
      }
    }},
   plmnsOfInterRATCellsList OMIT
 },
 connectedModePLMNIdentities OMIT,
 nonCriticalExtensions OMIT
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB18_Def (p_CellInfo : CellInfoCfg)
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)
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
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of one segment, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    sib_Pos rep64 :19
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul2
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of two segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep64 :19,
    sib_PosOffsetInfo {so4}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul3
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of three segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :19,
    sib_PosOffsetInfo {so4, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul4
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB5 of four segments, 3GPP TS 34.123−3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 4,
    sib_Pos rep64 :19,
    sib_PosOffsetInfo {so4, so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul1
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of one segment

Constraint Value

```
{
  scheduling {
    sib_Pos rep64 : 3
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul2
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of two segments

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep64 :3,
    sib_PosOffsetInfo {so4}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul3
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of three segments

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :3,
    sib_PosOffsetInfo {so4, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul4
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of four segments

Constraint Value

```
{
  scheduling {
    segCount 4,
    sib_Pos rep64 :3,
    sib_PosOffsetInfo {so4, so2, so2}
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB7_Def
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
)

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)

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)

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)

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
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)
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_2_3_Rx
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)
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
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)
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_CmplFACH_Tx (p_PowerOffsetInformation : PowerOffsetInformation)
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_TrChConfigTypeDCH_NoSHO
ASN1 Type : TrChConfigType
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

dch : normal

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoBCH1
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_13_6_StandAlone
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_336_148_RLC_UM
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : DL Transport channel configuration information for RLC tests using 336 bit transport blocks.
This information is used within the CMAC_Config_REQ for DCH1 and DCH5
Reference 3G TS 34.108 clause 6.11.1 and 6.11.3.

Constraint Value

```
{
  dlconnectedTrCHList {
    {
      trchid tsc_DL_DCH1,
      transportChannelInfo c_DCH_336_TFS_RLC_UM
    },
    {
      trchid tsc_DL_DCH5,
      transportChannelInfo c_DCH_148_TFS_DL
    }
  },
  dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k ) -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoPCH_FACH
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
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_13_6_StandAlone
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_336_148_RLC_UM
ASN1 Type : TrCHInfo
Derivation Path :
Encoding Variation :
Comments : UL Transport channel configuration information for RLC tests using 336 bit transport blocks.
This information is used within the CMAC_Config_REQ for DCH1 and DCH5
Reference 3G TS 34.108 clause 6.11.1

Constraint Value

```
{
  ulconnectedTrCHList {
    {
      trchid tsc_UL_DCH1,
      transportChannelInfo c_DCH_336_TFS_RLC_UM
    },
    {
      trchid tsc_UL_DCH5,
      transportChannelInfo c_DCH_148_TFS_UL
    }
  },
  ulTFCS c_TFCS_Cmpl0_1_2_3_Rx -- sent to SS
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingBCH1
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_4DCCH
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_1DTCH_RLC(p_RB_Identity: SS_RB_Identity)

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : DL Logical channel mapping list for RLC tests. The DTCH RAB for RLC testing is mapped to DCH1. The SRBs are mapped to DCH5.

Parameters
p_RB_Identity:
The RB Id to be used within the SS. This value can be used by the SS decoder to determine which RLC mode is being simulated.

Expected values:
−10 => UM7
−11 => UM15
−12 => AM7
−13 => AM15

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 p_RB_Identity
        }
      }
    },
    {
      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
          },
```

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Continued from previous page

ASN.1 Type Constraint Declaration

Constraint Value

```
        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

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

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
          },
          rB_Identity tsc_RB1
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
      },
      {
        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
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,
      logicalChannelType dTCH
```

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ASN.1 Type Constraint Declaration
Constraint Value
| ```
        },
        rB_Identity tsc_RB20
      }
    }
  }
 },
 dlconnectedTrCHList OMIT
}
``` |
| **Detailed Comments :** |
```

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingUL_4DCCH
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_1DTCH_RLC(p_RB_Identity: SS_RB_Identity)

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path :

Encoding Variation :

Comments : UL Logical channel mapping list for RLC tests. The DTCH RAB for RLC testing is mapped to DCH1. The SRBs are mapped to DCH5.

Parameters
p_RB_Identity:
The RB Id to be used within the SS. This value can be used by the SS decoder to determine which RLC mode is being simulated.

Expected values:
−10 => UM7
−11 => UM15
−12 => AM7
−13 => AM15

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 p_RB_Identity
        }
      }
    },
    {
      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
          },
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
        rB_Identity tsc_RB3
      },
      {
        logicalChannel_Mapping ul_LogicalChannelMapping : {
          macHeaderManipulation normalMacHeader,
          ul_TransportChannelType dch,
          logicalChannelIdentity tsc_UL_DCCH4,
          logicalChannelType dCCH
        },
        rB_Identity tsc_RB4
      }
    }
  }
 }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_U_RNTI
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
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 : c_UE_IdDefIMSI
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)
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_AddReconfTransChInfoList7_RLC_UM
ASN1 Type : UL_AddReconfTransChInfoList
Derivation Path :
Encoding Variation :
Comments : Transport channel information for DCH1 and DCH5 for UM RLC tests using 7 bit length indicators.
Reference 3G TS 34.108, clause 6.11.1

Constraint Value

```
{{
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH1,
    transportFormatSet dedicatedTransChTFS: c_DCH_336_TFS_RLC_UE_UM
  },
  {
    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_AddReconfTransChInfoListDCCH_13_6k
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
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
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_CommTrChInfoRLC_8K

ASN1 Type : UL_CommonTransChInfo

Derivation Path :

Encoding Variation :

Comments : UL_CommonTransChInfo for AM and UM RLC tests using 7 and 15 bit length indicators.
Reference 3G TS 34.108, clause 6.11.1 − 6.11.4.
Note that the TFS for DCH1 is limited to 0x336, and 1x366 for RLC testing with 7 bit length indicators.

Constraint Value

```
{
  tfc_Subset OMIT,
  prach_TFCS OMIT,
  modeSpecificInfo fdd:{
    ul_TFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoBelow64k )
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_DPCH_13_6_StandAlone (p_UL_ScramblingCode : UL_ScramblingCode)

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 : cb_DL_AM_RLC
ASN1 Type : DL_AM_RLC_Mode
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  inSequenceDelivery TRUE,
  receivingWindowSize rw128,
  dl_RLC_StatusInfo {
    timerStatusProhibit tsp200,
    timerEPC OMIT,
    missingPDU_Indicator TRUE,
    timerStatusPeriodic OMIT
  }
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_64K_CS (p_DL_CommonInformation : DL_CommonInformation;
p_SecondaryScramblingCode : SecondaryScramblingCode)
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_8K_RLC_7BitLI (p_DL_CommonInformation : DL_CommonInformation; p_SecondaryScramblingCode : SecondaryScramblingCode)

ASN1 Type : DL_DPCHInfo

Derivation Path : cb_DL_DPCH_64K_CS.

Encoding Variation :

Comments :

Constraint Value

REPLACE dl_DPCH_InfoPerRL.fdd.dl_ChannelisationCodeList.[0].sf_AndCodeNumber BY tsc_DL_DPCH1_ChC_RLC_7_BitLI

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_DL_DPCH_SRB_StandAloneDPCH_Offset (p_SecondaryScramblingCode : SecondaryScramblingCode)

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_SIB11_Def (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_IntraCellInfo4, p_IntraCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

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:
− 5 intra cells frequency of the same frequency
− 3 inter cell frequency of the same frequency.

Constraint Value

```
{
  sib12indicator TRUE,
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
      cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo {
          intraFreqMeasurementID OMIT, −− default value
          intraFreqCellInfoSI_List {
            removedIntraFreqCellList OMIT, −− removedIntraFreqCellList 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
                }
              },
              {
                intraFreqCellID p_IntraCellInfo4.cellId,
                cellInfo {
                  cellIndividualOffset OMIT, −− default value
                  referenceTimeDifferenceToCell OMIT,
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
            modeSpecificInfo fdd : {
              primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo4.priScrmCode },
              readSFN_Indicator TRUE,
              tx_DiversityIndicator FALSE
            },
            cellSelectionReselectionInfo OMIT -- value same as the serving cell
          }
        },
        {
          intraFreqCellID p_IntraCellInfo5.cellId,
          cellInfo {
            cellIndividualOffset OMIT, -- default value
            referenceTimeDifferenceToCell OMIT,
            modeSpecificInfo fdd : {
              primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo5.priScrmCode },
              readSFN_Indicator TRUE,
              tx_DiversityIndicator FALSE
            },
            cellSelectionReselectionInfo OMIT -- value same as the serving cell
          }
      }}
    },
    intraFreqMeasQuantity {
      filterCoefficient OMIT, -- default value
      modeSpecificInfo fdd : {
        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
```

Continued on next page

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ASN.1 Type Constraint Declaration
Constraint Value

```
            },
            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
          }
      } }

    }
  },
  interFreqMeasurementSysInfo
  {
    interFreqCellInfoSI_List {
      removedInterFreqCellList OMIT, -- removedInterFreqCellList in SIB11 is not used and ignored by the UE
      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
          }
        },
        {
```

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ASN.1 Type Constraint Declaration
Constraint Value

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
}
}
} }}
}}},
nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB11_Freq2 (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo4, p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

ASN1 Type : SysInfoType11

Derivation Path :

Encoding Variation :

Comments : Default system information block type 11. To be used by cell D,E,F:
− 3 intra cells frequency of the same frequency
− 5 inter cell frequency of the same frequency.

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 : {
              intraFreqMeasQuantity_FDD cpich_RSCP
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
    }
  },
  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_InterCellInfo4.cellId,
        frequencyInfo p_InterCellInfo4.frequencyInfo,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      },
      {
        interFreqCellID p_InterCellInfo5.cellId,
        frequencyInfo OMIT,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
      },
      {
        interFreqCellID p_InterCellInfo6.cellId,
        frequencyInfo OMIT,
        cellInfo {
          cellIndividualOffset OMIT, -- dafault 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
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
            }
          },
          {
            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
            }
          }
      } }}
  }}},
  nonCriticalExtensions OMIT --@sic T1s-040086 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB11_Freq3_PLMN1Or2 (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo4, p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

ASN1 Type : SysInfoType11

Derivation Path :

Encoding Variation :

Comments : Default system information block type 11. To be used by cell D,E,F:
− 3 intra cells frequency of the same frequency
− 5 inter cell frequency of the same frequency.

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_InterCellInfo4.cellId,
          frequencyInfo p_InterCellInfo4.frequencyInfo,
          cellInfo {
            cellIndividualOffset OMIT, -- default value
            referenceTimeDifferenceToCell OMIT,
            modeSpecificInfo fdd : {
              primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
              readSFN_Indicator FALSE,
              tx_DiversityIndicator FALSE
            },
            cellSelectionReselectionInfo OMIT -- value same as the serving cell
          }
        },
        {
          interFreqCellID p_InterCellInfo5.cellId,
          frequencyInfo OMIT,
          cellInfo {
            cellIndividualOffset OMIT, -- default value
            referenceTimeDifferenceToCell OMIT,
            modeSpecificInfo fdd : {
              primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
              readSFN_Indicator FALSE,
              tx_DiversityIndicator FALSE
            },
            cellSelectionReselectionInfo OMIT -- value same as the serving cell
          }
        },
        {
          interFreqCellID p_InterCellInfo6.cellId,
          frequencyInfo OMIT,
          cellInfo {
            cellIndividualOffset OMIT, -- dafault 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 p_InterCellInfo7.frequencyInfo,
          cellInfo {
            cellIndividualOffset OMIT, -- default value
            referenceTimeDifferenceToCell OMIT,
            modeSpecificInfo fdd : {
              primaryCPICH_Info { primaryScramblingCode p_InterCellInfo7.priScrmCode },
              readSFN_Indicator FALSE,
              tx_DiversityIndicator FALSE
            },
```

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ASN.1 Type Constraint Declaration
Constraint Value

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
}
}
} }}
}}},
nonCriticalExtensions OMIT −−@sic ER1653 sic@
}

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB11_Freq3_PLMN3 (p_ActiveCellInfo, p_IntraCellInfo2, p_InterCellInfo3, p_InterCellInfo4, p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

ASN1 Type : SysInfoType11

Derivation Path :

Encoding Variation :

Comments : Default system information block type 11. To be used by cell D,E,F:
− 3 intra cells frequency of the same frequency
− 5 inter cell frequency of the same frequency.

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
                }
              }
          } },
          intraFreqMeasQuantity {
            filterCoefficient OMIT, −− default value
            modeSpecificInfo fdd : {
              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 }
              },
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
        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
          }
      } }

    }
  },
  interFreqMeasurementSysInfo
  {
    interFreqCellInfoSI_List {
      removedInterFreqCellList OMIT,
      newInterFreqCellList {
        {
          interFreqCellID p_InterCellInfo3.cellId,
          frequencyInfo p_InterCellInfo3.frequencyInfo,
          cellInfo {
            cellIndividualOffset OMIT, -- default value
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
        referenceTimeDifferenceToCell OMIT,
        modeSpecificInfo fdd : {
          primaryCPICH_Info { primaryScramblingCode p_InterCellInfo3.priScrmCode },
          readSFN_Indicator FALSE,
          tx_DiversityIndicator FALSE
        },
        cellSelectionReselectionInfo OMIT -- value same as the serving cell
      }
    },
      {
      interFreqCellID p_InterCellInfo4.cellId,
      frequencyInfo OMIT,
      cellInfo {
        cellIndividualOffset OMIT, -- default value
        referenceTimeDifferenceToCell OMIT,
        modeSpecificInfo fdd : {
          primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
          readSFN_Indicator FALSE,
          tx_DiversityIndicator FALSE
        },
        cellSelectionReselectionInfo OMIT -- value same as the serving cell
      }
    },
    {
      interFreqCellID p_InterCellInfo5.cellId,
      frequencyInfo OMIT,
      cellInfo {
        cellIndividualOffset OMIT, -- default value
        referenceTimeDifferenceToCell OMIT,
        modeSpecificInfo fdd : {
          primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
          readSFN_Indicator FALSE,
          tx_DiversityIndicator FALSE
        },
        cellSelectionReselectionInfo OMIT -- value same as the serving cell
      }
    },
    {
      interFreqCellID p_InterCellInfo6.cellId,
      frequencyInfo p_InterCellInfo6.frequencyInfo,
      cellInfo {
        cellIndividualOffset OMIT, -- dafault 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
        },
```

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ASN.1 Type Constraint Declaration

Constraint Value

```
            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
          }
        }
    } }}
  }}},
  nonCriticalExtensions OMIT −−@sic ER1653 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB12_Def

ASN1 Type : SysInfoType12

Derivation Path :

Encoding Variation :

Comments : Default system information block type 12, used in connected mode. 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

```
{
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
      cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo OMIT,
        interFreqMeasurementSysInfo OMIT
      },
      interRATMeasurementSysInfo OMIT
    }
  },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments : Similar to c_SIB11_def except that "detectedSetReportingQuantities" is not present and "timeToTrigger" = 0

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB12_Freq2

ASN1 Type : SysInfoType12

Derivation Path :

Encoding Variation :

Comments : Default system information block type 12, used in connected mode. To be used by cell D,E,F:
− 3 intra cells frequency of the same frequency
− 5 inter cell frequency of the same frequency.

Constraint Value

```
{
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
      cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo OMIT,
        interFreqMeasurementSysInfo OMIT
      },
      interRATMeasurementSysInfo OMIT
    }
  },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments : Similar to c_SIB11_def except that "detectedSetReportingQuantities" is not present and "timeToTrigger" = 0

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB1_Def (p_CellInfo : CellInfoCfg)
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)

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
    }
  },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB3_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)

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
    }
  },
  nonCriticalExtensions OMIT −−@sic T1s−040086 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN (p_CellInfoCfg : CellInfoCfg)

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 sic@
}
```

Detailed Comments : Similar to c_SIB3_Def

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB4_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)

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 0,
    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 sic@
}
```

Detailed Comments : Similar to c_SIB3_Def

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB5_Def (p_CellInfo : CellInfoCfg)
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,
            assignedSubChannelNumber '1111'B
```

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ASN.1 Type Constraint Declaration
Constraint Value

```
        }
      },
      {
        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
        ctch_Indicator FALSE
```

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Continued from previous page

ASN.1 Type Constraint Declaration

Constraint Value

```
      },
      {
        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 sic@
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cb_SIB6_Def (p_CellInfo : CellInfoCfg)

ASN1 Type : SysInfoType6

Derivation Path :

Encoding Variation :

Comments : Default system information block type 6, used in connected mode.

Constraint Value

```
{
  pich_PowerOffset p_CellInfo.powerPICH,
  modeSpecificInfo fdd : {
    aich_PowerOffset p_CellInfo.powerAICH
  },
  primaryCCPCH_Info OMIT,
  prach_SystemInformationList OMIT,
  sCCPCH_SystemInformationList OMIT,
  cbs_DRX_Level1Information OMIT
}
```

Detailed Comments : Similar to cb_SIB5_Def, except "AC−to−ASC mapping table" not present

ASN.1 Type Constraint Declaration

Constraint Name : cb_TrChInfoRACH1
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
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
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)
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_DL_AM_RLC_SRB
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_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)
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_UL_AM_RLC_SRB
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 : cs_CipheringModeCmdOn (p_CipheringAlgorithm : CipheringAlgorithm)
ASN1 Type : CipheringModeCommand
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

startRestart : p_CipheringAlgorithm

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityCheckInfo0
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_P(p1,p2,p3,p4,p5 : RRC_MessageSequenceNumber)
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)
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
ASN1 Type : CipheringModeCommand
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

dummy : NULL

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoList20 (p_RLC_SN20 : RLC_SequenceNumber)
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo( tsc_RB20, p_RLC_SN20 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoList20_21(p_RLC_SN20, p_RLC_SN21 : RLC_SequenceNumber)
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  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_ActTimeInfoList20_22(p_RLC_SN20, p_RLC_SN22 : RLC_SequenceNumber)
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  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_ActTimeInfoList20_24(p_RLC_SN20, p_RLC_SN24 : RLC_SequenceNumber)
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo( tsc_RB20, p_RLC_SN20 ),
  c_RB_ActTimeInfo( tsc_RB24, p_RLC_SN24 )
}
```

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoList21(p_RLC_SN21 : RLC_SequenceNumber)
ASN1 Type : RB_ActivationTimeInfoList
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

```
{
  c_RB_ActTimeInfo( tsc_RB21, p_RLC_SN21 )
}
```

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)

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)

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)

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)

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)

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_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)

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)

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)

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_DataReqRAB(p_RB_Identity : SS_RB_Identity; p_PDU: PDU)
ASP Type : RLC_TR_TestDataInd
Derivation Path :
Comments : This constraint is used to receive a data PDU using the default RAB for RLC testing.

Parameters:
p_PDU: The RLC data PDU to be transmitted.

Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_RB_Identity	
data	p_PDU	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_DataReqRAB(p_RB_Identity : SS_RB_Identity; p_PDU: PDU)
ASP Type : RLC_TR_TestDataReq
Derivation Path :
Comments : This constraint is used to send a data PDU using the default RAB for RLC testing.

Parameters:
p_PDU: The RLC data PDU to be transmitted.

Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_RB_Identity	
data	p_PDU	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_DataReqRB0(p_RB_Identity : SS_RB_Identity; p_PDU: PDU)
ASP Type : RLC_TR_TestDataReq
Derivation Path :
Comments : This constraint is used to send a data PDU using the default RAB for RLC testing.

Parameters:
p_PDU: The RLC data PDU to be transmitted.

Parameter Name	Parameter Value	Comments
cellId	tsc_DefaultCellId	
rB_Id	p_RB_Identity	
data	p_PDU	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_DataIndHiPriNAS(p_Rb_Id : SS_RB_Identity; p_PDU: PDU)
ASP Type : RLC_TR_TestDataInd
Derivation Path :
Comments : This constraint is used to receive a data PDU using the High priority NAS SRB.

Parameters:
p_PDU: The RLC data PDU to be received.

Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_Rb_Id	
data	p_PDU	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : cas_DataReqHiPriNAS(p_RB_Identity : SS_RB_Identity; p_PDU: PDU)
ASP Type : RLC_TR_TestDataReq
Derivation Path :
Comments : This constraint is used to send a data PDU using the default RAB for RLC testing.

Parameters:
p_PDU: The RLC data PDU to be transmitted.

Parameter Name	Parameter Value	Comments
cellId	tsc_CellDedicated	
rB_Id	p_RB_Identity	
data	p_PDU	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : car_InitDirectTransfer_MAC (p_CellId: INTEGER; p_Rb : SS_RB_Identity; p_Domain : SS_CN_DomainIdentity; p_Pdu : PDU)
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	p_Domain	
start	?	
msg	p_Pdu	

Detailed Comments :

ASP Constraint Declaration

Constraint Name : ca_AT_CmdCnf
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)
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)
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
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)
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)
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)
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)
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)

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)

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)

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 : cas_MeasurementControl (
p_CellId: INTEGER;
p_RB_Id: SS_RB_Identity;
p_PDU: DL_DCCH_Message
)

ASP Type : RLC_AM_DATA_REQ

Derivation Path :

Comments : to send a Measurement Control PDU in AM mode

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_TFC_ControlAM(
p_CellId : INTEGER;
p_RB_Id: INTEGER;
p_PDU: DL_DCCH_Message
)

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 : car_PRACH_Measurement_Report_IND(p_CellId, p_PhyChId : INTEGER; p_MeasRep : PRACH_MeasurementReport)

ASP Type : CPHY_PRACH_Measurement_Report_IND

Derivation Path :

Comments :

Constraint Value

```
{
cellId              p_CellId,
routingInfo         physicalChannelIdentity : p_PhyChId,
ratType             fdd,
measurementReport p_MeasRep
}
```

Detailed Comments :

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
)

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_PICH_Info(p_CellId: INTEGER; p_PICH_Info: PICH_Info; p_TxPower : PICH_PowerOffset;p_SCCPCH_Ass: INTEGER)

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_AichInfo(
p_CellId: INTEGER;
p_PhyChId: INTEGER;
p_AICH_Info: AICH_Info;
p_TxPower: AICH_PowerOffset)

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)
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)
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)

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_CMAC_CfgCnf (p_CellId: INTEGER; p_PhyChId : INTEGER)

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)

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)

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)

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_PagingCfgCnf(p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)

ASP Type : CMAC_PAGING_Config_CNF

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity

}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_PagingCfgReq(
p_CellId: INTEGER;
p_PhysicalChannelIdentity: PhysicalChannelIdentity;
p_RatType: RatType;
p_Pdu: CmacPagingConfigReq
)

ASP Type : CMAC_PAGING_Config_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity,
  ratType p_RatType,
  configMessage p_Pdu
}
```

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)

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)

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)

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)

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)

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_CRLC_CfgCnf(p_CellId: INTEGER; p_RB_Id: INTEGER)

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)

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)

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)

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)

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)
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)
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)
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)

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)

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)

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_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

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_InfoActNow (p_CellId : INTEGER; p_PhyChId : INTEGER)

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)

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)
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)
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)
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)

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)

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)
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)
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)
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)
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_pSCH_Info(p_CellId: INTEGER; p_TxPower : DL_TxPower)
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)

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)

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)

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)

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_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping)

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 p_PayloadSize,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
          segmentationIndication TRUE
        }
      }
    },
    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)

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)

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)

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)

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
)

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)
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)
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)
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)

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)

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)
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)
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)
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)
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)
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)
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)

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)

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)

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)

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
)

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_AM_DataMuiCnf(
p_CellId: INTEGER;
p_RB : INTEGER;
p_Mui : Mui
)

ASP Type : RLC_AM_DATA_CNF

Derivation Path :

Comments :

Constraint Value

```
{
 cellId p_CellId,
 routingInfo rB_Identity : p_RB ,
 mui p_Mui
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_CRLC_IntegrityFail

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)
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)
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)
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
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
)
ASP Type : RLC_AM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult *,
  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)
ASP Type : RLC_UM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult *,
  uM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RB_SetUpCmpl(
p_CellId : INTEGER;
p_RB :INTEGER ;
p_Pdu: UL_DCCH_Message
)

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult *,
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)

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)

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_ConnRelCmplUM(p_CellId: INTEGER; p_RB_Id: INTEGER ; p_Pdu:UL_DCCH_Message)
ASP Type : RLC_UM_DATA_IND
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  integrityResult *,
  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)
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)
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
)

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult *,
  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)

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB ,
  integrityResult *,
  aM_message uL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_SigConnRelInd(
p_CellId: INTEGER;
p_RB : INTEGER;
p_PDU: UL_DCCH_Message
)

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity : p_RB ,
  integrityResult ?,
  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)

ASP Type : RLC_AM_DATA_IND

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RBId,
  integrityResult *,
  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)

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)
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)
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)
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
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
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)
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_PagingType1(
p_CellId: INTEGER;
p_RB_Id: SS_RB_Identity ;
p_Pdu: PCCH_Message
)
ASP Type : RLC_TR_DATA_REQ
Derivation Path :
Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  tM_message pCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_RB_SetUpAM_WithCnf(
p_CellId: INTEGER;
p_RB_Id: INTEGER;
p_Mui : Mui;
p_Pdu: DL_DCCH_Message
)

ASP Type : RLC_AM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  confirmationRequest confirmationRequested: p_Mui,
  aM_message dL_DCCH_Message : p_Pdu
}
```

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : cas_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)

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)

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)
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)
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)
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)

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_ServiceRequestAny
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	?		
ciphKeySeqNo	?		
ptmsi	c_MobileIdPTMSI_lv(?)		
pDP_ContextStatus	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_PagingResponseAny
PDU Type : PAGINGRESPONSE
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	’??100111’B		Message Type (1) M BITSTRING [8]
spare4	’0000’B		Spare half octet M BITSTRING [4]
ciphKeySeqNum	?		Ciphering Key Sequence Number M BITSTRING [4]
mSClsmk2	c_MS_Clsmk2_Any_lv		Mobile Station Classmark 2 M MSClsmk2 (4 octets)
mobileId	?		Mobile Identity LV M MobileId (2−10 octets)

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_StatusAnyPad
PDU Type : RLC_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.

Parameters:
p_SuperFields: The SUFI list to be received.
@sic RASH T1−031585 sic@

Field Name	Field Value	Field Encoding	Comments
dC_Field	tsc_DC_ControlPDU		
type	tsc_PDU_TypeStatus		
superFields	−		
superFieldsRec	?		4
padding	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_StatusAndPad(p_SuperFields: SuperFields; p_NumHalfOctetsPadding: INTEGER)
PDU Type : RLC_STATUS_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This constraint is used to send an AM STATUS PDU containing the given superfields.

Parameters:
p_SuperFields:
The super−fields to be included in the STATUS PDU.

p_PaddingSizeHalfOctets:
The number of half octets to be added at the end of the PDU. In general. this parameter will contain the value (2 * tcv_PU_Size) − (p_SuperFields size + 1)

NOTE: SUFI list size = p_Superfields size + 1 half octet (for D/C field and Type)

Field Name	Field Value	Field Encoding	Comments
dC_Field	tsc_DC_ControlPDU		1 bit
type	tsc_PDU_TypeStatus		3 bits
superFields	p_SuperFields		
superFieldsRec	−		
padding	INT_TO_BIT(0, (p_NumHalfOctetsPadding * 4))		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AMD_LIsAndPad(p_SN: INTEGER;p_Poll: PollingBit; p_LIs: LenInds; p_Data:AM_Data;p_NumofBitsPadding: INTEGER)

PDU Type : MAC_AMD_PDU

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This constraint is used to send an AM PDU containing data and a length indicator group, and padding.

Parameters:
p_SN:
An integer containing the next sequence number to be transmitted. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

p_Poll:
The value of the Poll bit. This parameter must be one of the following values: tsc_P_Poll, tsc_P_NoPoll.

p_LIs:
The length indicator group to be used in the PDU. This field must contain at least one LI.

p_Data:
The data to be included in the PDU.

p_NumHalfOctetsPadding:
The number of half octets of padding to be included at the end of the PDU. It is the callers responsibility to ensure that the LI group size + the data size + the padding size is exactly equal to the current PU size.

Field Name	Field Value	Field Encoding	Comments
dcField	tsc_DC_AMDPDU		
seqNum	INT_TO_BIT(p_SN, tsc_AM_SN_Size)		
pollingBit	p_Poll		
headerExt	tsc_HE_LI_AndE_Bit		
lenInds	p_LIs		
data	p_Data		
piggybackedStatus	–		
padding	INT_TO_BIT(0, p_NumofBitsPadding)		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_MAC_PDU_TCTF(p_TCTF: TCTF; p_Data: PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send MAC PDU's with various values for the TCTF field.
Ref 3G TS 25.321 clause 9.1.2

The same constraint can be used for uplink and downlink, since the appropriate TCTF field can be provided as a parameter, and all other fields are the same.

Field Name	Field Value	Field Encoding	Comments
tctf	p_TCTF		
ueIdType	tsc_UE_IdTypeC_RNTI		
ueId	tsc_CRNTI		
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments : The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

This PDU will be received by the UE, and routed to the third logical channel mapped to RACH. (High priority NAS SRB)

PDU Constraint Declaration

Constraint Name : cs_MAC_PDU_CT(p_CT_Field: CT_Field; p_Data: PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send a MAC PDU on a DCCH mapped to FACH with the given value for the CT field. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_CT_Field
The CT field value to be used in the transmitted MAC PDU.

p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

Field Name	Field Value	Field Encoding	Comments
tctf	tsc_DCCH_OnFACH_FDD		
ueIdType	tsc_UE_IdTypeC_RNTI		
ueId	tsc_CRNTI		
ctField	p_CT_Field		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_MAC_PDU_UE_IdType(p_UE_IdType: UE_IdType; p_Data: PDU;p_Ue_Id : UE_Id)

PDU Type : MAC_PDU

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This PDU is used to send a MAC PDU on a DCCH mapped to FACH with the given value for the UE−Id type field. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_UE_IdType
The UE−Id type field value to be used in the transmitted MAC PDU.

p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

Field Name	Field Value	Field Encoding	Comments
tctf	tsc_DCCH_OnFACH_FDD		
ueIdType	p_UE_IdType		
ueId	p_Ue_Id		
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_MAC_PDU_UE_Id(p_UE_Id: UE_Id; p_Data: PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send a MAC PDU on a DCCH mapped to FACH with the given value for the UE−Id field. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_UE_Id
The UE−Id field value to be used in the transmitted MAC PDU.

p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

Field Name	Field Value	Field Encoding	Comments
tctf	tsc_DCCH_OnFACH_FDD		
ueIdType	tsc_UE_IdTypeC_RNTI		
ueId	p_UE_Id		
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_MAC_PDU_Def(p_Data: PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send a MAC PDU on DCCH 3 mapped to FACH with the default field values. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

Field Name	Field Value	Field Encoding	Comments
tctf	tsc_DCCH_OnFACH_FDD		
ueIdType	tsc_UE_IdTypeU_RNTI		
ueId	tsc_CRNTI		o_OctToBit(px_TMSI_Def)
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_MAC_PDU_CT_DCH(p_CT_Field: CT_Field; p_Data: PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send a MAC PDU on a DCCH mapped to FACH with the given value for the CT field. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_CT_Field
The CT field value to be used in the transmitted MAC PDU.

p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

Field Name	Field Value	Field Encoding	Comments
tctf	–		
ueIdType	–		
ueId	–		
ctField	p_CT_Field		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_MAC_PDU_Send_STATUS_Def(p_Data: RLC_STATUS_PDU)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to SendMAC PDU's on DCCH 3 mapped to FACH using the default field values. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_Data
The expected MAC SDU in the received MAC PDU.

Field Name	Field Value	Field Encoding	Comments
tctf	tsc_DCCH_OnFACH_FDD		
ueIdType	tsc_UE_IdTypeC_RNTI		
ueId	tsc_CRNTI		
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_MAC_PDU_RCV_STATUS_TCTF(p_TCTF: TCTF; p_Data: RLC_STATUS_PDU)
PDU Type : MAC_PDU_RCV_STATUS
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send MAC PDU's with various values for the TCTF field.
Ref 3G TS 25.321 clause 9.1.2

The same constraint can be used for uplink and downlink, since the appropriate TCTF field can be provided as a parameter, and all other fields are the same.
@sic RASH T1−031585 sic@

Field Name	Field Value	Field Encoding	Comments
tctf	p_TCTF		
ueIdType	tsc_UE_IdTypeC_RNTI		
ueId	tsc_CRNTI		
ctField	tsc_CT_LoCh3		
data	p_Data		

Detailed Comments : The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

This PDU will be received by the UE, and routed to the third logical channel mapped to RACH. (High priority NAS SRB)

PDU Constraint Declaration

Constraint Name : c_MAC_PDU_CT_RCV_STATUS_DCH(p_CT_Field: CT_Field; p_Data: RLC_STATUS_PDU)
PDU Type : MAC_PDU_RCV_STATUS
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send a MAC PDU on a DCCH mapped to FACH with the given value for the CT field. Separate constraints are provided for uplink and downlink since the TCTF field value is different for sending and receiving.

Ref 3G TS 25.321 clause 9.1.2

Parameters
p_CT_Field
The CT field value to be used in the transmitted MAC PDU.

p_Data
The MAC SDU to be used in the transmitted MAC PDU.
NOTE: The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.
@sic RASH T1−031585 sic@

Field Name	Field Value	Field Encoding	Comments
tctf	−		
ueIdType	−		
ueId	−		
ctField	p_CT_Field		
data	p_Data		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_UMD(p_SN: INTEGER; p_Data: MAC_UM_Data)

PDU Type : MAC_UMD_PDU

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This constraint is used to represent a UM PDU containing data, no length indicators, and no padding.

Parameters:
p_SN:
An integer containing the next sequence number to be transmitted or received. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

p_Data:
The data to be included in the PDU. It is the callers responsibility to ensure that the data size is exactly equal to the current PU size.

Field Name	Field Value	Field Encoding	Comments
seqNum	INT_TO_BIT(p_SN, tsc_UM_SN_Size)		
eBit	tsc_E_Data		
lenInds	–		
data	p_Data		
padding	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_UMD_LIs(p_SN: INTEGER; p_LIs: LenInds; p_Data: MAC_UM_Data)

PDU Type : MAC_UMD_PDU

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This constraint is used to represent a UM PDU containing data and a length indicator group, and no padding.

Parameters:
p_SN:
An integer containing the next sequence number to be transmitted or received. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

p_LIs:
The length indicator group to be used in the PDU. This field must contain at least one LI.

p_Data:
The data to be included in the PDU. It is the callers responsibility to ensure that the data size + the LI group size is exactly equal to the current PU size.

Field Name	Field Value	Field Encoding	Comments
seqNum	INT_TO_BIT(p_SN, tsc_UM_SN_Size)		
eBit	tsc_E_LI_AndE_Bit		
lenInds	p_LIs		
data	p_Data		
padding	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_UMD_LIsAndPad(p_SN: INTEGER; p_LIs: LenInds; p_Data:MAC_UM_Data;p_NumofBitsPadding: INTEGER)

PDU Type : MAC_UMD_PDU

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : This constraint is used to represent a UM PDU containing data, a length indicator group, and padding.

Parameters:
p_SN:
An integer containing the next sequence number to be transmitted or received. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

p_LIs:
The length indicator group to be used in the PDU. This field must contain at least one LI, and at least one LI indicating that the rest of the PDU contains padding.

p_Data:
The data to be included in the PDU.

p_NumHalfOctetsPadding:
The number of half octets padding to be included in the PDU. It is the users responsibility to ensure that the LI group size + the data size + the padding size is exactly equal to the current PU size. This parameter is used in a call to INT_TO_BIT, so a value must be provided.

Field Name	Field Value	Field Encoding	Comments
seqNum	INT_TO_BIT(p_SN, tsc_UM_SN_Size)		
eBit	tsc_E_LI_AndE_Bit		
lenInds	p_LIs		
data	p_Data		
padding	INT_TO_BIT(0, p_NumofBitsPadding)		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_MAC_PDU_CCCH_TCTF(p_TCTF: TCTF)
PDU Type : MAC_PDU
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : This PDU is used to send MAC PDU's with various values for the TCTF field.
Ref 3G TS 25.321 clause 9.1.2

The same constraint can be used for uplink and downlink, since the appropriate TCTF field can be provided as a parameter, and all other fields are the same.

Field Name	Field Value	Field Encoding	Comments
tctf	p_TCTF		
ueIdType	–		
ueId	–		
ctField	–		
data	–		

Detailed Comments : The user of this constraint is responsible for ensuring that the MAC header + data is the correct length to fit exactly in one transport block.

This PDU will be received by the UE, and routed to the third logical channel mapped to RACH. (High priority NAS SRB)

PDU Constraint Declaration

Constraint Name : c_ActivateRB_TestMode
PDU Type : ACTIVATERBTESTMODE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
tCProtocolDiscriminator	'1111'B		
msgType	'01000100'B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_ActivateRB_TestModeCmpl
PDU Type : ACTIVATERBTESTMODECOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
tCProtocolDiscriminator	’1111’B		
msgType	’01000101’B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_AuthFailAny
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)
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
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
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_CloseUE_TestLoop(p_UE_TestLoopMode: UE_TestLoopMode; p_UE_TestLoopMode1LB_Setup: UE_TestLoopMode1LB_Setup)
PDU Type : CLOSEUETESTLOOP
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
tCProtocolDiscriminator	’1111’B		
msgType	’01000000’B		
uE_TestLoopMode	p_UE_TestLoopMode		
uE_TestLoopMode1LB_Setup	p_UE_TestLoopMode1LB_Setup		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_CloseUE_TestLoopCmpl
PDU Type : CLOSEUETESTLOOPCOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
tCProtocolDiscriminator	’1111’B		
msgType	’01000001’B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_DeactivateRB_TestMode
PDU Type : DEACTIVATERBTESTMODE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
tCProtocolDiscriminator	’1111’B		
msgType	’01000110’B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_DeactivateRB_TestModeCmpl
PDU Type : DEACTIVATERBTESTMODECOMPLETE
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
tCProtocolDiscriminator	’1111’B		
msgType	’01000111’B		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_LocUpdAcpTMSI (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)
PDU Type : LOCATIONUPDATINGACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

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_MobileIdTMSI_Def		
followOnProceed	’10100001’B		
cTSPerm	’10100010’B		
equivalentPLMN	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_LocUpdAcpTMSI_E_PLMN (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_ePLMN : PLMN_List)

PDU Type : LOCATIONUPDATINGACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

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_MobileIdTMSI_Def		
followOnProceed	’10100001’B		
cTSPerm	’10100010’B		
equivalentPLMN	p_ePLMN		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : c_PagRsp (p_KeySeq: KeySeq; p_MobileId: MS_Identity_lv)

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
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)
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_RA_UpdReqAny
(p_UpdateType : UpdateType_v; p_RAI : RAI_v; p_KeySeq : KeySeq)

PDU Type : ROUTINGAREAUPDATEREQUEST

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : @sic EW T1s040041 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		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_ActPDP_ContextReqMO_Any
PDU Type : ACTIVATEPDPCONTEXTREQUESTul
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments : Activate PDP Context Request
ue –> n
3GPP 24.008, 9.5.1

Field Name	Field Value	Field Encoding	Comments
ti	?		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	’01000001’B		
requestedNSAPI	?		
requestedLLC_SAPI	?		This has to be set to Not Assigned by UE in UMTS domain.
requestedQoS	?		The AT command interface will be used to set the QoS to this value.
pDP_Address	?		
accessPtName	*		The GGSN logical name or the external packet data network logical name
protocolConfOpts	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_AttachComplete
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)

PDU Type : ATTACHREQUEST

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

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@

Detailed Comments : @SIC OLAF R&S T1−031835 and Anite T1−03xtc2 SIC@

PDU Constraint Declaration

Constraint Name : cr_AuthAndCiphFailure(p_Cause : RejCau; p_AUTS : AuthenticationFailureParameter)

PDU Type : AUTHENTICATION_AND_CIPHERING_FAILURE

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	’0000’B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	’00011100’B		
gmmCause	p_Cause		
authFailurePar	p_AUTS		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_AuthAndCiphRsp(p_authRsp : AuthRsp_tv; p_authRspExt :AuthRspExt)
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
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	?IF_PRESENT		O
ptmsiSignature	?IF_PRESENT		O

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_ServiceRequest (p_sType : ServiceType_v; p_PTMSI : MS_Identity_lv; p_KeySeq : KeySeq)
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_ContextStatusAnyIF_PRESENT		@sic ER1534 sic@

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_SetupMO_Any
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		
bcap1	cr_BcapAnyMO		
bcap2	*		
facility	*		
cgps	*		
cdpn	*		
cdps	*		
llcRepeatInd	*		
llc1	*		
llc2	*		
hlcRepeatInd	*		
hlc1	*		
hlc2	*		
userUser	*		
sS_VersionInd	*		
cLIR_Suppression	*		
cLIR_Invocation	*		
cC_Capabilities	*		
facilityCCBS_AdvRecall	*		
facilityCCBS_RecallAlign	*		
streamId	*		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cr_StatusAny
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)
PDU Type : ATTACHACCEPT
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

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
spare	’0000’B		
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	–		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AttachAccE_PLMN (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature; p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity; p_ePLMN : PLMN_List)

PDU Type : ATTACHACCEPT

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

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
spare	’0000’B		
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	p_ePLMN		

Detailed Comments :

PDU Constraint Declaration

Constraint Name : cs_AttachRej(p_cause : RejCau)

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)

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(’001’B)		GPRS encryption algorithm GEA/1
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 :

PDU Constraint Declaration

Constraint Name : cr_DeactPDP_ContextReqMO(p_SM_Cause: RejCau)

PDU Type : DEACTIVATEPDPCONTEXTREQUEST

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Deactivate PDP Context Request
n <=> ue
24.008, 9.5.14

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any IF_PRESENT		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	’01000110’B		
sM_Cause	p_SM_Cause		
tearDwnInd	cs_TearDwnInd_tv		

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_MeasRepTV
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{ integrityCheckInfo    *,
 message          measurementReport :
{
  measurementIdentity 2,
  measuredResults  trafficVolumeMeasuredResultsList :
{{
  rb_Identity ?,
  rlc_BuffersPayload ?,
  averageRLC_BufferPayload OMIT,
  varianceOfRLC_BufferPayload OMIT
}},
  measuredResultsOnRACH OMIT,
  additionalMeasuredResults OMIT,
  eventResults OMIT,
  v390nonCriticalExtensions *
}
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_MeasurementControlTrafficVolumeRelease (
p_IntegrityInfo : IntegrityCheckInfo ;
p_RRC_TI: RRC_TransactionIdentifier)
PDU Type : DL_DCCH_Message
Derivation Path :
Encoding Rule Name : PER_Unaligned
Encoding Variation :
Comments : Measurement control to report periodically 2 reports on Transport Channel 1

Constraint Value

```
{
      integrityCheckInfo    p_IntegrityInfo,
      message  measurementControl : r3:{
         measurementControl_r3                  {
            rrc_TransactionIdentifier p_RRC_TI,
                 measurementIdentity 2,
                 measurementCommand release : NULL ,
                measurementReportingMode OMIT,
               additionalMeasurementList OMIT,
               dpch_CompressedModeStatusInfo OMIT
         },
         v390nonCriticalExtensions OMIT
      }
   }
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_MeasurementControlTrafficVolumeSetup (
p_IntegrityInfo : IntegrityCheckInfo ;
p_RRC_TI: RRC_TransactionIdentifier)

PDU Type : DL_DCCH_Message

Derivation Path :

Encoding Rule Name : PER_Unaligned

Encoding Variation :

Comments : Measurement control to report periodically 2 reports on Transport Channel 1

Constraint Value

```
{
      integrityCheckInfo    p_IntegrityInfo,
      message  measurementControl : r3:{
         measurementControl_r3                  {
            rrc_TransactionIdentifier p_RRC_TI,
                  measurementIdentity 2,
                  measurementCommand setup : trafficVolumeMeasurement :
                   {
        trafficVolumeMeasurementObjectList   {  dch:  tsc_UL_DCH1 },
        trafficVolumeMeasQuantity  rlc_BufferPayload : NULL,

        trafficVolumeReportingQuantity  {
                                          rlc_RB_BufferPayload  TRUE,
                                          rlc_RB_BufferPayloadAverage   FALSE,
                                          rlc_RB_BufferPayloadVariance FALSE
                                                    },
        measurementValidity { ue_State  cell_DCH } ,
        reportCriteria   periodicalReportingCriteria :
                   {
                       reportingAmount ra8,
                       reportingInterval  ril0_25
                  }
                  },
              measurementReportingMode
                    {
                       measurementReportTransferMode  acknowledgedModeRLC,
                       periodicalOrEventTrigger  periodical
                    },
              additionalMeasurementList  OMIT,
              dpch_CompressedModeStatusInfo  OMIT
        },
        v390nonCriticalExtensions OMIT
      }
   }
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_TransportFormatCombCtrl (
p_IntegrityCheckInfo : IntegrityCheckInfo ;
p_RRC_Ti : RRC_TransactionIdentifier;
p_TFC : TFC_Subset)

PDU Type : DL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Transport Format Combination Control message used to restrict the UL TFCIs

Constraint Value

```
{            integrityCheckInfo      p_IntegrityCheckInfo  ,
            message   transportFormatCombinationControl  :
           {
                  rrc_TransactionIdentifier    p_RRC_Ti,
                 modeSpecificInfo              fdd  :  NULL,
                  dpch_TFCS_InUplink           p_TFC,
                  tfc_ControlDuration          OMIT,
                   laterNonCriticalExtensions        OMIT
           }
 }
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_Status_MAC_NoInteg

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Ref sec 8.1.9.3a of 25.331

Constraint Value

```
{
integrityCheckInfo OMIT,
−− As MAC test cases will be run with Integrity and Ciphering off
  message  rrcStatus :
 {
 protocolErrorInformation
   {
    diagnosticsType  type1 :    messageNotCompatibleWithReceiverState :
    {
      rrc_TransactionIdentifier 1,
−−Hard coded value in Pre Coded Dummy downlink Direct Transfer Message
      receivedMessageType downlinkDirectTransfer

     }
    }
 }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cdr_108_RRC_ConnReq_MAC (p_EstCause: EstablishmentCause)
PDU Type : UL_CCCH_Message
Derivation Path : cbr_108_RRC_ConnReq.
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
REPLACE message.rrcConnectionRequest.initialUE_Identity BY
( imsi : ?,
  tmsi_and_LAI :
 {
            tmsi o_ConvertTMSI(px_TMSI_Def),
              lai
           {
        plmn_Identity
         {
         mcc {0,0,1},
          mnc {0,1}
         },
         lac '0000000000000001'B
              }
          },


p_TMSI_and_RAI :
 {
                      p_TMSI o_ConvertPTMSI(px_PTMSI_Def),
                      rai
                       {
                      lai
                    {
                      plmn_Identity
                        {
                          mcc {0,0,1},
                          mnc {0,1}
                        },
                      lac '0000000000000001'B
                    },
                  rac '00000001'B
                 }
               } )
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cds_RRC_ConnSetupDCH_NoCapEnq

```
(
    p_InitUEId:          InitialUE_Identity;
    p_RRC_Ti:            RRC_TransactionIdentifier;
    p_PrmbScrmCode: PrimaryScramblingCode;
    p_U_RNTI_New : U_RNTI;
    p_UL_ScramblingCode : UL_ScramblingCode
)
```

PDU Type : DL_CCCH_Message

Derivation Path : cbs_108_RRC_ConnSetupDCH.

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

REPLACE message.rrcConnectionSetup.r3.rrcConnectionSetup_r3.capabilityUpdateRequirement BY OMIT

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cds_RRC_ConnSetupFACH_NoCapEnq

```
(
    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
)
```

PDU Type : DL_CCCH_Message

Derivation Path : cbs_108_RRC_ConnSetupFACH.

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

REPLACE message.rrcConnectionSetup.r3.rrcConnectionSetup_r3.capabilityUpdateRequirement BY OMIT

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_108_RB_SetUpCmpl
(
p_RRC_Ti : RRC_TransactionIdentifier;
p_Count_C_ActivationTime : ActivationTime;
p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList
)

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : Defined in TS 34.108 clause 9.

p_Count_C_ActivationTime : The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC−TM and (b) UE is transiting to CELL_DCH state after the RB establishment procedure. Else, this IE is absent

p_RB_ActivationTimeInfoList : If ciphering is not activated in RADIO BEARER SETUP message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC−UM and RLC−AM RBs

Constraint Value

```
{
  integrityCheckInfo * ,
  message radioBearerSetupComplete : {
    rrc_TransactionIdentifier p_RRC_Ti,
    ul_IntegProtActivationInfo *,
    ul_TimingAdvance *,
    start_Value *,
    count_C_ActivationTime p_Count_C_ActivationTime,
    rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList,
    ul_CounterSynchronisationInfo *,
    laterNonCriticalExtensions *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cbr_108_RRC_ConnReq (p_EstCause: EstablishmentCause)

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
)

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
)

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
)
```

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)
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)
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)

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

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_RB_SetUpCmplNoStartVal
(
p_RRC_Ti : RRC_TransactionIdentifier;
p_Count_C_ActivationTime : ActivationTime;
p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList
)

PDU Type : UL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : START value is omitted

p_Count_C_ActivationTime : The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC−TM and (b) UE is transiting to CELL_DCH state after the RB establishment procedure. Else, this IE is absent

p_RB_ActivationTimeInfoList : If ciphering is not activated in RADIO BEARER SETUP message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC−UM and RLC−AM RBs

Constraint Value

```
{
  integrityCheckInfo * ,
  message radioBearerSetupComplete : {
    rrc_TransactionIdentifier p_RRC_Ti,
    ul_IntegProtActivationInfo *,
    ul_TimingAdvance *,
    start_Value OMIT,
    count_C_ActivationTime p_Count_C_ActivationTime,
    rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList,
    laterNonCriticalExtensions *
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_RrcConnReqAny

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
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 : cr_RRC_SigConnRelInd (p_CN_Domain : CN_DomainIdentity)
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

```
{
  integrityCheckInfo *,
  message signallingConnectionReleaseIndication :
  {
    cn_DomainIdentity p_CN_Domain,
    laterNonCriticalExtensions * −−@sic T1s−040086 sic@
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_108_RRC_ConnRelCCCH (
p_U_rnti: U_RNTI;
p_RRC_Ti: RRC_TransactionIdentifier)

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)

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)

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_RRC_PagingType1_PTMSI (
p_PagCause : PagingCause;
p_P_tmsi : P_TMSI_GSM_MAP;
p_Domain : CN_DomainIdentity
)

PDU Type : PCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{
  message pagingType1: c_PagingType1_P_TMSI ( p_PagCause, p_P_tmsi, p_Domain )
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_RRC_PagingType1_TMSI(p_PagCause: PagingCause; p_Tmsi:TMSI_GSM_MAP; p_Domain : CN_DomainIdentity)

PDU Type : PCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{
  message pagingType1: c_PagingType1_TMSI(p_PagCause, p_Tmsi, p_Domain )
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_RRC_RB_SetUp (
p_Integrityinfo : IntegrityCheckInfo;
p_RRC_Ti : RRC_TransactionIdentifier;
p_Activetime : ActivationTime;
p_RRCStateInd : RRC_StateIndicator;
p_FreqInfo : FrequencyInfo;
p_Rablist : RAB_InformationSetupList;
p_UlCommTrChInfo : UL_CommonTransChInfo;
p_UlAddReconfTrChInfo : UL_AddReconfTransChInfoList;
p_DlCommTrChInfo : DL_CommonTransChInfo;
p_DlAddReconfTrChInfo : DL_AddReconfTransChInfoList;
p_DlInfoPerRl : DL_InformationPerRL_List;
p_DL_CommonInformation : DL_CommonInformation;
p_UL_DPCH_Info : UL_DPCH_Info;
p_RB_InformationAffectedList : RB_InformationAffectedList
)

PDU Type : DL_DCCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments :

Constraint Value

```
{
  integrityCheckInfo p_Integrityinfo,
  message radioBearerSetup: r3 : {
    radioBearerSetup_r3 {
      rrc_TransactionIdentifier p_RRC_Ti,
      integrityProtectionModeInfo OMIT,
      cipheringModeInfo OMIT,
      activationTime p_Activetime,
      new_U_RNTI OMIT,
      new_C_RNTI OMIT,
      rrc_StateIndicator p_RRCStateInd,
      utran_DRX_CycleLengthCoeff OMIT,
      cn_InformationInfo OMIT,
      srb_InformationSetupList OMIT,
      rab_InformationSetupList p_Rablist,
      rb_InformationAffectedList p_RB_InformationAffectedList ,
      ul_CommonTransChInfo p_UlCommTrChInfo,
      ul_deletedTransChInfoList OMIT,
      ul_AddReconfTransChInfoList p_UlAddReconfTrChInfo,
      modeSpecificTransChInfo fdd:{
        cpch_SetID OMIT,
        addReconfTransChDRAC_Info OMIT
      },
      dl_CommonTransChInfo p_DlCommTrChInfo,
      dl_DeletedTransChInfoList OMIT,
      dl_AddReconfTransChInfoList p_DlAddReconfTrChInfo,
      frequencyInfo p_FreqInfo,
      maxAllowedUL_TX_Power tsc_MaxAllowPwr,
      ul_ChannelRequirement ul_DPCH_Info : p_UL_DPCH_Info,
      modeSpecificPhysChInfo fdd:{
        dl_PDSCH_Information OMIT
      },
      dl_CommonInformation p_DL_CommonInformation,
      dl_InformationPerRL_List p_DlInfoPerRl
    },
    v3a0NonCriticalExtensions {
      radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT },
      laterNonCriticalExtensions OMIT
    }
  }
```

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ASN.1 PDU Constraint Declaration
Constraint Value
}
Detailed Comments :

ASN.1 PDU Constraint Declaration	
Constraint Name	**:** cs_SIB_MsgCmpl(p_SIBType : SIB_Type; p_SIBData: SIB_Data_fixed)
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)
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_MsgCmplList2(p_SIBType1 : SIB_Type; p_SIBData1:SIB_Data_variable; p_SIBType2 :SIB_Type; p_SIBData2: SIB_Data_variable)

PDU Type : BCCH_BCH_Message

Derivation Path :

Encoding Rule Name :

Encoding Variation :

Comments : System information message contains two complete SIB's. 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_SIBType1,
        sib_Data_variable p_SIBData1 },
      {
        sib_Type p_SIBType2,
        sib_Data_variable p_SIBData2 }}
  }
}
```

Detailed Comments :

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgFirst(p_SIBType : SIB_Type; p_SegCount: INTEGER; p_SIBData: SIB_Data_fixed)

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)

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)

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

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)

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 :

IV

Dynamic Part

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_1

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE discards PDUs with reserved or incorrect values in the TCTF field.
2. To verify that the TCTF field is correctly applied when a CCCH is mapped to the RACH/FACH.

Configuration :

Default : MAC_Default

Comments : Reference :
TS 25.321 clauses 9.2.1 and 9.2.1.4.

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_GenericSetupProceduresToIdleUpdate_CCCH			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_RRC_PagType1_DefMAC (tsc_DefaultCellId)			Step 1
7		+ts_MAC_ReceiveRRC_ConnReqInDefaultCell AndInit			Step 2 @sic RASH Er1394 sic@
8		+ts_SendRRC_ConnecSetup(c_MAC_PDU_CCCH_TCTF (tsc_Reserved1_OnFACH_FDD), (tsc_UM_CCCH_Payloadsize) ,8)			Step 5 Sent with incorrect TCTF ’0100 0001’B
9		+ts_MAC_ReceiveRRC_ConnReqInDefault Cell			Step 6
10		+ts_SendRRC_ConnecSetup(c_MAC_PDU_CCCH_TCTF (tsc_CTCH_OnFACH_FDD), (tsc_UM_CCCH_Payloadsize) ,8)			Step 7 Sent with incorrect TCTF ’1000 0000’B
11		+ts_MAC_ReceiveRRC_ConnReqInDefaultCell			Step 8
12		+ts_SendRRC_ConnecSetup(c_MAC_PDU_CCCH_TCTF (tsc_Reserved2_OnFACH_FDD), (tsc_UM_CCCH_Payloadsize) ,8)			Step 9 Sent with incorrect TCTF ’’1000 0001’B
13		+ts_MAC_ReceiveRRC_ConnReqIn DefaultCell			Step 10

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		+ts_SendRRC_ConnecSetup(c_MAC_PDU_CCCH_TCTF (tsc_CCCH_OnFACH_FDD), (tsc_UM_CCCH_Payloadsize) ,8)			Step 13 Sent with correct TCTF '0100 0000'B
15		+ ts_SetCellCfg (tsc_DefaultCellId, cell_FACH_MAC_SRB0)			
16	TSP1	AM ? RLC_AM_DATA_IND	car_RRC_ConnSetupCmpl(tsc_CellDedicated, tsc_RB2,cr_108_RRC_ConnSetupCmpl (0, *))	(P)	Step 14
17		+lt_ReceiveIDT			
18	TBE	(tcv_TestBody := FALSE)			
		lt_ReceiveIDT			
19		[tcv_CN_Domain = cs_domain]			
20		Dc?RRC_DataInd	car_InitDirectTransfer_MAC (tsc_CellDedicated, tsc_RB3, tsc_SS_CS_Domain, cr_PagingResponseAny)		Receive the Initial direct Transfer Message for Paging Response
21		[tcv_CN_Domain = ps_domain]			
22		Dc?RRC_DataInd	car_InitDirectTransfer_MAC (tsc_CellDedicated, tsc_RB3, tsc_SS_PS_Domain, cr_ServiceRequestAny)		Receive the Initial direct Transfer Message for Service Request
Detailed Comments : 1. PAGE UE					

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_2

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE discards PDUs with reserved or incorrect values in the TCTF field
2. To verify that the TCTF field, C/T field, UE−Id type and UE−Id field are correctly applied when a DTCH or DCCH is mapped to the RACH/FACH

Configuration :

Default : MAC_Default

Comments : Reference(s)
TS 25.321 clauses 9.2.1 and 9.2.1.1 c).

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_MAC_GenericSetupProceduresToBGP6_2Or6_4			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_Reserved1_OnFACH_FDD, −), tsc_ExpectedPayloadSize−6,0)			2
7		+ts_MonitorUplinkSpecefiedTime (10)			3
8		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize,0)			4
9		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (0,12) , INT_TO_BIT (0,12), *, *, ?, ?, ?))			6
10		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_Reserved3_OnFACH_FDD, −), tsc_ExpectedPayloadSize − 6,1)			2
11		+ts_MonitorUplinkSpecefiedTime (10)			3
12		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize,1)			4
13		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (1,12) , INT_TO_BIT (1,12) , *, *, ?, ?, ?))			5

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
14		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_CTCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize − 6 ,2)			2
15		+ts_MonitorUplinkSpecefiedTime (10)			3
16		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize,2)			4
17		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (2,12) , INT_TO_BIT (2,12), *, *, ?, ?, ?))			5
18		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC , c_MAC_PDU_TCTF(tsc_Reserved2_OnFACH_FDD, −), tsc_ExpectedPayloadSize − 6,3)			2
19		+ts_MonitorUplinkSpecefiedTime (10)			3
20		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize,3)			4
21		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (3,12) , INT_TO_BIT (3,12), *, *, ?, ?, ?))			5
22		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_Reserved4_OnFACH_FDD, −), tsc_ExpectedPayloadSize − 6,4)			2

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
23		+ts_MonitorUplink SpecefiedTime (10)			3
24		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnFACH_FDD, −), tsc_ExpectedPayloadSize,4)			4
25		+ts_ReceiveRRC_RLC_Status PDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (4,12) , INT_TO_BIT (4,12), *, *, ?, ?, ?))			5
26	TBE	(tcv_TestBody := FALSE)			

Detailed Comments : 1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH and Acknowledge receipt of the AM RLC PDU with SN 0. (STEP 1)

The paging response message is expected to fit into a single RLC PDU. This depends on the following:

1.1. The NAS PAGING RESPONSE message will be exactly 11 octets.
This results from 7 octets of fixed length information, and since a TMSI is available, it shall be used as the mobile identity (4 octets)

1.3. The field measuredResultsOnRACH in InitialDirectTransfer will be omitted, because system information block 12 specifies that no measurement reports should be provided by the UE.

2. Send the dummy dl direct Transfer message with invalid MAC header (Step 2)
3. Monitor RACH for 10 seconds. If any activity test case fails. (Step 2a)
4 Send the dummy dl direct Transfer Message with correct MAC header (Step 3)

5. Receive RRC and RLC staus PDU's (Step 4 and 5)

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_3

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE discards PDUs with reserved or incorrect values in C/T field.

2. To verify that the TCTF field, C/T field, UE−Id type and UE−Id field are correctly applied when a DTCH or DCCH is mapped to the RACH/FACH.

Configuration :

Default : MAC_Default

Comments : Reference(s)
TS 25.321 clauses 9.2.1 and 9.2.1.1 c).

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_MAC_GenericSetupProceduresToBGP6_2Or6_4			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_CT(tsc_CT_LoCh8, −), tsc_ExpectedPayloadSize,0)			2
7		+ts_MonitorUplinkSpecefiedTime (10)			3
8		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_CT(tsc_CT_LoCh3, −), tsc_ExpectedPayloadSize,0)			4
9		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (0,12) , INT_TO_BIT (0,12), *, *, ?, ?, ?))			5
10		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_CT(tsc_CT_Reserved, −), tsc_ExpectedPayloadSize ,1)			2
11		+ts_MonitorUplinkSpecefiedTime (10)			3
12		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_CT(tsc_CT_LoCh3, −), tsc_ExpectedPayloadSize,1)			4
13		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (1,12) , INT_TO_BIT (1,12), *, *, ?, ?, ?))			5
14	TBE	(tcv_TestBody := FALSE)			

Detailed Comments : 1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH.

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Test Case Dynamic Behaviour

Detailed Comments : ...

The paging response message is expected to fit into a single RLC PDU. This
1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH and Acknowledge receipt of the AM RLC PDU with SN 0. (STEP 1)

The paging response message is expected to fit into a single RLC PDU. This depends on the following:

1.1. The NAS PAGING RESPONSE message will be exactly 11 octets.
This results from 7 octets of fixed length information, and since a TMSI is available, it shall be used as the mobile identity (4 octets)

1.3. The field measuredResultsOnRACH in InitialDirectTransfer will be omitted, because system information block 12 specifies that no measurement reports should be provided by the UE.
2. Send the dummy dl direct Transfer message with invalid MAC header (Step 2)
3. Monitor RACH for 10 seconds. If any activity test case fails. (Step 2a)
4 Send the dummy dl direct Transfer Message with correct MAC header (Step 3)

5. Receive RRC and RLC staus PDU's (Step 4 and 5)

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_4

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE discards PDUs with reserved values in UE−Id type field
2. To verify that the TCTF field, C/T field, UE−Id type and UE−Id field are correctly applied when a DTCH or DCCH is mapped to the RACH/FACH

Configuration :

Default : MAC_Default

Comments : Reference(s)
TS 25.321 clauses 9.2.1 and 9.2.1.1 c).

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_MAC_GenericSetupProceduresToBGP6_2Or6_4			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_IdType(tsc_UE_IdTypeReserved1, −,tcv_CellInfoA.cRNTI), tsc_ExpectedPayloadSize,0)			2
7		+ts_MonitorUplinkSpecefiedTime (10)			3
8		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_IdType(tsc_UE_IdTypeC_RNTI, − , tcv_CellInfoA.cRNTI), tsc_ExpectedPayloadSize,0)			4
9		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (0,12) , INT_TO_BIT (0,12), *, *, ?, ?, ?))			5
10		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_IdType(tsc_UE_IdTypeReserved2, −, tcv_CellInfoA.cRNTI), tsc_ExpectedPayloadSize,1)			2
11		+ts_MonitorUplinkSpecefiedTime (10)			3
12		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_IdType(tsc_UE_IdTypeC_RNTI, −,tcv_CellInfoA.cRNTI), tsc_ExpectedPayloadSize,1)			4

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params (INT_TO_BIT (1,12) , INT_TO_BIT (1,12), *, *, ?, ?, ?))			5
14	TBE	(tcv_TestBody := FALSE)			

Detailed Comments : 1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH and Acknowledge receipt of the AM RLC PDU with SN 0. (STEP 1)

The paging response message is expected to fit into a single RLC PDU. This depends on the following:

1.1. The NAS PAGING RESPONSE message will be exactly 11 octets.
This results from 7 octets of fixed length information, and since a TMSI is available, it shall be used as the mobile identity (4 octets)

.3. The field measuredResultsOnRACH in InitialDirectTransfer will be omitted, because system information block 12 specifies that no measurement reports should be provided by the UE.

2. Send the dummy dl direct Transfer message with invalid MAC header (Step 2)
3. Monitor RACH for 10 seconds. If any activity test case fails. (Step 2a)
4 Send the dummy dl direct Transfer Message with correct MAC header (Step 3)

5. Receive RRC and RLC staus PDU's (Step 4 and 5)

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_5

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE ignores PDUs with UE−Ids that do not match the Id allocated to it.
2. To verify that the TCTF field, C/T field, UE−Id type and UE−Id field are correctly applied when a DTCH or DCCH is mapped to the RACH/FACH

Configuration :

Default : MAC_Default

Comments : Reference(s)
TS 25.321 clauses 9.2.1 and 9.2.1.1 c).

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_MAC_GenericSetupProceduresToBGP6_2Or6_4			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_Id(o_BitstringChange ((o_BitstringChange(tcv_CellInfoA.cRNTI , 16, 15)),16,14), −), tsc_ExpectedPayloadSize,0)			2 @sic ER2019 sic@
7		+ts_MonitorUplinkSpecefiedTime (10)			3
8		+ts_SendDLDirectTransfer(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_UE_Id(tcv_CellInfoA.cRNTI , −), tsc_ExpectedPayloadSize,0)			4
9		+ts_ReceiveRRC_RLC_StatusPDU_FACH (tsc_RB_DCCH_FACH_MAC, cr_SUFI_Params(INT_TO_BIT (0,12) , INT_TO_BIT (0,12), *, *, ?, ?, ?))			5
10	TBE	(tcv_TestBody := FALSE)			

Detailed Comments : 1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH and Acknowledge receipt of the AM RLC PDU with SN 0. (STEP 1)

The paging response message is expected to fit into a single RLC PDU. This depends on the following:

1.1. The NAS PAGING RESPONSE message will be exactly 11 octets.
This results from 7 octets of fixed length information, and since a TMSI is available, it shall be used as the mobile identity (4 octets)

1.3. The field measuredResultsOnRACH in InitialDirectTransfer will be omitted, because system information block 12 specifies that no measurement reports should be provided by the UE.
2. Send the dummy dl direct Transfer message with invalid MAC header (Step 2)
3. Monitor RACH for 10 seconds. If any activity test case fails. (Step 2a)

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Test Case Dynamic Behaviour	
Detailed Comments :	... 4 Send the dummy dl direct Transfer Message with correct MAC header (Step 3) 5. Receive RRC and RLC staus PDU's (Step 4 and 5)

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_1_8

Group : MAC/MappingBetweenLoChAndTrCh/

Purpose : 1. To verify that the UE discards PDUs with reserved or incorrect values in C/T field.

2. To verify that the TCTF field, C/T field, UE−Id type and UE−Id field are correctly applied when a DTCH or DCCH is mapped to the RACH/FACH.

Configuration :

Default : MAC_Default

Comments : Reference(s)
TS 25.321 clauses 9.2.1 and 9.2.1.1 b).

Selection Ref :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		+ts_GenericSetupProceduresToBGP6_1			
3		+lt_TestBody			
4		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
		lt_TestBody			
5	TBS	(tcv_TestBody := TRUE)			
6		+ts_SendDLDirectTransfer(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_LoCh8, −), tsc_ExpectedPayloadSize,0)			2
7		+ts_MonitorUplinkSpecefiedTime (10)			3
8		+ts_SendDLDirectTransfer(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_LoCh3, −), tsc_ExpectedPayloadSize,0)			4
9		+ts_ReceiveRRC_RLC_StatusPDU_DCH (tsc_RB_DCCH_DCH_MAC, cr_SUFI_Params(INT_TO_BIT (0,12) , INT_TO_BIT (0,12), *, *, ?, ?, ?))			5
10		+ts_SendDLDirectTransfer(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_Reserved, −), tsc_ExpectedPayloadSize ,1)			2
11		+ts_MonitorUplinkSpecefiedTime (10)			3
12		+ts_SendDLDirectTransfer(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_LoCh3, −), tsc_ExpectedPayloadSize,1)			4
13		+ts_ReceiveRRC_RLC_StatusPDU_DCH (tsc_RB_DCCH_DCH_MAC, cr_SUFI_Params (INT_TO_BIT (1,12) , INT_TO_BIT (1,12), *, *, ?, ?, ?))			5
14	TBE	(tcv_TestBody := FALSE)			

Detailed Comments : 1. Receive PAGING RESPONSE in an RRC InitialDirectTransfer message on the high priority NAS AM DCCH and Acknowledge receipt of the AM RLC PDU with SN 0. (STEP 1)

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Test Case Dynamic Behaviour	
Detailed Comments :	... The paging response message is expected to fit into a single RLC PDU. This depends on the following: 1.1. The NAS PAGING RESPONSE message will be exactly 11 octets. This results from 7 octets of fixed length information, and since a TMSI is available, it shall be used as the mobile identity (4 octets) 1.3. The field measuredResultsOnRACH in InitialDirectTransfer will be omitted, because system information block 12 specifies that no measurement reports should be provided by the UE. 2. Send the dummy dl direct Transfer message with invalid MAC header (Step 2) 3. Monitor RACH for 10 seconds. If any activity test case fails. (Step 2a) 4 Send the dummy dl direct Transfer Message with correct MAC header (Step 3) 5. Receive RRC and RLC staus PDU's (Step 4 and 5)

Test Case Dynamic Behaviour

Test Case Name : tc_7_1_3_1
Group : MAC/PriorityHandlingBetweenDataFlowsOfOneUE/
Purpose : To verify that the UE Prioritises signalling to data on a lower priority logical channel
Configuration :
Default : RRC_Def1,RLC_Default
Comments : TS 25.321 clause 11.4
25.301 clause 5.3.1.2
Selection Ref :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(300)			
2		[px_CipheringOnOff = FALSE]			@sic ER1977 sic@
3		[px_RAT = fdd]			
4		+pr_GenericSetupProcedures			
5		+ts_RRC_SetUpRAB_UM_7_RLC (tsc_DefaultCellId, tcv_RAB_Id, cbs_DefaultRLC_InfoUM)			Step 3−4
6		+pr_CloseUE_TestLoop(tsc_UL_SDU_Size7_1_3_1)			Step 5−6
7	TBS	(tcv_TestBody := TRUE)			
8		+lt_LocalTest			
9	TBE	(tcv_TestBody := FALSE)		(P)	
10		+ts_TC_DeactivateRB_TestMode(tsc_DefaultCellId)			
11		+po_ConnectionAndSS_Rel(tsc_DefaultCellId)			
12		[px_RAT = tdd]		I	
13		[TRUE]		I	
14		[TRUE]		I	
		lt_LocalTest			
15		AM ! RLC_AM_DATA_REQ	cas_TFC_ControlAM (tsc_CellDedicated, tsc_RB2, cs_TransportFormatCombCtrl (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti, C_TFC_RestrictUE_0_1_2))		Step 7
16		+ lt_SendData			
17		+ lt_ReceiveRLC_DataMeasurementReport			
		lt_SendData			
18		AM ! RLC_AM_DATA_REQ	cas_MeasurementControl (tsc_CellDedicated, tsc_RB2, cs_MeasurementControlTrafficVolumeSetup (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti))		Transmit the Traffic Volume Measurement Control on DCH 1. Step 8

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		TM ! TxMAC	cas_DataReqRAB(tsc_RB_UM_7_RLC, c_UMD_LIs(0, c_LIs2_7BitLIs(39,tsc_LI7_Padding), o_OctToBit(tsc_DataTx_7_1_3_1)))		Step 9
		lt_ReceiveRLC_DataMeasurementReport			
20	Loop1	AM ? RLC_AM_DATA_IND	car_MeasRepAM (tsc_CellDedicated, tsc_RB2, cr_RRC_MeasRepTV)		receive any measurement reports before actual loop backed PDU reception
21		GOTO Loop1			
22		TM ? RxMAC START t_WaitMS(500)	car_DataReqRAB(tsc_RB_UM_7_RLC, c_UMD(tcv_SQN_Received , ?))		First Uplink Loop Backed PDU, it will not have any LI and Padding
23		(tcv_SQN_Received := tcv_SQN_Received +1)			Increment sequence number
24		+lt_ReceiveRLC_DataMeasurementReportContinue			
		lt_ReceiveRLC_DataMeasurementReportContinue			
25	Loop2	AM ? RLC_AM_DATA_IND CANCEL t_WaitMS	car_MeasRepAM (tsc_CellDedicated, tsc_RB2, cr_RRC_MeasRepTV)	(P)	The Measurement Report received within 500 ms of First UL Data
26		+lt_Clean			
27		TM ? RxMAC	car_DataReqRAB(tsc_RB_UM_7_RLC, c_UMD(tcv_SQN_Received , ?))		Continue receiving loop backed PDU's
28		(tcv_SQN_Received := tcv_SQN_Received +1)			Increment sequence number

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Test Case Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
29		GOTO Loop2			
30		? TIMEOUT t_WaitMS		(F)	Measurement Report not transmitted within 500 ms hence Fail
31		+lt_Clean lt_Clean			
32		AM ! RLC_AM_DATA_REQ	cas_MeasurementControl (tsc_CellDedicated, tsc_RB2, cs_MeasurementControlTrafficVolumeRelease (tcv_CellIndInfo.dl_IntegrityCheckInfo, tcv_RRC_Ti))		Transmit the Traffic Volume Measurement Control to stop on DCH 1.
33	Loop3	TM ? RxMAC	car_DataReqRAB(tsc_RB_UM_7_RLC, c_UMD_LIs(24, c_LIs1_7BitLI (40) ,?))	(P)	Last Loop backed PDU, with one LI 40 (320 Bits) and Sequence number 24 (i.e 25 PDU) received
34		TM ? RxMAC	car_DataReqRAB(tsc_RB_UM_7_RLC, c_UMD(tcv_SQN_Received , ?))		Continue receiving loop backed PDU's
35		(tcv_SQN_Received := tcv_SQN_Received +1)			Increment sequence number
36		[tcv_SQN_Received <= 24]			
37		GOTO Loop3			
38		[tcv_SQN_Received > 24]		(F)	Error occured in loop back PDU's

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Test Case Dynamic Behaviour	
Detailed Comments :	1. with MLP =8, and Num ASC =7, ASC=7 and assignedSubChannelNumber = '1111'B, the reception of RLC loop back data is sufficient to prove it has ben received on correct ASC. 3. the 39 byte 312 bit PDU is transmitted. 312 + 2 LI's(16) = 328 the payload size of the RAB. As this the first PDU to be transmitted on this RAB, the Sequence number is 0. 4.

Test Step Dynamic Behaviour

Test Step Name : ts_MAC_GenericSetupProceduresToBGP6_2Or6_4

Group : Preambles/

Objective : Initialise the system simulator, and perform the RRC connection establishment procedure defined in 3G TS 34.108 clause 7.4.2.1 to bring the UE into state BGP 6_2.

Default : RRC_Def1

Comments : This preamble configures the system simulator for MAC testing, and then performs the Generic setup procedures as defined in 3G TS 34.108.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_CipheringOnOff = FALSE]			
2		[px_RAT =fdd]			
3		+ts_RRC_InitVariables (cell_FACH)			1
4		+ts_InitDummyDL_Transfer			
5		+ts_SS_CreateCellFACH (tsc_DefaultCellId)			2
6		+ts_SendDefSysInfo(tsc_DefaultCellId)			2
7		+ts_IdleUpdated (tsc_DefaultCellId)			3
8		+lt_ReconfigureHiPriNAS_AsTransparent			
9		+ts_RRC_PagType1_DefMAC (tsc_DefaultCellId)			4
10		+ts_RRC_ConnEstForMAC_RecIniTDirecTrans(tsc_DefaultCellId)			4
11		(tcv_ReceiveSigConnRelInd := TRUE)			
12	TSE1	[px_RAT = tdd]		I	5
13	TSE2	[TRUE]		I	6
14	TSE3	[TRUE]		I	7
		lt_ReconfigureHiPriNAS_AsTransparent			
15		+ts_CRLC_Rel(tsc_CellDedicated, tsc_RB3)			9
16		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow(tsc_DefaultCellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH, c_TrLogMapping_PchFach1TransRB3)		8
17		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_DefaultCellId, tsc_S_CCPCH1)		

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow(tsc_DefaultCellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMapping_Rach1TransRB3)		8
19		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_DefaultCellId, tsc_PRACH1)		
20		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB_DCCH_FACH_MAC, 168, { uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3 })		9
21		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB_DCCH_FACH_MAC)		
22		+ts_SetCellCfg (tsc_DefaultCellId, cell_FACH_MAC_SRB_NoConn)			

Detailed Comments : 1. Initialise test case variables ready for system simulator configuration.

2. Initialise system simulator with SRBs ready for RRC connection establishment on FACH. Start system information broadcast using the default system information messages.

3. Perform idle updated procedure on FACH.

4. Page UE, and complete mobile terminated RRC connection establishment on FACH. (Ref 3G TS 34.108 clause 7.1.2)

5. Generic setup procedures for TDD are not implemented yet. This value of px_RAT results in final inconclusive verdict

6. Unexpected value of px_RAT provided.

7. This test must be performed with integrity off to ensure that the paging response message fits in a single RLC PDU.

8. Reconfigure the MAC for SCCPCH and PRACH to set the macHeaderManipulation field to 'OmitMacHeader' for RB3. This allows the MAC header information to be specified by the TTCN for transmitted PDUs, and inspected by the TTCN for received PDUs.

NOTE: The 'reconfigure' option in CMAC_Config_REQ is still being discussed. It may be necessary in future to release the MAC layers for these physical channels, and then setup new MAC layers with transparent RB3.

9. Release the RLC entity for RB3, and setup a new RLC entity using transparent mode. This allows the RLC header information to be specified for transmitted

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Test Step Dynamic Behaviour
Detailed Comments : ... PDUs, and inspected for received PDUs. This is required to support the transparent MAC configuration described above.

Test Step Dynamic Behaviour

Test Step Name : ts_GenericSetupProceduresToBGP6_1

Group : Preambles/

Objective : Initialise the system simulator, and perform the RRC connection establishment procedure defined in 3G TS 34.108 clause 7.4.2.1 to bring the UE into state BGP 6_1.

Default : RRC_Def1

Comments : This preamble configures the system simulator for MAC testing, and then performs the Generic setup procedures as defined in 3G TS 34.108.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_CipheringOnOff = FALSE]			
2		[px_RAT =fdd]			
3		+ts_RRC_InitVariables (cell_DCH)			1
4		+ts_InitDummyDL_Transfer			
5		+ts_SS_CreateCellDCH (tsc_DefaultCellId)			2
6		+ts_SendDefSysInfo(tsc_DefaultCellId)			2
7		+ts_IdleUpdated (tsc_DefaultCellId)			3
8		+lt_ReconfigureHiPriNAS_AsTransparent			
9		+ts_RRC_PagType1_DefMAC (tsc_DefaultCellId)			4
10		+ts_RRC_ConnEstForMAC_RecIniTDirecTrans(tsc_DefaultCellId)			4
11		(tcv_ReceiveSigConnRelInd := TRUE)			
12	TSE1	[px_RAT = tdd]		I	5
13	TSE2	[TRUE]		I	6
14	TSE3	[TRUE]		I	7
		lt_ReconfigureHiPriNAS_AsTransparent			
15		+ts_CRLC_Rel(tsc_CellDedicated, tsc_RB3)			9
16		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoDL_13_6_StandAlone, c_TrLogMappingDL_4DCCH_TransRB3, 0)		8
17		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
18		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoUL_13_6_StandAlone, c_TrLogMappingUL_4DCCH_TransRB3, 0)		8
19		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_UL_DPCH1)		
20		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDedicated, tsc_RB_DCCH_DCH_MAC, 148, { uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3 })		9
21		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, tsc_RB_DCCH_DCH_MAC)		
22		+ts_SetCellCfg (tsc_DefaultCellId, cell_DCH_MAC_SRB_NoConn)			

Detailed Comments : 1. Initialise test case variables ready for system simulator configuration.

2. Initialise system simulator with SRBs ready for RRC connection establishment on FACH. Start system information broadcast using the default system information messages.

3. Perform idle updated procedure on FACH.

4. Page UE, and complete mobile terminated RRC connection establishment on FACH. (Ref 3G TS 34.108 clause 7.1.2)

5. Generic setup procedures for TDD are not implemented yet. This value of px_RAT results in final inconclusive verdict

6. Unexpected value of px_RAT provided.

7. This test must be performed with integrity off to ensure that the paging response message fits in a single RLC PDU.

8. Reconfigure the MAC for SCCPCH and PRACH to set the macHeaderManipulation field to 'OmitMacHeader' for RB3. This allows the MAC header information to be specified by the TTCN for transmitted PDUs, and inspected by the TTCN for received PDUs.

NOTE: The 'reconfigure' option in CMAC_Config_REQ is still being discussed. It may be necessary in future to release the MAC layers for these physical channels, and then setup new MAC layers with transparent RB3.

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Test Step Dynamic Behaviour
Detailed Comments : ...
9. Release the RLC entity for RB3, and setup a new RLC entity using transparent mode. This allows the RLC header information to be specified for transmitted PDUs, and inspected for received PDUs. This is required to support the transparent MAC configuration described above.

Test Step Dynamic Behaviour

Test Step Name : ts_GenericSetupProceduresToIdleUpdate_CCCH

Group : Preambles/

Objective : Initialise the system simulator, With a configuaration of DL CCCH in TM mode with MAC configured to not add MAC headers.

Default : RRC_Def1

Comments : This preamble configures the system simulator for MAC testing, and then performs the Generic setup procedures as defined in 3G TS 34.108.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_CipheringOnOff = FALSE]			
2		[px_RAT =fdd]			
3		+ts_RRC_InitVariables (cell_FACH)			1
4		+ts_SS_CreateCellFACH (tsc_DefaultCellId)			2
5		+ts_SendDefSysInfo (tsc_DefaultCellId)			2
6		+ts_IdleUpdated (tsc_DefaultCellId)			3
7		+lt_ReconfigureDL_CCCH_AsTransparent			
8	TSE1	[px_RAT = tdd]		I	5
9	TSE2	[TRUE]		I	6
10	TSE3	[TRUE]		I	7
		lt_ReconfigureDL_CCCH_AsTransparent			
11		+ts_CRLC_Rel(tsc_DefaultCellId, tsc_RB0)			9
12		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoActNow(tsc_DefaultCellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH, cd_TrLogMapping_PchFach1TransRB0)		8
13		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_DefaultCellId, tsc_S_CCPCH1)		
14		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_DefaultCellId, tsc_RB_CCCH_FACH_MAC, 168, { dLlogicalChannelIdentity tsc_DL_CCCH5 })		9 @sic 04/03/04 OG ER1503 sic@
15		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_DefaultCellId, tsc_RB_CCCH_FACH_MAC)		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
16		CRLC ! CRLC_Config_REQ	ca_RB_TM_UL_Info(tsc_DefaultCellId, tsc_RB0, 166, {uLlogicalChannelIdentity tsc_UL_CCCH5})		cofigure radio bearers (uplink): RB0 (TM + CCCH + RACH)
17		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_DefaultCellId, tsc_RB0)		
18		+ts_SetCellCfg (tsc_DefaultCellId, cell_FACH_MAC_SRB0_NoConn)			

Detailed Comments : 1. Initialise test case variables ready for system simulator configuration.

2. Initialise system simulator with SRBs ready for RRC connection establishment on FACH. Start system information broadcast using the default system information messages.

3. Perform idle updated procedure on FACH.

4. Page UE, and complete mobile terminated RRC connection establishment on FACH. (Ref 3G TS 34.108 clause 7.1.2)

5. Generic setup procedures for TDD are not implemented yet. This value of px_RAT results in final inconclusive verdict

6. Unexpected value of px_RAT provided.

7. This test must be performed with integrity off to ensure that the paging response message fits in a single RLC PDU.

8. Reconfigure the MAC for SCCPCH and PRACH to set the macHeaderManipulation field to 'OmitMacHeader' for RB3. This allows the MAC header information to be specified by the TTCN for transmitted PDUs, and inspected by the TTCN for received PDUs.

NOTE: The 'reconfigure' option in CMAC_Config_REQ is still being discussed. It may be necessary in future to release the MAC layers for these physical channels, and then setup new MAC layers with transparent RB3.

9. Release the RLC entity for RB3, and setup a new RLC entity using transparent mode. This allows the RLC header information to be specified for transmitted PDUs, and inspected for received PDUs. This is required to support the transparent MAC configuration described above.

Test Step Dynamic Behaviour

Test Step Name : ts_InitDummyDL_Transfer
Group : Preambles/
Objective : To Initialise the Dummy Dl Message to be sent based on the Domain of existing signalling connection
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_CN_Domain = cs_domain]			
2		(tcv_DummyDL_DirectTransferMsg := tsc_DummyDL_DirectTransferMsg_PS)			
3		[tcv_CN_Domain = ps_domain]			
4		(tcv_DummyDL_DirectTransferMsg := tsc_DummyDL_DirectTransferMsg_CS)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_InitRRC_ConnecSetup
Group : Preambles/
Objective : To Initialise the RRC Connection Setup PDU to be send depending on the domain of the UE
Default : RRC_Def1
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (tsc_DefaultCellId)			
2		(tcv_RRC_ConnecSetupMsg := o_PER_EncodeRRC_ConnSetup_MAC(cbs_108 _RRC_ConnSetupFACH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo. cRNTI, tcv_TmpCellInfo.uL_ScramblingCode)))			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : pr_CloseUE_TestLoop(p_LB_Size: INTEGER)

Group : Preambles/

Objective :

Default :

Comments : This preamble is used to close the UE test loop mode, for the default cellId (tsc_CellA), and the default RB used forMAC testing.

Parameters:
p_LB_Size: The uplink RLC SDU size in bits. This value will be represented as a 14 bit value in the LB Setup IE, so the valid range is from 0..16383.

Test case variables affected:
tcv_UE_TestLoopClosed will be set to TRUE by this test step.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_CN_Domain = ps_domain]			@sic RASH ER1977 sic@
2		+ts_TC_CloseUE_TestLoop(tsc_DefaultCellId, tsc_UE_TestLoopMode1, c_UE_TestLoopMode1_LB_Setup(p_LB_Size, tsc_RB20))			
3		[tcv_CN_Domain = cs_domain]			@sic RASH ER1977 sic@
4		+ts_TC_CloseUE_TestLoop(tsc_DefaultCellId, tsc_UE_TestLoopMode1, c_UE_TestLoopMode1_LB_Setup(p_LB_Size, tsc_RB10))			@sic RASH ER1977 sic@

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : pr_GenericSetupProcedures

Group : Preambles/

Objective :

Default : RRC_Def1

Comments : This preamble configures the system simulator for AM / UM testing, and then performs the Generic setup procedures as defined in 3G TS 34.108.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_RAT =fdd]			
2		+ts_InitVariables			1
3		+lt_InitRLC_Variables			9
4		+ts_SS_CreateCellDCH (tsc_DefaultCellId)			
5		+ts_SendDefSysInfo(tsc_DefaultCellId)			
6		+ts_IdleUpdated (tsc_DefaultCellId)			3
7		+ lt_SendPaging			4
8		+ lt_ReceiveResponseToPaging			5
9		+ ts_SS_SecurityDownloadStart (tcv_CN_Domain, tcv_Start)			
10		+ts_TC_ActivateRB_TestMode(tsc_DefaultCellId)			6
11	TSE1	[px_RAT = tdd]		I	7
12	TSE2	[TRUE]		I	8
		lt_InitRLC_Variables			
13		[pc_PS AND (px_CN_DomainTested = ps_domain)]			
14		(tcv_CN_Domain := ps_domain, tcv_RAB_Id := tsc_RAB_DefPS)			
15		[pc_CS AND (px_CN_DomainTested = cs_domain)]			
16		(tcv_CN_Domain := cs_domain, tcv_RAB_Id := tsc_RAB_DefCS)			
17		[TRUE]		I	
		lt_SendPaging			
18		[tcv_CN_Domain = ps_domain]			
19		+ts_RRC_ConnEst_DCH_MT_PTMSI(tsc_DefaultCellId, terminatingInteractiveCall, o_ConvertPTMSI(px_PTMSI_Def), terminatingInteractiveCall)			
20		[tcv_CN_Domain = cs_domain]			
21		+ts_RRC_ConnEst_DCH_MT_TMSI(tsc_DefaultCellId, terminatingConversationalCall, px_TMSI_Def, terminatingConversationalCall)			
22		[TRUE]		I	
		lt_ReceiveResponseToPaging			
23		[tcv_CN_Domain = ps_domain]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
24		Dc ? RRC_DataInd (tcv_CellIndInfo.start_PS := RRC_DataInd.start)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), *, tcv_PS_KeySeq))		SERVICE REQUEST
25		+ ts_RRC_Security (tsc_DefaultCellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
26		[tcv_CN_Domain = cs_domain]			
27		Dc?RRC_DataInd (tcv_CellIndInfo.start_CS := RRC_DataInd.start)	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, c_PagRsp(?, c_MobileIdTMSI_lv))		5
28		+ ts_MM_Authentication(tsc_DefaultCellId)			Steps 6a−6b
29		+ts_RRC_Security (tsc_DefaultCellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			@sic Er
30		[TRUE]		I	

Detailed Comments : 1. Initialise test case variables ready for system simulator configuration.

2. Initialise system simulator with SRBs ready for RRC connection establishment on DCH, with an additional RAB 5 mapped to a TM RLC entity. This RAB will be mapped to the appropriate UE RAB configured as AM or TM, and the RLC test case will create and verify the AM / UM headers.

3. Perform idle updated procedure on DCH.

4. Page UE, and complete mobile terminated RRC connection establishment on DCH. (Ref 3G TS 34.108 clause 7.1.2)

5. Paging response from UE.

6. Activate UE RB test mode (Ref 3G TS 34.109 clause 5.2.1)

7. Generic setup procedures for TDD are not implemented yet. This value of px_RAT results in final inconclusive verdict

8. Unexpected value of px_RAT provided.

9. Initialize RLC specific variables depending on the doamin to be used

Test Step Dynamic Behaviour

Test Step Name : ts_ReceiveRRC_RLC_StatusPDU_DCH (p_Rb_Id : SS_RB_Identity; p_SUFI_Params : SUFI_Params)

Group : General/

Objective : To receive RRC Status PDU on RB2 and RLC Status on RB1 mapped on DCH. They can come in any order.

Default : MAC_Default

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		AM ? RLC_AM_DATA_IND	car_RRC_Status(tsc_CellDedicated, tsc_RB2, cr_RRC_Status_MAC_NoInteg)		
2		TM ? RLC_TR_TestDataInd (tcv_StatusPDU := RLC_TR_TestDataInd.data)	car_DataIndHiPriNAS(p_Rb_Id, c_MAC_PDU_CT_RCV_STATUS_DCH(tsc_CT_LoCh3, cr_StatusAnyPad))		
3		(tcv_StatusMatchRes := o_SUFI_Handler(p_SUFI_Params, tcv_StatusPDU.data.superFieldsRec))			
4		[tcv_StatusMatchRes.result = TRUE]		(P)	
5		[TRUE]		(F)	
6		TM ? RLC_TR_TestDataInd (tcv_StatusPDU := RLC_TR_TestDataInd.data)	car_DataIndHiPriNAS(p_Rb_Id, c_MAC_PDU_CT_RCV_STATUS_DCH(tsc_CT_LoCh3, cr_StatusAnyPad))		
7		AM ? RLC_AM_DATA_IND	car_RRC_Status(tsc_CellDedicated, tsc_RB2, cr_RRC_Status_MAC_NoInteg)		
8		(tcv_StatusMatchRes := o_SUFI_Handler(p_SUFI_Params, tcv_StatusPDU.data.superFieldsRec))			
9		[tcv_StatusMatchRes.result = TRUE]		(P)	
10		[TRUE]		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_ReceiveRRC_RLC_StatusPDU_FACH (p_Rb_Id : SS_RB_Identity; p_SUFI_Params : SUFI_Params)

Group : General/

Objective : To receive RRC Status PDU on RB2 and RLC Status on RB1 mapped on RACH. They can come in any order.

Default : MAC_Default

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		AM ? RLC_AM_DATA_IND	car_RRC_Status(tsc_CellDedicated, tsc_RB2, cr_RRC_Status_MAC_NoInteg)		
2		TM ? RLC_TR_TestDataInd (tcv_StatusPDU := RLC_TR_TestDataInd.data)	car_DataIndHiPriNAS(p_Rb_Id, cr_MAC_PDU_RCV_STATUS_TCTF(tsc_DCCH_OnRACH_FDD, cr_StatusAnyPad))		
3		(tcv_StatusMatchRes := o_SUFI_Handler(p_SUFI_Params, tcv_StatusPDU.data.superFieldsRec))			
4		[tcv_StatusMatchRes.result = TRUE]		(P)	
5		[TRUE]		(F)	
6		TM ? RLC_TR_TestDataInd (tcv_StatusPDU := RLC_TR_TestDataInd.data)	car_DataIndHiPriNAS(p_Rb_Id, cr_MAC_PDU_RCV_STATUS_TCTF(tsc_DCCH_OnRACH_FDD, cr_StatusAnyPad))		
7		AM ? RLC_AM_DATA_IND	car_RRC_Status(tsc_CellDedicated, tsc_RB2, cr_RRC_Status_MAC_NoInteg)		
8		(tcv_StatusMatchRes := o_SUFI_Handler(p_SUFI_Params, tcv_StatusPDU.data.superFieldsRec))			
9		[tcv_StatusMatchRes.result = TRUE]		(P)	
10		[TRUE]		(F)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendDLDirectTransfer(p_RB_Identity : SS_RB_Identity;p_MAC_PDU: MAC_PDU;p_SegmentLength : INTEGER; p_RLC_SN : INTEGER)

Group : General/

Objective : To Transmit the DLDirect Message to a invalid domain and a dummy NAS String, designed to fit in one RLC Segment

Default : MAC_Default

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_MAC_PDU := p_MAC_PDU)			
2		(tcv_MAC_PDU.data :=cs_AMD_LIsAndPad (p_RLC_SN, tsc_P_Poll, c_LIs2_7BitLIs (tsc_DummyDL_DirectTransferLen, tsc_LI7_Padding), tcv_DummyDL_DirectTransferMsg, (p_SegmentLength − ((tsc_DummyDL_DirectTransferLen +2)*8))))			1
3		TM ! TxMAC	cas_DataReqHiPriNAS(p_RB_Identity, tcv_MAC_PDU)		

Detailed Comments : 1. The RLC PDU is constructed from Lenth Indicators, Dummy downlink PDU and the Padding

Test Step Dynamic Behaviour

Test Step Name : ts_MonitorUplinkSpecefiedTime (p_Time : INTEGER)

Group : General/

Objective : To check there is no uplink activity for specified amount of time in seconds

Default : MAC_Default

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitS (p_Time)			
2	TBS	AM ? RLC_AM_DATA_IND	car_RRC_Status(tsc_CellDedicated, ?, cr_RRC_Status_MAC_NoInteg)	(F)	
3		TM ? RLC_TR_TestDataInd (tcv_StatusPDU := RLC_TR_TestDataInd.data)	car_DataIndHiPriNAS(?, cr_MAC_PDU_RCV_STATUS_TCTF(tsc_DCCH_OnRACH_FDD, cr_StatusAnyPad))	(F)	
4		? TIMEOUT t_WaitS		(P)	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_GetRRC_ConnecSetupSegment(p_SegmentNumber, p_SegmentLength, p_MacHeadLen: INTEGER)

Group : General/

Objective : Assign the requested segment of the pre−coded RRC Connection Setup message to tcv_RLC_UM_PDU.

Default : MAC_Default

Comments : This test step is used to extract the requested segment from the pre−coded AUTHENTICATION REQUEST message, based on the given segment size.

Parameters
p_SegmentNumber
The required segment number, from 1 to 3 inclusive. The pre−coded AUTHENTICATION REQUEST message fits in 3 RLC PDUs when the payload size is 128. Any other values of p_SegmentNumber will result in a test case error.

p_SegmentLength
The length of the segment to exctract. This value is used to extract the appropriate substring from the pre−coded AUTHENTICATION REQUEST message stored in tsc_AuthReq.

Test case variables affected
tcv_RLC_PDU will contain the requested segment of the AUTHENTICATION REQUEST message, including an RLC header with sequence number equal to (p_SegmentNumber − 1).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_SegmentNumber = 1]			
2		(tcv_RLC_UM_PDU := c_UMD_LIs(p_SegmentNumber − 1, c_LIs1_7BitLI(124), o_BitstringXtract(o_OctToBit (tcv_RRC_ConnecSetupMsg), tsc_RRC_ConnecSetupLen, p_SegmentLength−8, 0)))			As this is the PDU with sequence number 0, sent, it is sent with the special length indicator of ’111 1100’B i.e 124
3		[(p_SegmentNumber > 1) AND (p_SegmentNumber < 6)]			
4		(tcv_RLC_UM_PDU := c_UMD(p_SegmentNumber − 1, o_BitstringXtract(o_OctToBit (tcv_RRC_ConnecSetupMsg), tsc_RRC_ConnecSetupLen, p_SegmentLength, (((p_SegmentNumber − 1) * p_SegmentLength)−8))))			
5		[p_SegmentNumber = 6]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
6		(tcv_RLC_UM_PDU := c_UMD_LIsAndPad(p_SegmentNumber − 1, c_LIs2_7BitLIs(17, tsc_LI7_Padding), o_BitstringXtract(o_OctToBit (tcv_RRC_ConnecSetupMsg), tsc_RRC_ConnecSetupLen, (p_SegmentLength − 16−(8 − p_MacHeadLen)), (((p_SegmentNumber − 1) * p_SegmentLength)−8)) , (8 − p_MacHeadLen)))			
7	ERR1	[(p_SegmentNumber > 6) OR (p_SegmentNumber < 0)]		I	1
Detailed Comments : 1. the hand codde RRC connection setup message will be always sufficient enough to fill in $ RLC segments.					

Test Step Dynamic Behaviour

Test Step Name : ts_SendRRC_ConnecSetup(p_MAC_PDU: MAC_PDU; p_SegmentLength, p_MacHeadLen: INTEGER)

Group : General/

Objective : Send all 5 segments of the hand coded RRC Connection Setipt message using the header information provided in the given MAC PDU.

Default : MAC_Default

Comments : Parameters
p_MAC_PDU: Used to initialise all fields in tcv_MAC_PDU except for the data field, which is initialised to the appropriate RRC Connection setupsegment during each iteration through the loop.

p_SegmentLength: Used to determine how many bits will be used for each segment of the RRC connection Setup. Normally this will be tsc_ExpectedPayloadSize, but other values may need to be used if the MAC header is not the normal length.

Variables affected
tcv_MAC_PDU is used as a working variable by this test step.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_RRC_ConnecSetupSegmentNum := 1)			1
2		(tcv_MAC_PDU := p_MAC_PDU)			2
3		REPEAT lt_SendRRC_ConnSetupSegment UNTIL [tcv_RRC_ConnecSetupSegmentNum = 7]			1
		lt_SendRRC_ConnSetupSegment			
4		[tcv_RRC_ConnecSetupSegmentNum <= 6]			
5		+ts_GetRRC_ConnecSetupSegment (tcv_RRC_ConnecSetupSegmentNum , p_SegmentLength, p_MacHeadLen)			3
6		(tcv_MAC_PDU.data := tcv_RLC_UM_PDU)			3
7		TM ! TxMAC	cas_DataReqRB0(tsc_RB_CCCH_FACH_MAC, tcv_MAC_PDU)		3
8		(tcv_RRC_ConnecSetupSegmentNum:= tcv_RRC_ConnecSetupSegmentNum + 1)			4
9	ERR1	[TRUE]		I	5

Detailed Comments :

1. tcv_AuthReqSegmentNumber is used to iterate through the4 segments in the hand codedRRC connection setupt message. The variable is initialised to 1, and then all 4 segments are sent using the given MAC PDU header. tcv_AuthReqSegmentNumber is incremented in the local tree lt_SendAuthReqSegment.

2. Initialise tcv_MAC_PDU to use the given field values for the MAC PDU header. The data field will be updated each time through the loop to contain the next segment of the RRC Connection Setup message.

3. Extract the next segment from the Authentication Request message, assign it to the data field of tcv_MAC_PDU, and transmit it on the high priority NAS AM DCCH. The third and final segment includes two length indicators. The first LI indicates the end of the RLC SDU, and the second LI indicates that the rest of the PDU is padding.

4. Increment tcv_RRC_ConnecSetupSegmentNum ready to transmit the next segment.

5. IfIt_SendRRC_ConnSetupSegment is used and tcv_RRC_ConnecSetupSegmentNum is greater than 3, a test case error has occured, and a final inconclusive verdict is assigned.

Test Step Dynamic Behaviour

Test Step Name : ts_MAC_ReceiveRRC_ConnReqInDefaultCellAndInit
Group : General/
Objective : To receive the RRc connection Request message from the Ue in the Default cell.
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitMS			wait timer with 13.5 seconds
2	TSP1	TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity) CANCEL t_WaitMS	car_RRC_ConnReq (tsc_DefaultCellId , tsc_RB0, cdr_108_RRC_ConnReq_MAC (tcv_RRC_EstCauMT))	(P)	RRC connection received control transferred out of test step
3		+ts_InitRRC_ConnecSetup			
4		?TIMEOUT t_WaitMS		(F)	UE not responding to Paging

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_MAC_ReceiveRRC_ConnReqInDefaultCell
Group : General/
Objective : To receive the RRc connection Request message from the Ue in the Default cell.
Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_WaitMS			wait timer with 13.5 seconds
2	TSP1	TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_DefaultCellId , tsc_RB0, cdr_108_RRC_ConnReq_MAC (tcv_RRC_EstCauMT))	(P)	RRC connection received control transferred out of test step
3		AM ? RLC_AM_DATA_IND CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl (?, ?))	(F)	RRC Connection Setup complete received, UE has not discarded the previous sent invalid MAC PDU, hence fail
4		?TIMEOUT t_WaitMS			
5		+ts_RRC_PagType1_DefMAC (tsc_DefaultCellId)			
6		START t_WaitMS			
7		TM ? RLC_TR_DATA_IND CANCEL t_WaitMS	car_RRC_ConnReq (tsc_DefaultCellId , tsc_RB0, cdr_108_RRC_ConnReq_MAC (tcv_RRC_EstCauMT))	(P)	RRC connection received control transferred out of test step
8	TSF2	?TIMEOUT t_WaitMS		I	UE not responding to Paging

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnEstForMAC_RecIniTDirecTrans(
p_CellId: INTEGER
)

Group : RRC_Steps/

Objective : To execute the RRC connection establishment Procedure and to receive the Service request or Paging response NAS message

Default : RRC_Def1

Comments : This test step is identical to the test step ts_RRC_ConnEst except that the RRC connection setup message has been modified to enable Timer_Status_Periodic for RB3. This timer is used for MAC testing such that the UE will provide STATUS reports regularly even if it has not received any RLC PDUs (because they have been discarded by the MAC layer due to invalid MAC headers).

The generic Step to establish RRC Connection and bring UE to CELL_FACH or CELL_DCH state. In this Step , 4Signalling Radio Bearers with 3.4kbps DL & UL is setup (RB# 1, 2, 3,4)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_Message.message.rrcConnectionRequest.initialUE_Identity)	car_RRC_ConnReq (tsc_DefaultCellId, tsc_RB0, cbr_108_RRC_ConnReq(tcv_RRC_EstCauMT))		
3		+lt_Send_ConnSetUp			
4		+lt_ReceiveRRC_ConnCmplAndPagRespOrServReq			
		lt_Send_ConnSetUp			
5		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)]			
6		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cds_RRC_ConnSetupFACH_NoCapEnq (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.cRNTI, tcv_TmpCellInfo.uL_ScramblingCode))		
7		+ ts_SetCellCfg (p_CellId, cell_FACH_MAC_SRB)			
8		[(tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
9		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cds_RRC_ConnSetupDCH_NoCapEnq (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_ScramblingCode))		
10		+ ts_SetCellCfg (p_CellId, cell_DCH_MAC_SRB)			
11	ERR	[TRUE] lt_ReceiveRRC_ConnCmplAndPagRespOrServReq		I	2.
12		(tcv_MAC_Counter :=0)			
13		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB)]			
14	Rcv1	AM ? RLC_AM_DATA_IND	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl(tcv_RRC_Ti, *))	(P)	
15		START t_WaitMS(5000)			Start a timer of 5 seconds to receive the First Paging respons e or service request Segment
16		+ lt_ReceiveSegments_FACH			
17		TM ? RxMAC	car_DataIndHiPriNAS(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnRACH_FDD, ?))		Receive first segment
18		+lt_Updatecounter			1

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
19		TM ! TxMAC	cas_DataReqHiPriNAS(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_Send_STATUS_Def(cs_StatusAndPad(cs_SF_Ack(tcv_MAC_Counter), 31)))		
20		GOTO Rcv1			
21		[(tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB)]			
22	Rcv2	AM ? RLC_AM_DATA_IND	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupCmpl(tcv_RRC_Ti, *))	(P)	
23		START t_WaitMS(5000)			Start a timer of 5 seconds to receive the First Paging response or service request Segment
24		+ lt_ReceiveSegments_DCH			
25		TM ? RxMAC	car_DataIndHiPriNAS(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_LoCh3, ?))		
26		+lt_Updatecounter			1
27		TM ! TxMAC	cas_DataReqHiPriNAS(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_RCV_STATUS_DCH(tsc_CT_LoCh3, cs_StatusAndPad(cs_SF_Ack(tcv_MAC_Counter),31)))		
28		GOTO Rcv2			
29	ERR	[TRUE]		I	
		lt_Updatecounter			
30		[tcv_MAC_Counter < px_NumOfSegInPagResOrServReq]			
31		(tcv_MAC_Counter := tcv_MAC_Counter+1)			
32		[TRUE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		lt_ReceiveSegments_FACH			
33	Next1	TM ? RxMAC CANCEL t_WaitMS	car_DataIndHiPriNAS(tsc_RB_DCCH_FACH_MAC, c_MAC_PDU_TCTF(tsc_DCCH_OnRACH_FDD, ?))		
34		+lt_Updatecounter			1
35		TM ! TxMAC	cas_DataReqHiPriNAS(tsc_RB_DCCH_FACH_MAC, cs_MAC_PDU_Send_STATUS_Def(cs_StatusAndPad(cs_SF_Ack(tcv_MAC_Counter), 31)))		
36		START t_WaitMS (tsc_WaitNextRLC_Segment)			
37		GOTO Next1			
38		? TIMEOUT t_WaitMS			
39		[tcv_MAC_Counter = px_NumOfSegInPagResOrServReq]		(P)	
40		[TRUE]		(F)	
		lt_ReceiveSegments_DCH			
41	Next2	TM ? RxMAC CANCEL t_WaitMS	car_DataIndHiPriNAS(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_DCH(tsc_CT_LoCh3, ?))		
42		+ lt_Updatecounter			
43		TM ! TxMAC	cas_DataReqHiPriNAS(tsc_RB_DCCH_DCH_MAC, c_MAC_PDU_CT_RCV_STATUS_DCH(tsc_CT_LoCh3, cs_StatusAndPad(cs_SF_Ack(tcv_MAC_Counter),31)))		
44		START t_WaitMS (tsc_WaitNextRLC_Segment)			
45		GOTO Next2			
46		? TIMEOUT t_WaitMS			
47		[tcv_MAC_Counter = px_NumOfSegInPagResOrServReq]		(P)	
48		[TRUE]		(F)	

Detailed Comments : 1. Update the cell configuration
2. This step is only intended for use by the MAC layer, for tests to be performed in Cell FACH state.

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_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 = 4]			Operation Band 4 under test
44		[((p_UARFCN_D − p_UARFCN_U) = 225)]			Default seperation
45		(tcv_Res := TRUE)			
46		[TRUE]			Non default seperation
47		(tcv_Res := FALSE)			
		lt_Init_SSInfo_CellA			
48		(tcv_CellInfoA := c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, tcv_FreqInfoMid , px_UL_ScramblingCode))			1.
		lt_Init_SSInfo_CellB			
49		(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			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
50		(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			
51		(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			
52		(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			
53		(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			
54		(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			
55		(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_NAS_Delay(p_Dly: INTEGER)
Group : BasicM_General_Steps/
Objective : Realization of a Delay
Default : NAS_OtherwiseFail
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_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_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_AuthAndCiphFailure(?, *))	I	AUTHENTICATION AND CIPHERING Failure, then stop execution by assigning INCONCLUSIVE verdict as this might be a USIM issue.
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_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_GMM_IdleUpdated (p_CellId : INTEGER)

Group : BasicM_MM_GMM_Steps/

Objective : Turn on UE and register for PS or combined PS/CS services.

Default : NAS_OtherwiseFail

Comments : Initial conditions:
− Cell referenced by p_CellId is configured and sending SysInfos on BCCH
− UE is switched off with a valid Test USIM inserted

Input paramters:
− p_CellId referencing the Cell

Global paramters used:
− The SS will use global authentication paramters and keys which are generated in test Step ts_GMM_Authentication:
tcv_AuthRAND, tcv_KeySeq, tcv_AuthAUTN, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM.
− The SS will assign to the UE default values for P−TMSI, P−TMSI signature and (in case of combined PS/IMSI attach) TMSI.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[(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.
3		+lt_IdleUpdated_NMO_I			
4		(tcv_Use_E_PLMN := FALSE)			Invalidate the tcv_E_PLMN
5		[(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 procedures independently
6		+lt_IdleUpdated_NMO_II			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
7		(tcv_Use_E_PLMN := FALSE)			Invalidate the tcv_E_PLMN
8		[tcv_UE_OpMode = opModeC]			If UE is in operation mode C, then run GMM procedure (for PS only attach).
9		+lt_GMMOnly_IdleUpdated			
10		(tcv_Use_E_PLMN := FALSE)			Invalidate the tcv_E_PLMN
11	ERR	[TRUE]		I	Programming error
		lt_IdleUpdated_NMO_I			
12		+ ts_MMI_UE_SwitchOn			
13		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection
14		[pc_AutomaticAttachSwitchON = TRUE]			Perform combined CS/PS procedure
15		+lt_AttachRequest			ATTACH REQUEST
16		+ts_GMM_Authentication (p_CellId)			AUTHENTICATION AND CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
17		+lt_SecurityMode			SECURITY MODE COMMAND SECURITY MODE COMPLETE
18		+lt_AttachAccept			ATTACH ACCEPT ATTACH COMPLETE
19		+lt_RRC_ConnRel			RRC connection release
20		[pc_AutomaticAttachSwitchON = FALSE]			First perform Location Update procedure, and then trigger UE via AT command to perform GPRS Attach
21		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		Any Location Update request
22		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
23		+ts_MM_Authentication(p_CellId)			Authentication
24		+ts_RRC_Security (p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			
25		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac))		Location Updating Accept

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
26		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI reallocation complete
27		+lt_RRC_ConnRel			Release RRC connection
28		START t_WaitS (1)			Wait 1 s to allow UE to relax
29		?TIMEOUT t_WaitS			
30		START t_WaitS (60)			
31		+ts_AT_TriggerGMM_Attach			trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos
32		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection
33		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_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
34		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
35		+ts_GMM_Authentication (p_CellId)			AUTHENTICATION AND CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
36		+lt_SecurityMode			SECURITY MODE COMMAND SECURITY MODE COMPLETE
37		+lt_AttachAccept			ATTACH ACCEPT ATTACH COMPLETE
38		+lt_RRC_Conn Rel			RRC connection release
39		? TIMEOUT t_WaitS		F	IF UE doesent respond to Attach triggered Fail the UE.
		lt_IdleUpdated_NMO_II			
40		+ ts_MMI_UE_SwitchOn			
41		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection
42		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		Any Location Update request
43		(tcv_GMM_AttachExpect := TRUE, tcv_GMM_AttachRec := FALSE)			Set Flags in order to enable default handler to store ATTACH REQUEST PDU in case it is sent during Location Update procedure
44		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
45		+ts_MM_Authentication(p_CellId)			Authentication
46		+ts_RRC_Security (p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			
47		+ lt_LocUpdAcc			
48		+lt_HandleAttachRequest			
49		+ts_GMM_Authentication (p_CellId)			AUTHENTICATION AND CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE
50		+lt_SecurityMode			SECURITY MODE COMMAND SECURITY MODE COMPLETE
51		+lt_AttachAccept			ATTACH ACCEPT ATTACH COMPLETE
52		+lt_RRC_ConnRel			RRC connection release
53		lt_HandleAttachRequest (tcv_GMM_AttachExpect := FALSE)			Disable NAS default handler for ATTACH REQUEST

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
54		[tcv_GMM_AttachRec = TRUE]			ATTACH REQUEST was received and handled by NAS default handler
55		[NOT pc_AutomaticAttachSwitchON]			ATTACH REQUEST was NOT yet received and the UE does not automatically attach at switch on
56		+lt_RRC_ConnRel			RRC connection release
57		START t_WaitS (1)			Wait 1 s to allow UE to relax
58		?TIMEOUT t_WaitS			
59		START t_WaitS (60)			
60		+ts_AT_TriggerGMM_Attach			Trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos
61		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection
62		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_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
63		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
64		? TIMEOUT t_WaitS		F	
65		[TRUE]			The UE did not send ATTACH REQUEST but it should since it shall automatically switch attach at switch on
66		START t_WaitS (5)			
67		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_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
68		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
69		? TIMEOUT t_WaitS			Now, if this event happens, then the UE didn't send an ATTACH REQUEST yet. We give the UE a last chance: We release the connection and wait for the UE to autamtically start a connection and finally send an ATTACH REQUE

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
					ST @SICOLAFSIC@
70		+lt_RRC_ConnRel			RRC connection release @SICOLAFSIC@
71		START t_WaitS (5)			
72		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection @SICOLAFSIC@
73		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_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested @SICOLAFSIC@
74		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			@SICOLAFSIC@
75		? TIMEOUT t_WaitS		F	@SICOLAFSIC@ Here we finally FAIL the UE! [Note: Actually the timout will be handled by the default handler of ts_RRC_ConnEst]
		lt_GMMOnly_IdleUpdated			
76		+ ts_MMI_UE_SwitchOn			
77		+lt_GMMOnly_TriggerAttach			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
78		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establish RRC connection
79		+lt_AttachRequest			ATTACH REQUEST
80		+ts_GMM_Authentication (p_CellId)			AUTHENTICATION AND CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE
81		+lt_SecurityMode			SECURITY MODE COMMAND SECURITY MODE COMPLETE
82		+lt_AttachAccept			ATTACH ACCEPT ATTACH COMPLETE
83		+lt_RRC_ConnRel			RRC connection release
		lt_GMMOnly_TriggerAttach			
84		[NOT pc_AutomaticAttachSwitchON]			
85		+ts_NAS_Delay(tsc_TWaitSysInfo)			Allow UE to decode Sys Infos
86		START t_WaitS (60)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
87		+ts_AT_TriggerGMM_Attach			Trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos
88		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_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
89		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
90		? TIMEOUT t_WaitS		F	
91		[TRUE]			Do nothing: UE will automatically attempt PS attach
		lt_AttachRequest			
92		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUEST – Extract Attach type requested
93		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
		lt_LocUpdAcc			
94		[tcv_Use_E_PLMN = FALSE]			
95		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac))		LOCATION UPDATING ACCEPT
96		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLOCATION COMPLETE

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
97		[TRUE]			[tcv_Use_E_PLMN = TRUE]
98		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI_E_PLMN (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_E_PLMN))		LOCATION UPDATING ACCEPT including 'equivalent PLMN list'
99		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLOCATION COMPLETE
		lt_SecurityMode			
100		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURITY MODE COMMAND SECURITY MODE COMPLETE
		lt_AttachAccept			
101		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_I)]			if UE is mode A and NMO II
102		(tcv_AssignedTMSI :=px_TMSI_Def, tcv_AssignedPTMSI :=px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values
103		[tcv_Use_E_PLMN = FALSE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
104		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('011'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), c_GMM_MobileIdTMSI (tcv_AssignedTMSI)))		ATTACH ACCEPT for combined CS/PS − Attach result 'GPRS/IMSI attached' − RAI default − P−TMSI signature − MobileId P−TMSI − defaut TMSI
105		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
106		[TRUE]			[tcv_Use_E_PLMN = TRUE]
107		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_AttachAccE_PLMN(c_GMM_AttachResult('011'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), c_GMM_MobileIdTMSI (tcv_AssignedTMSI), tcv_E_PLMN))		ATTACH ACCEPT for combined CS/PS − Attach result 'GPRS/IMSI attached' − RAI default − P−TMSI signature − MobileId P−TMSI − defaut TMSI − equivalent PLMN list

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
108		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
109		[TRUE]			If mode is C or if NMO is II
110		(tcv_AssignedPTMSI := px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values
111		[tcv_Use_E_PLMN = FALSE]			
112		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
113		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
114		[TRUE]			[tcv_Use_E_PLMN = TRUE]

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
115		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_AttachAccE_PLMN(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), –, tcv_E_PLMN))		ATTACH ACCEPT for PS only − Attach result 'GPRS attached' − RAI default (RAI−1) − P−TMSI −1 signature − MobileId P−TMSI −1 − omit TMSI − equivalent PLMN list
116		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPLETE
		lt_RRC_ConnRel			
117		[(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)]			@sic T1s040622,624 & 626 sic@
118		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dcch)			
119		[tcv_TmpCellInfo.cellConfig <> cell_FACH]			
120		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			

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Test Step Dynamic Behaviour

Detailed Comments : See 3GPP 24.008 / 4.7 and also 3GPP 34.108 / 7.2.2 (Registration on PS)
See also the detailed description in test Step ts_MM_IdleUpdated, on which this test Step is based.

Test Step Dynamic Behaviour

Test Step Name : ts_IdleUpdated (p_CellId: INTEGER)

Group : BasicM_MM_GMM_Steps/

Objective : To bring the UE into MM and/or GMM state Idle Updated

Default : NAS_OtherwiseFail

Comments : Initial conditions:
− The UE is initially switched off
− The cell referred has been properly configured.
Note−1: The cell settings (like PLMN, LAC and RAC) used during the registration procedure are extracted from cell info record in tcv_CellInfoX
Note−2: If 'equivalent PLMN list' is to be used, please set global variable tcv_Use_E_PLMN to TRUE and accordingly initialise tcv_E_PLMN

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_CS AND pc_PS]			both CS and PS supported and for testing
2		+ts_GMM_IdleUpdated (p_CellId)			
3		[pc_CS]			CS supported and for testing
4		+ts_MM_IdleUpdated (p_CellId)			
5		[pc_PS]			PS supported and for testing
6		+ts_GMM_IdleUpdated (p_CellId)			
7	ERR1	[TRUE]		I	

Detailed Comments : Parameter description:
==========
p_CellId Cell Identification INTEGER

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 (wrappin g)

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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_XO R 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_IdleUpdated (p_CellId: INTEGER)

Group : BasicM_MM_GMM_Steps/

Objective : To bring the UE into MM state Idle Updated − CS mode, general case

Default : NAS_OtherwiseFail

Comments : Before IdleUpdated can be used a Cell is to be created and System Information must be sent. This test Step covers the general case: the UE has a valid TMSI.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch SS_CellInfo table correponding to the cell
2		+ts_MM_PwrOrUSIM_On(tsc_USIM_NeedRmv)			2. Activate the UE
3		START t_Dly (150000)			3. Supervise the reception of the expected Location Updating Request @sic RASH t1s040617 sic@
4		+ ts_RRC_ConnEst (p_CellId, est_Reg, OMIT)			Connection Establishment MO
5		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start) CANCEL t_Dly	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		4. Any Location Update request
6		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
7		+ts_MM_Authentication(p_CellId)			4.1 Authentication
8		+ts_RRC_Security (p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			
9		[tcv_Use_E_PLMN = FALSE]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
10		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac))		4.2 Location Updating Accept without 'equivalent PLMN list'
11		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		4.3 TMSI reallocation complete
12		+ lt_RRC_ConnRel			Connection Release
13		[TRUE]			[tcv_Use_E_PLMN = TRUE]
14		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI_E_PLMN (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_E_PLMN))		4.2 Location Updating Accept including 'equivalent PLMN list'
15		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		4.3 TMSI reallocation complete
16		+ lt_RRC_ConnRel			Connection Release
17		lt_RRC_ConnRel (tcv_Use_E_PLMN := FALSE)			De−initialise the variable tcv_Use_E_PLMN

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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_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)]			
19		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dcch)			
20		[tcv_TmpCellInfo.cellConfig <> cell_FACH]			
21		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			

Detailed Comments : Parameter description:
==========

p_CellId Cell Identification INTEGER

Algorithm/Steps:
==========
1. UE is deactivated
2. UE is activated
3. Location registration is expected to happen within time TwaitLocUpdReq
4. The location registration is accepted, and a new TMSI − the default TMSI used for testing − is passed to the UE. The UE stores the newly provided TMSI.
4.1 Authentication with default values
4.2 Location Updating Accept with default TMSI and MNC, MCC, LAI
4.3 Completion of the TMSI reallocation procedure
5. If NO Location Updating Request is received, ie the timer supervising the receipt of the Location registration runs out, this is assumed to be due to the fact that the PLMN is in the forbidden list. In this case local test Step lt_RmvFbdnList is executed to clear this situation.
6. This should not happen, so the verdict is INCONCLUSIVE. Resources are to be released properly and automatic PLMN selection is to be restablished.

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 T1s0406 22,624 & 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)]			1.@sic Draft 14.4.2.1 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 : ts_RRC_SetUpRAB_UM_7_RLC (p_CellId: INTEGER; p_RAB_Id : BITSTRING; p_RLC_Info : RLC_Info)

Group : BasicM_RRC_Steps/RRC_RAB_Steps/

Objective :

Default : RRC_Def1

Comments : This test step performs an RB setup procedure to configure RB10 in the UE as a UM DTCH entity that should use 7 bit length indicators. Reference 3G TS 34.108 clause 6.11.1.
The corresponding entity in the SS is configured as TM, but with an identical transport block size. The UM header information is specified in the TTCN for DL, and can be inspected by the TTCN for UL.

Parameters
p_CellId: The cell id to use for signalling, and configuration of the RB for testing.

p_RAB_Id: The RAB Id to be used within the RB SETUP message.

p_RLC_Info: The RLC configuration information to be used within the RB setup message for DTCH. This parameter is provided so that different configurations can be used to meet the requirements of each specific test case.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
3		CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber)	car_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
4		(tcv_ActTime := (256 + tcv_FrameNumber − (tcv_FrameNumber MOD 8 + 8)) MOD 256, tcv_TGCFN := (tcv_FrameNumber + (256 − 4)) MOD 256)			
5		+ lt_SendRAB_SetupCS_OrPS			
6		AM ? RLC_AM_DATA_CNF	car_AM_DataMuiCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui)		
7		+ts_SS_2DCH_Modify(p_CellId, c_DCH_336_148_UL_InfoRLC_UM(tcv_ActTime) , c_DCH_336_148_DL_InfoRLC_UM(tcv_ActTime) , c_TrChInfoUL_336_148_RLC_UM, c_TrChInfoDL_336_148_RLC_UM, c_TrLogMappingUL_4DCCH_1DTCH_RLC(tsc_RB_UM_7_RLC), c_TrLogMappingDL_4DCCH_1DTCH_RLC(tsc_RB_UM_7_RLC), tcv_ActTime, cb_DL_DPCH_8K_RLC_7BitLI (c_DL_CommonInformationRB_SetUp (tsc_DL_DPCH1_SFP_RLC_7BitLI), tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_RLC_7BitLI, pl1, t			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		cv_TmpCellInfo.uL_ScramblingCode))			
8		+ts_SS_RB_TM_Cfg_RLC(336, tsc_RB_UM_7_RLC)			
9	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (p_CellId , cell_RLC_DCH_UM_RAB_7Lis)			
10		+ ts_SetCellCfg (p_CellId, cell_RLC_DCH_UM_RAB_7Lis)			
		lt_SendRAB_SetupCS_OrPS			
11		[tcv_CN_Domain = cs_domain]			
12		AM ! RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui, cs_RRC_RB_SetUp(tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, tcv_ActTime, cell_DCH, OMIT, c_RAB_InfoListRLC(p_RAB_Id, p_RLC_Info, cs_domain, tsc_RB10), c_UL_CommTrChInfoRLC_8K, c_UL_AddReconfTransChInfoList7_RLC_UM, c_DL_CommonTransChInfo SameAsUL, c_DL_AddReconfTransChInfoListRLC, c_DL_InformationPerRL (tcv_TmpCellInfo.priScrmCode, tsc_DL_DPCH1_ChC_RLC_7_BitLI, tcv_TmpCellInfo.dl_DPCH_2ndScrCode), c_DL_CommonInformation RB_SetUp (tsc_DL_DPCH1_SFP_RLC_7BitLI), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_RLC_7BitLI, pl1, tcv_TmpCellInfo.uL_ScramblingCode), OMIT		

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
			))		
13		[tcv_CN_Domain = ps_domain]			
14		AM ! RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui, cs_RRC_RB_SetUp(tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, tcv_ActTime, cell_DCH, OMIT, c_RAB_InfoListRLC(p_RAB_Id, p_RLC_Info, ps_domain, tsc_RB20), c_UL_CommTrChInfoRLC_ 8K, c_UL_AddReconfTransChIn foList7_RLC_UM, c_DL_CommonTransChInfo SameAsUL, c_DL_AddReconfTransChIn foListRLC, c_DL_InformationPerRL (tcv_TmpCellInfo.priScrmCo de, tsc_DL_DPCH1_ChC_RLC _7_BitLI, tcv_TmpCellInfo.dl_DPCH_ 2ndScrCode), c_DL_CommonInformation RB_SetUp (tsc_DL_DPCH1_SFP_RLC _7BitLI), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_RLC_ 7BitLI, pl1, tcv_TmpCellInfo.uL_Scrambl ingCode), OMIT))		
Detailed Comments :					

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_NoConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)]			
11		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetupFACH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCode , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.cRNTI, tcv_TmpCellInfo.uL_ScramblingCode))		
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_NoConn]			
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_NoConn]			
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_No Conn]			
27		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2)			
28		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn]			
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH)			@sic T1s040622 sic@
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn]			@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_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCo de , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_Scrambl ingCode))		
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_ConnEst_DCH_MT_PTMSI (
p_CellId: INTEGER;
p_PagCause: PagingCause;
p_P_tmsi:P_TMSI_GSM_MAP;
p_EstCause: EstablishmentCause
)

Group : BasicM_RRC_Steps/

Objective : To bring the the UE into CELL_DCH state with a MT call with Paging Type P_TMSI

Default : RRC_DefConnEst

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
4		+ts_CMAC_Pag1_Cfg(p_CellId)			
5		TM ! RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_PTMSI (p_PagCause, p_P_tmsi, tcv_CN_Domain))		
6		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))		
7		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))		
8		+ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
9		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			1.

Detailed Comments : 1. Update the cell configuration
2. Download the START value to SS

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_ConnEst_DCH_MT_TMSI (
p_CellId: INTEGER;
p_PagCause: PagingCause;
p_Tmsi:OCTETSTRING;
p_EstCause: EstablishmentCause)

Group : BasicM_RRC_Steps/

Objective : To bring the the UE into CELL_DCH state with a MT call with Paging Type TMSI

Default : RRC_DefConnEst

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
4		+ts_CMAC_Pag1_Cfg(p_CellId)			
5		TM ! RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_TMSI (p_PagCause, o_ConvertTMSI(p_Tmsi), tcv_CN_Domain))		
6		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))		
7		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))		
8		+ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
9		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)			1.

Detailed Comments :

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_No Conn)			
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_No Conn)			
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_No Conn)			
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			@sic T1s0406 22 sic@
34		+ ts_CRLC_RelReconfSRB (p_CellId)			
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn)			
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)]			@sic T1s0406 24 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 T1s0406 24 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 T1s0406 26 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 T1s0404 68 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] lt_Send_RRC_ConnectionRelease		I	
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]		I	Programming error
		lt_RptRcvConnRel			
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_PagType1_DefMAC (p_CellId: INTEGER)

Group : BasicM_RRC_Steps/

Objective : To send PAGING TYPE 1 with the default TIMSI for CS and PTMSI for PS and with the default paging cause

Default : RRC_Def1

Comments : SS CMAC shall be configured before sending the PAGING TYPE 1 message.
tcv_RRC_PagingCau is assigned in ts_RRC_InitVariables (shall be called before).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
2		+ts_CMAC_Pag1_Cfg(p_CellId)			
3		[tcv_CN_Domain = cs_domain]			
4		TM ! RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_TMSI (tcv_RRC_PagingCau, o_ConvertTMSI(px_TMSI_Def), tcv_CN_Domain))		
5		[tcv_CN_Domain = ps_domain]			
6		TM ! RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_PTMSI (tcv_RRC_PagingCau, o_ConvertPTMSI (px_PTMSI_Def), tcv_CN_Domain))		

Detailed Comments :

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_RRC_ReceiveRB_SetupCmpl (p_CellId : INTEGER; p_RbType: RB_ConfigType)

Group : BasicM_RRC_Steps/

Objective : To receive RADIO BEARER SETUP COMPLETE message and reconfigure SS according to the received information element values.

Default : RRC_Def1

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		START t_WaitMS			
3		[(p_RbType = cell_DCH_Speech) OR (p_RbType = cell_DCH_64kCS_RAB_SRB) OR (p_RbType = cell_DCH_57_6kCS_RAB_SRB) OR (p_RbType = cell_Two_DTCH) OR (p_RbType = cell_Four_DTCH_CS) OR ((p_RbType = cell_Two_DTCH_PS_CS) AND (tcv_CN_Domain = cs_domain)) OR ((p_RbType = cell_Four_DTCH_PS_CS) AND (tcv_CN_Domain = cs_domain)) OR ((p_RbType = cell_DCH_DSCH_CS_PS) AND (tcv_CN_Domain = cs_domain))]			TM RAB
4		[(tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = cs_domain)]			
5		+ lt_CipheringStartedTM_RAB			
6		[tcv_CellIndInfo.cs_cipheringStarted = FALSE]			
7		+ lt_CipheringNotStartedTM_RAB			
8		[TRUE]			AM/UM RAB
9		[(tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = ps_domain)]			@sic ER1945 sic@
10		+ lt_CipheringStartedAM_RAB			
11		[TRUE]			
12		+ lt_CipheringNotStartedAM_RAB			
		lt_CipheringStartedTM_RAB			
13		+ ts_CMAC_DownloadSecurityKey (tcv_AuthCK, OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)			
14		+ ts_CMAC_UL_DL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_ActTime ,notInc)			@sic T1−017 32 sic@
15	TSF1	? TIMEOUT t_WaitMS		(F)	

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
16	TSP2	AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.count_C_ActivationTime, tcv_CellIndInfo.start_CS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.start_Value) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, *, OMIT))	(P)	A new start value is provided
17		+ts_CMAC_DownloadSecurityKey(tcv_AuthCK, OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)			@sic Erricsson sic@
18		+ ts_CMAC_UL_DL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, incPerCFN_Cycle) lt_CipheringStartedAM_RAB			@sic T1−031732 sic@
19	TSF3	? TIMEOUT t_WaitMS		(F)	
20	TSP3	AM ?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.rb_UL_CiphActivationTimeInfo) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cr_RRC_RB_SetUpCmplNoStartVal (tcv_RRC_Ti, OMIT, *))	(P)	No start value RB UL cipher not present
21		+ lt_SS_CipheringAM_RAB_UL_DL (tcv_PS_AuthCK)			@sic ER1945 sic@
22	TSP4	AM ?RLC_AM_DATA_IND (tcv_CellIndInfo.start_PS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.start_Value , tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.rb_UL_CiphActivationTimeInfo) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, OMIT, *))	(P)	A new start value is provided A RB UL cipher is not present
23		+ lt_SS_CipheringAM_RAB_UL_DL (tcv_PS_AuthCK) lt_CipheringNotStartedTM_RAB			@sic ER1945 sic@
24	TSF5	? TIMEOUT t_WaitMS		(F)	
25	TSP5	AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.count_C_ActivationTime, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.rb_UL_CiphActivationTimeInfo) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cr_RRC_RB_SetUpCmplNoStartVal (tcv_RRC_Ti, *,*))	(P)	No start value No RB UL cipher
26		+ ts_CMAC_DownloadSecurityKey (OMIT, OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
27		+ ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime,notInc)			@sic T1−017 32 sic@
28	TSP6	AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.count_C_ActivationTime, tcv_CellIndInfo.start_CS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.start_Value) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, *, OMIT))	(P)	A new start value is provided
29		+ ts_CMAC_DownloadSecurityKey (OMIT, OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)			
30		+ ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime ,notInc)			@sic T1−017 32 sic@
		lt_CipheringNotStartedAM_RAB			
31	TSF5	? TIMEOUT t_WaitMS		(F)	
32	TSP5	AM ?RLC_AM_DATA_IND CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cr_RRC_RB_SetUpCmplNoStartVal (tcv_RRC_Ti, OMIT,OMIT))	(P)	No start value No RB UL cipher
33		+ lt_SS_CipheringAM_RAB_UL_DL(OMIT)			
34	TSP6	AM ?RLC_AM_DATA_IND (tcv_CellIndInfo.start_PS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Message.message.radioBearerSetupComplete.start_Value) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, OMIT, OMIT))	(P)	A new start value is provided
35		+ lt_SS_CipheringAM_RAB_UL_DL (OMIT)			
		lt_SS_CipheringAM_RAB_UL_DL (p_KC : KeyCiphering)			
36		[(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_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_PS)]			@sic New RAB config sic@
37		+ lt_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)			
38		(tcv_RLC_SeqNumDL_RB20 := 0)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
39		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)			@sic T1−031 732 sic@
40		+ ts_CRLC_UL_CipherCfg_RAB (tcv_CN_Domain, cs_RB_ActTimeInfoList20 (0) ,notInc)			@sic T1−031 732 sic@
41		[(p_RbType = cell_DCH_2AM_PS) OR (p_RbType =cell_DCH_2_PS_Call)]			
42		+ lt_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)			
43		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB22 := 0)			
44		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)			@sic T1−031 732 sic@
45		+ ts_CRLC_UL_CipherCfg_RAB (tcv_CN_Domain,cs_RB_ActTimeInfoList20 _22 (0, 0),notInc)			@sic T1−031 732 sic@
46		[(p_RbType = cell_PDCP_AM_UM_RAB)]			@sic New RAB config t1s040622 sic@
47		+ lt_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)			
48		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB21 := 0)			
49		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)			@sic T1−031 732 sic@
50		+ ts_CRLC_UL_CipherCfg_RAB (tcv_CN_Domain,cs_RB_ActTimeInfoList20 _21 (0, 0),notInc)			@sic T1−031 732 sic@
51		[(p_RbType = cell_PDCP_UM_RAB)]			
52		+ lt_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)			
53		(tcv_RLC_SeqNumDL_RB21 := 0)			
54		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)			@sic T1−031 732 sic@
55		+ ts_CRLC_UL_CipherCfg_RAB (tcv_CN_Domain, cs_RB_ActTimeInfoList21 (0) ,notInc)			@sic T1−031 732 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
56		[(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 t1s040622 sic@
57		+ lt_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)			
58		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB24 := 0)			
59		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)			
60		+ ts_CRLC_UL_CipherCfg_RAB (tcv_CN_Domain,cs_RB_ActTimeInfoList20_24 (0, 0),notInc)			
61		[TRUE] lt_CRLC_SecurityConfig (p_Hfn_LT: HyperFrameNumber ; p_KC_LT: KeyCiphering)			for RLC do nothing
62		CRLC ! CRLC_SecurityMode_Config_REQ	ca_CRLC_SecurityModeCfgReq (tsc_CellDedicated , tcv_CellIndInfo.recentSecureDomain, p_Hfn_LT , p_KC_LT, OMIT, OMIT)		Download security keys for RLC. CRLC is configured with cellId −1 (tsc_CellDedicated) @sic T1s−040575 sic@
63		CRLC ? CRLC_SecurityMode_Config_CNF	ca_CRLC_SecurityModeCfgCnf (tsc_CellDedicated)		
Detailed Comments :					

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_DownloadSecurityKey (p_KC : KeyCiphering; p_IK : IntegrityKey; p_GSM_ck : GSM_CipheringKey; p_CN_Domain : CN_DomainIdentity; p_HFN : B20)			
Group :		BasicM_Security_Steps/			
Objective :		To download all security keys to CMAC. Only the keys/Parameters to be downloaded will be passed as parameters, rest will be omitted depending on the PICS.			
Default :		SS_Def			
Comments :					
Description :					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
1		CMAC ! CMAC_SecurityMode_Config_REQ	ca_CMAC_SecurityModeCfgReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC, p_IK, p_GSM_ck)		Download security keys for MAC
2		CMAC ? CMAC_SecurityMode_Config_CNF	ca_CMAC_SecurityModeCfgCnf (tsc_CellDedicated)		
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 , tcv_CellIndInfo. recentSecureDomain , p_rbId , p_CipherMode, p_SeqNum , p_IncMode)		configure cipheringfor signaling radio bearers @sic T1−031 732 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)			@sic RASH Er1433 sic@
		lt_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber)			
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 cipheringfor 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 ciphering for signaling radio bearers @sic T1−031732 sic@
2		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(tsc_CellDedicated)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_UL_CipherCfg_RAB (p_CN_Domain : CN_DomainIdentity; 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 , p_CN_Domain, p_RB_ActivationTimeInfoList ,p_IncMode)		configure ciphering for signaling radio bearers @sic T1−031732 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 cipherin g for RLC (RBs 1, 2, 3 and 4)@sic T1−017 32 sic@
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			@sic T1−017 32 sic@
22		+ ts_CMAC_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[TRUE]			If no New Cipherin g config
		lt_InitialiseRRC_MSN			
24		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN 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]			Cipherin g 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_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, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCap,7)))))		Ciphering for signalling RBs 1 to 4 @sic RASH T1−031470 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_Integrity CheckInfo, 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_Integrity CheckInfo, 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_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist , OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		Cipherin g for signallin g RBs 1 to 4
51		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF
52		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.cipheringAlg orithmCapability,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_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 (p_CN_Domain = ps_domain)]			
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)]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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))			
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)]			Cell DCH no TM RAB
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)]			cell DCH with TM RAB
8		+ lt_DownloadKeyCRLC (tcv_HFN,p_KC,p_IK)			
9		+ lt_DownloadKeyCMAC (tcv_HFN, p_KC)			
10		[TRUE]			
11		[NOT px_CipheringOnOff]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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 T1s0406 22,624 & 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)]			Cell DCH no TM RAB @sic ER1926 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 T1−031 723 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_UL_DL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER; p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective : Configure ciphering on the MAC layer for UL and DLRBs.

Default : SS_Def

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_CMAC_DL_CipherCfg (p_CipherMode, p_ActTime, p_IncrDcr)			
2		+ts_CMAC_UL_CipherCfg (p_CipherMode, p_ActTime, p_IncrDcr)			

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_Pag1_Cfg (p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : Configure paging on the MAC layer.

Default : SS_Def

Comments : This step shall be used when UE in idle mode.
The DRX cycle length to use is the shortest of the CN domain specific Drx cycle length.
The test case variable tcv_dRX_CycleLengthPaging is assigned to: the smallest value of CN Drx cycle length for the CN domain the UE is attached to.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_RAT = fdd]			
3		+ lt_CalculateDrxCycleLength			
4		CMAC ! CMAC_PAGING_Config_REQ	ca_CMAC_PagingCfgReq(p_CellId, tsc_S_CCPCH1, fdd, c_MAC_PagingCfg (o_GetPI(px_IMSI_Def, 18), tcv_dRX_CycleLengthPaging))		
5		CMAC ? CMAC_PAGING_Config_CNF	ca_CMAC_PagingCfgCnf(p_CellId, tsc_S_CCPCH1)		
6	ERR1	[px_RAT = tdd]		I	
7	ERR2	[TRUE]		I	
		lt_CalculateDrxCycleLength			
8		[pc_CS AND pc_PS]			0.
9		[tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength <= tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DRX_CycleLength]			1.
10		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength)			
11		[TRUE]			2.
12		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DRX_CycleLength)			
13		[pc_CS AND NOT (pc_PS)]			3.
14		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength)			
15		[pc_PS AND NOT (pc_CS)]			4.
16		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DRX_CycleLength)			

Detailed Comments :
0. UE supports CS and PS
1. CN Drx Cycle length for CS is smaller than PS, then CN Drx Cycle length for CS is used
2. CN Drx Cycle length for CS is smaller than PS, then CN Drx Cycle length for PS is used
3. UE supports only CS, the CN Drx cycle length for CS is used
4. UE supports only PS, the CN Drx cycle length for PS is used

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_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) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR((tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_CS_PS) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_TmpCellInfo.cellConfig =cell_Four_DTCH_CS_PS) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) 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_DC			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
		H_DSCH_CS_PS)]			
9		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated , tsc_RB20)		
10		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated , tsc_RB20)		
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		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
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, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH
6		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
7		+ lt_RelBCCH_FACH			@sic Rash implied due to T1s040385 4.12 sic@
8	ERR1	[px_RAT = tdd]		I	
9	ERR2	[TRUE]		I	
		lt_RelBCCH_FACH			
10		[(tcv_CellInfoA.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoA.cellConfig = cell_FACH) OR (tcv_CellInfoA.cellConfig = cell_FACH_PS)]			
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 correpo nding to the cell
2	ERR	[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]		I	Fatal error: cell already configur ed
3		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			Cell not yet configur ed
4		+ lt_CellIsAlreadyStarted			
5		[px_RAT = fdd]			
6		CPHY!CPHY_Cell_Config_REQ	ca_CellCfgReq(p_CellId, tcv_TmpCellInfo.tCell, tcv_TmpCellInfo.frequencyIn fo, tcv_TmpCellInfo.priScrmCo de, tcv_TmpCellInfo.attenuation Level, tcv_TmpCellInfo.sfnOffset, tcv_TmpCellInfo.cellTxPowe rLevel)		
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_NeedRm v)			1. Deactiva te 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_CreateCellDCH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

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;
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(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_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 T1s0406 02 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	Program ming 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	ERR2	[TRUE]		I	

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_Info(p_CellId, tsc_RB_BCCH_FACH, 166, {dLlogicalChannelIdentity tsc_BCCH6})		cofigure radio bearers (downlink): RB9 (TM + BCCH + FACH)
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_RB_TM_Cfg_RLC (p_PayLoad: INTEGER; p_RB_Identity: SS_RB_Identity)

Group : BasicM_SS_Configuration_Steps/

Objective :

Default : InitOtherwiseFail

Comments : Configure TM RLC entity in SS for RLC testing. The given RB identity can be used by the SS decoder to determine which RLC mode is being simulated.

The UE entity should be configured as an AM or UM entity using the same transport block size. This allows the RLC header information to be specified and / or inspected by the TTCN.

DL Logical channel mapping list for RLC tests. The DTCH RAB for RLC testing is mapped to DCH1. The SRBs are mapped to DCH5.

Parameters
p_CellId:
The cell to be used to configure the new RLC entity.

p_Payload:
The TM payload size in bits. This should be equal to the simulated AM or UM payload size, plus the relevant RLC header size.

p_RB_Identity:
The RB Id to be used within the SS. Different values can be used by the SS decoder to determine which RLC mode is being simulated.

Expected values:
−10 => UM7
−11 => UM15
−12 => AM7
−13 => AM15

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,
			p_RB_Identity,
			p_PayLoad,
			{
			uLlogicalChannelIdentity tsc_UL_DTCH1,
			dLlogicalChannelIdentity tsc_DL_DTCH1
			}
			)		

2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated, p_RB_Identity)		

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)]			@sic RASH T1s0404622 sic@
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)			
119		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB22)			
120		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic RASH t1s040462 sic@
121		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
122		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
123		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
124		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
125		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
126		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
127		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
128		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
129		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
130		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
131		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
132		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
133		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
134		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
135		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)			
136		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			
137		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH3)			
138		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			
139		+ lt_Release_BCCH			
140		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
141		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)]			
142		+ lt_RelSRB1_4			
143		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
144		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			@sic RASH ERq926 sic@

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
145		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic RASH ERq926 sic@
146		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
147		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
148		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
149		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
150		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
151		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
152		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
153		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
154		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
155		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
156		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
157		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
158		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
159		+ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH2)			
160		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
161		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			
162		+ ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH3)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
163		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			
164		+ lt_Release_BCCH			
165		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
166		[tcv_TmpCellInfo.cellConfig = cell_Two_DTCH]			
167		+ lt_RelSRB1_4			
168		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
169		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
170		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
171		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
172		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
173		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
174		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
175		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
176		+ lt_ReleaseCommonCh			
177		+ lt_Release_BCCH			
178		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
179		[tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS]			
180		+ lt_RelSRB1_4			
181		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
182		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
183		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
184		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB13)			
185		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
186		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
187		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
188		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
189		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
190		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
191		+ lt_ReleaseCommonCh			
192		+ lt_Release_BCCH			
193		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
194		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)]			@sic New RAB sic@
195		+ lt_RelSRB1_4			
196		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
197		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
198		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
199		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
200		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
201		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
202		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
203		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
204		+ lt_ReleaseCommonCh			
205		+ lt_Release_BCCH			
206		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
207		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			@sic New RAB sic@
208		+ lt_RelSRB1_4			
209		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
210		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
211		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
212		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
213		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
214		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
215		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
216		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
217		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
218		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
219		+ lt_ReleaseCommonCh			2.
220		+ lt_Release_BCCH			
221		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
222		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS)]			
223		+ lt_RelSRB1_4			
224		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
225		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
226		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
227		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
228		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
229		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
230		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
231		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
232		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_DL_PDSCH1)			
233		+ ts_SS_StopRL (p_CellId , tsc_DL_PDSCH1)			
234		+ lt_ReleaseCommonCh			
235		+ lt_Release_BCCH			
236		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
237		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)]			
238		+ lt_RelSRB1_4			
239		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
240		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
241		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
242		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
243		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
244		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
245		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
246		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
247		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
248		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
249		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
250		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_DL_PDSCH1)			
251		+ ts_SS_StopRL (p_CellId , tsc_DL_PDSCH1)			
252		+ lt_ReleaseCommonCh			
253		+ lt_Release_BCCH			
254		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
255		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH)]			@sic New RAB complete addition sic@
256		+ lt_RelSRB1_4			
257		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
258		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
259		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
260		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
261		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
262		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
263		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
264		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
265		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
266		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
267		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
268		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
269		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
270		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
271		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
272		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
273		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
274		+ lt_ReleaseCommonCh			
275		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
276		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
277		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
278		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
279		+ lt_Release_BCCH			
280		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
281		[(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@
282		+ lt_RelSRB1_4			
283		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
284		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB22)			
285		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB23)			
286		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
287		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic T1s040624 sic@
288		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
289		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
290		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
291		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
292		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
293		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
294		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
295		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
296		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
297		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
298		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
299		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
300		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
301		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH2)			
302		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
303		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			
304		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH3)			
305		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
306		+ lt_Release_BCCH			
307		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
308		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			@sic New RAB complete addition sic@
309		+ lt_RelSRB1_4			
310		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
311		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
312		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			@sic T1s040626 sic@
313		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			@sic T1s040626 sic@
314		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
315		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
316		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
317		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
318		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
319		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
320		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
321		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
322		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
323		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
324		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
325		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
326		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
327		+ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH2)			
328		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
329		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH3)			
330		+ ts_CPHY_TrChRelNonDch(p_CellId , tsc_S_CCPCH3)			
331		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH3)			
332		+ lt_Release_BCCH			
333		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
334		[TRUE] lt_Release_BCCH			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
335		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH)			
336		+ ts_CMAC_Rel (p_CellId, tsc_P_CCPCH)			
337		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_P_CCPCH)			
338		+ ts_SS_StopRL (p_CellId, tsc_S_SCH)			
339		+ ts_SS_StopRL (p_CellId, tsc_P_SCH)			
340		+ ts_SS_StopRL (p_CellId , tsc_P_CCPCH)			
341		+ ts_SS_StopRL (p_CellId, tsc_P_CPICH)			
		lt_ReleaseCommonCh			
342		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
343		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
344		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
345		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
346		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
347		+ ts_CRLC_Rel (p_CellId, tsc_RB_PCCH)			3.
348		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
349		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
350		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
351		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
		lt_RelSRB1_4			
352		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
353		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
354		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
355		+ 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	ERR	[TRUE]		I	
		lt_ReleaseRLC_RB			
111		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis)]			
112		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_15_RLC)			
113		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis)]			
114		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_7_RLC)			
115		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)]			
116		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_15_RLC)			
117		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
118		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_7_RLC)			
		lt_RelSRB1_4			
119		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
120		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
121		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
122		+ 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_InitializeSIB11_SIB12 (p_CellID : INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To assign tcv_SIB11 and tcv_SIB12
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellID)			
2		[tcv_NumOfPLMN = 1]			Default I PLMN test case
3		+lt_1Or2PLMN			
4		[tcv_NumOfPLMN = 2]			2 PLMN test case
5		+lt_1Or2PLMN			
6		[tcv_NumOfPLMN = 3]			3 PLMN test case
7		+lt_3PLMN			
8		[TRUE]		(I)	Test step not designed for this
		lt_1Or2PLMN			
9		[p_CellID = tsc_CellA]			
10		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
11		[p_CellID = tsc_CellB]			
12		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
13		[p_CellID = tsc_CellC]			
14		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
15		[p_CellID = tsc_CellD]			
16		(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
17		[p_CellID = tsc_CellE]			
18		(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
19		[p_CellID = tsc_CellF]			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
20		(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoF, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
21		[p_CellID = tsc_CellG]			
22		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoG, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
23		[p_CellID = tsc_CellH]			
24		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoH, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
25		[TRUE]		I	no such cell
		lt_3PLMN			
26		[p_CellID = tsc_CellA]			
27		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF , tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
28		[p_CellID = tsc_CellB]			
29		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF , tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
30		[p_CellID = tsc_CellC]			
31		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF , tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
32		[p_CellID = tsc_CellD]			
33		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2(tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
34		[p_CellID = tsc_CellE]			
35		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
36		[p_CellID = tsc_CellF]			
37		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoF, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
38		[p_CellID = tsc_CellG]			
39		(tcv_SIB11 := cb_SIB11_Freq3_PLMN3 (tcv_CellInfoG, tcv_CellInfoH,tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
40		[p_CellID = tsc_CellH]			
41		(tcv_SIB11 := cb_SIB11_Freq3_PLMN3 (tcv_CellInfoH, tcv_CellInfoG, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
42		[TRUE]		I	no such cell
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_InitializeSIB2AndSIB18(p_CellInfo: CellInfoCfg)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To initialize tcv_SIB2 and tcv_SIB18
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB2 := c_SIB2_Def (p_CellInfo))			
2		[tcv_NumOfPLMN = 1]			Default I PLMN test case
3		(tcv_SIB18 := c_SIB18_Def(p_CellInfo))			
4		[tcv_NumOfPLMN = 2]			2 PLMN Test Case
5		+ lt_Init2PLMN			
6		[tcv_NumOfPLMN = 3]			3 PLMN Test case
7		+ lt_Init3PLMN			
8		[TRUE]		(I)	The test step not designed for this
		lt_Init2PLMN			
9		[(p_CellInfo.cellId = tsc_CellA) OR (p_CellInfo.cellId = tsc_CellB) OR (p_CellInfo.cellId = tsc_CellC) OR (p_CellInfo.cellId = tsc_CellG) OR (p_CellInfo.cellId = tsc_CellH)]			PLMN Group 1 cells, Hence MCC and MNC of Cell D used
10		(tcv_SIB18 := c_SIB18_2PLMN(tcv_CellInfoD))			
11		[TRUE]			PLMN Group 2 cells, Hence MCC and MNC of Cell A used
12		(tcv_SIB18 := c_SIB18_2PLMN(tcv_CellInfoA))			
		lt_Init3PLMN			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
13		[(p_CellInfo.cellId = tsc_CellA) OR (p_CellInfo.cellId = tsc_CellB) OR (p_CellInfo.cellId = tsc_CellC)]			PLMN Group 1 cells, Hence MCC and MNC of Cell D and G used
14		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoD, tcv_CellInfoG))			
15		[(p_CellInfo.cellId = tsc_CellD) OR (p_CellInfo.cellId = tsc_CellE) OR (p_CellInfo.cellId = tsc_CellF)]			PLMN Group 2 cells, Hence MCC and MNC of Cell A and G used
16		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoA, tcv_CellInfoG))			
17		[TRUE]			PLMN Group 3 cells, Hence MCC and MNC of Cell A and D used
18		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoA, tcv_CellInfoD))			
Detailed Comments :					

Test Step Dynamic Behaviour

Test Step Name : ts_SendDefSysInfo (p_CellId: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To broadcast default system infomation.
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_UTRAN_GERAN_ParaInit(p_CellId)			ts_SetTmpCellInfo done already in ts_UTRAN_GERAN_ParaInit
2		+ts_CellDependentPara(p_CellId)			
3		+ts_InitializeSIB2AndSIB18(tcv_TmpCellInfo)			
4		+ ts_InitializeSIB11_SIB12 (p_CellId)			
5		[px_RAT = fdd]			
6		+ts_SendNoSegDefSchedul(p_CellId)			
7		+ts_SendSIB1 (cb_SIB1_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
8		+ts_SendSIB2 (tcv_SIB2 , p_CellId, tsc_Now)			
9		+ts_SendSIB3(tcv_SIB3, p_CellId, tsc_Now)			
10		+ts_SendSIB4(tcv_SIB4, p_CellId, tsc_Now)			
11		+ts_SendSIB5(cb_SIB5_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
12		+ts_SendSIB6(cb_SIB6_Def(tcv_TmpCellInfo), p_CellId, tsc_Now)			
13		+ts_SendSIB7(c_SIB7_Def, p_CellId, tsc_Now)			
14		+ts_SendSIB11(tcv_SIB11, p_CellId, tsc_Now)			
15		+ts_SendSIB12(tcv_SIB12, p_CellId, tsc_Now)			
16		+ts_SendSIB18(tcv_SIB18, p_CellId, tsc_Now)			
17		+ts_SendSB1_DefSchedul(tcv_SB1, p_CellId, tsc_Now)			
18		+ts_SendMIB(tcv_MIB, p_CellId, tsc_Now)			
19	ERR1	[px_RAT = tdd]		I	
20	ERR2	[TRUE]		I	

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendNoSegDefSchedul(p_CellId : INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

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: 64 frames;
Not scheduled positions: frame 54 (SIB_POS 27).
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, 6, 27, tsc_Now)			pos = 27
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)		

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_SendSB1_DefSchedul (p_SB: SysInfoTypeSB1; p_CellId : INTEGER; p_Timing : INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SysInfoTypeSB1 to SS
Default : InitOtherwiseFail
Comments :
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 =1]			
3		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
4		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
5		+lt_CompleteSIB(schedulingBlock1)			4.
6		+ts_ChangeSB1_ValueTag			
7		(tcv_MIB.sibSb_ReferenceList.[0].scheduling := c_SB1_Schedul1, tcv_SB1_ValueTagChanged := FALSE)			
8		[tcv_Segs.segCount <>1]		I	2.
		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		[LENGTH_OF(tcv_Segs.seg1) <> 226]			
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 SB1 then segmentation.
2. The result of segmentation shall be one segment for the SB1 (current assumption).
3. Send the scheduling info to SS.(one segment; REP=16; POS=1).
4. Construct the system information message containing the first segment of SB1 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB1 (p_SIB: SysInfoType1; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIBType1 to SS

Default : InitOtherwiseFail

Comments : SIB1 is concatenated with SIB2.
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_SIB1 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB1: p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB2 : tcv_SIB2))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 11, p_Timing)			3.
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_MsgCmplList2(systemInformationBlockType 1, tcv_Segs.seg1, systemInformationBlockType 2, tcv_Segs.seg2))		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			

Detailed Comments :
1. Save the new SIB1 value to tcv_SIB1, unaligned PER encoding of the SIB1 and SIB2.
2. The concatenated SIB1 and SIB2 is too long .
3. Send the scheduling info to SS. one segment: REP=64, POS=11.
4. Construct the system information message containing completeList of SIB1+SIB2 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB11(p_SIB: SysInfoType11; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIBType11 to SS
Default : InitOtherwiseFail
Comments :
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.[2].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul1)			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 6, 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, 6, 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, 6, 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.[2].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul2)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 6, 31, p_Timing)			8.
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_MsgNoSegment)		6.
22		+ts_Scheduling(p_CellId, 6, 29, p_Timing)			3.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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_MsgFirst(systemInformationBlockType11, 2, tcv_Segs.seg1))		4.
25		+ts_Scheduling(p_CellId, 6, 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.[2].sib_Type.sysInfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysInfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul3)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 6, 30, p_Timing)			5.
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_MsgSubsequent(systemInformationBlockType11, 1, tcv_Segs.seg2))		7.
37		+ts_Scheduling(p_CellId, 6, 29, p_Timing)			3.
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_MsgFirst(systemInformationBlockType11, 3, tcv_Segs.seg1))		4.
40		+ts_Scheduling(p_CellId, 6, 31, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg3) <= 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 to SS. one segment: REP=64, POS=29.
4. Construct the system information message containing first segment of SIB11 and send it to SS.
5. Send the scheduling info to SS. one segment: REP=64, POS=30.
6. Send no segment system information message to SS.
7. Construct the system information message containing the second segment of SIB11 and send it to SS.
8. Send the scheduling info segment to SS. one segment: REP=64, POS=31.
9. Construct thesystem information message containing the third segment of SIB11 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB12(p_SIB: SysInfoType12; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIBType12 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB12 : 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.[3].sib_Type.sysInfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul1)			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		+lt_CompleteSIB(systemInformationBlockType12)			4.
10		+ts_Scheduling(p_CellId, 6, 14, 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, 6, 15, 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.[3].sib_Type.sysInfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul2)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			8.
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_MsgNoSegment)		6.
22		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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_MsgFirst(systemInformationBlockType12, 2, tcv_Segs.seg1))		4.
25		+ts_Scheduling(p_CellId, 6, 14, 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(systemInformationBlockType12, 1, tcv_Segs.seg2))		7.
29		[TRUE]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType12, 1, tcv_Segs.seg2))		7.
31		[tcv_Segs.segCount = 3]			
32		(tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysInfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul3)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 6, 14, p_Timing)			5.
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_MsgSubsequent(systemInformationBlockType12, 1, tcv_Segs.seg2))		7.
37		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.
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_MsgFirst(systemInformationBlockType12, 3, tcv_Segs.seg1))		4.
40		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg3) <= 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(systemInformationBlockType12, 2, tcv_Segs.seg3))		9.
44		[TRUE]			
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType12, 2, tcv_Segs.seg3))		9.
46		[TRUE]			
		lt_CompleteSIB(p_SIBType : SIB_Type)			
47		[LENGTH_OF(tcv_Segs.seg1) = 226]			
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
49		[TRUE]			
50		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 SIB12 then segmentation.
2. The result of segmentation shall be one or two or three segments for the SIB12 (current assumption).
3. Send the scheduling info segment to SS. one segment: REP=64, POS=13 .
4. Construct the system information message containing the first segment of SIB12 and send it to SS.
5. Send the scheduling info segment to SS. one segment: REP=64, POS=14.
6. Send no segment system information message to SS.
7. Construct the system information message containing the second segment of SIB12 and send it to SS.
8. Send the scheduling info to SS. one segment: REP=64, POS=15 .
9. Construct the system information message containing the third segment of SIB12 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB18 (p_SIB: SysInfoType18; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIB18 to SS

Default : InitOtherwiseFail

Comments : SIB18 is concatenated with SIB7, default scheduling described in 3GPP TS 34.123−3 clause 8.4.3

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB18 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB18 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 18, p_Timing)			3.
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_MsgCmplList2(systemInformationBlockType7, tcv_Segs.seg2, systemInformationBlockType18, tcv_Segs.seg1))		4.
7		(tcv_SB1.sib_ReferenceList.[4].sib_Type.sysInfoType18 := (tcv_SB1.sib_ReferenceList.[4].sib_Type.sysInfoType18) MOD 4 + 1)			
8		+ts_ChangeSB1_ValueTag			

Detailed Comments :
1. save the new value of SIB18, unaligned PER encoding of the SIB7 and SIB18.
2. The concatenated SIB7 and SIB18 is too long.
3. Send the scheduling info to SS. one segment: REP=64, POS=18.
4. Construct the system information message containing SIB18 + SIB7 and sent to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB2 (p_SIB: SysInfoType2; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIB2 to SS
Default : InitOtherwiseFail
Comments : SIB2 is concatenated with SIB1
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB2 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB2 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB1 : tcv_SIB1))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 11, p_Timing)			3.
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_MsgCmplList2 (systemInformationBlockType1, tcv_Segs.seg2, systemInformationBlockType2, tcv_Segs.seg1))		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			

Detailed Comments :
1. Save the new SIB2 value to tcv_SIB2, unaligned PER encoding of the SIB1 and SIB2.
2. The concatenated SIB1 and SIB2 is too long.
3. Send the scheduling info to SS. one segment, REP=64, POS=11.
4. Construct the system information message containing SIB2 + SIB1 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB3(p_SIB: SysInfoType3; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIB3 to SS
Default : InitOtherwiseFail
Comments : SIB3 is concatenated with SIB7.
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB3 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB3 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 10, p_Timing)			3.
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_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg2, systemInformationBlockType 3, tcv_Segs.seg1))		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			

Detailed Comments :
1. Save the new value of SIB3 to tcv_SIB3, unaligned PER encoding of the SIB3 and SIB7.
2. The concatenated SIB3 and SIB7 is too long.
3. Send the scheduling info to SS. one segment; REP=64, POS=10.
4. Construct the system information message containing SIB3 + SIB7 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB4(p_SIB: SysInfoType4; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIB4 to SS
Default : InitOtherwiseFail
Comments : SIB4 is concatenated with SIB7
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB4 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB4 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 26, p_Timing)			3.
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_MsgCmplList2(systemInformationBlockType7, tcv_Segs.seg2, systemInformationBlockType4, tcv_Segs.seg1))		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			

Detailed Comments :
1. Save the new value of SIB3 to tcv_SIB3, unaligned PER encoding of the SIB3 and SIB7.
2. The concatenated SIB4 and SIB7 is too long.
3. Send the scheduling info to SS. one segment; REP=64, POS=10.
4. Construct the system information message containing SIB4 + SIB7 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB5 (p_SIB: SysInfoType5; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
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, 6, 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, 6, 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, 6, 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, 6, 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)			
18		+ts_ChangeMIB_Value Tag			
19		[tcv_Segs.segCount = 2]			
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)			

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
21		+ts_ChangeMIB_ValueTag			
22		+ts_Scheduling(p_CellId, 6, 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, 6, 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, 6, 19, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_Config_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(systemInformationBlockType5, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
32		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
34		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType5, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType5, 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)			
39		+ts_ChangeMIB_ValueTag			
40		+ts_Scheduling(p_CellId, 6, 23, p_Timing)			10.
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.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
43		+ts_Scheduling(p_CellId, 6, 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, 6, 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, 6, 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)			
57		+ts_ChangeMIB_ValueTag			
58		+ts_Scheduling(p_CellId, 6, 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.
61		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
62		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
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, 6, 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, 6, 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 less that 5 segments for the SIB5 (current assumption).
3. Send the scheduling info segment to SS. one segment: REP=64, POS=19.
4. Construct the system information message containing the first segment of SIB5 and send it to SS.
5. Send the scheduling info segment to SS. one segment: REP=64, POS=21.
6. Send no segment system information message to SS.
7. Construct the system information message containing the second segment of SIB5 and send it to SS.
8. Send the scheduling info to SS. one segment: REP=64, POS=22.
9. Construct thesystem information message containing the third segment of SIB5 and send it to SS.
10. Send the scheduling info to SS. one segment: REP=64, POS=23.
11. Construct the system information message containing the fourth segment of SIB5 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB6(p_SIB: SysInfoType6; p_CellId : INTEGER; p_Timing: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SIBType6 to SS
Default : InitOtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB6 : p_SIB)))			1.
2		[tcv_Segs.segCount >4]		I	2.
3		[tcv_Segs.segCount <=4]			
4		[tcv_Segs.segCount = 1]			
5		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul1)			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 6, 3, p_Timing)			3.
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		+lt_CompleteSIB(systemInformationBlockType6)			4.
10		+ts_Scheduling(p_CellId, 6, 5, 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, 6, 6, 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		+ts_Scheduling(p_CellId, 6, 7, p_Timing)			10.
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)		6.
19		[tcv_Segs.segCount = 2]			
20		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul2)			
21		+ts_ChangeSB1_ValueTag			
22		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			8.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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, 6, 7, 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, 6, 3, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_Config_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(systemInformationBlockType6, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
32		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Segs.seg2) <= 214]			
34		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(systemInformationBlockType6, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType6, 1, tcv_Segs.seg2))		7.
37		[tcv_Segs.segCount = 3]			
38		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul3)			
39		+ts_ChangeSB1_ValueTag			
40		+ts_Scheduling(p_CellId, 6, 7, p_Timing)			10.
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, 6, 3, p_Timing)			3.

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Test Step Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
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(systemInformationBlockType6, 3, tcv_Segs.seg1))		4.
46		+ts_Scheduling(p_CellId, 6, 5, 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(systemInformationBlockType6, 1, tcv_Segs.seg2))		7.
49		+ts_Scheduling(p_CellId, 6, 6, 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(systemInformationBlockType6, 2, tcv_Segs.seg3))		9.
53		[TRUE]			
54		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType6, 2, tcv_Segs.seg3))		9.
55		[tcv_Segs.segCount = 4]			
56		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysInfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul4)			
57		+ts_ChangeSB1_ValueTag			
58		+ts_Scheduling(p_CellId, 6, 3, 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(systemInformationBlockType6, 4, tcv_Segs.seg1))		4.
61		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
62		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**
63		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(systemInformationBlockType6, 1, tcv_Segs.seg2))		7.
64		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			5.
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(systemInformationBlockType6, 2, tcv_Segs.seg3))		7.
67		+ts_Scheduling(p_CellId, 6, 7, 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(systemInformationBlockType6, 3, tcv_Segs.seg4))		11.
71		[TRUE]			
72		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInformationBlockType6, 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 SIB6 then segmentation.
2. The result of segmentation shall be one or two or three or four segments for the SIB6 (current assumption).
3. Send the scheduling info to SS. one segment: REP=64, POS=3.
4. Construct the system information message containing the first segment of SIB6 and send it to SS.
5. Send the scheduling infot to SS. one segment: REP=64, POS=5.
6. Send no segment system information message to SS.
7. Construct the system information message containing the second segment of SIB6 and send it to SS.
8. Send the scheduling info to SS. one segment: REP=64, POS=6.
9. Construct the system information message containing the third segment of SIB6 and send it to SS.
10. Send the scheduling info to SS. one segment: REP=64, POS=7.
11. Construct the system information message containing the fourth segment of SIB6 and send it to SS.

Test Step Dynamic Behaviour

Test Step Name : ts_SendSIB7(p_SIB: SysInfoType7; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIB7 to SS

Default : InitOtherwiseFail

Comments : single SIB7 or concatenated with SIB3 or SIB4 or SIB18, default scheduling described in 3GPP TS 34.123−3 clause 8.4.3

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB7 : p_SIB)), tcv_SIB7 := p_SIB)			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 6, 2, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockType7)			4.
7		+lt_ConcatWithSIB3			
8		+lt_ConcatWithSIB18			
9		+lt_ConcatWithSIB4			
		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.
		lt_ConcatWithSIB3			
14		(tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB7 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB3 : tcv_SIB3))			5.
15		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	6.
16		[TRUE]			
17		+ts_Scheduling(p_CellId, 6, 10, p_Timing)			7.
18		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType7, tcv_Segs.seg1, systemInformationBlockType3, tcv_Segs.seg2))		8.
		lt_ConcatWithSIB18			
20		(tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB18 : tcv_SIB18))			9.

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Test Step Dynamic Behaviour

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	10.
22		[TRUE]			
23		+ts_Scheduling(p_CellId, 6, 18, p_Timing)			11.
24		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
25		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg1, systemInformationBlockType 18, tcv_Segs.seg2))		12.
		lt_ConcatWithSIB4			
26		(tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB4 : tcv_SIB4))			13.
27		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	14.
28		[TRUE]			
29		+ts_Scheduling(p_CellId, 6, 26, p_Timing)			15.
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_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg1, systemInformationBlockType 4, tcv_Segs.seg2))		16.

Detailed Comments :

1. save the new value of SIB7, 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=64, POS=2.
4. Construct the system information message containing SIB7 and send it to SS.
5. unaligned PER encoding of the SIB7 and SIB3.
6. concateneted SIB7 and SIB3 is too long.
7. Send the scheduling info to SS. one segment: REP=64, POS=10.
8. Construct the system information message containing SIB7 + SIB3 and send it to SS.
9. unaligned PER encoding of the SIB18.
10. concatenated SIB7 and SIB18 is too long.
11. Send the scheduling info to SS. one segment: REP=64, POS=18.
12. Construct the system information message containing SIB7 + SIB18 and send it to SS.
13. unaligned PER encoding of the SIB4.
14. concatenated SIB7 and SIB4 is too long.
15. Send the scheduling info to SS. one segment: REP=64, POS=26.
16. Construct the system information message containing SIB7 + SIB4 and send it to SS.

In system information broadcasting, SIB7 is concatinated with SIB3, SIB4, and SIB18, the assignment tcv_SIB7 := p_SIB in line 1 is to provide a communication mechanism between ts_SendSIB7 and ts_SendSIB4, ts_SendSIB3, ts_SendSIB18. Normally the ts_SendSIB7 is called in the preamble part of the test case to establish the default system information broadcasting. If in the test body the contents of SIB7 need be changed and afterards SIB3 or SIB4 or SIB18 needs also be changed, the ts_SendSIB7 will be called again with a new SIB7 value and ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18 will also be called again with new SIB value, in the new call of ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18 new SIB7 value, which was used in the new call of ts_SendSIB7, shall be used. the assignment tcv_SIB7 := p_SIB in line 1 is to provide this new value for ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18.

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_TC_ActivateRB_TestMode (p_CellId: INTEGER)

Group : BasicM_TC_Steps/

Objective : Activate UE radio bearer test mode.

Default : NAS_OtherwiseFailActRB_TM

Comments : tcv_TestModeActivated is assigned to TRUE to keep track that RB test mode has been activated during the test case; to be used in the postamble.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_CN_Domain = cs_domain]			
2		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_DataReq (tsc_CellDedicated, tsc_RB3, c_ActivateRB_TestMode)		
3	TSP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_ActivateRB_TestModeCmpl)	(P)	
4		(tcv_RB_TestModeActivated := TRUE)			1.
5	TSF1	?TIMEOUT t_Dly		(F)	no answer received
6		[tcv_CN_Domain = ps_domain]			
7		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, c_ActivateRB_TestMode)		
8	TSP2	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_ActivateRB_TestModeCmpl)	(P)	
9		(tcv_RB_TestModeActivated := TRUE)			1.
10	TSF2	?TIMEOUT t_Dly		(F)	no answer received

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_TC_CloseUE_TestLoop(p_CellId: INTEGER; p_UE_TestLoopMode: UE_TestLoopMode; p_UE_TestLoopMode1LB_Setup: UE_TestLoopMode1LB_Setup)

Group : BasicM_TC_Steps/

Objective : Close UE test loop

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_CN_Domain = cs_domain]			
2		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_DataReq(tsc_CellDedicated, tsc_RB3,c_CloseUE_TestLoop(p_UE_TestLoopMode, p_UE_TestLoopMode1LB_Setup))		
3	TSP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_CloseUE_TestLoopCmpl)	(P)	
4	TSF1	?TIMEOUT t_Dly		(F)	no answer received
5		[tcv_CN_Domain = ps_domain]			
6		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3,c_CloseUE_TestLoop(p_UE_TestLoopMode, p_UE_TestLoopMode1LB_Setup))		
7	TSP2	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_CloseUE_TestLoopCmpl)	(P)	
8	TSF2	?TIMEOUT t_Dly		(F)	no answer received

Detailed Comments :

Test Step Dynamic Behaviour

Test Step Name : ts_TC_DeactivateRB_TestMode(p_CellId: INTEGER)
Group : BasicM_TC_Steps/
Objective : Deactivate UE radio bearer test mode
Default : NAS_OtherwiseFail
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_CN_Domain = cs_domain]			
2		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_DataReq(tsc_CellDedicated, tsc_RB3,c_DeactivateRB_TestMode)		
3	TSP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_DeactivateRB_TestModeCmpl)	(P)	
4	TSF1	?TIMEOUT t_Dly		(F)	no answer received
5		[tcv_CN_Domain = ps_domain]			
6		Dc!RRC_DataReq START t_Dly (tsc_TT01)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3,c_DeactivateRB_TestMode)		
7	TSP2	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_DeactivateRB_TestModeCmpl)	(P)	
8	TSF2	?TIMEOUT t_Dly		(F)	no answer received

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")		
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")		
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 :

Default Dynamic Behaviour

Default Name : MAC_Default
Group :
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		AM ? RLC_AM_DATA_IND [(tcv_ReceiveSigConnRelInd = TRUE) AND (tcv_TestBody = TRUE)]	car_RRC_SigConnRelInd (tsc_CellDedicated, ?, cr_RRC_SigConnRelInd (tcv_CN_Domain))	(P)	
2		(tcv_ReceiveSigConnRelInd := FALSE)			
3		RETURN			
4		TM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	1
5		RETURN			
6		TM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	2
7		AM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	3
8		RETURN			
9		AM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	4
10		UM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	3
11		RETURN			
12		UM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	4
13		CPHY ? CPHY_PRACH_Measurement_Report_IND	car_PRACH_Measurement_ Report_IND(?, ?, ?)	(I)	6
14		? TIMEOUT t_Guard		(I)	5
15		? TIMEOUT		(I)	9
16	DFF1	CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail	(F)	
17		RETURN			

Detailed Comments :

1. If unexpected data is received on the TM PCO outside of the test body, the preambles / postambles have failed, and an inconclusive verdict is assigned.

2. If unexpected data is received on the TM PCO within the test body, the test purpose has not been met, and a fail verdict is assigned.

3. If unexpected data is received on the AM or UM PCO outside of the test body, the preambles / postambles have failed, and an inconclusive verdict is assigned.

4. If unexpected data is received on the AM or UM PCO within the test body, the test purpose has not been met, and a fail verdict is assigned.

5. If the guard timer expires at any time, the test case has timed out, and an inconclusive verdict is assigned.

6. If any undesired PRACH measurement report is received the test case result Inconclusive

9. If any other timer expires and is not explicitly handled in the test case, an inconclusive verdict is assigned.

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 @sic EW 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 @sic EW 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 : NAS_OtherwiseFailActRB_TM

Group : NAS_Defaults/

Objective : To match unexpected events and fail the test case.
Any Setup or Activate PDP context request message can be received and ignored.

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd [tcv_CN_Domain = cs_domain]	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_SetupMO_Any)		0.
2		RETURN			
3		Dc ? RRC_DataInd [tcv_CN_Domain = ps_domain]	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_ActPDP_ContextReqMO_Any)		0.
4		RETURN			
5		?TIMEOUT t_Guard			1.
6		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
7		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
8		[tcv_TestBody = FALSE]			
9	DFI1	CANCEL		(I)	
10		[tcv_TestBody = TRUE]			
11	DFF1	CANCEL		(F)	
12		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
13		RETURN			
14	DFI2	Dc?OTHERWISE [tcv_TestBody = FALSE]		(I)	2.
15		CANCEL			3.
16	DFF2	Dc?OTHERWISE [tcv_TestBody = TRUE]		(F)	5.
17		CANCEL			3.
18		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
19	DFF3	[tcv_CellIndInfo.integrityStarted]		(F)	
20		RETURN			
21		[NOT tcv_CellIndInfo.integrityStarted]			
22		RETURN			

Detailed Comments : 0. UE may send the SETUP or the Activate PDP context request message, then it shall be ignored

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.

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_lv, 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, cr_DeactPDP_ContextReq MO(?))	(I)	2. @sic ER1935 T1s040569 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, cr_DeactPDP_ContextReq MO(?))	(F)	5.@sic ER1935 T1s040569 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		CPHY?OTHERWISE			
21	DFI2	CANCEL		(I)	
22		CMAC?OTHERWISE			
23	DFI3	CANCEL		(I)	
24		CRLC?OTHERWISE			
25	DFI4	CANCEL		(I)	
26		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
27	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)	
28		RETURN			
29		[NOT tcv_CellIndInfo.integrityStarted]			
30		RETURN			
31		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@
32		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		@sic ER1440 sic@

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Default Dynamic Behaviour					
Nr	**Label**	**Behaviour Description**	**Constraints Ref**	**Verdict**	**Comments**
33		RETURN			@sic ER1440 sic@
34		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVICE REQUEST
35		RETURN			
36		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@
37		RETURN			
Detailed Comments :					

Default Dynamic Behaviour

Default Name : RLC_Default
Group : RLC_Defaults/
Objective :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1	DFI1	TM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	1
2		RETURN			
3	DFF1	TM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	2
4	DFI2	AM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	3
5		RETURN			
6	DFF2	AM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	4
7	DFI3	UM ? OTHERWISE [tcv_TestBody = FALSE]		(I)	3
8		RETURN			
9	DFF3	UM ? OTHERWISE [tcv_TestBody = TRUE]		(F)	4
10		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		10
11	DFF4	[tcv_CellIndInfo.integrityStarted]		(F)	
12		RETURN			
13		[NOT tcv_CellIndInfo.integrityStarted]			
14		RETURN			
15	DFI4	? TIMEOUT t_Guard			5
16		Ut ! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
17		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
18		[tcv_TestBody = FALSE]			
19	DFI5	CANCEL		(I)	
20		[tcv_TestBody = TRUE]			
21	DFF7	CANCEL		(F)	
22	DFI6	? TIMEOUT t_Poll		(I)	6
23	DFI7	? TIMEOUT t_Status		(I)	7
24	DFI8	? TIMEOUT t_Reset		(I)	8
25		?TIMEOUT			
26		[tcv_TestBody = FALSE]			
27	DFI9	CANCEL		(I)	
28		[tcv_TestBody = TRUE]			
29	DFF8	CANCEL		(F)	

Detailed Comments :

1. If unexpected data is received on the TM PCO outside of the test body, the preambles / postambles have failed, and an inconclusive verdict is assigned.

2. If unexpected data is received on the TM PCO within the test body, the test purpose has not been met, and a fail verdict is assigned.

3. If unexpected data is received on the AM or UM PCO outside of the test body, the preambles / postambles have failed, and an inconclusive verdict is assigned.

4. If unexpected data is received on the AM or UM PCO within the test body, the test purpose has not been met, and a fail verdict is assigned.

5. If the guard timer expires at any time, the test case has timed out, and an

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Default Dynamic Behaviour
Detailed Comments : ... inconclusive verdict is assigned. 6. The poll timer is used to measure the time between poll events by using the READTIMER operation. It is not expected to expire, so if expiry of this timer occurs, an inconclusive verdict is assigned indicating a test case error. 7. The status timer is used to measure the time between STATUS PDUs by using the READTIMER operation. It is not expected to expire, so if expiry of this timer occurs, an inconclusive verdict is assigned indicating a test case error. 8. The reset timer is used to measure the time between RESET PDUs by using the READTIMER operation. It is not expected to expire, so if expiry of this timer occurs, an inconclusive verdict is assigned indicating a test case error. 9. If any other timer expires and is not explicitly handled in the test case, an inconclusive verdict is assigned. 10. If an Integrity failure indication occurrs, a fail verdict is assigned.