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Integrated Services Digital Network (ISDN); Signalling System No.7 ISDN User Part (ISUP) version 1 Test specification

ETSI

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI).

The text of this ETS is almost identical to that contained in CCITT Recommendations Q.784 (1991) and Q.785 (1991). It has therefore been decided to endorse the text of CCITT Recommendations Q.784 (1991) and Q.785 (1991), and to specify the exceptions to those Recommendations in this ETS.

A Tree and Tabular Combined Notation (TTCN) version of the tests contained in CCITT Recommendation Q.784 (1991) is included as an informative annex to this ETS.

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1 Scope

This European Telecommunication Standard (ETS) specifies a detailed set of validation and compatibility tests that validate the protocol specified in ETS 300 121 [4]. The tests confirm that the Signalling System No.7 Integrated Services Digital Network (ISDN) User Part (ISUP) protocol supported by any given implementation on the international interface has the ability to correctly convey the necessary signalling information to support the supplementary services specified in ETS 300 121 [4].

The requirements of this ETS are almost identical to those contained in CCITT Recommendations Q.784 [2] and Q.785 [3]. This ETS endorses the text of CCITT Recommendations Q.784 [2] and Q.785 [3]. It specifies the exceptions to those Recommendations, and some additional requirements.

A TTCN version of the tests contained in CCITT Recommendation Q.784 [2] is included as an informative annex to this ETS.

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

[1] CCITT Recommendation Q.780 (1988): "Signalling system No.7 test specification general description".

[2] CCITT Recommendation Q.784 (1991): "ISUP basic call test specification".

[3] CCITT Recommendation Q.785 (1991): "ISUP protocol test specification for supplementary services".

[4] ETS 300 121 (1992): "Integrated Services Digital Network (ISDN); Application of the ISDN User Part (ISUP) of CCITT Signalling System No.7 for international ISDN interconnections (ISUP version 1)".

[5] ETS 300 336: "Integrated Services Digital Network (ISDN); Signalling System No.7; Message Transfer Part (MTP); Test specification".

3 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
MTP	Message Transfer Part
TTCN	Tree and Tabular Combined Notation

4 Requirements

4.1 General principles of validation and compatibility testing

For the general principles of validation and compatibility testing, CCITT Recommendation Q.780 [1] shall apply.

4.2 Message Transfer Part (MTP) compatibility testing

For compatibility testing, this ETS requires that the Message Transfer Part (MTP) of Signalling System No.7 shall have been tested to ETS 300 336 [5].

4.3 Text of CCITT Recommendation Q.784

The text of CCITT Recommendation Q.784 [2] shall apply, with the exceptions identified in subclause 4.4 of this ETS.

4.4 Exceptions to CCITT Recommendation Q.784

The following test numbers in § 6 of CCITT Recommendation Q.784 [2] are not applicable for the basic call procedures in ETS 300 121 [4]:

- test number 1.5.4; and

- test number 8.

With respect to the tests covering the circuit group blocking and unblocking procedures, the following applies:

The valid range value indicated in the group blocking/unblocking messages may be up to 255, but the number of status bits set to "1" (identifying the affected circuits) shall be 32 or less (as indicated in CCITT Recommendation Q.767 § C.3.27b).

4.5 Text of CCITT Recommendation Q.785

The text of CCITT Recommendation Q.785 [3] shall apply, with the exceptions identified in subclause 4.6 of this ETS.

4.6 Exceptions to CCITT Recommendation Q.785

The following test numbers in § 5 of CCITT Recommendation Q.785 [3] are not applicable for the supplementary services supported by ETS 300 121 [4]:

- test number 3.5.1;

- test number 3.5.2;

- test number 3.6.1;

- test number 3.6.2;

- test number 3.6.3; and

- test number 3.6.4.

Annex A (informative): TTCN version of CCITT Recommendation Q.784

A.1 Scope

This annex provides the test specification for the basic call procedures of Signalling System No.7 ISUP (CCITT Recommendations Q.761 to Q.764 and Q.767) based on CCITT Recommendation X.292 (ISO/IEC 9646). This test specification makes use of the Tree and Tabular Combined Notation (TTCN) and reflects the content of the test specification described in CCITT Recommendation Q.784 [2]. In all cases of conflict between the text of CCITT Recommendation Q.784 [2] and this TTCN annex, then CCITT Recommendation Q.784 [2] takes precedence.

A.2 Abbreviations

For the purposes of this annex, the following abbreviations apply:

ASP	Abstract Service Primitive
ATS	Abstract Test Suite
CAB	Circuit PCO between service provider and signalling point B
CPT	Compatibility Test
IUT	Implementation Under Test
LAB	Lower Tester PCO between service provider and signalling point B
LT	Lower Tester
PCO	Point of Control and Observation
PDU	Protocol Data Unit
TTCN	Tree and Tabular Combined Notation
VAT	Validation Test
UT	Upper Tester
UTA	Upper Tester PCO at signalling point A

A.3 Test methodology

This test specification in TTCN makes use of the abstract test methodology as described below.

The test methodology used for ISUP testing is called the distributed test method (see figure 1). With this test method an abstract configuration for testing is established, which does not constrain the implementation of test machines. The configuration consists of the Implementation Under Test (IUT) and the tester. The main functionalities of the tester are separated into a Lower Tester (LT) and an Upper Tester (UT).

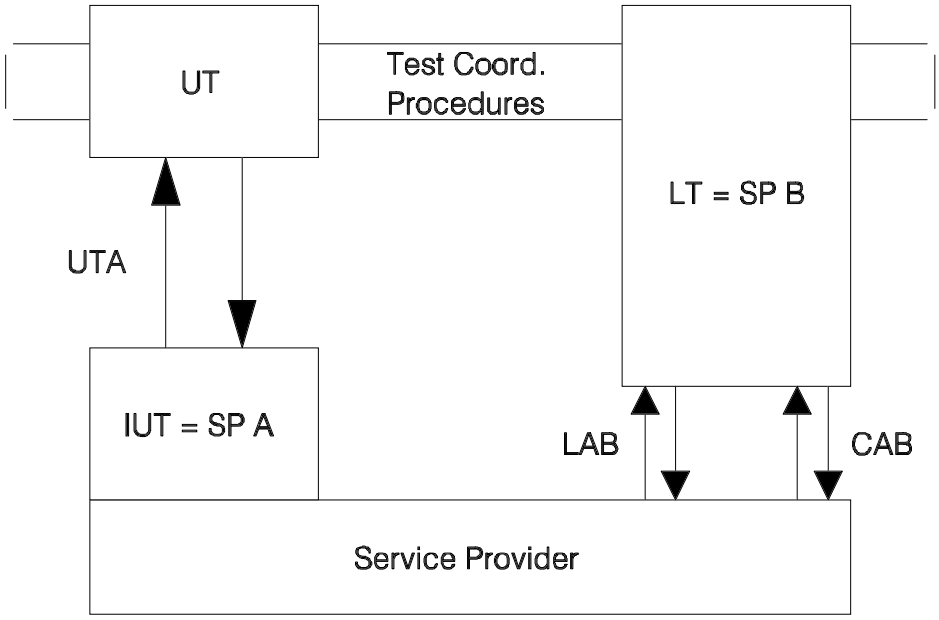

Figure 1: ISUP test method

In principle, the lower tester has the capabilities to control and observe the IUT at its lower boundary via the underlying service provider. The upper tester has the capabilities to control and observe the IUT at its upper boundary.

For ISUP testing in particular, the lower tester controls and observes the IUT from the signalling point of view via the underlying service provider MTP and from the connection point of view via a predefined number of circuits. The upper tester controls and observes the IUT by handling calls. In addition the upper tester should control the MML-interface and should observe the indications for maintenance purposes.

A.4 Explanation to the test specification

An Abstract Test Suite (ATS) specification written in TTCN needs to contain the following four parts:

a) the overview, giving the structure of the test suite, for general information and understanding;

b) the declaration part, giving all the objects, e.g. constants, variables, Points of Control and Observation (PCOs), timers, Protocol Data Unit types (PDU types) and Abstract Service Primitive types (ASP types);

c) the constraints part, giving the actual values for Protocol Data Units (PDUs) and Abstract Service Primitives (ASPs);

d) the dynamic part, describing each test case behaviour.

A.4.1 Test suite overview

The test suite overview is a sort of directory. It provides an index to the test suite and can be used for documentation and reference. The overview indicates the name of the test suite; references to the relevant protocol standards; information on the abstract test method and a test suite structure, an index to the test cases, test steps and defaults contained in the dynamic part. The relation between the test list of CCITT Recommendation Q.784 [2] and the TTCN test groups and test case names is indicated in the test suite structure and test case index tables.

The test suite overview for this ISUP test specification is given in Clause A.6.

A.4.2 TTCN declarations

The declaration part should mention all the objects used in the dynamic part. The TTCN notation provides a particular format for all sorts of objects to be declared. The declarations for ISUP are given in Clause A.7.

Clause A.7 identifies:

- test suite parameters and test suite constants. These are introduced to enable test case selection procedures;

- test suite variables. These are declared for use in test cases, e.g. RSC_Received in test case ISUPB50203;

- three PCOs. These are used in the ISUP test suite:

  LAB: lower tester PCO between service provider and signalling point B. By means of this PCO ISUP signalling information is exchanged between the lower tester and the IUT;

CAB: circuit PCO between service provider and signalling point B. By means of this PCO circuit control procedures, e.g. connectivity check and echo control check, are accomplished;

UTA: upper tester PCO at signalling point A. Some kind of stimulus operations to generate and clear calls, to activate circuit supervision procedures, etc., are assumed;

- all timer identifiers and the corresponding duration;

- the ASP types which is an incomplete TTCN declaration. A TTCN ASP declaration consists of the ASP type identifier, the PCO type identifier and the ASP structure. The last part of this declaration is omitted, in order to create the same level of abstraction as described in the CCITT Recommendation Q.784 [2] test specification using the CCITT Recommendation Q.780 [1] methodology;

- the PDU types for which the same approach described previously is applied.

A.4.3 TTCN constraints

The ASPs given in combination with the send and receive events in the dynamic part are references to instances of ASP types. Every instance of an ASP type, called ASP constraint, specifies an actual ASP value. An ASP constraint may carry a PDU constraint. All ASP and PDU constraints are grouped in the TTCN constraints part. The constraints part for ISUP are given in Clause A.8.

Due to the high level of abstraction which is required, only the ASP constraint identifier and its ASP type identifier are described in this test suite. The actual values of the constraints are not envisaged.

The ASPs used in this test suite are grouped into:

user ASPs: these ASPs are stimuli to establish a call, to release a call, to suspend a call, to resume a call and to check the provision of tones and announcements;

maintenance ASPs: one maintenance ASP is declared to represent a maintenance indication from the IUT;

mml ASPs: several mml ASPs are described to enable the activation of circuit supervision procedures within ISUP;

circuit ASPs: this category ASPs are exchanged by some functionality which enables circuit control procedures, e.g. connectivity check;

call setup ASPs: the call setup ASPs represent the corresponding call setup PDUs in ISUP;

call release ASPs: the call release ASPs represent the corresponding call release PDUs in ISUP;

circuit supervision ASPs: the circuit supervision ASPs represent the corresponding circuit supervision PDUs in ISUP.

A.4.4 TTCN dynamic part

The TTCN dynamic part contains the main body of the test suite, i.e.:

- the test cases grouped into test groups: each test case represents one test purpose. Subclause A.9.1 contains the test cases representing the purposes as mentioned in the ISUP test list (see Clause A.5);

- the test steps grouped into the test step library: a test step can be called by all test cases defined in the test suite. A test step can be represented as a procedure call or subroutine as defined in a programming language. The ISUP test suite does use this TTCN construct e.g. to achieve pre-test conditions and to check specific circuit operations. The required test steps for the ISUP test suite are specified in subclause A.9.2.

- the default groups: if a test case or a test step refers to a default tree, then the content of the default tree covers additional alternatives to receive events specified in that test case or test step. In that case any received behaviour other than the expected behaviour as specified in the test case or test step will be handled by the default tree. A very generic default tree for this ISUP test specification is specified in subclause A.9.3.

The test specification is based on the test methodology described above. By means of well chosen identifiers for PCOs and ASPs the used test methodology is expressed.

The identifications of the ASPs are self explaining. Although, the TTCN constraints part should clarify the contents of the ASPs, this is not done in order to create the same level of abstraction as described in the CCITT Recommendation Q.784 [2] test specification using the CCITT Recommendation Q.780 [1] methodology (the actual message content is not specified).

In this test specification only the method of "explicit final verdict" is used (i.e. in each leaf of the behaviour tree an entry occurs in the verdict column of the dynamic behaviour tables). If the leaf is an ATTACH construct (i.e. test step reference), this verdict has the following meaning: the verdict applies to each leaf of the behaviour tree of the test step.

A.4.5 Application of TTCN version for validation test and compatibility test

This TTCN version of CCITT Recommendation Q.784 [2] is applicable for both Validation Test (VAT) and Compatibility Test (CPT). It is a conceptual description of the test process which in no way implies any implementation of the test system. This means that in case of VAT the LT could be a test box or a real exchange with other supporting equipment. In case of CPT the LT is a real exchange (SP B) with supporting equipment.

A.5 ISUP test list

1 Circuit supervision

- 1.1 Non allocated circuits
- 1.2 Reset of circuits
  - 1.2.1 RSC received on an idle circuit
  - 1.2.2 RSC sent on an idle circuit
  - 1.2.3 RSC received on a locally blocked circuit
  - 1.2.4 RSC received on a remotely blocked circuit
  - 1.2.5 Circuit group reset received
  - 1.2.6 Circuit group reset sent
  - 1.2.7 Circuit group reset received on remotely blocked circuits
- 1.3 Blocking of circuits
  - 1.3.1 Circuit group blocking unblocking
    - 1.3.1.1 CGB and CGU received
    - 1.3.1.2 CGB and CGU sent
  - 1.3.2 Circuit blocking unblocking
    - 1.3.2.1 BLO received
    - 1.3.2.2 BLO sent
    - 1.3.2.3 Blocking from both ends removal of blocking from one end
    - 1.3.2.4 IAM received on a remotely blocked circuit
- 1.4 Continuity check test call
  - 1.4.1 CCR received successful
  - 1.4.2 CCR sent successful
  - 1.4.3 CCR received unsuccessful
  - 1.4.4 CCR sent unsuccessful
  - 1.4.5 CCR received unsuccessful verify T27 timer
- 1.5 Receipt of unreasonable signalling information messages
  - 1.5.1 Receipt of unexpected messages
  - 1.5.2 Receipt of unexpected messages during call setup
  - 1.5.3 Receipt of unexpected messages during a call
  - 1.5.4 Confusion procedures For further study

2 Normal call setup - ordinary speech calls

- 2.1 Both way circuit selection
  - 2.1.1 IAM sent by controlling SP
  - 2.1.2 IAM sent by non controlling SP
- 2.2 Called address sending
  - 2.2.1 En bloc operation
  - 2.2.2 Overlap operation with SAM
- 2.3 Successful call setup
  - 2.3.1 Ordinary call with various indications in ACM
  - 2.3.2 Ordinary call with ACM CPG and ANM
  - 2.3.3 Ordinary call with various indications in CON
  - 2.3.4 Call switched via a satellite
  - 2.3.5 Echo control procedure for call setup
  - 2.3.6 Blocking and unblocking during a call initiated
  - 2.3.7 Blocking and unblocking during a call received

3 Normal call release

- 3.1 Calling party clears before address complete
- 3.2 Calling party clears before answer
- 3.3 Calling party clears after answer
- 3.4 Called party clears after answer
- 3.5 Suspend initiated by the network
- 3.6 Suspend and resume initiated by a calling party
- 3.7 Suspend and resume initiated by a called party
- 3.8 Collision of REL messages

4 Unsuccessful call setup

4.1 Validate a set of known causes for release

5 Abnormal situation during a call

5.1 Inability to release in response to a REL after ANM
5.2 Timers
- 5.2.1 T7 waiting for ACM or CON
- 5.2.2 T9 waiting for an answer message
- 5.2.3 T1 and T5 failure to receive a RLC
- 5.2.4 T6 waiting for RES Network message
- 5.2.5 T8 waiting for COT message if applicable
- 5.2.6 T12 and T13 failure to receive a BLA
- 5.2.7 T14 and T15 failure to receive a UBA
- 5.2.8 T16 and T17 failure to receive a RLC
- 5.2.9 T18 and T19 failure to receive a CGBA
- 5.2.10 T20 and T21 failure to receive a CGUA
- 5.2.11 T22 and T23 failure to receive a GRA

5.3 Reset of circuits during a call
- 5.3.1 Of an outgoing circuit
- 5.3.2 Of an incoming circuit

6 Special call setup

6.1 Continuity check call
- 6.1.1 Continuity check required
- 6.1.2 COT applied on previous circuit
- 6.1.3 Calling party clears during COT
- 6.1.4 Delay of through connect
- 6.1.5 COT unsuccessful

6.2 Automatic repeat attempt
- 6.2.1 Dual seizure for non controlling SP
- 6.2.2 Blocking of a circuit
- 6.2.3 Circuit reset
- 6.2.4 Continuity check failure
- 6.2.5 Reception of unreasonable signalling information

6.3 Dual seizure
- 6.3.1 Dual seizure for controlling SP

6.4 Semi-automatic operation
- 6.4.1 FOT sent following a call to a subscriber
- 6.4.2 FOT received following a call to a subscriber
- 6.4.3 FOT sent following a call via codes 11 and 12
- 6.4.4 FOT received following a call via codes 11 and 12

7 Bearer services

7.1 64 kbit/s unrestricted
- 7.1.1 Successful call setup
- 7.1.2 Unsuccessful call setup
- 7.1.3 Dual seizure

7.2 3,1 kHz audio
- 7.2.1 Successful call setup

8 Congestion control and user flow control

For further study.

A.6 Test suite overview

Test Suite Structure		
Suite Name	:	TTCN version of the CCITT Recommendation Q.784
Standards ref	:	CCITT Recommendation Q.764
PICS ref	:	For further study
PIXIT ref	:	For further study
Test Method(s)	:	DSE (Distributed Single-layer Embedded test method)
Comments	:	The structure of the test suite aligns with the contents of CCITT Recommendation Q.784

Test Case Index

(continued)

Test Case Index (concluded)

Test Step Index

(continued)

Test Step Index (concluded)

Default Index

A.7 Declarations part

Test Suite Parameter Declarations			
Parameter	**Type Name**	**PICS/PIXIT Ref.**	**Comments**
SP_A	BOOLEAN		
CONTR_SP	BOOLEAN		
CASE	INTEGER		

Test Suite Constant Declarations			
Constant	**Type**	**Value**	**Comments**
NameORI	BOOLEAN	TRUE	SP A is originating exchange
TER	BOOLEAN	FALSE	SP A is terminating exchange
CPA	BOOLEAN	TRUE	SP A is controlling
CPB	BOOLEAN	FALSE	SP B is controlling
A	INTEGER	1	
B	INTEGER	2	
C	INTEGER	3	
D	INTEGER	4	

Test Suite Variable Declarations			
Variable Name	**Type**	**Value**	**Comments**
Ready_To_Receive_REL	BOOLEAN	FALSE	
Ready_To_Receive_RSC	BOOLEAN	FALSE	
RSC_Received	BOOLEAN	FALSE	

PCO Declarations			
PCO Name	**PCO Type**	**Role**	**Comments**
LAB	ISUP_PCO	LT	
UTA	UPPERTESTER_PCO	UT	
CAB	CIRCUIT_PCO	LT	

Timer Declarations			
Timer Name	**Duration**	**Units**	**Comments**
TNOAC	100	sec	ensures no response from IUT
T1min	4	sec	waiting for RLC
Tcot_delay	2	sec	simulating continuity check delay
T1max	15	sec	waiting for RLC
T5min	57	sec	waiting for RLC
T5max	63	sec	waiting for RLC
T6min	60	sec	waiting for RES
T6max	120	sec	waiting for RES
T7min	20	sec	waiting for ACM or CON
T7max	30	sec	waiting for ACM or CON
T8min	10	sec	waiting for COT
T8max	15	sec	waiting for COT
T9min	120	sec	waiting for ANM
T9max	240	sec	waiting for ANM
T12min	4	sec	waiting for BLO
T12max	15	sec	waiting for BLO
T13min	57	sec	waiting for BLO
T13max	63	sec	waiting for BLO
T14min	4	sec	waiting for UBL
T14max	15	sec	waiting for UBL
T15min	57	sec	waiting for UBL
T15max	63	sec	waiting for UBL
T16min	4	sec	waiting for RSC
T16max	15	sec	waiting for RSC
T17min	57	sec	waiting for RSC
T17max	63	sec	waiting for RSC
T18min	4	sec	waiting for CGB
T18max	15	sec	waiting for CGB
T19min	57	sec	waiting for CGB
T19max	63	sec	waiting for CGB
T20min	4	sec	waiting for CGU
T20max	15	sec	waiting for CGU
T21min	57	sec	waiting for CGU
T21max	63	sec	waiting for CGU
T22min	4	sec	waiting for GRS
T22max	15	sec	waiting for GRS
T23min	57	sec	waiting for GRS
T23max	63	sec	waiting for GRS
T24min	1500	ms	continuity recognition
T24max	2	sec	continuity recognition
T25min	1	sec	continuity recognition
T25max	10	sec	continuity recognition
T26min	60	sec	second continuity check failure
T26max	180	sec	second continuity check failure
T27max	240	sec	continuity check request received

ASP Type Declarations

ASP Type	PCO Type	PDU Type	Comments
USER_REQ	UPPERTESTER_PCO	USER_ACTIONS	
USER_IND	UPPERTESTER_PCO	USER_ACTIONS	
MML_REQ	UPPERTESTER_PCO	MML_ACTIONS	
MAINT_IND	UPPERTESTER_PCO	MAINT_ACTIONS	
SPEECH_REQ	CIRCUIT_PCO	USER_DATA	
SPEECH_IND	CIRCUIT_PCO	USER_DATA	
DATA_REQ	CIRCUIT_PCO	USER_DATA	
DATA_IND	CIRCUIT_PCO	USER_DATA	
CONTCHECK_REQ	CIRCUIT_PCO	CONTCHECK_TONE	
CONTCHECK_IND	CIRCUIT_PCO	CONTCHECK_TONE	
CONTCHECKLOOP_REQ	CIRCUIT_PCO	CIRCUIT_ACTIONS	
TONE_IND	CIRCUIT_PCO	TONE	
TRANSFER_REQ	ISUP_PCO	ISUP_PDUs	
TRANSFER_IND	ISUP_PCO	ISUP_PDUs	

PDU Type Declarations

PDU Type	PCO Type	Comments
USER_ACTIONS	UPPERTESTER_PCO	
MML_ACTIONS	UPPERTESTER_PCO	
MAINT_ACTIONS	UPPERTESTER_PCO	
USER_DATA	CIRCUIT_PCO	
CONTCHECK_TONE	CIRCUIT_PCO	
CIRCUIT_ACTIONS	CIRCUIT_PCO	
TONE	CIRCUIT_PCO	
ISUP_PDUs	ISUP_PCO	

A.8 Constraints part

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
SETUP_REQ_Speech	USER_REQ	user asps
SETUP_REQ_64kbps_unrestr	USER_REQ	
SETUP_REQ_3_1kHz_audio	USER_REQ	
SETUP_REQ_Satellite	USER_REQ	
SETUP_REQ_Echo_Control	USER_REQ	
SETUP_REQ_any	USER_REQ	
SETUP_REQ_Overlap	USER_REQ	
SETUP_RESP_any	USER_REQ	
SETUP_IND_any	USER_IND	
SETUP_IND_64kbps_unrestr	USER_IND	
INFO_REQ	USER_REQ	
RINGING_TONE_BA	USER_IND	
REL_REQ	USER_REQ	
REL_IND	USER_IND	
REL_IND_Cause_Unalloc_nr	USER_IND	
REL_IND_Cause_No_circuit	USER_IND	
REL_IND_Cause_Bearer_cap_not_author	USER_IND	
REL_IND_Cause_Bearer_cap_not_avail	USER_IND	
REL_IND_Cause_Bearer_cap_not_impl	USER_IND	
SUSPEND_REQ	USER_REQ	
SUSPEND_IND	USER_IND	
RESUME_REQ	USER_REQ	
RESUME_IND	USER_IND	
FOT_REQ	USER_REQ	
FOT_IND	USER_IND	
TONE_ANNCT_Unalloc_nr	USER_IND	
TONE_ANNCT_No_circuit	USER_IND	
TONE_ANNCT_Switch_congestion	USER_IND	
NO_contcheck_tone_heard	USER_IND	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
ALARM_MaintSystem	MAINT_IND	Alarm to maint.
ECD_REENABLED_cic	MAINT_IND	ECD reenabled
ECD_DISABLED_cicx	MAINT_IND	ECD disabled
ECD_DISABLED_cicy	MAINT_IND	ECD disabled

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
RESET_CIRCUIT	MML_REQ	mml asps
GROUPRESET	MML_REQ	
GROUPBLOCK_maint	MML_REQ	
GROUPUNBLOCK_maint	MML_REQ	
GROUPBLOCK_hardw	MML_REQ	
GROUPUNBLOCK_hardw	MML_REQ	
BLOCK_CIRCUIT	MML_REQ	
UNBLOCK_CIRCUIT	MML_REQ	
CONTCHECK_TESTCALL	MML_REQ	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
INFO_any_BA	SPEECH_REQ	circuit asps
INFO_any_AB	SPEECH_IND	
INFO_echo_BA	SPEECH_REQ	
INFO_echo_AB	SPEECH_IND	
DATA_any_BA	DATA_REQ	
DATA_any_AB	DATA_IND	
CONTCHECK_tone_BA	CONTCHECK_REQ	
CONTCHECK_tone_AB	CONTCHECK_IND	
CONTCHECK_tone_failed_AB	CONTCHECK_IND	
CONNECT_CONTCHECKLOOP_B	CONTCHECKLOOP_REQ	
DISCONNECT_CONTCHECKLOOP_B	CONTCHECKLOOP_REQ	
RINGING_TONE_AB	TONE_IND	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
IAM_nonexistentCIC_BA	TRANSFER_REQ	call setup asps
IAM_AB	TRANSFER_IND	
IAM_BA	TRANSFER_REQ	
IAM_cicx_AB	TRANSFER_IND	
IAM_cicx_BA	TRANSFER_REQ	
IAM_cicy_AB	TRANSFER_IND	
IAM_Satellite_AB	TRANSFER_IND	
IAM_Echo_Control_AB	TRANSFER_IND	
IAM_Speech_AB	TRANSFER_IND	
IAM_Speech_BA	TRANSFER_REQ	
IAM_64kbps_unrestr_AB	TRANSFER_IND	
IAM_64kbps_unrestr_BA	TRANSFER_REQ	
IAM_3_1kHz_audio_AB	TRANSFER_IND	
IAM_3_1kHz_audio_BA	TRANSFER_REQ	
IAM_cicx_64kbps_unrestr_AB	TRANSFER_IND	
IAM_cicx_64kbps_unrestr_BA	TRANSFER_REQ	
IAM_cicy_64kbps_unrestr_AB	TRANSFER_IND	
IAM_Overlap_AB	TRANSFER_IND	
IAM_Satellite_BA	TRANSFER_REQ	
IAM_Echo_Control_BA	TRANSFER_REQ	
IAM_contcheckreq_AB	TRANSFER_IND	
IAM_contcheckreq_cicx_AB	TRANSFER_IND	
IAM_contcheckreq_cicy_AB	TRANSFER_IND	
IAM_contcheckreq_BA	TRANSFER_REQ	
IAM_contcheckprevious_AB	TRANSFER_IND	
IAM_contcheckprevious_BA	TRANSFER_REQ	
SAM_BA	TRANSFER_REQ	
SAM_AB	TRANSFER_IND	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
ACM_BA	TRANSFER_REQ	call setup asps
ACM_AB	TRANSFER_IND	
ACM_cicx_AB	TRANSFER_IND	
ACM_cicy_BA	TRANSFER_REQ	
ACM_cicx_BA	TRANSFER_REQ	
ACM_Free_ISDN_BA	TRANSFER_REQ	
ACM_Free_Non_ISDN_BA	TRANSFER_REQ	
ACM_Free_ISDN_AB	TRANSFER_IND	
ACM_Free_Non_ISDN_AB	TRANSFER_IND	
ACM_No_Ind_ISDN_BA	TRANSFER_REQ	
ACM_No_Ind_Non_ISDN_BA	TRANSFER_REQ	
ACM_No_Ind_ISDN_AB	TRANSFER_IND	
ACM_No_Ind_Non_ISDN_AB	TRANSFER_IND	
ACM_Echo_Control_BA	TRANSFER_REQ	
ACM_Echo_Control_AB	TRANSFER_IND	
CPG_Alert_BA	TRANSFER_REQ	
CPG_Alert_AB	TRANSFER_IND	
CPG_Progress_BA	TRANSFER_REQ	
CPG_In_band_info_AB	TRANSFER_IND	
CPG_In_band_info_BA	TRANSFER_REQ	
CPG_Progress_AB	TRANSFER_IND	
CPG_BA	TRANSFER_REQ	
CON_BA	TRANSFER_REQ	
CON_AB	TRANSFER_IND	
CON_Free_ISDN_BA	TRANSFER_REQ	
CON_Free_Non_ISDN_BA	TRANSFER_REQ	
CON_No_Ind_ISDN_BA	TRANSFER_REQ	
CON_No_Ind_Non_ISDN_BA	TRANSFER_REQ	
CON_Free_ISDN_AB	TRANSFER_IND	
CON_Free_Non_ISDN_AB	TRANSFER_IND	
CON_No_Ind_ISDN_AB	TRANSFER_IND	
CON_No_Ind_Non_ISDN_AB	TRANSFER_IND	
ANM_BA	TRANSFER_REQ	
ANM_AB	TRANSFER_IND	
ANM_cicx_AB	TRANSFER_IND	
ANM_cicy_BA	TRANSFER_REQ	
ANM_cicx_BA	TRANSFER_REQ	
FOT_BA	TRANSFER_REQ	
FOT_AB	TRANSFER_IND	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
REL_AB	TRANSFER_IND	call release asps
REL_BA	TRANSFER_REQ	
REL_cicx_BA	TRANSFER_REQ	
REL_cicx_AB	TRANSFER_IND	
REL_cicy_AB	TRANSFER_IND	
REL_Unalloc_nr_BA	TRANSFER_REQ	
REL_Unalloc_nr_AB	TRANSFER_IND	
REL_No_circuit_BA	TRANSFER_REQ	
REL_Switch_congestion_BA	TRANSFER_REQ	
REL_Bearer_cap_not_authorized_BA	TRANSFER_REQ	
REL_Bearer_cap_not_available_BA	TRANSFER_REQ	
REL_Bearer_cap_not_implemented_BA	TRANSFER_REQ	
RLC_AB	TRANSFER_IND	
RLC_BA	TRANSFER_REQ	
RLC_cicx_AB	TRANSFER_IND	
RLC_cicy_BA	TRANSFER_REQ	
RLC_cicx_BA	TRANSFER_REQ	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
GRS_BA	TRANSFER_REQ	circuit supervision asps
GRS_RANGE_INVALID_BA	TRANSFER_REQ	
GRS_AB	TRANSFER_IND	
GRA_AB	TRANSFER_IND	
GRA_BA	TRANSFER_REQ	
CGB_maint_BA	TRANSFER_REQ	
CGB_maint_RANGE_INVALID_BA	TRANSFER_REQ	
CGB_hardw_RANGE_INVALID_BA	TRANSFER_REQ	
CGB_maint_AB	TRANSFER_IND	
CGB_hardw_AB	TRANSFER_IND	
CGBA_maint_AB	TRANSFER_IND	
CGBA_maint_BA	TRANSFER_REQ	
CGBA_hardw_BA	TRANSFER_REQ	
CGU_maint_BA	TRANSFER_REQ	
CGU_maint_AB	TRANSFER_IND	
CGU_hardw_AB	TRANSFER_IND	
CGUA_maint_AB	TRANSFER_IND	
CGUA_maint_BA	TRANSFER_REQ	
CGUA_hardw_BA	TRANSFER_REQ	

ASP Constraints Declarations		
Constraint Name	**ASP Type**	**Comments**
RSC_BA	TRANSFER_REQ	circuit supervision asps
RSC_AB	TRANSFER_IND	
RSC_cicx_BA	TRANSFER_REQ	
RSC_cicx_AB	TRANSFER_IND	
BLO_AB	TRANSFER_IND	
BLO_BA	TRANSFER_REQ	
BLO_cicx_BA	TRANSFER_REQ	
BLO_cicy_BA	TRANSFER_REQ	
BLA_BA	TRANSFER_REQ	
BLA_AB	TRANSFER_IND	
BLA_AB	TRANSFER_IND	
BLA_cicx_AB	TRANSFER_IND	
BLA_cicy_AB	TRANSFER_IND	
UBL_BA	TRANSFER_REQ	
UBL_AB	TRANSFER_IND	
UBA_AB	TRANSFER_IND	
UBA_BA	TRANSFER_REQ	
SUS_netw_BA	TRANSFER_REQ	
SUS_netw_AB	TRANSFER_IND	
SUS_user_BA	TRANSFER_REQ	
SUS_user_AB	TRANSFER_IND	
RES_netw_BA	TRANSFER_REQ	
RES_netw_AB	TRANSFER_IND	
RES_user_BA	TRANSFER_REQ	
RES_user_AB	TRANSFER_IND	
CCR_BA	TRANSFER_REQ	
CCR_AB	TRANSFER_IND	
COT_failed_BA	TRANSFER_REQ	
COT_failed_AB	TRANSFER_IND	
COT_failed_cicx_AB	TRANSFER_IND	
COT_successful_BA	TRANSFER_REQ	
COT_successful_AB	TRANSFER_IND	
COT_finished_AB	TRANSFER_IND	
XXX_BA	TRANSFER_REQ	
XXX_cicx_BA	TRANSFER_REQ	
YYY_BA	TRANSFER_REQ	

A.9 Dynamic part

A.9.1 Test case dynamic behaviour

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10101			
Group	:	ISUPB/CS/Non_alloc_circuits/			
Purpose	:	To verify that on receipt of a CIC relating to a circuit which does not exist, SP A will discard the message and alert the maintenance system			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Non allocated circuits REFERENCE: PRE-TEST CONDITIONS: Arrange the data in signalling point B such that the CIC identifies a circuit that does not exist between SP A and SP B. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_nonexistentCIC_BA	
UTA ? MAINT_IND			2	ALARM_MaintSystem	P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10201			
Group	:	ISUPB/CS/Reset/			
Purpose	:	To verify that on receipt of a reset circuit message SP A will respond by sending a release complete message			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: RSC received on an idle circuit REFERENCE: Q.764 § 2.10.3.1 a) b) PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	RSC_BA	
LAB ? TRANSFER_IND			2	RLC_AB	
+Check_CIRCUIT_IDLE			3		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10202			
Group	:	ISUPB/CS/Reset/			
Purpose	:	To verify that SP A is able to generate reset circuit message			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: RSC sent on an idle circuit REFERENCE: Q.764 § 2.10.3.1 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! MML_REQ			1	RESET_CIRCUIT	
LAB ? TRANSFER_IND			2	RSC_AB	
LAB ! TRANSFER_REQ			3	RLC_BA	
+Check_CIRCUIT_IDLE			4		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10203			
Group	:	ISUPB/CS/Reset/			
Purpose	:	To verify that on receipt of a reset circuit message while in its locally blocked state, SP A will respond by sending blocking and release complete messages			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: RSC received on a locally blocked circuit REFERENCE: Q.764 § 2.10.3.1 c) PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
+BlockLocal_CIRCUIT			1		
LAB ! TRANSFER_REQ			2	RSC_BA	
LAB ? TRANSFER_IND			3	BLO_AB	
+Receive_RLC_and_send_BLA			4		
+Check_LOCAL_BLOCKING_CIRCUIT			5		P NOTE
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10204				
Group	: ISUPB/CS/Reset/				
Purpose	: To verify that SP A is able to react to a reset circuit message for a remotely blocked circuit				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: RSC received on a remotely blocked circuit REFERENCE: Q.764 § 2.10.3.1 d) PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
+BlockRemote_CIRCUIT		1			
LAB ! TRANSFER_REQ		2	RSC_BA		
LAB ? TRANSFER_IND		3	RLC_AB		
+Check_CIRCUIT_IDLE		4		P	
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10205				
Group	: ISUPB/CS/Reset/				
Purpose	: To verify that on receipt of one circuit group reset message SP A will respond by sending a circuit group reset acknowledge message				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: Circuit group reset received REFERENCE: Q.764 § 2.10.3.2 PRE-TEST CONDITIONS: All circuits are idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
+GRS_RANGE_VALID		1			
+Check_CIRCUIT_IDLE		2			NOTE
+GRS_RANGE_INVALID		3			
+Check_CIRCUIT_IDLE		4		P	NOTE
Detailed Comments:					
NOTE: Check that all circuits involved in GRS are idle.					

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10206				
Group	: ISUPB/CS/Reset/				
Purpose	: To verify that SP A is able to generate a circuit group reset message				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: Circuit group reset sent REFERENCE: Q.764 § 2.10.3.2 PRE-TEST CONDITIONS: All circuits are idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! MML_REQ		1	GROUPRESET		
LAB ? TRANSFER_IND		2	GRS_AB		
LAB ! TRANSFER_REQ		3	GRA_BA		
+Check_CIRCUIT_IDLE		4		P	NOTE
Detailed Comments:					
NOTE: This test step should be repeated for all circuits of the circuit group.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10207			
Group	:	ISUPB/CS/Reset/			
Purpose	:	To verify that SP A is able to react to a circuit group reset message correctly for remotely blocked circuits			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Circuit group reset received on remotely blocked circuits REFERENCE: Q.764 § 2.10.3.2 d) PRE-TEST CONDITIONS: All circuits are idle. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	BLO_cicx_BA	
LAB ? TRANSFER_IND			2	BLA_cicx_AB	
LAB ! TRANSFER_REQ			3	BLO_cicy_BA	
LAB ? TRANSFER_IND			4	BLA_cicy_AB	
LAB ! TRANSFER_REQ			5	GRS_BA	
LAB ? TRANSFER_IND			6	GRA_AB	
+Check_CIRCUIT_IDLE			7		P NOTE
Detailed Comments:					
NOTE: This check applies to both circuits cicx and cicy.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10311			
Group	:	ISUPB/CS/Blocking/Circuit_group/			
Purpose	:	To verify that the circuit group blocking feature can be correctly initiated			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CGB and CGU received REFERENCE: Q.764 § 2.9.2 PRE-TEST CONDITIONS: All circuits are idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
+BlockRemote_CIRCUIT_GROUP_MAINT					
# [CASE=A]			1		
+Check_REMOTE_BLOCKING_CIRCUIT_GROUP			2		NOTE
+UnblockRemote_CIRCUIT_GROUP_MAINT			3		
+Check_UNBLOCKED_CIRCUIT_GROUP			4		
+BlockRemote_CIRCUIT_GROUP_MAINT_					
# RANGE_INVALID			5		P
+BlockRemote_CIRCUIT_GROUP_HARDW					
# [CASE=B]			6		
+Check_REMOTE_BLOCKING_CIRCUIT_					
# GROUP_HARDW			7		NOTE
+UnblockRemote_CIRCUIT_GROUP_HARDW			8		
+Check_UNBLOCKED_CIRCUIT_GROUP			9		
+BlockRemote_CIRCUIT_GROUP_HARDW_					
# RANGE_INVALID			10		P
Detailed Comments:					
NOTE 1: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10312				
Group	: ISUPB/CS/Blocking/Circuit_group/				
Purpose	: To verify that SPA is able to generate one circuit group blocking message and one circuit group unblocking message				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: CGB and CGU sent REFERENCE: Q.764 § 2.9.2 PRE-TEST CONDITIONS: All circuits are idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! MML_REQ [CASE=A]		1	GROUPBLOCK_MAINT		
LAB ? TRANSFER_IND		2	CGB_maint_AB		
LAB ! TRANSFER_REQ		3	CGBA_maint_BA		
UTA ! MML_REQ		4	GROUPUNBLOCK_MAINT		
LAB ? TRANSFER_IND		5	CGU_maint_AB		
LAB ! TRANSFER_REQ		6	CGUA_maint_BA		
+Check_UNBLOCKED_CIRCUIT_GROUP		7		P	NOTE
UTA ! MML_REQ [CASE=B]		8	GROUPBLOCK_HARDW		
LAB ? TRANSFER_IND		9	CGB_hardw_AB		
LAB ! TRANSFER_REQ		10	CGBA_hardw_BA		
UTA ! MML_REQ		11	GROUPUNBLOCK_HARDW		
LAB ? TRANSFER_IND		12	CGU_hardw_AB		
LAB ! TRANSFER_REQ		13	CGUA_hardw_BA		
+Check_UNBLOCKED_CIRCUIT_GROUP		14		P	
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10321				
Group	: ISUPB/CS/Blocking/Circuit/				
Purpose	: To verify that the blocking/unblocking procedure can be correctly initiated				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: BLO received REFERENCE: Q.764 § 2.9.2 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	BLO_BA		
LAB ? TRANSFER_IND		2	BLA_AB		
+Check_REMOTE_BLOCKING_CIRCUIT		3			NOTE
LAB ! TRANSFER_REQ		4	UBL_BA		
LAB ? TRANSFER_IND		5	UBA_AB		
+Check_UNBLOCKED_CIRCUIT		6		P	
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10322			
Group	:	ISUPB/CS/Blocking/Circuit/			
Purpose	:	To verify that SP A is able to generate blocking messages			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: BLO sent REFERENCE: Q.764 § 2.9.2 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! MML_REQ			1	BLOCK_CIRCUIT	
LAB ? TRANSFER_IND			2	BLO_AB	
LAB ! TRANSFER_REQ			3	BLA_BA	
UTA ! MML_REQ			4	UNBLOCK_CIRCUIT	
LAB ? TRANSFER_IND			5	UBL_AB	
LAB ! TRANSFER_REQ			6	UBA_BA	
+Check_UNBLOCKED_CIRCUIT			7		P NOTE
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10323			
Group	:	ISUPB/CS/Blocking/Circuit/			
Purpose	:	To verify that the blocking/unblocking procedure can be correctly initiated			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Blocking from both ends removal of blocking from one end REFERENCE: Q.764 § 2.9.2 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! MML_REQ			1	BLOCK_CIRCUIT	
LAB ? TRANSFER_IND			2	BLO_AB	
LAB ! TRANSFER_REQ			3	BLA_BA	
LAB ! TRANSFER_REQ			4	BLO_BA	
LAB ? TRANSFER_IND			5	BLA_AB	
+Check_BOTHENDS_BLOCKING_CIRCUIT			6		NOTE
UTA ! MML_REQ			7	UNBLOCK_CIRCUIT	
LAB ? TRANSFER_IND			8	UBL_AB	
LAB ! TRANSFER_REQ			9	UBA_BA	
+Check_REMOTE_BLOCKING_CIRCUIT			10		NOTE
LAB ! TRANSFER_REQ			11	UBL_BA	
LAB ? TRANSFER_IND			12	UBA_AB	
+Check_UNBLOCKED_CIRCUIT			13		P NOTE
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10324			
Group	:	ISUPB/CS/Blocking/Circuit/			
Purpose	:	To verify that an IAM will unblock the remotely blocked circuit			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: IAM received on a remotely blocked circuit REFERENCE: Q.764 § 2.9.2.3 xiv) PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	BLO_BA	
LAB ? TRANSFER_IND			2	BLA_AB	
+Check_REMOTE_BLOCKING_CIRCUIT			3		NOTE
LAB ! TRANSFER_REQ			4	IAM_BA	
+Receive_ACM_and_SETUP_IND			5		
UTA ! USER_REQ			6	SETUP_RESP_any	
LAB ? TRANSFER_IND			7	ANM_AB	
+Check_CONNECTIVITY			8		
LAB ! TRANSFER_REQ			9	REL_BA	
+Receive_RLC_and_REL_IND			10		
+Check_CIRCUIT_IDLE			11		P
Detailed Comments:					
NOTE: A CPC="test call" should not be used for this check.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10401			
Group	:	ISUPB/CS/Cont_check_test_call/			
Purpose	:	To verify that the continuity test call procedure can be correctly performed			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CCR received successful REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	CCR_BA	
CAB ! CONTCHECK_REQ			2	CONTCHECK_tone_BA	
CAB ? CONTCHECK_IND			3	CONTCHECK_tone_AB	
LAB ! TRANSFER_REQ			4	REL_BA	
LAB ? TRANSFER_IND			5	RLC_AB	
+Check_CIRCUIT_IDLE			6		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10402			
Group	:	ISUPB/CS/Cont_check_test_call/			
Purpose	:	To verify that the continuity test call procedure can be correctly performed			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CCR sent successful REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: The circuit is idle. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! MML_REQ			1	CONTCHECK_TESTCALL	
LAB ? TRANSFER_IND			2	CCR_AB	
CAB ! CONNECT_CONTCHECKLOOP_REQ			3	CONNECT_CONTCHECKLOOP_B	
UTA ! USER_REQ			4	REL_REQ	
LAB ? TRANSFER_IND			5	REL_AB	
LAB ! TRANSFER_REQ			6	RLC_BA	
CAB ! CONNECT_CONTCHECKLOOP_REQ			7	DISCONNECT_CONTCHECKLOOP_B	
+Check_CIRCUIT_IDLE			8		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10403			
Group	:	ISUPB/CS/Cont_check_test_call/			
Purpose	:	To verify that the messages associated with continuity check procedure can be correctly received			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CCR received unsuccessful REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: Ensure that no backward check tone is detected within the specified time out. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	CCR_BA	
CAB ! CONTCHECK_REQ START T24max			2	CONTCHECK_tone_BA	
?TIMEOUT T24max			3		
LAB ! TRANSFER_REQ START T26max			4	COT_failed_BA	
?TIMEOUT T26max			5		
LAB ! TRANSFER_REQ			6	CCR_BA	
CAB ! CONTCHECK_REQ START T24max			7	CONTCHECK_tone_BA	
?TIMEOUT T24max			8		
LAB ! TRANSFER_REQ START T26max			9	COT_failed_BA	
UTA ? MAINT_IND			10	ALARM_MaintSystem	
?TIMEOUT T26max			11		
LAB ! TRANSFER_REQ			12	CCR_BA	P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10404			
Group	:	ISUPB/CS/Cont_check_test_call/			
Purpose	:	To verify that the continuity check procedure can be correctly invoked			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CCR sent unsuccessful REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: Ensure that no backward check tone is detected within the specified time out. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! MML_REQ			1	CONTCHECK_TESTCALL	
LAB ? TRANSFER_IND START T24max			2	CCR_AB	
LAB ? TRANSFER_IND				COT_failed_AB	
# CANCEL T24max, START T26max			3		
LAB ? TRANSFER_IND				CCR_AB	
# CANCEL T26max, START T24max			4		
LAB ? TRANSFER_IND				COT_failed_AB	
# CANCEL T24max, START T26max			5		
UTA ? MAINT_IND			6	ALARM_MaintSystem	
LAB ? TRANSFER_IND CANCEL T26max			7	CCR_AB	P
?TIMEOUT T26max			8		F
?TIMEOUT T24max			9		F
?TIMEOUT T26max			10		F
?TIMEOUT T24max			11		F
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB10405			
Group	:	ISUPB/CS/Cont_check_test_call/			
Purpose	:	To verify that the continuity check procedure can be correctly received			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: CCR received unsuccessful verify T27 timer REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: (a) Continuity check is required. (b) Ensure that no backward check tone is detected within the specified time out. (c) The data in SP B is arranged such that a second CCR is not generated. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_contcheckreq_BA	
CAB ! CONTCHECK_REQ START T24min			2	CONTCHECK_tone_BA	
?TIMEOUT T24min			3		
LAB ! TRANSFER_REQ START T27max			4	COT_failed_BA	
?TIMEOUT T27max			5		
LAB ? TRANSFER_IND			6	RSC_AB	
LAB ! TRANSFER_REQ			7	RLC_BA	P
Detailed Comments:					

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB10501
Group	:	ISUPB/CS/Rec_UNREAS/
Purpose	:	To verify that the action taken by a signalling point upon receipt of unexpected messages is as stated in Q.764 § 2.10.5.1
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Receipt of unexpected messages REFERENCE: Q.764 § 2.10.5.1 a) b) d) PRE-TEST CONDITIONS: (a) Arrange the data in signalling point B such that REL, RLC and other unreasonable messages may be initiated. (b) The circuit should be idle and unblocked. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP : SP

Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ [CASE=A]	1	REL_BA		NOTE 1
LAB ? TRANSFER_IND	2	RLC_AB		
+Check_CIRCUIT_IDLE	3		P	
LAB ! TRANSFER_REQ [CASE=B]	4	RLC_BA		NOTE 1
+Check_CIRCUIT_IDLE	5		P	
LAB ! TRANSFER_REQ [CASE=C]	6	XXX_BA		NOTEs 1&2
LAB ? TRANSFER_IND	7	RSC_AB		
LAB ! TRANSFER_REQ	8	RLC_BA		
+Check_CIRCUIT_IDLE	9		P	
LAB ! TRANSFER_REQ [CASE=D]	10	YYY_BA		NOTE 1
+Check_CIRCUIT_IDLE	11		P	

Detailed Comments:

NOTE 1: This test covers only some of the ambiguous messages which could be received.

NOTE 2: Not all the unreasonable messages will cause a RSC message to be sent.

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB10502				
Group	: ISUPB/CS/Rec_UNREAS/				
Purpose	: (a) To verify that the action taken by a signalling point upon receipt of unexpected messages is as stated in Q.764 § 2.10.5.1 (b) The circuit should be idle and unblocked				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: Receipt of unexpected messages during call setup REFERENCE: Q.764 § 2.10.5.1 d) PRE-TEST CONDITIONS: (a) Arrange the data in signalling point B such that other unreasonable messages may be initiated. (b) The circuit should be idle and unblocked. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [CASE=A]		1	SETUP_REQ_any		
LAB ? TRANSFER_IND		2	IAM_AB		
LAB ! TRANSFER_REQ		3	ACM_BA		
LAB ! TRANSFER_REQ		4	XXX_BA		NOTE
LAB ! TRANSFER_REQ		5	ANM_BA		
+Check_CONNECTIVITY		6			
UTA ! USER_REQ		7	REL_REQ		
LAB ? TRANSFER_IND		8	REL_AB		
LAB ! TRANSFER_REQ		9	RLC_BA	P	
LAB ! TRANSFER_REQ [CASE=B]		10	IAM_BA		
LAB ! TRANSFER_REQ		11	YYY_BA		NOTE
LAB ? TRANSFER_IND		12	RSC_AB		
LAB ! TRANSFER_REQ		13	RLC_BA		
+Check_CIRCUIT_IDLE		14		P	
Detailed Comments:					
NOTE: Messages other than call control messages will be used for XXX and YYY.					

pTest Case Dynamic Behaviour		
Test Case Name	:	ISUPB10503
Group	:	ISUPB/CS/Rec_UNREAS/
Purpose	:	To verify that the action taken by a signalling point upon receipt of unexpected messages is as stated in Q.764 § 2.10.5.1
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Receipt of unexpected messages during a call REFERENCE: Q.764 § 2.10.5.1 c) d) PRE-TEST CONDITIONS: (a) Arrange the data in signalling point B such that an unexpected RLC and other unreasonable messages may be initiated. (b) The circuit should be idle an unblocked. CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [CASE=A]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
LAB ! TRANSFER_REQ	4	ANM_BA		
+Check_CONNECTIVITY	5			
LAB ! TRANSFER_REQ	6	RLC_BA		
LAB ? TRANSFER_IND	7	REL_AB		
LAB ! TRANSFER_REQ	8	RLC_BA		
+Check_CIRCUIT_IDLE	9		P	
UTA ! USER_REQ [CASE=B]	10	SETUP_REQ_any		
LAB ? TRANSFER_IND	11	IAM_AB		
LAB ! TRANSFER_REQ	12	ACM_BA		
LAB ! TRANSFER_REQ	13	ANM_BA		
+Check_CONNECTIVITY	14			
LAB ! TRANSFER_REQ	15	XXX_BA		NOTE
+Check_CONNECTIVITY	16			
LAB ! TRANSFER_REQ	17	REL_BA		
+Receive_RLC_and_REL_IND	18		P	

Detailed Comments:

NOTE: Messages other than REL, RLC, RSC and SUS will be used for XXX.

Test Case Dynamic Behaviour				
Test Case Name	: ISUPB20101			
Group	: ISUPB/NCS/Both_way_select/			
Purpose	: To verify that signalling point A can initiate an outgoing call on a circuit capable of bothway operation when the controlling SP is A			
Default	: AnyOtherEventUnexpected			
Comments	: SUBTITLE: IAM sent by controlling SP REFERENCE: Q.764 § 2.1 PRE-TEST CONDITIONS: (a) Called termination is free. (b) Circuit selected is capable of bothway operation. (c) SP A is the controlling signalling point. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
UTA ! USER_REQ		7	REL_REQ	
LAB ? TRANSFER_IND		8	REL_AB	
LAB ! TRANSFER_REQ		9	RLC_BA	
+Check_CIRCUIT_IDLE		10		P
Detailed Comments:				

Test Case Dynamic Behaviour				
Test Case Name	: ISUPB20102			
Group	: ISUPB/NCS/Both_way_select/			
Purpose	: To verify that signalling point A can initiate an outgoing call on a circuit capable of bothway operation when the non-controlling SP is A			
Default	: AnyOtherEventUnexpected			
Comments	: SUBTITLE: IAM sent by non controlling SP REFERENCE: Q.764 § 2.1 PRE-TEST CONDITIONS: (a) Called termination is free. (b) Circuit selected is capable of bothway operation. (c) SP A is the non-controlling signalling point. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
LAB ! TRANSFER_REQ		7	REL_BA	
+Receive_RLC_and_REL_IND		8		
+Check_CIRCUIT_IDLE		9		P
Detailed Comments:				

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB20201
Group	:	ISUPB/NCS/Cld_addr_send/
Purpose	:	To verify that a call can be succesfully established (all digits included in the IAM)
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: En bloc operation REFERENCE: Q.764 §§ 2.1.1, 2.1.4, 2.1.7 and 2.3 PRE-TEST CONDITIONS: (a) Called termination is free. (b) The exchange data is arranged such all digits are included in the IAM. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
UTA ! USER_REQ	7	REL_REQ		
LAB ? TRANSFER_IND	8	REL_AB		
LAB ! TRANSFER_REQ	9	RLC_BA		
+Check_CIRCUIT_IDLE	10		P	
LAB ! TRANSFER_REQ [SP_A=TER]	11	IAM_BA		
+Receive_ACM_and_SETUP_IND	12			
+Check_RINGING_TONE	13			
UTA ! USER_REQ	14	SETUP_RESP_any		
LAB ? TRANSFER_IND	15	ANM_AB		
+Check_CONNECTIVITY	16			
LAB ! TRANSFER_REQ	17	REL_BA		
+Receive_RLC_and_REL_IND	18			
+Check_CIRCUIT_IDLE	19		P	

Detailed Comments:

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB20202				
Group	: ISUPB/NCS/Cld_addr_send/				
Purpose	: To verify that signalling point A can initiate a call using an IAM followed by a SAM				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: Overlap operation with SAM REFERENCE: Q.764 § 2.1.2 PRE-TEST CONDITIONS: (a) Called termination is free. (b) The signalling point data is arranged such that digits are generated in an IAM followed by a SAM. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [SP_A=ORI]		1	SETUP_REQ_Overlap		
LAB ? TRANSFER_IND		2	IAM_Overlap_AB		
UTA ! USER_REQ		3	INFO_REQ		
LAB ? TRANSFER_IND		4	SAM_AB		NOTE
LAB ! TRANSFER_REQ		5	ACM_BA		
+Check_RINGING_TONE		6			
LAB ! TRANSFER_REQ		7	ANM_BA		
+Check_CONNECTIVITY		8			
UTA ! USER_REQ		9	REL_REQ		
LAB ? TRANSFER_IND		10	REL_AB		
LAB ! TRANSFER_REQ		11	RLC_BA		
+Check_CIRCUIT_IDLE		12		P	
LAB ! TRANSFER_REQ [SP_A=TER]		13	IAM_BA		
LAB ! TRANSFER_REQ		14	SAM_BA		NOTE
+Receive_ACM_and_SETUP_IND		15			
+Check_RINGING_TONE		16			
UTA ! USER_REQ		17	SETUP_RESP_any		
LAB ? TRANSFER_IND		18	ANM_AB		
+Check_CONNECTIVITY		19			
LAB ! TRANSFER_REQ		20	REL_BA		
+Receive_RLC_and_REL_IND		21			
+Check_CIRCUIT_IDLE		22		P	
Detailed Comments:					
NOTE: Where SP A is in a position to know by digit analysis that the final digit has been sent. Confirm that an end-of-pulsing (ST) signal is included in the last address message. Multiple SAMs may be used.					

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB20301
Group	:	ISUPB/NCS/Succ_setup/
Purpose	:	To verify that a call can be successfully completed using various indications in address complete messages
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Ordinary call with various indications in ACM REFERENCE: Q.764 §§ 2.1.4.1 and 2.1.7 PRE-TEST CONDITIONS: Called termination is free. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
[SP_A=ORI]	1			
+SETUP_ORI_Call_BCI_Free_ISDN_in_ACM	2			
+SETUP_ORI_Call_BCI_Free_Non_ISDN_in_ACM	3			
+SETUP_ORI_Call_BCI_No_Ind_ISDN_in_ACM	4			
+SETUP_ORI_Call_BCI_No_Ind_Non_ISDN_				
# in_ACM	5		P	
[SP_A=TER]	6			
+SETUP_TER_Call_BCI_Free_ISDN_in_ACM	7			
+SETUP_TER_Call_BCI_Free_Non_ISDN_in_ACM	8			
+SETUP_TER_Call_BCI_No_Ind_ISDN_in_ACM	9			
+SETUP_TER_Call_BCI_No_Ind_Non_ISDN_				
# in_ACM	10		P	
Detailed Comments:				

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB20302
Group	:	ISUPB/NCS/Succ_setup/
Purpose	:	To verify that a call can be successfully completed using address complete message, call progress message and answer message
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Ordinary call with ACM CPG and ANM REFERENCE: Q.764 § 2.1.5 PRE-TEST CONDITIONS: Called termination is free. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
[SP_A=ORI]	1			
+SETUP_ORI_Call_CPG_Alerting	2			
+SETUP_ORI_Call_CPG_Progress	3			
+SETUP_ORI_Call_CPG_In_band_info	4		P	
[SP_A=TER]	5			
+SETUP_TER_Call_CPG_Alerting	6			
+SETUP_TER_Call_CPG_Progress	7			
+SETUP_TER_Call_CPG_In_band_info	8		P	
Detailed Comments:				

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB20303
Group	:	ISUPB/NCS/Succ_setup/
Purpose	:	To verify that a call can be successfully completed using various indications in the connect messages
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Ordinary call with various indications in CON REFERENCE: Q.764 § 2.1.4.2 PRE-TEST CONDITIONS: Called termination is free. A connect message is returned instead of an answer message from SP B. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
[SP_A=ORI]	1			
+SETUP_ORI_Call_BCI_Free_ISDN_				
# in_CON	2			
+SETUP_ORI_Call_BCI_Free_Non_ISDN_				
# in_CON	3			
+SETUP_ORI_Call_BCI_No_Ind_ISDN_				
# in_CON	4			
+SETUP_ORI_Call_BCI_No_Ind_Non_ISDN_				
# in_CON	5		P	
[SP_A=TER]	6			
+SETUP_TER_Call_BCI_Free_ISDN_				
# in_CON	7			
+SETUP_TER_Call_BCI_Free_Non_ISDN_				
# in_CON	8			
+SETUP_TER_Call_BCI_No_Ind_ISDN_				
# in_CON	9			
+SETUP_TER_Call_BCI_No_Ind_Non_ISDN_				
# in_CON	10		P	

Detailed Comments:

Test Case Dynamic Behaviour

Test Case Name : ISUPB20304
Group : ISUPB/NCS/Succ_setup/
Purpose : To verify the satellite indicator in the initial address message is correctly set
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: Call switched via a satellite
REFERENCE: Q.764 § 2.1
PRE-TEST CONDITIONS:
(a) Called termination is free.
(b) The signalling point data is arranged such that the call is switched via a satellite connection or has a satellite connection already included in the path.
CONFIGURATION: 1
TYPE OF TEST: VAT and CPT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_Satellite		
LAB ? TRANSFER_IND	2	IAM_Satellite_AB		NOTE
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
UTA ! USER_REQ	7	REL_REQ		
LAB ? TRANSFER_IND	8	REL_AB		
LAB ! TRANSFER_REQ	9	RLC_BA		
+Check_CIRCUIT_IDLE	10		P	
LAB ! TRANSFER_REQ [SP_A=TER]	11	IAM_Satellite_BA		NOTE
+Receive_ACM_and_SETUP_IND	12			
+Check_RINGING_TONE	13			
UTA ! USER_REQ	14	SETUP_RESP_any		
LAB ? TRANSFER_IND	15	ANM_AB		
+Check_CONNECTIVITY	16			
LAB ! TRANSFER_REQ	17	REL_BA		
+Receive_RLC_and_REL_IND	18			
+Check_CIRCUIT_IDLE	19		P	

Detailed Comments:

NOTE: Was the satelite indicator "BA" bits in the Nature of Connection Indicators in the IAM set to "01"?

Test Case Dynamic Behaviour				
Test Case Name	: ISUPB20305			
Group	: ISUPB/NCS/Succ_setup/			
Purpose	: To verify that a call can be successfully established with the inclusion of echo control devices			
Default	: AnyOtherEventUnexpected			
Comments	: SUBTITLE: Echo control procedure for call setup REFERENCE: Q.764 § 2.8 PRE-TEST CONDITIONS: (a) Called termination is free. (b) The signalling point data is arranged such that the call is routed over a route requiring echo control devices or already has a echo control device included in the connection. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]		1	SETUP_REQ_Echo_Control	
LAB ? TRANSFER_IND		2	IAM_Echo_Control_AB	NOTE 1
LAB ! TRANSFER_REQ		3	ACM_Echo_Control_BA	NOTE 2
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
+Check_ECHO_DEVICES		7		
UTA ! USER_REQ		8	REL_REQ	
LAB ? TRANSFER_IND		9	REL_AB	
LAB ! TRANSFER_REQ		10	RLC_BA	
+Check_CIRCUIT_IDLE		11		P
LAB ! TRANSFER_REQ [SP_A=TER]		12	IAM_Echo_Control_BA	NOTE 1
+Receive_ACM_Echo_and_SETUP_IND		13		NOTE 2
+Check_RINGING_TONE		14		
UTA ! USER_REQ		15	SETUP_RESP_any	
LAB ? TRANSFER_IND		16	ANM_AB	
+Check_CONNECTIVITY		17		
+Check_ECHO_DEVICES		18		
LAB ! TRANSFER_REQ		19	REL_BA	
+Receive_RLC_and_REL_IND		20		
+Check_CIRCUIT_IDLE		21		P
Detailed Comments:				
NOTE 1:	Is the Echo Control Device Indicator bit "E" (outgoing half echo device included) in Nature of Connection Indicators in the IAM set to "1"?			
NOTE 2:	Is the Echo Control Device Indicator bit "N" (incoming half echo device included) in the Backward Call Indicators in the ACM set to "1"?			

Test Case Dynamic Behaviour

Test Case Name : ISUPB20306
Group : ISUPB/NCS/Succ_setup/
Purpose : To verify that the circuit blocking and unblocking procedure can be correctly initiated during a call
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: Blocking and unblocking during a call (initiated)
REFERENCE: Q.764 § 2.9.2.1
PRE-TEST CONDITIONS: Called termination is free.
CONFIGURATION: 1
TYPE OF TEST: VAT and CPT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
UTA ! MML_REQ	7	BLOCK_CIRCUIT		
LAB ? TRANSFER_IND	8	BLO_AB		
LAB ! TRANSFER_REQ	9	BLA_BA		
+Check_CONNECTIVITY	10			
UTA ! USER_REQ	11	REL_REQ		
LAB ? TRANSFER_IND	12	REL_AB		
LAB ! TRANSFER_REQ	13	RLC_BA		
+Check_LOCAL_BLOCKING_CIRCUIT	14			NOTE
UTA ! MML_REQ	15	UNBLOCK_CIRCUIT		
LAB ? TRANSFER_IND	16	UBL_AB		
LAB ! TRANSFER_REQ	17	UBA_BA		
+Check_UNBLOCKED_CIRCUIT	18		P	
LAB ! TRANSFER_REQ [SP_A=TER]	19	IAM_BA		
+Receive_ACM_and_SETUP_IND	20			
+Check_RINGING_TONE	21			
UTA ! USER_REQ	22	SETUP_RESP_any		
LAB ? TRANSFER_IND	23	ANM_AB		
+Check_CONNECTIVITY	24			
LAB ! TRANSFER_REQ	25	BLO_BA		
LAB ? TRANSFER_IND	26	BLA_AB		
+Check_CONNECTIVITY	27			
LAB ! TRANSFER_REQ	28	REL_BA		
+Receive_RLC_and_REL_IND	29			
+Check_REMOTE_BLOCKING_CIRCUIT	30			NOTE
LAB ! TRANSFER_REQ	31	UBL_BA		
LAB ? TRANSFER_IND	32	UBA_AB		
+Check_UNBLOCKED_CIRCUIT	33		P	

Detailed Comments:
NOTE: A CPC="test call" should not be used for this check.

Test Case Dynamic Behaviour				
Test Case Name	: ISUPB20307			
Group	: ISUPB/NCS/Succ_setup/			
Purpose	: To verify that the circuit blocking and unblocking procedure can be correctly received during a call			
Default	: AnyOtherEventUnexpected			
Comments	: SUBTITLE: Blocking and unblocking during a call (received) REFERENCE: Q.764 § 2.9.2.1 PRE-TEST CONDITIONS: Called termination is free. CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]		1	SETUP_REQ_any	
LAB ? TRANSFER_IND		2	IAM_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
LAB ! TRANSFER_REQ		7	BLO_BA	
LAB ? TRANSFER_IND		8	BLA_AB	
+Check_CONNECTIVITY		9		
UTA ! USER_REQ		10	REL_REQ	
LAB ? TRANSFER_IND		11	REL_AB	
LAB ! TRANSFER_REQ		12	RLC_BA	
+Check_REMOTE_BLOCKING_CIRCUIT		13		NOTE
LAB ! TRANSFER_REQ		14	UBL_BA	
LAB ? TRANSFER_IND		15	UBA_AB	
+Check_UNBLOCKED_CIRCUIT		16		P
LAB ! TRANSFER_REQ [SP_A=TER]		17	IAM_BA	
+Receive_ACM_and_SETUP_IND		18		
+Check_RINGING_TONE		19		
UTA ! USER_REQ		20	SETUP_RESP_any	
LAB ? TRANSFER_IND		21	ANM_AB	
+Check_CONNECTIVITY		22		
UTA ! MML_REQ		23	BLOCK_CIRCUIT	
LAB ? TRANSFER_IND		24	BLO_AB	
LAB ! TRANSFER_REQ		25	BLA_BA	
+Check_CONNECTIVITY		26		
LAB ! TRANSFER_REQ		27	REL_BA	
+Receive_RLC_and_REL_IND		28		
+Check_LOCAL_BLOCKING_CIRCUIT		29		NOTE
UTA ! MML_REQ		30	UNBLOCK_CIRCUIT	
LAB ? TRANSFER_IND		31	UBL_AB	
LAB ! TRANSFER_REQ		32	UBA_BA	
+Check_UNBLOCKED_CIRCUIT		33		P
Detailed Comments:				
NOTE: A CPC="test call" should not be used for this check.				

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB30101			
Group	:	ISUPB/NCR/			
Purpose	:	To verify that the calling party can successfully release a call prior to receipt of any backward message			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Calling party clears before any backward message REFERENCE: Q.764 § 2.3 PRE-TEST CONDITIONS: The circuit is idle CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
UTA ! USER_REQ			3	REL_REQ	
LAB ? TRANSFER_IND			4	REL_AB	
LAB ! TRANSFER_REQ			5	RLC_BA	
+Check_CIRCUIT_IDLE			6		P
LAB ! TRANSFER_REQ [SP_A=TER]			7	IAM_BA	
UTA ? USER_IND			8	SETUP_IND_any	
LAB ! TRANSFER_REQ			9	REL_BA	
+Receive_RLC_and_REL_IND			10		
+Check_CIRCUIT_IDLE			11		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB30201			
Group	:	ISUPB/NCR/			
Purpose	:	To verify that the calling party can successfully release a call prior to receipt of answer			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Calling party clears before answer REFERENCE: Q.764 § 2.3 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
LAB ! TRANSFER_REQ			3	ACM_BA	
+Check_RINGING_TONE			4		
UTA ! USER_REQ			5	REL_REQ	
LAB ? TRANSFER_IND			6	REL_AB	
LAB ! TRANSFER_REQ			7	RLC_BA	
+Check_CIRCUIT_IDLE			8		P
LAB ! TRANSFER_REQ [SP_A=TER]			9	IAM_BA	
+Receive_ACM_and_SETUP_IND			10		
+Check_RINGING_TONE			11		
LAB ! TRANSFER_REQ			12	REL_BA	
+Receive_RLC_and_REL_IND			13		
+Check_CIRCUIT_IDLE			14		P
Detailed Comments:					

Test Case Dynamic Behaviour				
Test Case Name	: ISUPB30301			
Group	: ISUPB/NCR/			
Purpose	: To verify that the calling party can successfully release a call after answer			
Default	: AnyOtherEventUnexpected			
Comments	: SUBTITLE: Calling party clears after answer REFERENCE: Q.764 § 2.3 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]		1	SETUP_REQ_any	
LAB ? TRANSFER_IND		2	IAM_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
UTA ! USER_REQ		7	REL_REQ	
LAB ? TRANSFER_IND		8	REL_AB	
LAB ! TRANSFER_REQ		9	RLC_BA	
+Check_CIRCUIT_IDLE		10		P
LAB ! TRANSFER_REQ [SP_A=TER]		11	IAM_BA	
+Receive_ACM_and_SETUP_IND		12		
+Check_RINGING_TONE		13		
UTA ! USER_REQ		14	SETUP_RESP_any	
LAB ? TRANSFER_IND		15	ANM_AB	
+Check_CONNECTIVITY		16		
LAB ! TRANSFER_REQ		17	REL_BA	
+Receive_RLC_and_REL_IND		18		
+Check_CIRCUIT_IDLE		19		P
Detailed Comments:				

Test Case Dynamic Behaviour				
Test Case Name : ISUPB30401 **Group** : ISUPB/NCR/ **Purpose** : To verify that a call can be successfully released in the backward direction **Default** : AnyOtherEventUnexpected **Comments** : SUBTITLE: Called party clears after answer REFERENCE: Q.764 § 2.3 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
LAB ! TRANSFER_REQ	7	REL_BA		
+Receive_RLC_and_REL_IND	8			
+Check_CIRCUIT_IDLE	9		P	
LAB ! TRANSFER_REQ [SP_A=TER]	10	IAM_BA		
+Receive_ACM_and_SETUP_IND	11			
+Check_RINGING_TONE	12			
UTA ! USER_REQ	13	SETUP_RESP_any		
LAB ? TRANSFER_IND	14	ANM_AB		
+Check_CONNECTIVITY	15			
UTA ! USER_REQ	16	REL_REQ		
LAB ? TRANSFER_IND	17	REL_AB		
LAB ! TRANSFER_REQ	18	RLC_BA		
+Check_CIRCUIT_IDLE	19		P	
Detailed Comments:				

Test Case Dynamic Behaviour

Test Case Name : ISUPB30501
Group : ISUPB/NCR/
Purpose : To verify that the called subscriber can successfully clear and reanswer a call
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: Suspend initiated by the network
REFERENCE: Q.764 § 2.5.1.3
PRE-TEST CONDITIONS: Called termination is free
CONFIGURATION: 1
TYPE OF TEST: VAT and CPT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
LAB ! TRANSFER_REQ	7	SUS_netw_BA		NOTE
UTA ? USER_IND	8	SUSPEND_IND		
LAB ! TRANSFER_REQ	9	RES_netw_BA		NOTE
UTA ? USER_IND	10	RESUME_IND		
+Check_CONNECTIVITY	11			
UTA ! USER_REQ	12	REL_REQ		
LAB ? TRANSFER_IND	13	REL_AB		
LAB ! TRANSFER_REQ	14	RLC_BA		
+Check_CIRCUIT_IDLE	15		P	
LAB ! TRANSFER_REQ [SP_A=TER]	16	IAM_BA		
+Receive_ACM_and_SETUP_IND	17			
+Check_RINGING_TONE	18			
UTA ! USER_REQ	19	SETUP_RESP_any		
LAB ? TRANSFER_IND	20	ANM_AB		
+Check_CONNECTIVITY	21			
UTA ! USER_REQ	22	SUSPEND_REQ		
LAB ? TRANSFER_IND	23	SUS_netw_AB		NOTE
UTA ! USER_REQ	24	RESUME_REQ		
LAB ? TRANSFER_IND	25	RES_netw_AB		NOTE
+Check_CONNECTIVITY	26			
LAB ! TRANSFER_REQ	27	REL_BA		
+Receive_RLC_and_REL_IND	28			
+Check_CIRCUIT_IDLE	29		P	

Detailed Comments:

NOTE: In order to generate these messages, an ISDN-PSTN interworking arrangement may be needed.

Test Case Dynamic Behaviour

Test Case Name	:	ISUPB30601
Group	:	ISUPB/NCR/
Purpose	:	To verify that the calling subscriber can successfully suspend and resume a call
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Suspend and resume initiated by a calling party REFERENCE: Q.764 §§ 2.5.1.1 and 2.5.2.1 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
UTA ! USER_REQ	7	SUSPEND_REQ		
LAB ? TRANSFER_IND	8	SUS_user_AB		NOTE
UTA ! USER_REQ	9	RESUME_REQ		
LAB ? TRANSFER_IND	10	RES_user_AB		NOTE
+Check_CONNECTIVITY	11			
UTA ! USER_REQ	12	REL_REQ		
LAB ? TRANSFER_IND	13	REL_AB		
LAB ! TRANSFER_REQ	14	RLC_BA		
+Check_CIRCUIT_IDLE	15		P	
LAB ! TRANSFER_REQ [SP_A=TER]	16	IAM_BA		
+Receive_ACM_and_SETUP_IND	17			
+Check_RINGING_TONE	18			
UTA ! USER_REQ	19	SETUP_RESP_any		
LAB ? TRANSFER_IND	20	ANM_AB		
+Check_CONNECTIVITY	21			
LAB ! TRANSFER_REQ	22	SUS_user_BA		NOTE
UTA ? USER_IND	23	SUSPEND_IND		
LAB ! TRANSFER_REQ	24	RES_user_BA		NOTE
UTA ? USER_IND	25	RESUME_IND		
+Check_CONNECTIVITY	26			
LAB ! TRANSFER_REQ	27	REL_BA		
+Receive_RLC_and_REL_IND	28			
+Check_CIRCUIT_IDLE	29		P	

Detailed Comments:

NOTE: An end-to-end ISDN arrangement is needed for this test.

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB30701			
Group	:	ISUPB/NCR/			
Purpose	:	To verify that the called subscriber can successfully suspend and resume a call			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Suspend and resume initiated by a called party REFERENCE: Q.764 §§ 2.5.1.2 and 2.5.2.2 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
LAB ! TRANSFER_REQ			3	ACM_BA	
+Check_RINGING_TONE			4		
LAB ! TRANSFER_REQ			5	ANM_BA	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	SUS_user_BA	NOTE
UTA ? USER_IND			8	SUSPEND_IND	
LAB ! TRANSFER_REQ			9	RES_user_BA	NOTE
UTA ? USER_IND			10	RESUME_IND	
+Check_CONNECTIVITY			11		
UTA ! USER_REQ			12	REL_REQ	
LAB ? TRANSFER_IND			13	REL_AB	
LAB ! TRANSFER_REQ			14	RLC_BA	
+Check_CIRCUIT_IDLE			15		P
LAB ! TRANSFER_REQ [SP_A=TER]			16	IAM_BA	
+Receive_ACM_and_SETUP_IND			17		
+Check_RINGING_TONE			18		
UTA ! USER_REQ			19	SETUP_RESP_any	
LAB ? TRANSFER_IND			20	ANM_AB	
+Check_CONNECTIVITY			21		
UTA ! USER_REQ			22	SUSPEND_REQ	
LAB ? TRANSFER_IND			23	SUS_user_AB	NOTE
UTA ! USER_REQ			24	RESUME_REQ	
LAB ? TRANSFER_IND			25	RES_user_AB	NOTE
+Check_CONNECTIVITY			26		
LAB ! TRANSFER_REQ			27	REL_BA	
+Receive_RLC_and_REL_IND			28		
+Check_CIRCUIT_IDLE			29		P
Detailed Comments:					
NOTE: An end-to-end ISDN arrangement is needed for this test.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB30801			
Group	:	ISUPB/NCR/			
Purpose	:	To verify that a release message may be received at an exchange from a succeeding or preceeding exchange after the release of the switch path is initiated			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Collision of REL messages REFERENCE: Q.764 § 2.3.1 e) PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ [SP_A=ORI]			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
LAB ! TRANSFER_REQ			3	ACM_BA	
+Check_RINGING_TONE			4		
LAB ! TRANSFER_REQ			5	ANM_BA	
+Check_CONNECTIVITY			6		
UTA ! USER_REQ			7	REL_REQ	
LAB ? TRANSFER_IND			8	REL_AB	
LAB ! TRANSFER_REQ			9	REL_BA	
+Receive_RLC_AND_REL_IND			10		
LAB ! TRANSFER_REQ			11	RLC_BA	
+Check_CIRCUIT_IDLE			12		P
LAB ! TRANSFER_REQ			13	RLC_BA	
+Receive_RLC_AND_REL_IND			14		
+Check_CIRCUIT_IDLE			15		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB40101			
Group	:	ISUPB/UCS/			
Purpose	:	To verify that the call will be immediately released by the outgoing signalling point if a release message with a given cause is received and the correct indication is given to the calling party			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Validate a set of known causes for release REFERENCE: Q.764 § 2.2 PRE-TEST CONDITIONS: Arrange the data in signalling point B such that a release message with a given cause is returned to the request CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
+SETUP_Call_REL_Unalloc_nr			1		
+SETUP_Call_REL_No_circuit			2		
+SETUP_Call_REL_Switch_congestion			3		P
Detailed Comments:					
NOTE:		It may not be possible to confirm that the appropriate tone is returned to the calling party. In this case it must be verified that the signalling point under test transmits the signal received.			

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB50101			
Group	:	ISUPB/ABN/Inabl_to_rel/			
Purpose	:	To verify that if the signalling point is unable to return a circuit to the idle condition in response to a release message, the circuit will be blocked			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Inability to release in response to a REL after ANM REFERENCE: Q.764 § 2.10.8.1 PRE-TEST CONDITIONS: Arrange the data in signalling point A such that it is unable to return the circuit to the idle condition in response to a release message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ [SP_A=TER]			1	IAM_BA	
+Receive_ACM_and_SETUP_IND			2		
+Check_RINGING_TONE			3		
UTA ! USER_REQ			4	SETUP_RESP_any	
LAB ? TRANSFER_IND			5	ANM_AB	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	REL_BA	
LAB ? TRANSFER_IND			8	BLO_AB	
UTA ? MAINT_IND			9	ALARM_MaintSystem	
LAB ! TRANSFER_REQ			10	BLA_BA	
+Receive_RLC_and_REL_IND			11		P
UTA ! USER_REQ [SP_A=ORI]			12	SETUP_REQ_any	
LAB ? TRANSFER_IND			13	IAM_AB	
LAB ! TRANSFER_REQ			14	ACM_BA	
+Check_RINGING_TONE			15		
LAB ! TRANSFER_REQ			16	ANM_BA	
+Check_CONNECTIVITY			17		
UTA ! USER_REQ			18	REL_REQ	
LAB ? TRANSFER_IND			19	REL_AB	
LAB ! TRANSFER_REQ			20	BLO_BA	
UTA ? MAINT_IND			21	ALARM_MaintSystem	
LAB ? TRANSFER_IND			22	BLA_AB	
LAB ! TRANSFER_REQ			23	RLC_BA	P
Detailed Comments:					

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50201
Group	:	ISUPB/ABN/Timers/
Purpose	:	To check that at the expiration of T7 the circuit will be released
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T7 waiting for ACM or CON REFERENCE: Q.764 § 2.10.8.3 PRE-TEST CONDITIONS: Arrange the data in signalling point B such that an address complete message is not returned to the call request CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND		IAM_AB		
# START T7min, START T7max	2			
?TIMEOUT T7min	3			
LAB ? TRANSFER_IND CANCEL T7max	4	REL_AB		
UTA ? USER_IND	5	REL_IND		
LAB ! TRANSFER_REQ	6	RLC_BA		
+Check_CIRCUIT_IDLE	7		P	
UTA ? USER_IND CANCEL T7max	8	REL_IND		
LAB ? TRANSFER_IND	9	REL_AB		
LAB ! TRANSFER_REQ	10	RLC_BA		
+Check_CIRCUIT_IDLE	11		P	
?TIMEOUT T7max	12			
LAB ! TRANSFER_REQ	13	REL_BA		
+Receive_RLC_and_REL_IND	14		F	
LAB ? TRANSFER_IND		REL_AB		
# CANCEL T7min, CANCEL T7max	15			
UTA ? USER_IND	16	REL_IND		
LAB ! TRANSFER_REQ	17	RLC_BA	F	
UTA ? USER_IND		REL_IND		
# CANCEL T7min, CANCEL T7max	18			
LAB ? TRANSFER_IND	19	REL_AB		
LAB ! TRANSFER_REQ	20	RLC_BA	F	

Detailed Comments:

Test Case Dynamic Behaviour

Test Case Name : ISUPB50202
Group : ISUPB/ABN/Timers/
Purpose : To verify that if an answer message is not received within T9 after receiving an address complete message the connection is released by the outgoing signalling point
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: T9 waiting for an answer message
REFERENCE: Q.764 § 2.10.8.3 a)
PRE-TEST CONDITIONS: The called party should not answer the call
CONFIGURATION: 1
TYPE OF TEST: VAT and CPT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ		ACM_BA		
# START T9min, START T9max	3			NOTE
?TIMEOUT T9min	4			
LAB ? TRANSFER_IND CANCEL T9max	5	REL_AB		
UTA ? USER_IND	6	REL_IND		
LAB ! TRANSFER_REQ	7	RLC_BA		
+Check_CIRCUIT_IDLE	8		P	
UTA ? USER_IND CANCEL T9max	9	REL_IND		
LAB ? TRANSFER_IND	10	REL_AB		
LAB ! TRANSFER_REQ	11	RLC_BA		
+Check_CIRCUIT_IDLE	12		P	
?TIMEOUT T9max	13			
LAB ! TRANSFER_REQ	14	REL_BA		
+Receive_RLC_and_REL_IND	15		F	
LAB ? TRANSFER_IND		REL_AB		
# CANCEL T9min, CANCEL T9max	16			
UTA ? USER_IND	17	REL_IND		
LAB ! TRANSFER_REQ	18	RLC_BA	F	
UTA ? USER_IND		REL_IND		
# CANCEL T9min, CANCEL T9max	19			
LAB ? TRANSFER_IND	20	REL_AB		
LAB ! TRANSFER_REQ	21	RLC_BA	F	

Detailed Comments:

NOTE: The timer needs only be run at the outgoing international exchange or national controlling exchange.

Test Case Dynamic Behaviour

Test Case Name : ISUPB50203
Group : ISUPB/ABN/Timers/
Purpose : To verify that appropriate actions take place at the expiration of timers T1 and T5
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: T1 and T5 failure to receive a RLC
REFERENCE: Q.764 §§ 2.2 and 2.10.6
PRE-TEST CONDITIONS: Arrange the data in signalling point B such that a release complete message is not returned in response to a release message
CONFIGURATION: 1
TYPE OF TEST: VAT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ	1	IAM_BA		
+Receive_ACM_and_SETUP_IND	2			
+Check_RINGING_TONE	3			
UTA ! USER_REQ	4	SETUP_RESP_any		
LAB ? TRANSFER_IND	5	ANM_AB		
+Check_CONNECTIVITY	6			
UTA ! USER_REQ	7	REL_REQ		
LAB ? TRANSFER_IND	8	REL_AB		
START T1min, START T1max,				
# START T5min, START T5max	9			
(RSC_Received := FALSE)	10			
(Ready_To_Receive_RSC := FALSE)	11			
(Ready_To_Receive_REL := FALSE)	12			
REPEAT Receive_REL_messages				NOTE
# UNTIL [RSC_Received]	13			
UTA ? MAINT_IND	14	ALARM_MaintSystem		
LAB ! TRANSFER_REQ	15	RLC_BA	P	

Detailed Comments:
NOTE: T1 is repeated and REL is retransmitted during T5 interval

Test Case Dynamic Behaviour

Test Case Name : ISUPB50204
Group : ISUPB/ABN/Timers/
Purpose : To verify that the call is released at the expiration of timer T6
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: T6 waiting for RES Network message
REFERENCE: Q.764 §§ 2.5.1.3, 2.5.2.3 and 2.5.3
PRE-TEST CONDITIONS: Arrange the data in signalling point B such that it is unable to return a resume message (called party will not reanswer)
CONFIGURATION: 1
TYPE OF TEST: VAT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	ACM_BA		
+Check_RINGING_TONE	4			
LAB ! TRANSFER_REQ	5	ANM_BA		
+Check_CONNECTIVITY	6			
LAB ! TRANSFER_REQ		SUS_netw_BA		
# START T6min, START T6max	7			NOTE
UTA ? USER_IND	8	SUSPEND_IND		
?TIMEOUT T6min	9			
LAB ? TRANSFER_IND CANCEL T6max	10	REL_AB		
UTA ? USER_IND	11	REL_IND		
LAB ! TRANSFER_REQ	12	RLC_BA		
+Check_CIRCUIT_IDLE	13		P	
UTA ? USER_IND CANCEL T6max	14	REL_IND		
LAB ? TRANSFER_IND	15	REL_AB		
LAB ! TRANSFER_REQ	16	RLC_BA		
+Check_CIRCUIT_IDLE	17		P	
?TIMEOUT T6max	18			
LAB ! TRANSFER_REQ	19	REL_BA		
+Receive_RLC_and_REL_IND	20		F	
LAB ? TRANSFER_IND		REL_AB		
# CANCEL T6min, CANCEL T6max	21			
UTA ? USER_IND	22	REL_IND		
LAB ! TRANSFER_REQ	23	RLC_BA	F	
UTA ? USER_IND		REL_IND		
# CANCEL T6min, CANCEL T6max	24			
LAB ? TRANSFER_IND	25	REL_AB		
LAB ! TRANSFER_REQ	26	RLC_BA	F	

Detailed Comments:
NOTE: T6 timer needs only to be run at the international or national controlling exchange.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50205
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that when the IAM indicates that the continuity check is required or is performed on the previous circuit and the COT message is not received within T8, the connection is released by the incoming signalling point
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T8 waiting for COT message if applicable REFERENCE: Q.764 § 2.10.8.3 PRE-TEST CONDITIONS: Arrange the data in signalling point B such that: (a) the signalling information in the IAM indicates that a continuity check has been performed on a previous circuit or continuity check is required on this circuit (b) it does not send a continuity message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ		IAM_contcheckreq_BA		
# START T8min, START T8max	1			
?TIMEOUT T8min	2			
LAB ? TRANSFER_IND CANCEL T8max	3	REL_AB		
LAB ! TRANSFER_REQ	4	RLC_BA		
+Check_CIRCUIT_IDLE	5		P	
?TIMEOUT T8max	6			
LAB ! TRANSFER_REQ	7	REL_BA		
LAB ? TRANSFER_IND	8	RLC_AB	F	
LAB ? TRANSFER_IND		REL_AB		
# CANCEL T8min, CANCEL T8max	9			
LAB ! TRANSFER_REQ	10	RLC_BA	F	

Detailed Comments:

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50206
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that appropriate actions take place at the expiration of timers T12 and T13
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T12 and T13 failure to receive a BLA REFERENCE: Q.764 § 2.10.4 PRE-TEST CONDITIONS: (a) Circuit is idle (b) Arrange the data in signalling point B such that a blocking acknowledge message is not returned in response to a blocking message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! MML_REQ	1	BLOCK_CIRCUIT		
LAB ? TRANSFER_IND START T12min,		BLO_AB		
#START T12max, START T13min, START T13max	2			
?TIMEOUT T12min	3			
LAB ? TRANSFER_IND CANCEL T12max	4	BLO_AB		
?TIMEOUT T13min	5			
+Receive_BLO_and_MaintSystem_and_T13	6			NOTE
?TIMEOUT T13min	7			
LAB ? TRANSFER_IND CANCEL T13max	8	BLO_AB	P	
?TIMEOUT T13max	9		F	
LAB ? TRANSFER_IND	10	BLO_AB	F	
# CANCEL T13min, CANCEL T13max				
?TIMEOUT T13max	11		F	
LAB ? TRANSFER_IND		BLO_AB		
# CANCEL T13min, CANCEL T13max	12		F	
?TIMEOUT T12max				
# CANCEL T13min, CANCEL T13max	13		F	
LAB ? TRANSFER_IND CANCEL T12min,		BLO_AB		
# CANCEL T12max, CANCEL T13min,				
# CANCEL T13max	14		F	

Detailed Comments:

NOTE: T12 is repeated and BLO is retransmitted during the first T13 interval.

Test Case Dynamic Behaviour

Test Case Name : ISUPB50207
Group : ISUPB/ABN/Timers/
Purpose : To verify that appropriate actions take place at the expiration of timers T14 and T15
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: T14 and T15 failure to receive a UBA
REFERENCE: Q.764 § 2.10.4
PRE-TEST CONDITIONS:
(a) Circuit is idle
(b) Arrange the data in signalling point B such that an unblocking acknowledge message is not returned in response to an unblocking message
CONFIGURATION: 1
TYPE OF TEST: VAT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
+BlockLocal_CIRCUIT	1			
UTA ! MML_REQ	2	UNBLOCK_CIRCUIT		
LAB ? TRANSFER_IND START T14min,		UBL_AB		
#START T14max, START T15min, START T15max	3			
?TIMEOUT T14min	4			
LAB ? TRANSFER_IND CANCEL T14max	5	UBL_AB		
?TIMEOUT T15min	6			
+Receive_UBL_and_MaintSystem_and_T15	7			NOTE
?TIMEOUT T15min	8			
LAB ? TRANSFER_IND CANCEL T15max	9	UBL_AB	P	
?TIMEOUT T15max	10		F	
LAB ? TRANSFER_IND		UBL_AB		
# CANCEL T15min, CANCEL T15max	11		F	
?TIMEOUT T15max	12		F	
LAB ? TRANSFER_IND		UBL_AB		
# CANCEL T15min, CANCEL T15max	13		F	
?TIMEOUT T14max				
# CANCEL T15min, CANCEL T15max	14		F	
LAB ? TRANSFER_IND CANCEL T14min,		UBL_AB		
# CANCEL T14max, CANCEL T15min,				
# CANCEL T15max	15		F	

Detailed Comments:
NOTE: T14 is repeated and UBL is retransmitted during the first T15 interval.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50208
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that appropriate actions take place at the expiration of timers T16 and T17
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T16 and T17 failure to receive a RLC REFERENCE: Q.764 § 2.10.3.1 PRE-TEST CONDITIONS: (a) Circuit is idle (b) Arrange the data in signalling point B such that a release complete message is not returned in response to a reset circuit message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! MML_REQ	1	RESET_CIRCUIT		
LAB ? TRANSFER_IND START T16min,		RSC_AB		
#START T16max, START T17min, START T17max	2			
?TIMEOUT T16min	3			
LAB ? TRANSFER_IND CANCEL T16max	4	RSC_AB		
?TIMEOUT T17min	5			
+Receive_RSC_and_MaintSystem_and_T17	6			NOTE
?TIMEOUT T17min	7			
LAB ? TRANSFER_IND CANCEL T17max	8	RSC_AB	P	
?TIMEOUT T17max	9		F	
LAB ? TRANSFER_IND		RSC_AB		
# CANCEL T17min, CANCEL T17max	10		F	
?TIMEOUT T17max	11		F	
LAB ? TRANSFER_IND		RSC_AB		
# CANCEL T17min, CANCEL T17max	12		F	
?TIMEOUT T16max				
# CANCEL T17min, CANCEL T17max	13		F	
LAB ? TRANSFER_IND CANCEL T16min,		RSC_AB		
# CANCEL T16max, CANCEL T17min,				
# CANCEL T17max	14		F	

Detailed Comments:

NOTE: T16 is repeated and RSC is retransmitted during the first T17 interval.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50209
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that appropriate actions take place at the expiration of timers T18 and T19
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T18 and T19 failure to receive a CGBA REFERENCE: Q.764 § 2.10.4 PRE-TEST CONDITIONS: (a) Circuit is idle (b) Arrange the data in signalling point B such that a circuit group blocking acknowledge message is not returned in response to a circuit group blocking message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! MML_REQ	1	GROUPBLOCK_MAINT		
LAB ? TRANSFER_IND START T18min,		CGB_maint_AB		
#START T18max, START T19min, START T19max	2			
?TIMEOUT T18min	3			
LAB ? TRANSFER_IND CANCEL T18max	4	CGB_maint_AB		
?TIMEOUT T19min	5			
+Receive_CGB_and_MaintSystem_and_T19	6			NOTE
?TIMEOUT T19min	7			
LAB ? TRANSFER_IND CANCEL T19max	8	CGB_maint_AB	P	
?TIMEOUT T19max	9		F	
LAB ? TRANSFER_IND		CGB_maint_AB		
# CANCEL T19min, CANCEL T19max	10		F	
?TIMEOUT T19max	11		F	
LAB ? TRANSFER_IND		CGB_maint_AB		
# CANCEL T19min, CANCEL T19max	12		F	
?TIMEOUT T18max				
# CANCEL T19min, CANCEL T19max	13		F	
LAB ? TRANSFER_IND CANCEL T18min,		CGB_maint_AB		
# CANCEL T18max, CANCEL T19min,				
# CANCEL T19max	14		F	

Detailed Comments:

NOTE: T18 is repeated and CGB is retransmitted during the first T19 interval.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50210
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that appropriate actions take place at the expiration of timers T20 and T21
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T20 and T21 failure to receive a CGUA REFERENCE: Q.764 § 2.10.4 PRE-TEST CONDITIONS: (a) Circuit is idle (b) Arrange the data in signalling point B such that a circuit group unblocking acknowledge message is not returned in response to a circuit group unblocking message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
+BlockLocal_CIRCUIT_GROUP	1			
UTA ! MML_REQ	2	GROUPUNBLOCK_MAINT		
LAB ? TRANSFER_IND START T20min,		CGU_maint_AB		
#START T20max, START T21min, START T21max	3			
?TIMEOUT T20min	4			
LAB ? TRANSFER_IND CANCEL T20max	5	CGU_maint_AB		
?TIMEOUT T21min	6			
+Receive_CGU_and_MaintSystem_and_T21	7			NOTE
?TIMEOUT T21min	8			
LAB ? TRANSFER_IND CANCEL T21max	9	CGU_maint_AB	P	
?TIMEOUT T21max	10		F	
LAB ? TRANSFER_IND		CGU_maint_AB		
# CANCEL T21min, CANCEL T21max	11		F	
?TIMEOUT T21max	12		F	
LAB ? TRANSFER_IND		CGU_maint_AB		
# CANCEL T21min, CANCEL T21max	13		F	
?TIMEOUT T20max				
# CANCEL T21min, CANCEL T21max	14		F	
LAB ? TRANSFER_IND CANCEL T20min,		CGU_maint_AB		
# CANCEL T20max, CANCEL T21min,				
# CANCEL T21max	15		F	

Detailed Comments:

NOTE: T20 is repeated and CGU is retransmitted during the first T21 interval.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB50211
Group	:	ISUPB/ABN/Timers/
Purpose	:	To verify that appropriate actions take place at the expiration of timers T22 and T23
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: T22 and T23 failure to receive a GRA REFERENCE: Q.764 § 2.10.4 PRE-TEST CONDITIONS: (a) Circuit is idle (b) Arrange the data in signalling point B such that a circuit group reset acknowledge message is not returned in response to a circuit group reset message CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! MML_REQ	1	GROUPRESET		
LAB ? TRANSFER_IND START T22min,		GRS_AB		
#START T22max, START T23min, START T23max	2			
?TIMEOUT T22min	3			
LAB ? TRANSFER_IND CANCEL T22max	4	GRS_AB		
?TIMEOUT T23min	5			
+Receive_GRS_and_MaintSystem_and_T23	6			NOTE
?TIMEOUT T23min	7			
LAB ? TRANSFER_IND CANCEL T23max	8	GRS_AB	P	
?TIMEOUT T23max	9		F	
LAB ? TRANSFER_IND		GRS_AB		
# CANCEL T23min, CANCEL T23max	10		F	
?TIMEOUT T23max	11		F	
LAB ? TRANSFER_IND		GRS_AB		
# CANCEL T23min, CANCEL T23max	12		F	
?TIMEOUT T22max CANCEL T23min,				
# CANCEL T23max	13		F	
LAB ? TRANSFER_IND CANCEL T22min,		GRS_AB		
# CANCEL T22max, CANCEL T23min,				
# CANCEL T23max	14		F	

Detailed Comments:

NOTE: T22 is repeated and GRS is retransmitted during the first T23 interval.

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB50301			
Group	:	ISUPB/ABN/Reset/			
Purpose	:	To verify that on receipt of a reset message the call is immediately released outgoing call			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Of an outgoing circuit REFERENCE: Q.764 § 2.10.3.1 a) PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
LAB ! TRANSFER_REQ			3	ACM_BA	
+Check_RINGING_TONE			4		
LAB ! TRANSFER_REQ			5	ANM_BA	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	RSC_BA	
+Receive_RLC_and_REL_IND			8		
+Check_CIRCUIT_IDLE			9		P
Detailed Comments:					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB50302			
Group	:	ISUPB/ABN/Reset/			
Purpose	:	To verify that on receipt of a reset message the call is immediately released incoming call			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Of an incoming circuit REFERENCE: Q.764 § 2.10.3.1 a) PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_BA	
+Receive_ACM_and_SETUP_IND			2		
+Check_RINGING_TONE			3		
UTA ! USER_REQ			4	SETUP_RESP_any	
LAB ? TRANSFER_IND			5	ANM_AB	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	RSC_BA	
+Receive_RLC_and_REL_IND			8		
+Check_CIRCUIT_IDLE			9		P
Detailed Comments:					

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60101
Group	:	ISUPB/SPCS/Cont_check_call/
Purpose	:	To verify that a call can be setup on a circuit requiring a continuity check
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Continuity check required REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: Arrange the data in signalling point A such that a continuity check is required on this circuit CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_contcheckreq_AB		
CAB ! CONTCHECKLOOP_REQ	3	CONNECT_CONTCHECKLOOP_B		
LAB ? TRANSFER_IND	4	COT_successful_AB		
CAB ! CONTCHECKLOOP_REQ	5	DISCONNECT_CONTCHECKLOOP_B		
LAB ! TRANSFER_REQ	6	ACM_BA		
+Check_RINGING_TONE	7			
LAB ! TRANSFER_REQ	8	ANM_BA		
+Check_CONNECTIVITY	9			
UTA ! USER_REQ	10	REL_REQ		
LAB ? TRANSFER_IND	11	REL_AB		
LAB ! TRANSFER_REQ	12	RLC_BA		
+Check_CIRCUIT_IDLE	13		P	
LAB ! TRANSFER_REQ [SP_A=TER]	14	IAM_contcheckreq_BA		
UTA ? USER_IND	15	SETUP_IND_any		
CAB ! CONTCHECK_REQ	16	CONTCHECK_tone_BA		
CAB ? CONTCHECK_IND	17	CONTCHECK_tone_AB		
LAB ! TRANSFER_REQ	18	COT_successful_BA		
LAB ? TRANSFER_IND	19	ACM_AB		
+Check_RINGING_TONE	20			
UTA ! USER_REQ	21	SETUP_RESP_any		
LAB ? TRANSFER_IND	22	ANM_AB		
+Check_CONNECTIVITY	23			
LAB ! TRANSFER_REQ	24	REL_BA		
+Receive_RLC_and_REL_IND	25			
+Check_CIRCUIT_IDLE	26		P	

Detailed Comments:

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60102
Group	:	ISUPB/SPCS/Cont_check_call/
Purpose	:	To verify that if a continuity check is being performed on a previous circuit, a backward message is delayed until receipt of the COT message
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: COT applied on a previous circuit REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: Arrange the data in signalling point B such that the signalling information in the IAM indicates that a continuity check has been performed on a previous circuit CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ START Tcot_delay	1	IAM_contcheckprevious_BA		
UTA ? USER_IND	2	SETUP_IND_any		
?TIMEOUT Tcot_delay	3			
LAB ! TRANSFER_REQ	4	COT_successful_BA		
LAB ? TRANSFER_IND	5	ACM_AB		
+Check_RINGING_TONE	6			
UTA ! USER_REQ	7	SETUP_RESP_any		
LAB ? TRANSFER_IND	8	ANM_AB		
+Check_CONNECTIVITY	9			
LAB ! TRANSFER_REQ	10	REL_BA		
+Receive_RLC_and_REL_IND	11			
+Check_CIRCUIT_IDLE	12		P	
LAB ? TRANSFER_IND CANCEL Tcot_delay	13	ACM_AB		
LAB ! TRANSFER_REQ	14	REL_BA		
+Receive_RLC_and_REL_IND	15		F	

Detailed Comments:

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60103
Group	:	ISUPB/SPCS/Cont_check_call/
Purpose	:	To verify that the calling party can successfully clear the call during the continuity check phase
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Calling party clears during a COT REFERENCE: Q.764 § 2.3 PRE-TEST CONDITIONS: (a) Arrange the data in signalling point A such that a continuity check is applied on this call (b) Calling party will release the call within 2 seconds CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_contcheckreq_AB		
CAB ! CONTCHECKLOOP_REQ	3	CONNECT_CONTCHECKLOOP_B		
UTA ! USER_REQ	4	REL_REQ		
LAB ? TRANSFER_IND	5	REL_AB		
LAB ! TRANSFER_REQ	6	RLC_BA		
CAB ! CONTCHECKLOOP_REQ	7	DISCONNECT_CONTCHECKLOOP_B		
+Check_CIRCUIT_IDLE	8		P	
LAB ! TRANSFER_REQ [SP_A=TER]	9	IAM_contcheckreq_BA		
UTA ? USER_IND	10	SETUP_IND_any		
LAB ! TRANSFER_REQ	11	REL_BA		
+Receive_RLC_and_REL_IND	12			
+Check_CIRCUIT_IDLE	13		P	

Detailed Comments:

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60104
Group	:	ISUPB/SPCS/Cont_check_call/
Purpose	:	To verify that the switching through of the speech path is delayed until the residual check-tone has propagated through the return of the speech path
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Delay of through connect REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: (a) The called termination is free (b) Arrange the data in signalling point A such that a continuity check is applied on this circuit CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_contcheckreq_AB		
CAB ! CONTCHECKLOOP_REQ	3	CONNECT_CONTCHECKLOOP_B		
UTA ? USER_IND	4	NO_contcheck_tone_heard		
LAB ? TRANSFER_IND	5	COT_successful_AB		
CAB ! CONTCHECKLOOP_REQ	6	DISCONNECT_CONTCHECKLOOP_B		
LAB ! TRANSFER_REQ	7	ACM_BA		
+Check_RINGING_TONE	8			
LAB ! TRANSFER_REQ	9	ANM_BA		
+Check_CONNECTIVITY	10			
UTA ! USER_REQ	11	REL_REQ		
LAB ? TRANSFER_IND	12	REL_AB		
LAB ! TRANSFER_REQ	13	RLC_BA		
+Check_CIRCUIT_IDLE	14		P	
LAB ! TRANSFER_REQ [SP_A=TER]	15	IAM_contcheckreq_BA		
UTA ? USER_IND	16	SETUP_IND_any		
CAB ! CONTCHECK_REQ	17	CONTCHECK_tone_BA		
UTA ? USER_IND	18	NO_contcheck_tone_heard		
CAB ? CONTCHECK_IND	19	CONTCHECK_tone_AB		
LAB ! TRANSFER_REQ	20	COT_successful_BA		
LAB ? TRANSFER_IND	21	ACM_AB		
+Check_RINGING_TONE	22			
UTA ! USER_REQ	23	SETUP_RESP_any		
LAB ? TRANSFER_IND	24	ANM_AB		
+Check_CONNECTIVITY	25			
LAB ! TRANSFER_REQ	26	REL_BA		
+Receive_RLC_and_REL_IND	27			
+Check_CIRCUIT_IDLE	28		P	

Detailed Comments:

Test Case Dynamic Behaviour

Test Case Name	:	ISUPB60105
Group	:	ISUPB/SPCS/Cont_check_call/
Purpose	:	To verify that a repeat attempt of the continuity check is made on the failed circuit
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: COT unsuccessful REFERENCE: Q.764 § 2.1.8 PRE-TEST CONDITIONS: (a) Arrange data in signalling point A such that a COT is applied on this circuit (b) Ensure that no backward tone is detected within the specified time out CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND START T24max	2	IAM_contcheckreq_AB		
LAB ? TRANSFER_IND CANCEL T24max,		COT_failed_AB		
# START T25min, START T25max	3			
?TIMEOUT T25min	4			
LAB ? TRANSFER_IND		CCR_AB		
# CANCEL T25max, START T24max	5			
LAB ? TRANSFER_IND CANCEL T24max,		COT_failed_AB		
# START T26min, START T26max	6			
UTA ? MAINT_IND	7	ALARM_MaintSystem		
?TIMEOUT T26min	8			
LAB ? TRANSFER_IND		CCR_AB		
# CANCEL T26max, START T24max	9			
LAB ? TRANSFER_IND CANCEL T24max	10	COT_failed_AB	P	
?TIMEOUT T24max	11		F	
?TIMEOUT T26max	12		F	
LAB ? TRANSFER_IND		CCR_AB		
# CANCEL T26min, CANCEL T26max	13		F	
?TIMEOUT T26max	14		F	
?TIMEOUT T24max	15		F	
?TIMEOUT T25max	16		F	
LAB ? TRANSFER_IND		CCR_AB		
# CANCEL T25min, CANCEL T25max	17		F	
?TIMEOUT T24max	18		F	

Detailed Comments:

NOTE: The call should be re-attempted.

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB60201				
Group	: ISUPB/SPCS/Autom_rep_attempt/				
Purpose	: To verify that an automatic repeat attempt will be made on detection of a dual seizure				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: Dual seizure for non-controlling SP REFERENCE: Q.764 § 2.9.1 i) PRE-TEST CONDITIONS: Arrange the signalling point data such that SP B is the controlling exchange for CIC=x CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ		1	SETUP_REQ_any		
LAB ? TRANSFER_IND		2	IAM_cicx_AB		
LAB ! TRANSFER_REQ		3	IAM_cicx_BA		
+Receive_ACM_cicx_and_SETUP_IND_					
# and_IAM_cicy		4			
+Check_RINGING_TONE		5			NOTE 1
UTA ! USER_REQ		6	SETUP_RESP_any		
LAB ? TRANSFER_IND		7	ANM_cicx_AB		
+Check_CONNECTIVITY		8			NOTE 1
LAB ! TRANSFER_REQ		9	ACM_cicy_BA		
+Check_RINGING_TONE		10			NOTE 2
LAB ! TRANSFER_REQ		11	ANM_cicy_BA		
+Check_CONNECTIVITY		12			NOTE 2
UTA ! USER_REQ		13	REL_REQ		
LAB ? TRANSFER_IND		14	REL_cicy_AB		
LAB ! TRANSFER_REQ		15	RLC_cicy_BA		
+Check_CIRCUIT_IDLE		16			NOTE 2
LAB ! TRANSFER_REQ		17	REL_cicx_BA		
+Receive_RLC_cicx_and_REL_IND		18			
+Check_CIRCUIT_IDLE		19		P	NOTE 1
Detailed Comments:					
NOTE 1: This check applies to the circuit cicx.					
NOTE 2: This check applies to the circuit cicy.					
NOTE 3: The message sequence may not be as shown above.					

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB60202			
Group	:	ISUPB/SPCS/Autom_rep_attempt/			
Purpose	:	To verify that an automatic repeat attempt will be made on receipt of the blocking message after sending an initial address message and before any backward messages have been received			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: Blocking of a circuit REFERENCE: Q.764 § 2.9.1 ii) PRE-TEST CONDITIONS: Arrange the data in the signalling point B such that a blocking message is returned in response to the initial address message of the first call request CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_cicx_AB	
LAB ! TRANSFER_REQ			3	BLO_cicx_BA	
+Receive_BLA_cicx_and_REL_cicx_					
# and_IAM_cicy_and_send_RLC			4		
LAB ! TRANSFER_REQ			5	ACM_cicy_BA	
+Check_RINGING_TONE			6		NOTE 1
LAB ! TRANSFER_REQ			7	ANM_cicy_BA	
+Check_CONNECTIVITY			8		NOTE 1
UTA ! USER_REQ			9	REL_REQ	
LAB ? TRANSFER_IND			10	REL_cicy_AB	
LAB ! TRANSFER_REQ			11	RLC_cicy_BA	
+Check_CIRCUIT_IDLE			12		P NOTE 1
Detailed Comments:					
NOTE 1: This check applies to the circuit cicy.					
NOTE 2: The message sequence may not be as shown above.					

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60203
Group	:	ISUPB/SPCS/Autom_rep_attempt/
Purpose	:	To verify that an automatic repeat attempt will be made on receipt of circuit reset after sending an initial address message and before any backward messages have been received
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Circuit reset REFERENCE: Q.764 § 2.9.1 iii) PRE-TEST CONDITIONS: (a) Arrange the data in the signalling point B such that a circuit reset message is returned in response to the initial address message of the first call request (b) The called termination should be free CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_cicx_AB		
LAB ! TRANSFER_REQ	3	RSC_cicx_BA		
+Receive_RLC_cicx_and_IAM_cicy	4			
LAB ! TRANSFER_REQ	5	ACM_cicy_BA		
+Check_RINGING_TONE	6			NOTE 1
LAB ! TRANSFER_REQ	7	ANM_cicy_BA		
+Check_CONNECTIVITY	8			NOTE 1
UTA ! USER_REQ	9	REL_REQ		
LAB ? TRANSFER_IND	10	REL_cicy_AB		
LAB ! TRANSFER_REQ	11	RLC_cicy_BA		
+Check_CIRCUIT_IDLE	12		P	NOTE 2

Detailed Comments:

NOTE 1: This check applies to the circuit cicy.
NOTE 2: This check applies to both circuits cicx and cicy.
NOTE 3: The message sequence may not be as shown above.

Test Case Dynamic Behaviour

Test Case Name : ISUPB60204
Group : ISUPB/SPCS/Autom_rep_attempt/
Purpose : To verify that an automatic repeat attempt will be made on continuity check failure
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: Continuity check failure
REFERENCE: Q.764 § 2.9.1 iv)
PRE-TEST CONDITIONS: Arrange the data in the signalling point B such that check tone is not returned within the specified limits to the first call request
CONFIGURATION: 1
TYPE OF TEST: VAT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_contcheckreq_cicx_AB		
LAB ? TRANSFER_IND	3	COT_failed_cicx_AB		NOTE 1
LAB ? TRANSFER_IND	4	IAM_contcheckreq_cicy_AB		
CAB ! CONTCHECKLOOP_REQ	5	CONNECT_CONTCHECKLOOP_B		
LAB ? TRANSFER_IND	6	COT_successful_cicy_AB		
CAB ! CONTCHECKLOOP_REQ	7	DISCONNECT_CONTCHECKLOOP_B		
LAB ! TRANSFER_REQ	8	ACM_cicy_BA		
+Check_RINGING_TONE	9			NOTE 2
LAB ! TRANSFER_REQ	10	ANM_cicy_BA		
+Check_CONNECTIVITY	11			NOTE 2
UTA ! USER_REQ	12	REL_REQ		
LAB ? TRANSFER_IND	13	REL_cicy_AB		
LAB ! TRANSFER_REQ	14	RLC_cicy_BA		
+Check_CIRCUIT_IDLE	15		P	NOTE 2

Detailed Comments:

NOTE 1: A repeat of the continuity check of the failed circuit will be made within 1 to 10 secs. See CCITT Recommenadtion Q.764 § 2.1.8. See also test case 6.1.5.
NOTE 2: This check applies to the circuit cicy.
NOTE 3: The message sequence may not be as shown above.

Test Case Dynamic Behaviour				
Test Case Name : ISUPB60205				
Group : ISUPB/SPCS/Autom_rep_attempt/				
Purpose : To verify that an automatic repeat attempt will be made on receipt of unreasonable signalling information after sending an initial address message and before any backward messages have been received				
Default : AnyOtherEventUnexpected				
Comments : SUBTITLE: Reception of unreasonable signalling information REFERENCE: Q.764 §§ 2.9.1 v) and 2.10.5.1 d) PRE-TEST CONDITIONS: (a) Arrange the data in the signalling point B such that unreasonable signalling information (see NOTE below) is returned in response to the initial address message of the first call request (b) The called termination should be free CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_cicx_AB		
LAB ! TRANSFER_REQ	3	XXX_cicx_BA		NOTE 1
+Receive_RSC_cicx_and_IAM_cicy	4			
LAB ! TRANSFER_REQ	5	RLC_cicx_BA		
LAB ! TRANSFER_REQ	6	ACM_cicy_BA		
+Check_RINGING_TONE	7			NOTE 2
LAB ! TRANSFER_REQ	8	ANM_cicy_BA		
+Check_CONNECTIVITY	9			NOTE 2
UTA ! USER_REQ	10	REL_REQ		
LAB ? TRANSFER_IND	11	REL_cicy_AB		
LAB ! TRANSFER_REQ	12	RLC_cicy_BA		
+Check_CIRCUIT_IDLE	13		P	NOTE 3
Detailed Comments:				
NOTE 1: This may be any message that if received at this point would be either ambigious or inappropriate. For example, SUS or RES messages.				
NOTE 2: This check applies to the circuit cicy.				
NOTE 3: This check applies to both circuits cicx and cicy.				
NOTE 4: The message sequence may not be as shown above.				

Test Case Dynamic Behaviour

Test Case Name	:	ISUPB60301
Group	:	ISUPB/SPCS/Dual_seiz/
Purpose	:	To verify that on detection of dual seizure, the call initiated by the controlling signalling point is completed and the non-controlling signalling point is backed off
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: Dual seizure for controlling SP REFERENCE: Q.764 § 2.10.1.4 PRE-TEST CONDITIONS: Arrange the signalling point data such that signalling point A is the controlling exchange CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [CONTR_SP = CPA]	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_cicx_AB		
LAB ! TRANSFER_REQ	3	IAM_cicx_BA		NOTE 1
LAB ! TRANSFER_REQ	4	ACM_cicx_BA		
+Check_RINGING_TONE	5			NOTE 2
LAB ! TRANSFER_REQ	6	ANM_cicx_BA		
+Check_CONNECTIVITY	7			NOTE 2
UTA ! USER_REQ	8	REL_REQ		
LAB ? TRANSFER_IND	9	REL_cicx_AB		
LAB ! TRANSFER_REQ	10	RLC_cicx_BA		
+Check_CIRCUIT_IDLE	11		P	NOTE 2
UTA ! USER_REQ [CONTR_SP = CPB]	12	SETUP_REQ_any		
LAB ? TRANSFER_IND	13	IAM_cicx_AB		
LAB ! TRANSFER_REQ	14	IAM_cicx_BA		
+Receive_ACM_cicx_and_SETUP_IND_				
# and_IAM_cicy	15			
+Check_RINGING_TONE	16			NOTE 2
UTA ! USER_REQ	17	SETUP_RESP_any		
LAB ? TRANSFER_IND	18	ANM_cicx_AB		
+Check_CONNECTIVITY	19			NOTE 2
LAB ! TRANSFER_REQ	20	REL_cicx_BA		
+Receive_RLC_cicx_and_REL_IND	21			
+Check_CIRCUIT_IDLE	22		P	NOTE 2

Detailed Comments:

NOTE 1: The call initiated by SP B should be re-attempted, see test number ISUPB60201.

NOTE 2: This check applies to the circuit cicx.

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB60401				
Group	: ISUPB/SPCS/Semi_autom_oper/				
Purpose	: To verify that the FOT is correctly sent				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: FOT sent following a call to a subscriber REFERENCE: Q.764 § 2.1.12 PRE-TEST CONDITIONS: (a) FOT message is generated at signalling point A (b) arrange the data so that a controlling operator is at signalling point A (c) arrange the data so that an assistant operator is at signalling point B CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ		1	SETUP_REQ_any		
LAB ? TRANSFER_IND		2	IAM_AB		
LAB ! TRANSFER_REQ		3	ACM_BA		
LAB ! TRANSFER_REQ		4	ANM_BA		
+Check_CONNECTIVITY		5			NOTE 1
UTA ! USER_REQ		6	FOT_REQ		NOTE 2
LAB ? TRANSFER_IND		7	FOT_AB		
+Check_CONNECTIVITY		8			NOTE 3
UTA ! USER_REQ		9	REL_REQ		
LAB ? TRANSFER_IND		10	REL_AB		
LAB ! TRANSFER_REQ		11	RLC_BA	P	
Detailed Comments:					
NOTE 1:	Checks connectivity between operator and subscriber.				
NOTE 2:	The support of the FOT message at the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).				
NOTE 3:	Checks connectivity between the operators.				

Test Case Dynamic Behaviour					
Test Case Name	:	ISUPB60402			
Group	:	ISUPB/SPCS/Semi_autom_oper/			
Purpose	:	To verify that the FOT is correctly received			
Default	:	AnyOtherEventUnexpected			
Comments	:	SUBTITLE: FOT received following a call to a subscriber REFERENCE: Q.764 § 2.1.12 PRE-TEST CONDITIONS: (a) FOT message is generated at signalling point B (b) arrange the data so that a controlling operator is at signalling point B (c) arrange the data so that an assistant operator is at signalling point A CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP			
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_BA	
+Receive_ACM_and_SETUP_IND			2		
UTA ! USER_REQ			3	SETUP_RESP_any	
LAB ? TRANSFER_IND			4	ANM_AB	
+Check_CONNECTIVITY			5		NOTE 1
LAB ! TRANSFER_REQ			6	FOT_BA	NOTE 2
UTA ? USER_IND			7	FOT_IND	
+Check_CONNECTIVITY			8		NOTE 3
LAB ! TRANSFER_REQ			9	REL_BA	
+Receive_RLC_and_REL_IND			10		P
Detailed Comments:					
NOTE 1:	Checks connectivity between operator and subscriber.				
NOTE 2:	The support of the FOT message at the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).				
NOTE 3:	Checks connectivity between the operators.				

Test Case Dynamic Behaviour					
Test Case Name	: ISUPB60403				
Group	: ISUPB/SPCS/Semi_autom_oper/				
Purpose	: To verify that a FOT is correctly sent				
Default	: AnyOtherEventUnexpected				
Comments	: SUBTITLE: FOT sent following a call via codes 11 and 12 REFERENCE: Q.764 § 2.1.12 PRE-TEST CONDITIONS: (a) FOT message is generated at signalling point A (b) arrange the data so that a controlling operator is at signalling point A (c) arrange the data so that an incoming operator is at signalling point B CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ		1	SETUP_REQ_any		
LAB ? TRANSFER_IND		2	IAM_AB		
LAB ! TRANSFER_REQ		3	ACM_BA		
LAB ! TRANSFER_REQ		4	ANM_BA		
+Check_CONNECTIVITY		5			NOTE 1
+Check_CONNECTIVITY		6			NOTE 2
UTA ! USER_REQ		7	FOT_REQ		NOTE 3
LAB ? TRANSFER_IND		8	FOT_AB		
+Check_CONNECTIVITY		9			NOTE 4
UTA ! USER_REQ		10	REL_REQ		
LAB ? TRANSFER_IND		11	REL_AB		
LAB ! TRANSFER_REQ		12	RLC_BA	P	

Detailed Comments:

NOTE 1: Checks connectivity between the operators.

NOTE 2: Checks connectivity between operator and subscriber.

NOTE 3: The support of the FOT message at the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).

NOTE 4: Checks connectivity between the operators.

Test Case Dynamic Behaviour		
Test Case Name	:	ISUPB60404
Group	:	ISUPB/SPCS/Semi_autom_oper/
Purpose	:	To verify that the FOT is correctly received
Default	:	AnyOtherEventUnexpected
Comments	:	SUBTITLE: FOT received following a call via codes 11 and 12 REFERENCE: Q.764 § 2.1.12 PRE-TEST CONDITIONS: (a) FOT message is generated at signalling point B (b) arrange the data so that a controlling operator is at signalling point B (c) arrange the data so that an incoming operator is at signalling point A CONFIGURATION: 1 TYPE OF TEST: VAT TYPE OF SP: SP

Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ	1	IAM_BA		
+Receive_ACM_and_SETUP_IND	2			
UTA ! USER_REQ	3	SETUP_RESP_any		
LAB ? TRANSFER_IND	4	ANM_AB		
+Check_CONNECTIVITY	5			NOTE 1
+Check_CONNECTIVITY	6			NOTE 2
LAB ! TRANSFER_REQ	7	FOT_BA		NOTE 3
UTA ? USER_IND	8	FOT_IND		
+Check_CONNECTIVITY	9			NOTE 4
LAB ! TRANSFER_REQ	10	REL_BA		
+Receive_RLC_and_REL_IND	11		P	

Detailed Comments:

NOTE 1: Checks connectivity between the operators.

NOTE 2: Checks connectivity between operator and subscriber.

NOTE 3: The support of the FOT message at the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).

NOTE 4: Checks connectivity between the operators.

Test Case Dynamic Behaviour

Test Case Name : ISUPB70101
Group : ISUPB/BSERV/64kbps_unres/
Purpose : To verify that a 64 kbit/s call can be successfully completed using appropriate Transmission Medium Requirement and User Service Information parameters
Default : AnyOtherEventUnexpected
Comments : SUBTITLE: Successful call setup
REFERENCE: Q.764 § 2.1
PRE-TEST CONDITIONS: Called termination is free
CONFIGURATION: 1
TYPE OF TEST: VAT and CPT
TYPE OF SP: SP

Behaviour Description	L	Cref	V	C
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_64kbps_unrestr		
LAB ? TRANSFER_IND	2	IAM_64kbps_unrestr_AB		NOTE 1
LAB ! TRANSFER_REQ	3	ACM_BA		
LAB ! TRANSFER_REQ	4	ANM_BA		
+Check_DATA	5			
UTA ! USER_REQ	6	REL_REQ		
LAB ? TRANSFER_IND	7	REL_AB		
LAB ! TRANSFER_REQ	8	RLC_BA		
+Check_CIRCUIT_IDLE	9		P	
LAB ! TRANSFER_REQ [SP_A=TER]	10	IAM_64kbps_unrestr_BA		
+Receive_ACM_and_SETUP_IND	11			
UTA ! USER_REQ	12	SETUP_RESP_any		
LAB ? TRANSFER_IND	13	ANM_AB		
+Check_DATA	14			
LAB ! TRANSFER_REQ	15	REL_BA		
+Receive_RLC_and_REL_IND	16			
+Check_CIRCUIT_IDLE	17		P	

Detailed Comments:

NOTE 1: Does the USI, if included, has appropriate information? For example, USI has two octets for 64 kbit/sec and at least four octets for any subrate. To check the contents of USI parameter is optional.
Is the "Echo Control Device Indicator" in Nature of Connection Indicators parameters set to "not included"?
Is the echo control device disabled or is a non-echo controlled circuit selected?

NOTE 2: Repeat this test for any subrate calls.

Test Case Dynamic Behaviour				
Test Case Name	:	ISUPB70102		
Group	:	ISUPB/BSERV/64kbps_unres/		
Purpose	:	To verify that the call will be immediately released by the outgoing signalling point if a release message with a given cause is received and, for circuits equipped with echo control, the echo control device is enabled		
Default	:	AnyOtherEventUnexpected		
Comments	:	SUBTITLE: Unsuccessful call setup REFERENCE: Q.764 § 2.2 PRE-TEST CONDITIONS: Arrange the data in signalling point B such that a release message with a given cause is returned to the request CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP		
Behaviour Description		**L**	**Cref**	**V** **C**
+SETUP_Call_REL_Unalloc_nr_64kbps_unrestr		1		
+SETUP_Call_REL_No_circuit_64kbps_unrestr		2		
+SETUP_Call_REL_Bearer_cap_not_				
# authorized_64kbp_unrestr		3		
+SETUP_Call_REL_Bearer_cap_not_				
# available_64kbp_unrestr		4		
+SETUP_Call_REL_Bearer_cap_not_				
# implemented_64kbp_unrestr		5		P
Detailed Comments:				

Test Case Dynamic Behaviour				
Test Case Name : ISUPB70103				
Group : ISUPB/BSERV/64kbs_unrestricted/				
Purpose : To verify that an automatic attempt will be made on detection of a dual seizure				
Default : AnyOtherEventUnexpected				
Comments : SUBTITLE: Dual seizure REFERENCE: Q.764 § 2.9.1 i) PRE-TEST CONDITIONS: Arrange the signalling point data such that SP B is the controlling exchange for CIC=x CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_64kbps_unrestr		
LAB ? TRANSFER_IND	2	IAM_cicx_64kbps_unrestr_AB		
LAB ! TRANSFER_REQ	3	IAM_cicx_64kbps_unrestr_BA		
+Receive_ACM_cicx_and_SETUP_IND_and_				
# IAM_cicy_64kbps_unrestr	4			
UTA ? MAINT_IND	5	ECD_DISABLED_cicx		NOTE 3
UTA ! USER_REQ	6	SETUP_RESP_any		
LAB ? TRANSFER_IND	7	ANM_cicx_AB		
+Check_DATA	8			NOTE 1
UTA ? MAINT_IND	9	ECD_DISABLED_cicy		NOTE 3
LAB ! TRANSFER_REQ	10	ACM_cicy_BA		
LAB ! TRANSFER_REQ	11	ANM_cicy_BA		
+Check_DATA	12			NOTE 2
UTA ! USER_REQ	13	REL_REQ		
LAB ? TRANSFER_IND	14	REL_cicy_AB		
LAB ! TRANSFER_REQ	15	RLC_cicy_BA		
+Check_CIRCUIT_IDLE	16			NOTE 2
LAB ! TRANSFER_REQ	17	REL_cicx_BA		
+Receive_RLC_cicx_and_REL_IND	18			
+Check_CIRCUIT_IDLE	19		P	NOTE 1
Detailed Comments:				
NOTE 1: This check applies to the circuit cicx.				
NOTE 2: This check applies to the circuit cicy.				
NOTE 3: This check applies to the circuits equipped with echo control.				
NOTE 4: The message sequence may not be as shown above.				

Test Case Dynamic Behaviour				
Test Case Name : ISUPB70201				
Group : ISUPB/BSERV/3.1kHz_audio/				
Purpose : To verify that a 3,1 kHz audio call can be successfully completed using appropriate Transmission Medium Requirement and User Service Information parameters				
Default : AnyOtherEventUnexpected				
Comments : SUBTITLE: Successful call setup REFERENCE: Q.764 § 2.1 PRE-TEST CONDITIONS: Called termination is free CONFIGURATION: 1 TYPE OF TEST: VAT and CPT TYPE OF SP: SP				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ [SP_A=ORI]	1	SETUP_REQ_3_1kHz_audio		
LAB ? TRANSFER_IND	2	IAM_3_1kHz_audio_AB		NOTEs 1&2
LAB ! TRANSFER_REQ	3	ACM_BA		
LAB ! TRANSFER_REQ	4	ANM_BA		
+Check_DATA_SPEECH	5			
UTA ! USER_REQ	6	REL_REQ		
LAB ? TRANSFER_IND	7	REL_AB		
LAB ! TRANSFER_REQ	8	RLC_BA		
+Check_CIRCUIT_IDLE	9		P	
LAB ! TRANSFER_REQ [SP_A=TER]	10	IAM_3_1kHz_audio_BA		NOTEs 1&2
+Receive_ACM_and_SETUP_IND	11			
UTA ! USER_REQ	12	SETUP_RESP_any		
LAB ? TRANSFER_IND	13	ANM_AB		
+Check_DATA_SPEECH	14			
LAB ! TRANSFER_REQ	15	REL_BA		
+Receive_RLC_and_REL_IND	16			
+Check_CIRCUIT_IDLE	17		P	
Detailed Comments:				
NOTE 1: Is the TMR set to "3,1 kHz audio"?				
NOTE 2: Does the USI, if included, has appropriate information? For example, USI has two or three octets for 3,1 kHz audio. To check the contents of the USI parameter is optional.				

A.9.2 Test step dynamic behaviour

Test Step Dynamic Behaviour					
Test Step Name	: GRS_RANGE_VALID				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that on receipt of one GRS SP A respond by sending a GRA				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	GRS_BA		NOTE 1
LAB ? TRANSFER_IND		2	GRA_AB		NOTE 2
Detailed Comments:					
NOTE 1: Range is 1 to 31.					
NOTE 2: Are the status bits in GRA set correctly?					

Test Step Dynamic Behaviour					
Test Step Name	: GRS_RANGE_INVALID				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that exchange discards GRS with invalid range				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ START TNOAC		1	GRS_RANGE_INVALID_BA		NOTE
?TIMEOUT TNOAC		2			
LAB ?OTHERWISE CANCEL TNOAC		3		F	
Detailed Comments:					
NOTE: Range 0 and 32 to 255.					

Test Step Dynamic Behaviour					
Test Step Name	: BlockLocal_CIRCUIT_GROUP_MAINT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To get circuit group blocked for SP A				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! MML_REQ		1	GROUPBLOCK_MAINT		
LAB ? TRANSFER_IND		2	CGB_maint_AB		
LAB ! TRANSFER_REQ		3	CGBA_maint_BA		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	: BlockRemote_CIRCUIT_GROUP_MAINT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that on receipt of one CGB SP A respond by sending a CGBA				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	CGB_maint_BA		NOTE
LAB ? TRANSFER_IND		2	CGBA_maint_AB		
Detailed Comments:					
NOTE: Range is 1 to 31.					

Test Step Dynamic Behaviour					
Test Step Name	: BlockRemote_CIRCUIT_GROUP_HARDW				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that on receipt of one CGB SP A respond by sending a CGBA				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	CGB_hardw_BA		NOTE
LAB ? TRANSFER_IND		2	CGBA_hardw_AB		
Detailed Comments:					
NOTE: Range is 1 to 31					

Test Step Dynamic Behaviour					
Test Step Name	: BlockRemote_CIRCUIT_GROUP_MAINT_RANGE_INVALID				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that exchange discards CGG with invalid range				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ START TNOAC		1	CGB_maint_RANGE_INVALID_BA		NOTE
?TIMEOUT TNOAC		2			
LAB ?OTHERWISE CANCEL TNOAC		3		F	
Detailed Comments:					
NOTE: Range 0 and 32 to 255					

Test Step Dynamic Behaviour					
Test Step Name	: BlockRemote_CIRCUIT_GROUP_HARDW_RANGE_INVALID				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To check that exchange discards CGG with invalid range				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ START TNOAC		1	CGB_hardw_RANGE_INVALID_BA		NOTE
?TIMEOUT TNOAC		2			
LAB ?OTHERWISE CANCEL TNOAC		3		F	
Detailed Comments:					
NOTE: Range 0 and 32 to 255					

Test Step Dynamic Behaviour					
Test Step Name	: UnblockRemote_CIRCUIT_GROUP_MAINT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To unblock circuit group which was blocked remotely				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	CGU_maint_BA		NOTE
LAB ? TRANSFER_IND		2	CGUA_maint_AB		
Detailed Comments:					
NOTE: Range is 1 to 31					

Test Step Dynamic Behaviour					
Test Step Name	: UnblockRemote_CIRCUIT_GROUP_HARDW				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To unblock circuit group which was blocked remotely				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	CGU_hardw_BA		NOTE
LAB ? TRANSFER_IND		2	CGUA_hardw_AB		
Detailed Comments:					
NOTE: Range is 1 to 31					

Test Step Dynamic Behaviour					
Test Step Name	: BlockLocal_CIRCUIT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To get circuit locally blocked for SP A				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! MML_REQ		1	BLOCK_CIRCUIT		
LAB ? TRANSFER_IND		2	BLO_AB		
LAB ! TRANSFER_REQ		3	BLA_BA		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	: UnblockLocal_CIRCUIT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To get circuit locally unblocked for SP A				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! MML_REQ		1	UNBLOCK_CIRCUIT		
LAB ? TRANSFER_IND		2	UBL_AB		
LAB ! TRANSFER_REQ		3	UBA_BA		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	: BlockRemote_CIRCUIT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To get circuit remotely blocked for SP A				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	BLO_BA		
LAB ? TRANSFER_IND		2	BLA_AB		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	: UnblockRemote_CIRCUIT				
Group	: ISUPB/TEST_STEP/Circuit_Supervision/				
Objective	: To get circuit remotely unblocked for SP A				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ		1	UBL_BA		
LAB ? TRANSFER_IND		2	UBA_AB		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	: Check_CIRCUIT_IDLE				
Group	: ISUPB/Circuit_Condition/				
Objective	: To check that circuit is idle				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ! USER_REQ		1	SETUP_REQ_any		
LAB ? TRANSFER_IND		2	IAM_AB		
LAB ! TRANSFER_REQ		3	REL_BA		
+Receive_RLC_and_REL_IND		4			
Detailed Comments:					
NOTE:	This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour					
Test Step Name	: Check_CONNECTIVITY				
Group	: ISUPB/TEST_STEP/Circuit_Condition/				
Objective	: To check that speech is possible				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
CAB ! SPEECH_REQ		1	INFO_any_BA		
CAB ? SPEECH_IND		2	INFO_any_AB		
Detailed Comments:					
NOTE:	This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour					
Test Step Name	: Check_RINGING_TONE				
Group	: ISUPB/TEST_STEP/Circuit_Condition/				
Objective	: To check that ringing tone can be heard				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
UTA ? USER_IND [SP_A=ORI]		1	RINGING_TONE_BA		
CAB ? TONE_IND [SP_A=TER]		2	RINGING_TONE_AB		
Detailed Comments:					
NOTE:	This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour					
Test Step Name	: Check_DATA				
Group	: ISUPB/TEST_STEP/Circuit_Condition/				
Objective	: To check that speech is possible				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
CAB ! DATA_REQ		1	DATA_any_BA		
CAB ? DATA_IND		2	DATA_any_AB		
Detailed Comments:					
NOTE: This check will be implementation dependent. However, this is a possible method.					

Test Step Dynamic Behaviour					
Test Step Name	: Check_DATA_SPEECH				
Group	: ISUPB/TEST_STEP/Circuit_Condition/				
Objective	: To check that speech is possible				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
CAB ! DATA_REQ		1	DATA_any_BA		
CAB ? DATA_IND		2	DATA_any_AB		
CAB ! SPEECH_REQ		3	INFO_any_BA		
CAB ? SPEECH_IND		4	INFO_any_AB		
Detailed Comments:					
NOTE: This check will be implementation dependent. However, this is a possible method.					

Test Step Dynamic Behaviour					
Test Step Name	: Check_ECHO_DEVICES				
Group	: ISUPB/TEST_STEP/Circuit_Condition/				
Objective	: To check that the echo devices operates correctly				
Default	: AnyOtherEventUnexpected				
Comments	:				
Behaviour Description		**L**	**Cref**	**V**	**C**
CAB ! SPEECH_REQ		1	INFO_echo_BA		
CAB ? SPEECH_IND		2	INFO_echo_AB		
Detailed Comments:					
NOTE: This check will be implementation dependent. However, this is a possible method.					

Test Step Dynamic Behaviour					
Test Step Name	:	Check_REMOTE_BLOCKING_CIRCUIT_GROUP			
Group	:	ISUPB/TEST_STEP/Circuit_Condition/			
Objective	:	To verify that a call can only be originated from SP B on the circuits indicated by the range and status field in CGB message			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	NOTE 1
LAB ! TRANSFER_REQ			3	REL_BA	
+Receive_RLC_and_REL_IND			4		
LAB ! TRANSFER_REQ			5	IAM_BA	NOTE 2
+Receive_ACM_and_SETUP_IND			6		
LAB ! TRANSFER_REQ			7	REL_BA	
+Receive_RLC_and_REL_IND			8		
Detailed Comments:					
NOTE 1:	Circuit is not member of the circuit group.				
NOTE 2:	Circuit is member of circuit group.				
NOTE 3:	This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour					
Test Step Name	:	Check_UNBLOCKED_CIRCUIT_GROUP			
Group	:	ISUPB/TEST_STEP/Circuit_Condition/			
Objective	:	To verify that a call can be originated from either SP on the circuits indicated by the range and status field in CGB message			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	NOTE 1
LAB ! TRANSFER_REQ			3	REL_BA	
+Receive_RLC_and_REL_IND			4		
LAB ! TRANSFER_REQ			5	IAM_BA	NOTE 2
+Receive_ACM_and_SETUP_IND			6		
LAB ! TRANSFER_REQ			7	REL_BA	
+Receive_RLC_and_REL_IND			8		
Detailed Comments:					
NOTE 1:	Circuit is member of the circuit group.				
NOTE 2:	Circuit is member of circuit group.				
NOTE 3:	This test step should be repeated for all circuits of the circuit group.				
NOTE 4:	This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour				
Test Step Name : Check_REMOTE_BLOCKING_CIRCUIT				
Group : ISUPB/TEST_STEP/Circuit_Condition/				
Objective : To verify that a call can only be originated from SP B on the circuit				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		NOTE 1
LAB ! TRANSFER_REQ	3	REL_BA		
+Receive_RLC_and_REL_IND	4			
LAB ! TRANSFER_REQ	5	IAM_BA		NOTE 2
+Receive_ACM_and_SETUP_IND	6			
LAB ! TRANSFER_REQ	7	REL_BA		
+Receive_RLC_and_REL_IND	8			
Detailed Comments:				
NOTE 1: Circuit is not the blocked one.				
NOTE 2: Circuit is the blocked one.				
NOTE 3: This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour				
Test Step Name : Check_UNBLOCKED_CIRCUIT				
Group : ISUPB/TEST_STEP/Circuit_Condition/				
Objective : To verify that a call can be originated from either SP on the circuit				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		
LAB ! TRANSFER_REQ	3	REL_BA		
+Receive_RLC_and_REL_IND	4			
LAB ! TRANSFER_REQ	5	IAM_BA		
+Receive_ACM_and_SETUP_IND	6			
LAB ! TRANSFER_REQ	7	REL_BA		
+Receive_RLC_and_REL_IND	8			
Detailed Comments:				
NOTE: This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour				
Test Step Name : Check_LOCAL_BLOCKING_CIRCUIT				
Group : ISUPB/TEST_STEP/Circuit_Condition/				
Objective : To verify that a call can only be originated from SP A on the circuit				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_any		
LAB ? TRANSFER_IND	2	IAM_AB		NOTE 1
LAB ! TRANSFER_REQ	3	REL_BA		
+Receive_RLC_and_REL_IND	4			
LAB ! TRANSFER_REQ	5	IAM_BA		NOTE 2
LAB ? TRANSFER_IND	6	BLO_AB		
LAB ! TRANSFER_REQ	7	BLA_BA		
Detailed Comments:				
NOTE 1: ircuit is the blocked one.				
NOTE 2: Circuit is the blocked one.				
NOTE 3: This check will be implementation dependent. However, this is a possible method.				

Test Step Dynamic Behaviour					
Test Step Name	:	Check_BOTHENDS_BLOCKING_CIRCUIT			
Group	:	ISUPB/TEST_STEP/Circuit_Condition/			
Objective	:	To verify that a call cannot be originated on the circuit by either SP			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	NOTE 1
LAB ! TRANSFER_REQ			3	REL_BA	
+Receive_RLC_and_REL_IND			4		
LAB ! TRANSFER_REQ			5	IAM_BA	
LAB ? TRANSFER_IND			6	BLO_AB	
LAB ! TRANSFER_REQ			7	BLA_BA	
Detailed Comments:					
NOTE 1: Circuit is not the blocked one.					
NOTE 2: This check will be implementation dependent. However, this is a possible method.					

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_ORI_Call_BCI_Free_ISDN_in_ACM			
Group	:	ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = ISDN in ACM			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND			2	IAM_Speech_AB	
LAB ! TRANSFER_REQ			3	ACM_Free_ISDN_BA	
+Check_RINGING_TONE			4		
LAB ! TRANSFER_REQ			5	ANM_BA	
+Check_CONNECTIVITY			6		
UTA ! USER_REQ			7	REL_REQ	
LAB ? TRANSFER_IND			8	REL_AB	
LAB ! TRANSFER_REQ			9	RLC_BA	
+Check_CIRCUIT_IDLE			10		
Detailed Comments:					

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_BCI_Free_Non_ISDN_in_ACM			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = non ISDN in ACM			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_Free_Non_ISDN_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
UTA ! USER_REQ		7	REL_REQ	
LAB ? TRANSFER_IND		8	REL_AB	
LAB ! TRANSFER_REQ		9	RLC_BA	
+Check_CIRCUIT_IDLE		10		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_BCI_No_Ind_ISDN_in_ACM			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = ISDN in ACM			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_No_Ind_ISDN_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
UTA ! USER_REQ		7	REL_REQ	
LAB ? TRANSFER_IND		8	REL_AB	
LAB ! TRANSFER_REQ		9	RLC_BA	
+Check_CIRCUIT_IDLE		10		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	:	SETUP_ORI_Call_BCI_No_Ind_Non_ISDN_in_ACM		
Group	:	ISUPB/TEST_STEP/Ori_Call_Setup/		
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = non ISDN in ACM		
Default	:	AnyOtherEventUnexpected		
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_No_Ind_Non_ISDN_BA	
+Check_RINGING_TONE		4		
LAB ! TRANSFER_REQ		5	ANM_BA	
+Check_CONNECTIVITY		6		
UTA ! USER_REQ		7	REL_REQ	
LAB ? TRANSFER_IND		8	REL_AB	
LAB ! TRANSFER_REQ		9	RLC_BA	
+Check_CIRCUIT_IDLE		10		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	:	SETUP_ORI_Call_CPG_Alerting		
Group	:	ISUPB/TEST_STEP/Ori_Call_Setup/		
Objective	:	To verify that a call can be successfully completed using event information "alerting" in the call progress message		
Default	:	AnyOtherEventUnexpected		
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
LAB ! TRANSFER_REQ		4	CPG_Alert_BA	
+Check_RINGING_TONE		5		
LAB ! TRANSFER_REQ		6	ANM_BA	
+Check_CONNECTIVITY		7		
UTA ! USER_REQ		8	REL_REQ	
LAB ? TRANSFER_IND		9	REL_AB	
LAB ! TRANSFER_REQ		10	RLC_BA	
+Check_CIRCUIT_IDLE		11		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_CPG_Progress			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using event information "progress" in the call progress message			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
LAB ! TRANSFER_REQ		4	CPG_Progress_BA	
+Check_RINGING_TONE		5		
LAB ! TRANSFER_REQ		6	ANM_BA	
+Check_CONNECTIVITY		7		
UTA ! USER_REQ		8	REL_REQ	
LAB ? TRANSFER_IND		9	REL_AB	
LAB ! TRANSFER_REQ		10	RLC_BA	
+Check_CIRCUIT_IDLE		11		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_CPG_In_band_info			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using event information "in_band_info" in the call progress message			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	ACM_BA	
LAB ! TRANSFER_REQ		4	CPG_In_band_info_BA	
+Check_RINGING_TONE		5		
LAB ! TRANSFER_REQ		6	ANM_BA	
+Check_CONNECTIVITY		7		
UTA ! USER_REQ		8	REL_REQ	
LAB ? TRANSFER_IND		9	REL_AB	
LAB ! TRANSFER_REQ		10	RLC_BA	
+Check_CIRCUIT_IDLE		11		
Detailed Comments:				

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_ORI_Call_BCI_Free_ISDN_in_CON			
Group	:	ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = ISDN in CON			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND			2	IAM_Speech_AB	
LAB ! TRANSFER_REQ			3	CON_Free_ISDN_BA	
+Check_CONNECTIVITY			4		
UTA ! USER_REQ			5	REL_REQ	
LAB ? TRANSFER_IND			6	REL_AB	
LAB ! TRANSFER_REQ			7	RLC_BA	
+Check_CIRCUIT_IDLE			8		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_ORI_Call_BCI_Free_Non_ISDN_in_CON			
Group	:	ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = non ISDN in CON			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND			2	IAM_Speech_AB	
LAB ! TRANSFER_REQ			3	CON_Free_Non_ISDN_BA	
+Check_CONNECTIVITY			4		
UTA ! USER_REQ			5	REL_REQ	
LAB ? TRANSFER_IND			6	REL_AB	
LAB ! TRANSFER_REQ			7	RLC_BA	
+Check_CIRCUIT_IDLE			8		
Detailed Comments:					

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_BCI_No_Ind_ISDN_in_CON			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = ISDN in CON			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	CON_No_Ind_ISDN_BA	
+Check_CONNECTIVITY		4		
UTA ! USER_REQ		5	REL_REQ	
LAB ? TRANSFER_IND		6	REL_AB	
LAB ! TRANSFER_REQ		7	RLC_BA	
+Check_CIRCUIT_IDLE		8		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_ORI_Call_BCI_No_Ind_Non_ISDN_in_CON			
Group	: ISUPB/TEST_STEP/Ori_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = non ISDN in CON			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ		1	SETUP_REQ_Speech	
LAB ? TRANSFER_IND		2	IAM_Speech_AB	
LAB ! TRANSFER_REQ		3	CON_No_Ind_Non_ISDN_BA	
+Check_CONNECTIVITY		4		
UTA ! USER_REQ		5	REL_REQ	
LAB ? TRANSFER_IND		6	REL_AB	
LAB ! TRANSFER_REQ		7	RLC_BA	
+Check_CIRCUIT_IDLE		8		
Detailed Comments:				

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_TER_Call_BCI_Free_ISDN_in_ACM			
Group	:	ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = ISDN in ACM			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_Speech_BA	
+Receive_ACM_Free_ISDN_and_SETUP_IND			2		
+Check_RINGING_TONE			3		
UTA ! USER_REQ			4	SETUP_RESP_any	
LAB ? TRANSFER_IND			5	ANM_AB	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	REL_BA	
+Receive_RLC_and_REL_IND			8		
+Check_CIRCUIT_IDLE			9		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_TER_Call_BCI_Free_Non_ISDN_in_ACM			
Group	:	ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = non ISDN in ACM			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ			1	IAM_Speech_BA	
+Receive_ACM_Free_Non_ISDN_and_SETUP_IND			2		
+Check_RINGING_TONE			3		
UTA ! USER_REQ			4	SETUP_RESP_any	
LAB ? TRANSFER_IND			5	ANM_AB	
+Check_CONNECTIVITY			6		
LAB ! TRANSFER_REQ			7	REL_BA	
+Receive_RLC_and_REL_IND			8		
+Check_CIRCUIT_IDLE			9		
Detailed Comments:					

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_TER_Call_BCI_No_Ind_ISDN_in_ACM			
Group	: ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = ISDN in ACM			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
+Receive_ACM_No_Ind_ISDN_and_SETUP_IND		2		
+Check_RINGING_TONE		3		
UTA ! USER_REQ		4	SETUP_RESP_any	
LAB ? TRANSFER_IND		5	ANM_AB	
+Check_CONNECTIVITY		6		
LAB ! TRANSFER_REQ		7	REL_BA	
+Receive_RLC_and_REL_IND		8		
+Check_CIRCUIT_IDLE		9		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_TER_Call_BCI_No_Ind_Non_ISDN_in_ACM			
Group	: ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = non ISDN in ACM			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
+Receive_ACM_No_Ind_Non_ISDN_and_				
# SETUP_IND		2		
+Check_RINGING_TONE		3		
UTA ! USER_REQ		4	SETUP_RESP_any	
LAB ? TRANSFER_IND		5	ANM_AB	
+Check_CONNECTIVITY		6		
LAB ! TRANSFER_REQ		7	REL_BA	
+Receive_RLC_and_REL_IND		8		
+Check_CIRCUIT_IDLE		9		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : SETUP_TER_Call_CPG_Alerting				
Group : ISUPB/TEST_STEP/Ter_Call_Setup/				
Objective : To verify that a call can be successfully completed using event information "alerting" in the call progress message				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ	1	IAM_Speech_BA		
+Receive_ACM_and_SETUP_IND	2			
LAB ? TRANSFER_IND	3	CPG_Alert_AB		
+Check_RINGING_TONE	4			
UTA ! USER_REQ	5	SETUP_RESP_any		
LAB ? TRANSFER_IND	6	ANM_AB		
+Check_CONNECTIVITY	7			
LAB ! TRANSFER_REQ	8	REL_BA		
+Receive_RLC_and_REL_IND	9			
+Check_CIRCUIT_IDLE	10			
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : SETUP_TER_Call_CPG_Progress				
Group : ISUPB/TEST_STEP/Ter_Call_Setup/				
Objective : To verify that a call can be successfully completed using event information "progress" in the call progress message				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ! TRANSFER_REQ	1	IAM_Speech_BA		
+Receive_ACM_and_SETUP_IND	2			
LAB ? TRANSFER_IND	3	CPG_Progress_AB		
+Check_RINGING_TONE	4			
UTA ! USER_REQ	5	SETUP_RESP_any		
LAB ? TRANSFER_IND	6	ANM_AB		
+Check_CONNECTIVITY	7			
LAB ! TRANSFER_REQ	8	REL_BA		
+Receive_RLC_and_REL_IND	9			
+Check_CIRCUIT_IDLE	10			
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_TER_Call_CPG_In_band_info			
Group	: ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	: To verify that a call can be successfully completed using event information "in_band_info" in the call progress message			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
+Receive_ACM_and_SETUP_IND		2		
LAB ? TRANSFER_IND		3	CPG_In_band_info_AB	
+Check_RINGING_TONE		4		
UTA ! USER_REQ		5	SETUP_RESP_any	
LAB ? TRANSFER_IND		6	ANM_AB	
+Check_CONNECTIVITY		7		
LAB ! TRANSFER_REQ		8	REL_BA	
+Receive_RLC_and_REL_IND		9		
+Check_CIRCUIT_IDLE		10		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_TER_Call_BCI_Free_ISDN_in_CON			
Group	: ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = ISDN in CON			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
UTA ? USER_IND		2	SETUP_IND	
LAB ? TRANSFER_IND		3	CON_Free_ISDN_AB	
+Check_CONNECTIVITY		4		
LAB ! TRANSFER_REQ		5	REL_BA	
+Receive_RLC_and_REL_IND		6		
+Check_CIRCUIT_IDLE		7		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_TER_Call_BCI_Free_Non_ISDN_in_CON			
Group	: ISUPB/TEST_STEP/Ter_Call_Setup/			
Objective	: To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = free; ISDN access indicator = non ISDN in CON			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
UTA ? USER_IND		2	SETUP_IND	
LAB ? TRANSFER_IND		3	CON_Free_Non_ISDN_AB	
+Check_CONNECTIVITY		4		
LAB ! TRANSFER_REQ		5	REL_BA	
+Receive_RLC_and_REL_IND		6		
+Check_CIRCUIT_IDLE		7		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	:	SETUP_TER_Call_BCI_No_Ind_ISDN_in_CON		
Group	:	ISUPB/TEST_STEP/Ter_Call_Setup/		
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = ISDN in CON		
Default	:	AnyOtherEventUnexpected		
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
UTA ? USER_IND		2	SETUP_IND	
LAB ? TRANSFER_IND		3	CON_No_Ind_ISDN_AB	
+Check_CONNECTIVITY		4		
LAB ! TRANSFER_REQ		5	REL_BA	
+Receive_RLC_and_REL_IND		6		
+Check_CIRCUIT_IDLE		7		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	:	SETUP_TER_Call_BCI_No_Ind_Non_ISDN_in_CON		
Group	:	ISUPB/TEST_STEP/Ter_Call_Setup/		
Objective	:	To verify that a call can be successfully completed using backward call indicator constraint: Called party status indicator = no indication; ISDN access indicator = non ISDN in CON		
Default	:	AnyOtherEventUnexpected		
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
LAB ! TRANSFER_REQ		1	IAM_Speech_BA	
UTA ? USER_IND		2	SETUP_IND	
LAB ? TRANSFER_IND		3	CON_No_Ind_Non_ISDN_AB	
+Check_CONNECTIVITY		4		
LAB ! TRANSFER_REQ		5	REL_BA	
+Receive_RLC_and_REL_IND		6		
+Check_CIRCUIT_IDLE		7		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_Call_REL_Unalloc_nr			
Group	: ISUPB/TEST_STEP/Unsucc_Call_Setup/			
Objective	: To verify that a call can be successfully released using cause information "unallocated number" in the release message			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ [CASE=A]		1	SETUP_REQ_any	
LAB ? TRANSFER_IND		2	IAM_AB	
LAB ! TRANSFER_REQ		3	REL_Unalloc_nr_BA	
+Receive_RLC_and_REL_IND		4		
UTA ? USER_IND		5	TONE_ANNCT_Unalloc_nr	
+Check_CIRCUIT_IDLE		6		
UTA ! USER_REQ [CASE=B]		7	SETUP_REQ_any	
LAB ? TRANSFER_IND		8	IAM_AB	
LAB ! TRANSFER_REQ		9	ACM_BA	
LAB ! TRANSFER_REQ		10	REL_Unalloc_nr_BA	
+Receive_RLC_and_REL_IND		11		
UTA ? USER_IND		12	TONE_ANNCT_Unalloc_nr	
+Check_CIRCUIT_IDLE		13		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name	: SETUP_Call_REL_No_circuit			
Group	: ISUPB/TEST_STEP/Unsucc_Call_Setup/			
Objective	: To verify that a call can be successfully released using cause information "no circuit available" in the release message			
Default	: AnyOtherEventUnexpected			
Comments	:			
Behaviour Description		**L**	**Cref**	**V** **C**
UTA ! USER_REQ [CASE=A]		1	SETUP_REQ_any	
LAB ? TRANSFER_IND		2	IAM_AB	
LAB ! TRANSFER_REQ		3	REL_No_circuit_BA	
+Receive_RLC_and_REL_IND		4		
UTA ? USER_IND		5	TONE_ANNCT_No_circuit	
+Check_CIRCUIT_IDLE		6		
UTA ! USER_REQ [CASE=B]		7	SETUP_REQ_any	
LAB ? TRANSFER_IND		8	IAM_AB	
LAB ! TRANSFER_REQ		9	ACM_BA	
LAB ! TRANSFER_REQ		10	REL_No_circuit_BA	
+Receive_RLC_and_REL_IND		11		
UTA ? USER_IND		12	TONE_ANNCT_No_circuit	
+Check_CIRCUIT_IDLE		13		
Detailed Comments:				

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_Call_REL_Switch_congestion			
Group	:	ISUPB/TEST_STEP/Unsucc_Call_Setup/			
Objective	:	To verify that a call can be successfully released using cause information "switching equipment congestion" in the release message			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ [CASE=A]			1	SETUP_REQ_any	
LAB ? TRANSFER_IND			2	IAM_AB	
LAB ! TRANSFER_REQ			3	REL_Switch_congestion_BA	
+Receive_RLC_and_REL_IND			4		
UTA ? USER_IND			5	TONE_ANNCT_Switch_congestion	
+Check_CIRCUIT_IDLE			6		
UTA ! USER_REQ [CASE=B]			7	SETUP_REQ_any	
LAB ? TRANSFER_IND			8	IAM_AB	
LAB ! TRANSFER_REQ			9	ACM_BA	
LAB ! TRANSFER_REQ			10	REL_Switch_congestion_BA	
+Receive_RLC_and_REL_IND			11		
UTA ? USER_IND			12	TONE_ANNCT_Switch_congestion	
+Check_CIRCUIT_IDLE			13		
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_Call_REL_Unalloc_nr_64kbps_unrestr			
Group	:	ISUPB/TEST_STEP/Unsucc_Call_Setup/			
Objective	:	To verify that a call can be successfully released using cause information "unallocated number" in the release message			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_64kbps_unrestr	
LAB ? TRANSFER_IND			2	IAM_64kbps_unrestr_AB	
LAB ! TRANSFER_REQ			3	REL_Unalloc_nr_BA	
+Receive_RLC_and_REL_IND_					
# Cause_Unalloc_nr			4		
+Check_CIRCUIT_IDLE			5		
UTA ? MAINT_IND			6	ECD_REENABLED_cic	NOTE
Detailed Comments:					
NOTE: This check applies to the circuits equipped with echo control.					

Test Step Dynamic Behaviour				
Test Step Name : SETUP_Call_REL_No_circuit_64kbps_unrestr				
Group : ISUPB/TEST_STEP/Unsucc_Call_Setup/				
Objective : To verify that a call can be successfully released using cause information "no circuit available" in the release message				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_64kbps_unrestr		
LAB ? TRANSFER_IND	2	IAM_64kbps_unrestr_AB		
LAB ! TRANSFER_REQ	3	REL_No_circuit_BA		
+Receive_RLC_and_REL_IND_				
# Cause_No_circuit	4			
+Check_CIRCUIT_IDLE	5			
UTA ? MAINT_IND	6	ECD_REENABLED_cic		NOTE
Detailed Comments:				
NOTE: This check applies to the circuits equipped with echo control.				

Test Step Dynamic Behaviour				
Test Step Name : SETUP_Call_REL_Bearer_cap_not_authorized_64kbp_unrestr				
Group : ISUPB/TEST_STEP/Unsucc_Call_Setup/				
Objective : To verify that a call can be successfully released using cause information "bearer capability not authorised " in the release message				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_64kbps_unrestr		
LAB ? TRANSFER_IND	2	IAM_64kbps_unrestr_AB		
LAB ! TRANSFER_REQ	3	REL_Bearer_cap_not_authorized_BA		
+Receive_RLC_and_REL_IND_Cause_				
# Bearer_cap_not_authorized	4			
+Check_CIRCUIT_IDLE	5			
UTA ? MAINT_IND	6	ECD_REENABLED_cic		NOTE
Detailed Comments:				
NOTE: This check applies to the circuits equipped with echo control.				

Test Step Dynamic Behaviour				
Test Step Name : SETUP_Call_REL_Bearer_cap_not_available_64kbp_unrestr				
Group : ISUPB/TEST_STEP/Unsucc_Call_Setup/				
Objective : To verify that a call can be successfully released using cause information "bearer capability not available " in the release message				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
UTA ! USER_REQ	1	SETUP_REQ_64kbps_unrestr		
LAB ? TRANSFER_IND	2	IAM_64kbps_unrestr_AB		
LAB ! TRANSFER_REQ	3	REL_Bearer_cap_not_available_BA		
+Receive_RLC_and_REL_IND_Cause_				
# Bearer_cap_not_available	4			
+Check_CIRCUIT_IDLE	5			
UTA ? MAINT_IND	6	ECD_REENABLED_cic		NOTE
Detailed Comments:				
NOTE: This check applies to the circuits equipped with echo control.				

Test Step Dynamic Behaviour					
Test Step Name	:	SETUP_Call_REL_Bearer_cap_not_implemented_64kbp_unrestr			
Group	:	ISUPB/TEST_STEP/Unsucc_Call_Setup/			
Objective	:	To verify that a call can be successfully released using cause information "bearer capability not implemented " in the release message			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
UTA ! USER_REQ			1	SETUP_REQ_64kbps_unrestr	
LAB ? TRANSFER_IND			2	IAM_64kbps_unrestr_AB	
LAB ! TRANSFER_REQ			3	REL_Bearer_cap_not_implemented_BA	
+Receive_RLC_and_REL_IND_Cause_					
# Bearer_cap_not_implemented			4		
+Check_CIRCUIT_IDLE			5		
UTA ? MAINT_IND			6	ECD_REENABLED_cic	NOTE
Detailed Comments:					
NOTE: This check applies to the circuits equipped with echo control.					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_REL_and_REL_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a REL is sent from A to B and a release indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	REL_AB	
UTA ? USER_IND			2	REL_IND	
UTA ? USER_IND			3	REL_IND	
LAB ? TRANSFER_IND			4	REL_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_and_REL_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC is sent from A to B and a release indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_AB	
UTA ? USER_IND			2	REL_IND	
UTA ? USER_IND			3	REL_IND	
LAB ? TRANSFER_IND			4	RLC_AB	
Detailed Comments:					

Test Step Dynamic Behaviour				
Test Step Name : Receive_RLC_and_REL_IND_Cause_Unalloc_nr				
Group : ISUPB/TEST_STEP/Various/				
Objective : To verify that a RLC is sent from A to B and a release indication is given to the user				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND	1	RLC_AB		
UTA ? USER_IND	2	REL_IND_Cause_Unalloc_nr		
UTA ? USER_IND	3	REL_IND_Cause_Unalloc_nr		
LAB ? TRANSFER_IND	4	RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : Receive_RLC_and_REL_IND_Cause_No_circuit				
Group : ISUPB/TEST_STEP/Various/				
Objective : To verify that a RLC is sent from A to B and a release indication is given to the user				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND	1	RLC_AB		
UTA ? USER_IND	2	REL_IND_Cause_No_circuit		
UTA ? USER_IND	3	REL_IND_Cause_No_circuit		
LAB ? TRANSFER_IND	4	RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : Receive_RLC_and_REL_IND_Cause_Bearer_cap_not_authorized				
Group : ISUPB/TEST_STEP/Various/				
Objective : To verify that a RLC is sent from A to B and a release indication is given to the user				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND	1	RLC_AB		
UTA ? USER_IND	2	REL_IND_Cause_Bearer_cap_not_author		
UTA ? USER_IND	3	REL_IND_Cause_Bearer_cap_not_author		
LAB ? TRANSFER_IND	4	RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_and_REL_IND_Cause_Bearer_cap_not_available			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC is sent from A to B and a release indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_AB	
UTA ? USER_IND			2	REL_IND_Cause_Bearer_cap_not_avail	
UTA ? USER_IND			3	REL_IND_Cause_Bearer_cap_not_avail	
LAB ? TRANSFER_IND			4	RLC_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_and_REL_IND_Cause_Bearer_cap_not_implemented			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC is sent from A to B and a release indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_AB	
UTA ? USER_IND			2	REL_IND_Cause_Bearer_cap_not_impl	
UTA ? USER_IND			3	REL_IND_Cause_Bearer_cap_not_impl	
LAB ? TRANSFER_IND			4	RLC_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_cicx_and_REL_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC indicating CIC x is sent from A to B and a release indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_cicx_AB	
UTA ? USER_IND			2	REL_IND	
UTA ? USER_IND			3	REL_IND	
LAB ? TRANSFER_IND			4	RLC_cicx_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_Echo_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM_Echo_Control is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_Echo_Control_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_Echo_Control_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_Free_ISDN_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM_Free_ISDN is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_Free_ISDN_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_Free_ISDN_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_Free_Non_ISDN_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM_Free_Non_ISDN is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_Free_Non_ISDN_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_Free_Non_ISDN_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_No_Ind_ISDN_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM_No_Ind_ISDN is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_No_Ind_ISDN_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_No_Ind_ISDN_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_No_Ind_Non_ISDN_and_SETUP_IND			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM_No_Ind_Non_ISDN is sent from A to B and a setup indication is given to the user			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_No_Ind_Non_ISDN_AB	
UTA ? USER_IND			2	SETUP_IND_any	
UTA ? USER_IND			3	SETUP_IND_any	
LAB ? TRANSFER_IND			4	ACM_No_Ind_Non_ISDN_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_cicx_and_SETUP_IND_and_IAM_cicy			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM indicating CIC x is sent from A to B, that a setup indication is given to the user and that an IAM indicating CIC y is sent from A to B			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_cicx_AB	
UTA ? USER_IND			2	SETUP_IND_any	
LAB ? TRANSFER_IND			3	IAM_cicy_AB	
LAB ? TRANSFER_IND			4	IAM_cicy_AB	
UTA ? USER_IND			5	SETUP_IND_any	
UTA ? USER_IND			6	SETUP_IND_any	
LAB ? TRANSFER_IND			7	ACM_cicx_AB	
LAB ? TRANSFER_IND			8	IAM_cicy_AB	
LAB ? TRANSFER_IND			9	IAM_cicy_AB	
LAB ? TRANSFER_IND			10	ACM_cicx_AB	
LAB ? TRANSFER_IND			11	IAM_cicy_AB	
LAB ? TRANSFER_IND			12	ACM_cicx_AB	
UTA ? USER_IND			13	SETUP_IND_any	
UTA ? USER_IND			14	SETUP_IND_any	
LAB ? TRANSFER_IND			15	ACM_cicx_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_ACM_cicx_and_SETUP_IND_and_IAM_cicy_64kbps_unrestr			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an ACM indicating CIC x is sent from A to B, that a setup indication is given to the user and that an IAM indicating CIC y is sent from A to B			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	ACM_cicx_AB	
UTA ? USER_IND			2	SETUP_IND_any	
LAB ? TRANSFER_IND			3	IAM_cicy_64kbps_unrestr_AB	
LAB ? TRANSFER_IND			4	IAM_cicy_64kbps_unrestr_AB	
UTA ? USER_IND			5	SETUP_IND_any	
UTA ? USER_IND			6	SETUP_IND_any	
LAB ? TRANSFER_IND			7	ACM_cicx_AB	
LAB ? TRANSFER_IND			8	IAM_cicy_64kbps_unrestr_AB	
LAB ? TRANSFER_IND			9	IAM_cicy_64kbps_unrestr_AB	
LAB ? TRANSFER_IND			10	ACM_cicx_AB	
LAB ? TRANSFER_IND			11	IAM_cicy_64kbps_unrestr_AB	
LAB ? TRANSFER_IND			12	ACM_cicx_AB	
UTA ? USER_IND			13	SETUP_IND_any	
UTA ? USER_IND			14	SETUP_IND_any	
LAB ? TRANSFER_IND			15	ACM_cicx_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_and_REL_IND_and_MaintSystem			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC, a REL IND and a MaintSystem are sent from A to B			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_AB	
UTA ? USER_IND			2	REL_IND	
UTA ? MAINT_IND			3	ALARM_MaintSystem	
UTA ? MAINT_IND			4	ALARM_MaintSystem	
UTA ? USER_IND			5	REL_IND	
UTA ? USER_IND			6	REL_IND	
LAB ? TRANSFER_IND			7	RLC_AB	
UTA ? MAINT_IND			8	ALARM_MaintSystem	
UTA ? MAINT_IND			9	ALARM_MaintSystem	
LAB ? TRANSFER_IND			10	RLC_AB	
UTA ? MAINT_IND			11	ALARM_MaintSystem	
LAB ? TRANSFER_IND			12	RLC_AB	
UTA ? USER_IND			13	REL_IND	
UTA ? USER_IND			14	REL_IND	
LAB ? TRANSFER_IND			15	RLC_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_BLA_cicx_and_REL_cicx_and_IAM_cicy_and_send_RLC_cicx			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an BLA indicating CIC x, a REL indicating CIC x and an IAM indicating CIC y is sent from A to B and send a RLC indicating CIC x from B to A			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	BLA_cicx_AB	
LAB ? TRANSFER_IND			2	REL_cicx_AB	
LAB ! TRANSFER_REQ			3	RLC_cicx_BA	
LAB ? TRANSFER_IND			4	IAM_cicy_AB	
LAB ? TRANSFER_IND			5	IAM_cicy_AB	
LAB ? TRANSFER_IND			6	REL_cicx_AB	
LAB ! TRANSFER_REQ			7	RLC_cicx_BA	
LAB ? TRANSFER_IND			8	IAM_cicy_AB	
LAB ? TRANSFER_IND			9	BLA_cicx_AB	
LAB ? TRANSFER_IND			10	REL_cicx_AB	
LAB ! TRANSFER_REQ			11	RLC_cicx_BA	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_cicx_and_IAM_cicy			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an RLC indicating CIC x and an IAM indicating CIC y is sent from A to B			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_cicx_AB	
LAB ? TRANSFER_IND			2	IAM_cicy_AB	
LAB ? TRANSFER_IND			3	IAM_cicy_AB	
LAB ? TRANSFER_IND			4	RLC_cicx_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RSC_cicx_and_IAM_cicy			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that an RSC indicating CIC x and an IAM indicating CIC y is sent from A to B			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RSC_cicx_AB	
LAB ? TRANSFER_IND			2	IAM_cicy_AB	
LAB ? TRANSFER_IND			3	IAM_cicy_AB	
LAB ? TRANSFER_IND			4	RSC_cicx_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_RLC_and_send_BLA			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	To verify that a RLC is sent from A to B and send a BLA from B to A			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND			1	RLC_AB	
LAB ! TRANSFER_REQ			2	BLA_BA	
LAB ! TRANSFER_REQ			3	BLA_BA	
LAB ? TRANSFER_IND			4	RLC_AB	
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_REL_messages			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	Receive release messages until reset circuit is received			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
?TIMEOUT T1min			1		
(Ready_To_Receive_REL := TRUE)			2		
LAB ? TRANSFER_IND			3	REL_AB	
[Ready_To_Receive_REL]			4		
CANCEL T1max			5		
START T1min, START T1max			6		
(Ready_To_Receive_REL := FALSE)			7		
[NOT (Ready_To_Receive_REL)]			8		
LAB ! TRANSFER_REQ				RLC_BA	
# CANCEL T1min, CANCEL T1max			9		F
?TIMEOUT T5min			10		
(Ready_To_Receive_RSC := TRUE)			11		
LAB ? TRANSFER_IND			12	RSC_AB	
[Ready_To_Receive_RSC]			13		
CANCEL T5max			14		
(RSC_Received := TRUE)			15		
[NOT (Ready_To_Receive_RSC)]			16		
LAB ! TRANSFER_REQ				RLC_BA	
# CANCEL T5min, CANCEL T5max			17		F
?TIMEOUT T1max			18		F
?TIMEOUT T5max			19		F
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_BLO_and_MaintSystem_and_T13			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	Receive a blocking message, alertion of maintenance system and manipulate T13			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND				BLO_AB	
# START T13min, START T13max			1		
UTA ? MAINT_IND			2	ALARM_MaintSystem	
?TIMEOUT T13min CANCEL T13max			3		F
UTA ? MAINT_IND			4	ALARM_MaintSystem	
LAB ? TRANSFER_IND				BLO_AB	
# START T13min, START T13max			5		
?TIMEOUT T13max			6		F
Detailed Comments:					

Test Step Dynamic Behaviour				
Test Step Name : Receive_UBL_and_MaintSystem_and_T15				
Group : ISUPB/TEST_STEP/Various/				
Objective : Receive an unblocking message, alertion of maintenance system and manipulate T15				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND		UBL_AB		
# START T15min, START T15max	1			
UTA ? MAINT_IND	2	ALARM_MaintSystem		
?TIMEOUT T15min CANCEL T15max	3		F	
UTA ? MAINT_IND	4	ALARM_MaintSystem		
LAB ? TRANSFER_IND		UBL_AB		
# START T15min, START T15max	5			
?TIMEOUT T15max	6		F	
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : Receive_RSC_and_MaintSystem_and_T17				
Group : ISUPB/TEST_STEP/Various/				
Objective : Receive a reset circuit message, alertion of maintenance system and manipulate T17				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND		RSC_AB		
# START T17min, START T17max	1			
UTA ? MAINT_IND	2	ALARM_MaintSystem		
?TIMEOUT T17min CANCEL T17max	3		F	
UTA ? MAINT_IND	4	ALARM_MaintSystem		
LAB ? TRANSFER_IND		RSC_AB		
# START T17min, START T17max	5			
?TIMEOUT T17max	6		F	
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name : Receive_CGB_and_MaintSystem_and_T19				
Group : ISUPB/TEST_STEP/Various/				
Objective : Receive a circuit group reset message, alertion of maintenance system and manipulate T19				
Default : AnyOtherEventUnexpected				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ? TRANSFER_IND		CGB_maint_AB		
# START T19min, START T19max	1			
UTA ? MAINT_IND	2	ALARM_MaintSystem		
?TIMEOUT T19min CANCEL T19max	3		F	
UTA ? MAINT_IND	4	ALARM_MaintSystem		
LAB ? TRANSFER_IND		CGB_maint_AB		
# START T19min, START T19max	5			
?TIMEOUT T19max	6		F	
Detailed Comments:				

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_CGU_and_MaintSystem_and_T21			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	Receive a circuit group unblocking message, alertion of maintenance system and manipulate T21			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND				CGU_maint_AB	
# START T21min, START T21max			1		
UTA ? MAINT_IND			2	ALARM_MaintSystem	
?TIMEOUT T21min CANCEL T21max			3		F
UTA ? MAINT_IND			4	ALARM_MaintSystem	
LAB ? TRANSFER_IND				CGU_maint_AB	
# START T21min, START T21max			5		
?TIMEOUT T21max			6		F
Detailed Comments:					

Test Step Dynamic Behaviour					
Test Step Name	:	Receive_GRS_and_MaintSystem_and_T23			
Group	:	ISUPB/TEST_STEP/Various/			
Objective	:	Receive a circuit group reset message, alertion of maintenance system and manipulate T23			
Default	:	AnyOtherEventUnexpected			
Comments	:				
Behaviour Description			**L**	**Cref**	**V** **C**
LAB ? TRANSFER_IND				GRS_AB	
# START T23min, START T23max			1		
UTA ? MAINT_IND			2	ALARM_MaintSystem	
?TIMEOUT T23min CANCEL T23max			3		F
UTA ? MAINT_IND			4	ALARM_MaintSystem	
LAB ? TRANSFER_IND				GRS_AB	
# START T23min, START T23max			5		
?TIMEOUT T23max			6		F
Detailed Comments:					

A.9.3 Default dynamic behaviour

Default Dynamic Behaviour				
Default Name : AnyOtherEventUnexpected				
Group : ISUPB/DEFAULT/				
Objective : To receive any behaviour other than expected behaviour				
Comments :				
Behaviour Description	**L**	**Cref**	**V**	**C**
LAB ?OTHERWISE	1		F	
CAB ?OTHERWISE	2		F	
UTA ?OTHERWISE	3		F	
Detailed Comments:				

Annex B (informative): Bibliography

1) CCITT Recommendation Q.761 (1988): "Functional description of the ISDN user part of Signalling System No.7".

2) CCITT Recommendation Q.762 (1988): "General function of messages and signals".

3) CCITT Recommendation Q.763 (1988): "Formats and codes".

4) CCITT Recommendation Q.764 (1988): "Signalling procedures".

5) CCITT Recommendation Q.767 (1991): "Application of the ISDN user part of CCITT Signalling System No.7 for international ISDN interconnections".

6) CCITT Recommendation X.292 (1992): "OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications - The tree and tabular combined notation (TTCN)".

History

Document history	
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