INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

Q.784
Annex A

(03/93)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SPECIFICATIONS OF SIGNALLING SYSTEM No. 7

TEST SPECIFICATION

TTCN VERSION OF RECOMMENDATION Q.784

ITU-T Recommendation Q.784 – Annex A

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation Q.784, Annex A was revised by the ITU-T Study Group XI (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

CONTENTS

Annex A

TTCN version of Recommendation Q.784

(Helsinki, 1993)

A.1 Scope

This annex provides the test specification for the basic call procedures of CCITT SS No. 7 ISUP (Recommendations Q.761-Q.764 and Q.767) based on the CCITT Recommendation X.292 (ISO IS 9646). This test specification makes use of the Tree and Tabular Combined Notation (TTCN) and reflects the content of the test specification described in Recommendation Q.784. In all cases of conflict between the text of Recommendation Q.784 and this TTCN annex, then Recommendation Q.784 shall take precedence.

A.2 Symbols and abbreviations (used in A.2 to A.4.5)

TTCN	Tree and Tabular Combined Notation
IUT	Implementation Under Test
ATS	Abstract Test Suite
ASP	Abstract Service Primitive
PDU	Protocol Data Unit
PCO	Point of Control and Observation
LT	Lower Tester
UT	Upper Tester
LAB	Lower Tester PCO between service provider and signalling point B
CAB	Circuit PCO between service provider and signalling point B
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 A.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 seperated into a lower tester (LT) and an upper tester (UT).

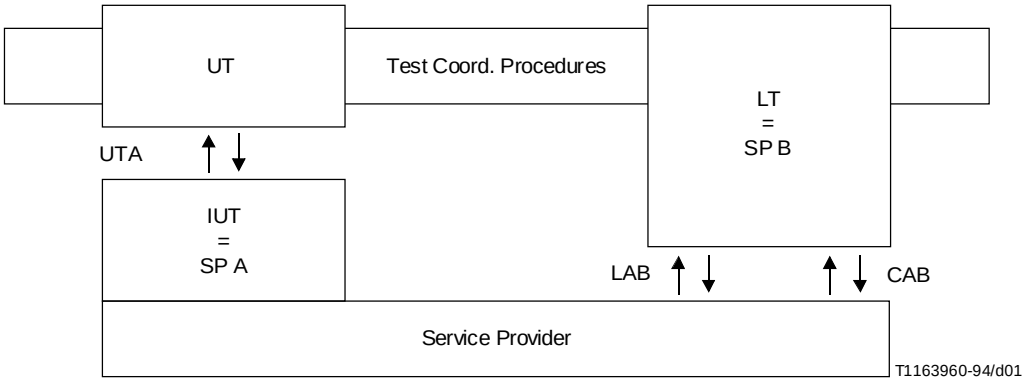

FIGURE A.1/Q.784

ISUP test method

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

For ISUP testing in particular, the lower tester controls and observes the implementation under test 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 implementation under test 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 must contain the following four parts:

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

– 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);

– the constraints part, giving the actual values for protocol data units (PDUs) and abstract service primitives (ASPs);

– 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 testlist of Recommendation Q.784 and the TTCN test groups and test case names are indicated in the test suite structure and test case index tables.

The test suite overview for this ISUP test specification is given in 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 A.7.

Subclause 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 Q.784 test specification using the Q.780 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 an PDU constraint. All ASP and PDU constraints are grouped in the TTCN constraints part. The constraints part for ISUP are given in 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 catagory ASPs are exchanged by some functionality which enables circuit control procedures, e.g. connectivity check.

– Call set-up ASPs – The call set-up ASPs represent the corresponding call set-up 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 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 contained in 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 A.9.3.

The test specification is based on the test methodology described above. By means of well chosen identifiers for points of control and observation (PCOs) and abstract service primitives (ASPs) the used test methodology is expressed.

The identifications of the ASPs are selfexplaining. 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 Q.784 test specification using the Q.780 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 VAT and CPT

This TTCN version of Recommendation Q.784 is applicable for both validation testing (VAT) and compatibility testing (CPT). It is a conceptual description of the test process which in noway implies any implementation of the test system. This means that in case of VAT the lower tester (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 set-up

1.5.3 Receipt of unexpected messages during a call

1.5.4 Confusion procedures for further study

2 Normal call set-up – 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 set-up

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 set-up

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 any backward message

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 set-up

4.1 Validate a set of known causes for release

5 Abnormal situation during a call

5.1 Inability to release in response to an 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 an 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 an 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 set-up

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 kbps unrestricted

7.1.1 Successful call set-up

7.1.2 Unsuccessful call set-up

7.1.3 Dual seizure

7.2 3.1 kHz audio

7.2.1 Successful call set-up

8 Congestion control and user flow control – For further study

A.6 Test Suite Overview

Test Suite Structure		
Suite Name:	TTCN version of Rec. Q.784	
Standards ref:	Rec. 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 Rec. Q.784	
Test Group Reference	Test Group Objective	Page No.
ISUPB/	ISUP Basic Call	
ISUPB/CS/	1 Circuit supervision	
ISUPB/CS/Non_alloc_circuits/	1.1 Non allocated circuits	
ISUPB/CS/Reset/	1.2 Reset of circuits	
ISUPB/CS/Blocking/	1.3 Blocking of circuits	
ISUPB/CS/Blocking/Circuit_group/	1.3.1 Circuit group blocking unblocking	
ISUPB/CS/Blocking/Circuit/	1.3.2 Circuit blocking unblocking	
ISUPB/CS/Cont_check_test_call/	1.4 Continuity check test call	
ISUPB/CS/Rec_UNREAS/	1.5 Receipt of unreasonable signalling information messages	
ISUPB/NCS/	2 Normal call set-up – Ordinary speech	
ISUPB/NCS/Both_way_select/	2.1 Both way circuit selection	
ISUPB/NCS/Cld_addr_send/	2.2 Called address sending	
ISUPB/NCS/Succ_set-up/	2.3 Successful call set-up	
ISUPB/NCR/	3 Normal call release	
ISUPB/UCS/	4 Unsuccessful call set-up	
ISUPB/ABN/	5 Abnormal situation during a call	
ISUPB/ABN/Inabl_to_rel/	5.1 Inability to release in respons to an REL after ANM	
ISUPB/ABN/Timers/	5.2 Timers	
ISUPB/ABN/Reset/	5.3 Reset of circuits during a call	
ISUPB/SPCS/	6 Special call set-up	
ISUPB/SPCS/Cont_check_call/	6.1 Continuity check call	
ISUPB/SPCS/Autom_rep_ attempt/	6.2 Automatic repeat attempt	
ISUPB/SPCS/Dual_seiz/	6.3 Dual seizure	
ISUPB/SPCS/Semi_autom_oper/	6.4 Semi automatic operation	
ISUPB/BSERV/	7 Bearer services	
ISUPB/BSERV/64kbps_unres/	7.1 64 kbps unrestricted	
ISUPB/BSERV/3.1kHz_audio/	7.2 3.1 kHz audio	
ISUPB/Congestion_and_user_flow/	8 Congestion control and user flow control – For further study	

A.7 Declarations Part

Test Suite Parameter Declarations			
Parameter Name	Type	PICS/PIXIT Reference	Comments
SP_A CONTR_SP CASE	BOOLEAN BOOLEAN INTEGER		

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

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

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

Timer Declarations			
Timer Name	Duration	Units	Comments
TNOAC	100	s	Ensures no response from IUT
T1min	4	s	Waiting for RLC
Tcot_delay	2	s	Simulating continuity check delay
T1max	15	s	Waiting for RLC
T5min	57	s	Waiting for RLC
T5max	63	s	Waiting for RLC
T6min	60	s	Waiting for RES
T6max	120	s	Waiting for RES
T7min	20	s	Waiting for ACM or CON
T7max	30	s	Waiting for ACM or CON
T8min	10	s	Waiting for COT
T8max	15	s	Waiting for COT
T9min	120	s	Waiting for ANM
T9max	240	s	Waiting for ANM
T12min	4	s	Waiting for BLO
T12max	15	s	Waiting for BLO
T13min	57	s	Waiting for BLO
T13max	63	s	Waiting for BLO
T14min	4	s	Waiting for UBL
T14max	15	s	Waiting for UBL
T15min	57	s	Waiting for UBL
T15max	63	s	Waiting for UBL
T16min	4	s	Waiting for RSC
T16max	15	s	Waiting for RSC
T17min	57	s	Waiting for RSC
T17max	63	s	Waiting for RSC
T18min	4	s	Waiting for CGB
T18max	15	s	Waiting for CGB
T19min	57	s	Waiting for CGB
T19max	63	s	Waiting for CGB
T20min	4	s	Waiting for CGU
T20max	15	s	Waiting for CGU
T21min	57	s	Waiting for CGU
T21max	63	s	Waiting for CGU
T22min	4	s	Waiting for GRS
T22max	15	s	Waiting for GRS
T23min	57	s	Waiting for GRS
T23max	63	s	Waiting for GRS
T24min	1500	ms	Continuity recognition
T24max	2	s	Continuity recognition
T25min	1	s	Continuity recognition
T25max	10	s	Continuity recognition
T26min	60	s	Second continuity check failure
T26max	180	s	Second continuity check failure
T27max	240	s	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_1 kHz_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 maintain
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	
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 set-up 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 set-up 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 UTA ? MAINT_IND	1 2	IAM_nonexistentCIC_BA 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: 2.10.3.1 a)/Q.764 and 2.10.3.1 b)/Q.764 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 LAB ? TRANSFER_IND +Check_CIRCUIT_IDLE	1 2 3	RSC_BA RLC_AB	 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: 2.10.3.1/Q.764 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ +Check_CIRCUIT_IDLE	1 2 3 4	RESET_CIRCUIT RSC_AB RLC_BA	 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: 2.10.3.1 c)/Q.764 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 LAB ! TRANSFER_REQ LAB ? TRANSFER_IND +Receive_RLC_and_send_BLA +Check_LOCAL_BLOCKING_CIRCUIT	1 2 3 4 5	 RSC_BA BLO_AB 	 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: 2.10.3.1 d)/Q.764 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 LAB ! TRANSFER_REQ LAB ? TRANSFER_IND +Check_CIRCUIT_IDLE	1 2 3 4	 RSC_BA RLC_AB 	 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: 2.10.3.2/Q.764 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 +Check_CIRCUIT_IDLE +GRS_RANGE_INVALID +Check_CIRCUIT_IDLE	1 2 3 4	 	 P	 (Note) (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: 2.10.3.2/Q.764 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: 2.10.3.2 d)/Q.764 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: 2.9.2/Q.764 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			
+UnblockRemote_CIRCUIT_GROUP_HARDW	8			
+Check_UNBLOCKED_CIRCUIT_GROUP	9			
+BlockRemote_CIRCUIT_GROUP_HARDW_				
# RANGE_INVALID	10		P	(Note)
Detailed Comments: NOTE – 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: 2.9.2/Q.764 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: 2.9.2/Q.764 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: 2.9.2/Q.764 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: 2.9.2/Q.764
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: 2.9.2.3 xiv)/Q.764 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: 2.1.8/Q.764 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 CAB ! CONTCHECK_REQ CAB ? CONTCHECK_IND LAB ! TRANSFER_REQ LAB ? TRANSFER_IND +Check_CIRCUIT_IDLE	1 2 3 4 5 6	CCR_BA CONTCHECK_tone_BA CONTCHECK_tone_AB REL_BA RLC_AB	 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: 2.1.8/Q.764 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 LAB ? TRANSFER_IND CAB ! CONNECT_CONTCHECKLOOP_REQ # UTA ! USER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ CAB ! CONNECT_CONTCHECKLOOP_REQ # +Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8	CONTCHECK_TESTCALL CCR_AB CONNECT_ CONTCHECKLOOP_B REL_REQ REL_AB RLC_BA DISCONNECT_ CONTCHECKLOOP_B	 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: 2.1.8/Q.764 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: 2.1.8/Q.764 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: 2.1.8/Q.764
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 2.10.5.1/Q.764.
Default:	AnyOtherEventUnexpected
Comments:	SUBTITLE: Receipt of unexpected messages REFERENCE: 2.10.5.1 a)/Q.764, 2.10.5.1 b)/Q.764 and 2.10.5.1 d)/Q.764 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		(Note 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:

NOTES

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

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: To verify that the action taken by a signalling point upon receipt of unexpected messages is as stated in 2.10.5.1/Q.764.

Default: AnyOtherEventUnexpected

Comments: SUBTITLE: Receipt of unexpected messages during call set-up
REFERENCE: 2.10.5.1 d)/Q.764
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.

Test 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 2.10.5.1/Q.764.
Default:	AnyOtherEventUnexpected
Comments:	SUBTITLE: Receipt of unexpected messages during a call REFERENCE: 2.10.5.1 c)/Q.764 and 2.10.5.1 d)/Q.764 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 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	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_REQ	11	IAM_AB		
LAB ? TRANSFER_IND	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: 2.1/Q.764 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: 2.1/Q.764 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: 2.1.1/Q.764, 2.1.4/Q.764, 2.1.7/Q.764 and 2.3/Q.764 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: 2.1.2/Q.764 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_set-up/
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: 2.1.4.1/Q.764, 2.1.7/Q.764 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_set-up/ 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: 2.1.5/Q.764 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] +SETUP_ORI_Call_CPG_Alerting +SETUP_ORI_Call_CPG_Progress +SETUP_ORI_Call_CPG_In_band_info [SP_A = TER] +SETUP_TER_Call_CPG_Alerting +SETUP_TER_Call_CPG_Progress +SETUP_TER_Call_CPG_In_band_info	1 2 3 4 5 6 7 8		 P P	
Detailed Comments:				

Test Case Dynamic Behaviour				
Test Case Name: ISUPB20303 Group: ISUPB/NCS/Succ_set-up/ 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: 2.1.4.2/Q.764 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] +SETUP_ORI_Call_BCI_Free_ISDN_ # in_CON +SETUP_ORI_Call_BCI_Free_Non_ISDN_ # in_CON +SETUP_ORI_Call_BCI_No_Ind_ISDN_ # in_CON +SETUP_ORI_Call_BCI_No_Ind_Non_ISDN_ # in_CON [SP_A = TER] +SETUP_TER_Call_BCI_Free_ISDN_ # in_CON +SETUP_TER_Call_BCI_Free_Non_ISDN_ # in_CON +SETUP_TER_Call_BCI_No_Ind_ISDN_ # in_CON +SETUP_TER_Call_BCI_No_Ind_Non_ISDN_ # in_CON	1 2 3 4 5 6 7 8 9 10		 P P	
Detailed Comments:				

Test Case Dynamic Behaviour

Test Case Name: ISUPB20304
Group: ISUPB/NCS/Succ_set-up/
Purpose: To verify the satellite indicator in the initial address message is correctly set.
Default: AnyOtherEventUnexpected
Comments: SUBTITLE: Call switched via a satellite
REFERENCE: 2.1/Q.764
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_set-up/
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 set-up
REFERENCE: 2.8/Q.764
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:

NOTES

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”?

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_set-up/
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: 2.9.2.1/Q.764
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_set-up/
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: 2.9.2.1/Q.764 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_IND	7	BLO_BA		
LAB ! TRANSFER_REQ	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: 2.3/Q.764 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: 2.3/Q.764 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: 2.3/Q.764 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: 2.3/Q.764 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: 2.5.1.3/Q.764
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: 2.5.1.1/Q.746 , 2.5.2.1/Q.764
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: 2.5.1.2/Q.764, 2.5.2.2/Q.764
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	25			
+ 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: 2.3.1 e)/Q.764 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: 2.2/Q.764 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 + SETUP_Call_REL_No_circuit + SETUP_Call_REL_Switch_congestion	1 2 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: 2.10.8.1/Q.764
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: 2.10.8.3/Q.764
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: 2.10.8.3 a) /Q.764 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 need 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 an RLC REFERENCE: 2.2/Q.764, 2.10.6/Q.764 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: 2.5.1.3/Q.764, 2.5.2.3/Q.764, 2.5.3/Q.764
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: 2.10.8.3/Q.764 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: 2.10.4/Q.764
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: 2.10.4/Q.764 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 T14max	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: 2.10.3.1/Q.764
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: 2.10.4/Q.764
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: 2.10.4/Q.764
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	GROUPUNBLOCK_MAINT		
UTA ! MML_REQ	2	CGU_maint_AB		
LAB ? TRANSFER_IND START T20min,				
#START T20max, START T21min, START T21max	3			
?TIMEOUT T20min	4	CGU_maint_AB		
LAB ? TRANSFER_IND CANCEL T20max	5			
?TIMEOUT T21min	6			
+ Receive_CGU_and_MaintSystem_and_T21	7			(Note)
?TIMEOUT T21min	8	CGU_maint_AB		
LAB ? TRANSFER_IND CANCEL T21max	9		P	
?TIMEOUT T21max	10	CGU_maint_AB	F	
LAB ? TRANSFER_IND				
# CANCEL T21min, CANCEL T21max	11		F	
?TIMEOUT T21max	12	CGU_maint_AB	F	
LAB ? TRANSFER_IND				
# CANCEL T21min, CANCEL T21max	13		F	
?TIMEOUT T20max				
# CANCEL T21min, CANCEL T21max	14	CGU_maint_AB	F	
LAB ? TRANSFER_IND CANCEL T20min,				
# 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: 2.10.4/Q.764
PRE-TEST CONDITIONS:
a) Circuit is idle.
b) Arrange the data in signalling point B such that a circuit group reset acknowledged message is not returned in response toa 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: 2.10.3.1 a)/Q.764 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: 2.10.3.1 a)/Q.764 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: 2.1.8/Q.764 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		CONNECT_		
#	3	CONTCHECKLOOP_B		
LAB ? TRANSFER_IND	4	COT_successful_AB		
CAB ! CONTCHECKLOOP_REQ		DISCONNECT_		
#	5	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: 2.1.8/Q.764 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: 2.3/Q.764 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		CONNECT_		
#	3	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: 2.1.8/Q.764 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		CONNECT_		
#	3	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: 2.1.8/Q.764 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 Comment:

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: 2.9.1 i)/Q.764 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		**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)

NOTES

1 This check applies to the circuit cicx.

2 This check applies to the circuit cicy.

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: 2.9.1 ii)/Q.764 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:

1 This check applies to the circuit cicy.

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: 2.9.1 iii)/Q.764 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:

1 This check applies to the circuit cicy.

2 This check applies to both circuits cicx and cicy.

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: 2.9.1 iv)/Q.764
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	REF	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		CONNECT_		
#	5	CONTCHECKLOOP_B		
LAB ? TRANSFER_IND	6	COT_successful_cicy_AB		
CAB ! CONTCHECKLOOP_REQ		DISCONNECT_		
#	7	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:

NOTES

1 A repeat of the continuity check of the failed circuit will be made within 1 to 10 seconds.

See 2.1.8/Q.764. See also testcase 6.1.5.

2 This check applies to the circuit cicy.

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: 2.9.1 v)/Q.764, 2.10.5.1 d)/Q.764. 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:

NOTES

1 This may be any message that if received at this point would be either ambigious or inappropriate. For example, SUS or RES messages.

2 This check applies to the circuit cicy.

3 This check applies to both circuits cicx and cicy.

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: 2.10.1.4/Q.764 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:

NOTES

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

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: 2.1.12/Q.764
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:

NOTES

1 Checks connectivity between operator and subscriber.

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).

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: 2.1.12/Q.764 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) Arange 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:

NOTES

1 Checks connectivity between operator and subscriber.

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).

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: 2.1.12/Q.764 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:

NOTES

1 Checks connectivity between the operators.

2 Checks connectivity between operator and subscriber.

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

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: 2.1.12/Q.764
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:

NOTES

1 Checks connectivity between the operators.

2 Checks connectivity between operator and subscriber.

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

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 kbps call can be successfully completed using appropriate Transmission Medium Requirement and User Service Information parameters.
Default:	AnyOtherEventUnexpected
Comments:	SUBTITLE: Successful call set-up REFERENCE: 2.1/Q.764 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:

NOTES

1 Does the USI, if included, have appropriate information? For example, USI has two octets for 64kb/s 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?

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 set-up REFERENCE: 2.2/Q.764 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: Section 2.9.1 i)/Q.764 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:

NOTES

1 This check applies to the circuit cicx.

2 This check applies to the circuit cicy.

3 This check applies to the circuits equipped with echo control.

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 set-up REFERENCE: 2.1/Q.764 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:

NOTES

1 Is the TMR set to “3.1 kHz Audio”?

2 Does the USI, if included, have appropriate information? For example, USI has two or three octets for 3.1 kHz audio. To check the contents of the User Service Information 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/ Purpose: To check that on receipt of one GRS SP A responds by sending a GRA. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2	GRS_BA GRA_AB		(Note 1) (Note 2)
Detailed Comments: NOTES 1 Range is 1 to 31. 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/ Purpose: To check that exchange discards GRS with invalid range. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ START TNOAC ?TIMEOUT TNOAC LAB ?OTHERWISE CANCEL TNOAC	1 2 3	GRS_RANGE_INVALID_BA	 F	(Note)
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/ Purpose: To get circuit group blocked for SP A. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
UTA ! MML_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ	1 2 3	GROUPBLOCK_MAINT CGB_maint_AB CGBA_maint_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: BlockRemote_CIRCUIT_GROUP_MAINT Group: ISUPB/TEST_STEP/Circuit_Supervision/ Purpose: To check that on receipt of one CGB SP A responds by sending a CGBA. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2	CGB_maint_BA CGBA_maint_AB		(Note)
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/ Purpose: To check that on receipt of one CGB SP A responds by sending a CGBA. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2	CGB_hardw_BA CGBA_hardw_AB		(Note)
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/ Purpose: To check that exchange discards CGG with invalid range. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ START TNOAC # ?TIMEOUT TNOAC LAB ?OTHERWISE CANCEL TNOAC	 1 2 3	CGB_maint_RANGE_ INVALID_BA	 F	(Note)
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/ Purpose: To check that exchange discards CGG with invalid range. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ START TNOAC # ?TIMEOUT TNOAC LAB ?OTHERWISE CANCEL TNOAC	 1 2 3	CGB_hardw_RANGE_ INVALID_BA	 F	 (Note)
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/ Purpose: To unblock circuit group which was blocked remotely. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2	CGU_maint_BA CGUA_maint_AB		(Note)
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/ Purpose: To unblock circuit group which was blocked remotely. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2	CGU_hardw_BA CGUA_hardw_AB		(Note)
Detailed Comments: NOTE – Range is 1 to 31.				

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

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

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

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

Test Step Dynamic Behaviour				
Test Step Name: Check_CIRCUIT_IDLE Group: ISUPB/Circuit_Condition/ Purpose: To check that circuit is idle. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
UTA ! USER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND	1 2 3 4	SETUP_REQ_any IAM_AB REL_BA		
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/ Purpose: To check that speech is possible. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
CAB ! SPEECH_REQ CAB ? SPEECH_IND	1 2	INFO_any_BA 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/ Purpose: To check that ringing tone can be heard. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
UTA ? USER_IND [SP_A=ORI] CAB ? TONE_IND [SP_A=TER]	1 2	RINGING_TONE_BA 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/ Purpose: To check that speech is possible. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
CAB ! DATA_REQ CAB ? DATA_IND	1 2	DATA_any_BA 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/ Purpose: To check that speech is possible. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
CAB ! DATA_REQ CAB ? DATA_IND CAB ! SPEECH_REQ CAB ? SPEECH_IND	1 2 3 4	DATA_any_BA DATA_any_AB INFO_any_BA 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/ Purpose: To check that the echo devices operate correctly. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
CAB ! SPEECH_REQ CAB ? SPEECH_IND	1 2	INFO_echo_BA 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND LAB ! TRANSFER_REQ + Receive_ACM_and_SETUP_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND	1 2 3 4 5 6 7 8	SETUP_REQ_any IAM_AB REL_BA IAM_BA REL_BA 		 (Note 1) (Note 2)
Detailed Comments: NOTES 1 Circuit is not member of the circuit group. 2 Circuit is member of circuit group. 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/			
Purpose:	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:

NOTES

1 Circuit is not member of circuit group.

2 Circuit is member of the circuit group.

3 This test step should be repeated for all circuits of the circuit group.

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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND LAB ! TRANSFER_REQ + Receive_ACM_and_SETUP_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND	1 2 3 4 5 6 7 8	SETUP_REQ_any IAM_AB REL_BA IAM_BA REL_BA		 (Note 1) (Note 2)
Detailed Comments: NOTES 1 Circuit is not the blocked one. 2 Circuit is the blocked one. 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND LAB ! TRANSFER_REQ + Receive_ACM_and_SETUP_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND	1 2 3 4 5 6 7 8	SETUP_REQ_any IAM_AB REL_BA IAM_BA REL_BA		
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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND LAB ! TRANSFER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ	1 2 3 4 5 6 7	SETUP_REQ_any IAM_AB REL_BA IAM_BA BLO_AB BLA_BA		 (Note 1) (Note 2)
Detailed Comments: NOTE 1 Circuit is not the blocked one. 2 Circuit is the blocked one. 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND LAB ! TRANSFER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ	1 2 3 4 5 6 7	SETUP_REQ_any IAM_AB REL_BA IAM_BA BLO_AB BLA_BA		 (Note 1)
Detailed Comments: NOTES 1 Circuit is not the blocked one. 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/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ LAB ! TRANSFER_REQ + Check_RINGING_TONE LAB ! TRANSFER_REQ + Check_CONNECTIVITY UTA ! USER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9 10 11	SETUP_REQ_Speech IAM_Speech_AB ACM_BA CPG_Alert_BA ANM_BA REL_REQ REL_AB RLC_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_ORI_Call_CPG_Progress Group: ISUPB/TEST_STEP/Ori_Call_Setup/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ LAB ! TRANSFER_REQ + Check_RINGING_TONE LAB ! TRANSFER_REQ + Check_CONNECTIVITY UTA ! USER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9 10 11	SETUP_REQ_Speech IAM_Speech_AB ACM_BA CPG_Progress_BA ANM_BA REL_REQ REL_AB RLC_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name:	SETUP_ORI_Call_CPG_In_band_info			
Group:	ISUPB/TEST_STEP/Ori_Call_Setup/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/			
Purpose:	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/ Purpose: 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 + Receive_ACM_Free_Non_ISDN_and_ # SETUP_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9	IAM_Speech_BA SETUP_RESP_any ANM_AB REL_BA		
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/ Purpose: 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 + Receive_ACM_No_Ind_ISDN_and_SETUP_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9	IAM_Speech_BA SETUP_RESP_any ANM_AB REL_BA		
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/ Purpose: 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 + Receive_ACM_No_Ind_Non_ISDN_and_ # SETUP_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9	IAM_Speech_BA SETUP_RESP_any ANM_AB REL_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_TER_Call_CPG_Alerting Group: ISUPB/TEST_STEP/Ter_Call_Setup/ Purpose: 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 + Receive_ACM_and_SETUP_IND LAB ? TRANSFER_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9 10	IAM_Speech_BA CPG_Alert_AB SETUP_RESP_any ANM_AB REL_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_TER_Call_CPG_Progress Group: ISUPB/TEST_STEP/Ter_Call_Setup/ Purpose: 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 + Receive_ACM_and_SETUP_IND LAB ? TRANSFER_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9 10	IAM_Speech_BA CPG_Progress_AB SETUP_RESP_any ANM_AB REL_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_TER_Call_CPG_In_band_info Group: ISUPB/TEST_STEP/Ter_Call_Setup/ Purpose: 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 + Receive_ACM_and_SETUP_IND LAB ? TRANSFER_IND + Check_RINGING_TONE UTA ! USER_REQ LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7 8 9 10	IAM_Speech_BA CPG_In_band_info_AB SETUP_RESP_any ANM_AB REL_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_TER_Call_BCI_Free_ISDN_in_CON Group: ISUPB/TEST_STEP/Ter_Call_Setup/ Purpose: 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 UTA ? USER_IND LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7	IAM_Speech_BA SETUP_IND CON_Free_ISDN_AB REL_BA		
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/ Purpose: 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 UTA ? USER_IND LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7	IAM_Speech_BA SETUP_IND CON_Free_Non_ISDN_AB REL_BA		
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/ Purpose: 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 UTA ? USER_IND LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7	IAM_Speech_BA SETUP_IND CON_No_Ind_ISDN_AB REL_BA		
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/ Purpose: 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 UTA ? USER_IND LAB ? TRANSFER_IND + Check_CONNECTIVITY LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND + Check_CIRCUIT_IDLE	1 2 3 4 5 6 7	IAM_Speech_BA SETUP_IND CON_No_Ind_Non_ISDN_AB REL_BA		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: SETUP_Call_REL_Unalloc_nr Group: ISUPB/TEST_STEP/Unsucc_Call_Setup/ Purpose: 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/ Purpose: 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/ Purpose: 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		TONE_ANNCT_		
#	5	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		TONE_ANNCT_		
#	12	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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND_ # Cause_Unalloc_nr + Check_CIRCUIT_IDLE UTA ? MAINT_IND	1 2 3 4 5 6	SETUP_REQ_64kbps_unrestr IAM_64kbps_unrestr_AB REL_Unalloc_nr_BA 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ + Receive_RLC_and_REL_IND_ # Cause_No_circuit + Check_CIRCUIT_IDLE UTA ? MAINT_IND	1 2 3 4 5 6	SETUP_REQ_64kbps_unrestr IAM_64kbps_unrestr_AB REL_No_circuit_BA 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/ Purpose: To verify that a call can be successfully released using cause information “bearer capability not authorized” in the release message. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
UTA ! USER_REQ LAB ? TRANSFER_IND LAB ! TRANSFER_REQ # + Receive_RLC_and_REL_IND_Cause_ # Bearer_cap_not_authorized + Check_CIRCUIT_IDLE UTA ? MAINT_IND	1 2 3 4 5 6	SETUP_REQ_64kbps_unrestr IAM_64kbps_unrestr_AB REL_Bearer_cap_ not_authorized_BA 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ # + Receive_RLC_and_REL_IND_Cause_ # Bearer_cap_not_available + Check_CIRCUIT_IDLE UTA ? MAINT_IND	1 2 3 4 5 6	SETUP_REQ_64kbps_unrestr IAM_64kbps_unrestr_AB REL_Bearer_cap_ not_available_BA 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/ Purpose: 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 LAB ? TRANSFER_IND LAB ! TRANSFER_REQ # + Receive_RLC_and_REL_IND_Cause_ # Bearer_cap_not_implemented + Check_CIRCUIT_IDLE UTA ? MAINT_IND	1 2 3 4 5 6	SETUP_REQ_64kbps_unrestr IAM_64kbps_unrestr_AB REL_Bearer_cap_ not_implemented_BA 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/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	REL_AB REL_IND REL_IND REL_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_RLC_and_REL_IND Group: ISUPB/TEST_STEP/Various/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND REL_IND RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_RLC_and_REL_IND_Cause_Unalloc_nr Group: ISUPB/TEST_STEP/Various/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND_Cause_Unalloc_nr REL_IND_Cause_Unalloc_nr RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_RLC_and_REL_IND_Cause_No_circuit Group: ISUPB/TEST_STEP/Various/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND_Cause_No_circuit REL_IND_Cause_No_circuit 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/ Purpose: To verify that an 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 UTA ? USER_IND # UTA ? USER_IND # LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND_Cause_Bearer_cap_ not_author REL_IND_Cause_Bearer_cap_ not_author 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/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND_Cause_Bearer cap_not_avail REL_IND_Cause_Bearer cap_not_avail 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/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_AB REL_IND_Cause_Bearer cap_not_impl REL_IND_Cause_Bearer_ cap_not_impl RLC_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_RLC_cicx_and_REL_IND Group: ISUPB/TEST_STEP/Various/ Purpose: To verify that an 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	RLC_cicx_AB REL_IND REL_IND RLC_cicx_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_ACM_and_SETUP_IND Group: ISUPB/TEST_STEP/Various/ Purpose: 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_AB SETUP_IND_any SETUP_IND_any ACM_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_ACM_Echo_and_SETUP_IND Group: ISUPB/TEST_STEP/Various/ Purpose: 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_Echo_Control_AB SETUP_IND_any SETUP_IND_any 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/ Purpose: 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_Free_ISDN_AB SETUP_IND_any SETUP_IND_any 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/ Purpose: 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_Free_Non_ISDN_AB SETUP_IND_any SETUP_IND_any 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/ Purpose: 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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_No_Ind_ISDN_AB SETUP_IND_any SETUP_IND_any 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/			
Purpose:	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 UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4	ACM_No_Ind_Non_ISDN_AB SETUP_IND_any SETUP_IND_any 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/			
Purpose:	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 UTA ? USER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	ACM_cicx_AB SETUP_IND_any IAM_cicy_AB IAM_cicy_AB SETUP_IND_any SETUP_IND_any ACM_cicx_AB IAM_cicy_AB IAM_cicy_AB ACM_cicx_AB IAM_cicy_AB ACM_cicx_AB SETUP_IND_any SETUP_IND_any 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/			
Purpose:	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/ Purpose: To verify that an RLC, an REL IND and a MaintSystem are sent from A to B. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ? TRANSFER_IND UTA ? USER_IND UTA ? MAINT_IND UTA ? MAINT_IND UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND UTA ? MAINT_IND UTA ? MAINT_IND LAB ? TRANSFER_IND UTA ? MAINT_IND LAB ? TRANSFER_IND UTA ? USER_IND UTA ? USER_IND LAB ? TRANSFER_IND	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	RLC_AB REL_IND ALARM_MaintSystem ALARM_MaintSystem REL_IND REL_IND RLC_AB ALARM_MaintSystem ALARM_MaintSystem RLC_AB ALARM_MaintSystem RLC_AB REL_IND REL_IND 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/			
Purpose:	To verify that a BLA indicating CIC x, an REL indicating CIC x and an IAM indicating CIC y is sent from A to B and send an 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/			
Purpose:	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/ Purpose: 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 LAB ? TRANSFER_IND LAB ? TRANSFER_IND LAB ? TRANSFER_IND	1 2 3 4	RSC_cicx_AB IAM_cicy_AB IAM_cicy_AB RSC_cicx_AB		
Detailed Comments:				

Test Step Dynamic Behaviour				
Test Step Name: Receive_RLC_and_send_BLA Group: ISUPB/TEST_STEP/Various/ Purpose: To verify that an 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 LAB ! TRANSFER_REQ LAB ! TRANSFER_REQ LAB ? TRANSFER_IND	1 2 3 4	RLC_AB BLA_BA BLA_BA RLC_AB		
Detailed Comments:				

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

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

Test Step Dynamic Behaviour				
Test Step Name: Receive_RSC_and_MaintSystem_and_T17 Group: ISUPB/TEST_STEP/Various/ Purpose: Receive a reset circuit message, alerting 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/ Purpose: Receive a circuit group reset message, alerting 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/ Purpose: Receive a circuit group unblocking message, alerting of maintenance system and manipulate T21. Default: AnyOtherEventUnexpected Comments:				
Behaviour Description	L	Cref	V	C
LAB ? TRANSFER_IND # START T21min, START T21max UTA ? MAINT_IND ?TIMEOUT T21min CANCEL T21max UTA ? MAINT_IND LAB ? TRANSFER_IND # START T21min, START T21max ?TIMEOUT T21max	 1 2 3 4 5 6	CGU_maint_AB ALARM_MaintSystem ALARM_MaintSystem CGU_maint_AB 	 F F	
Detailed Comments:				

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

A.9.3 Default Dynamic Behaviour

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