ITU

INTERNATIONAL TELECOMMUNICATION UNION





TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

SERIES Q: SWITCHING AND SIGNALLING Specifications of Signalling System No. 7 – Test specification

ISUP basic call test specification: Validation and compatibility for ISUP'92 and Q.767 protocols

ITU-T Recommendation Q.784.1

(Previously CCITT Recommendation)

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

SIGNALLING IN THE INTERNATIONAL MANUAL SERVICE	Q.1–Q.3
INTERNATIONAL AUTOMATIC AND SEMI-AUTOMATIC WORKING	Q.4–Q.59
FUNCTIONS AND INFORMATION FLOWS FOR SERVICES IN THE ISDN	Q.60–Q.99
CLAUSES APPLICABLE TO ITU-T STANDARD SYSTEMS	Q.100–Q.119
SPECIFICATION OF SIGNALLING SYSTEMS No. 4 AND No. 5	Q.120–Q.249
SPECIFICATIONS OF SIGNALLING SYSTEM No. 6	Q.250–Q.309
SPECIFICATIONS OF SIGNALLING SYSTEM R1	Q.310–Q.399
SPECIFICATIONS OF SIGNALLING SYSTEM R2	Q.400–Q.499
DIGITAL EXCHANGES	Q.500–Q.599
INTERWORKING OF SIGNALLING SYSTEMS	Q.600–Q.699
SPECIFICATIONS OF SIGNALLING SYSTEM No. 7	Q.700–Q.849
General	Q.700
Message transfer part	Q.701–Q.709
Simplified message transfer part	Q.710
Signalling connection control part	Q.711–Q.719
Telephone user part	Q.720–Q.729
ISDN supplementary services	Q.730–Q.739
Data user part	Q.740–Q.749
Signalling System No. 7 management	Q.750–Q.759
ISDN user part	Q.760–Q.769
Transaction capabilities application part	Q.770–Q.779
Test specification	Q.780–Q.799
Q3 interface	Q.800–Q.849
DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 1	Q.850–Q.999
PUBLIC LAND MOBILE NETWORK	Q.1000–Q.1099
INTERWORKING WITH SATELLITE MOBILE SYSTEMS	Q.1100–Q.1199
INTELLIGENT NETWORK	Q.1200–Q.1999
BROADBAND ISDN	Q.2000–Q.2999

For further details, please refer to ITU-T List of Recommendations.

ITU-T RECOMMENDATION Q.784.1

ISUP BASIC CALL TEST SPECIFICATION: VALIDATION AND COMPATIBILITY FOR ISUP'92 AND Q.767 PROTOCOLS

Summary

This Recommendation contains a detailed set of "Validation" and "Compatibility" tests for Signalling System No. 7 (ISUP) implementations according to Recommendations Q.761 - Q.764 (ISUP'92) and Q.767. For the test scripts an informal description method is used.

Source

ITU-T Recommendation Q.784.1 was revised by ITU-T Study Group 11 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 9th of July 1996.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. 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, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

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

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, the ITU had/had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

© ITU 1997

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

Page

1	Scope	1
2	References	1
3	Abbreviations	1
4	Objective of the test specification	3
5	Scope of the test list	4
6	General principles of tests	4
7	Test environment	4
7.1	Signalling relation	4
7.2	Configuration	4
7.3	General pre-test conditions	4
8	Different ISUP implementations	4
9	ISUP test list	5
10	ISUP test scripts	11

Recommendation Q.784.1

ISUP BASIC CALL TEST SPECIFICATION: VALIDATION AND COMPATIBILITY FOR ISUP'92 AND Q.767 PROTOCOLS

(revised in 1996)

1 Scope

This Recommendation contains a detailed set of tests for the Signalling System No. 7 Integrated Services Digital Network User Part (ISUP). These tests are intended to validate the protocol specified in ISUP'92 Recommendations Q.761 - Q.764 and Q.767. For ISUP'92 and Recommendation Q.767, the necessary tests depend on the supported Basic Call Procedures. Tests for ISUP *Blue Book* implementations are covered in the 1991 version of Recommendation Q.784. This Recommendation conforms to Recommendation Q.780 which describes the basic rules of the test specification.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- [1] ITU-T Recommendation Q.761 (1993), Functional description of the ISDN User Part of Signalling System No. 7.
- [2] ITU-T Recommendation Q.762 (1993), General function of messages and signals of the ISDN User Part of Signalling System No. 7.
- [3] ITU-T Recommendation Q.763 (1993), Formats and codes of the ISDN User Part of Signalling System No. 7.
- [4] ITU-T Recommendation Q.764 (1993), ISDN user part signalling procedures.
- [5] CCITT Recommendation Q.767 (1991), Application of the ISDN user part of CCITT Signalling System No. 7 for international ISDN interconnections.
- [6] ITU-T Recommendation Q.780 (1995), Signalling System No. 7 test specification General description.
- [7] CCITT Recommendation Q.784 (1991), *ISUP basic call test specification*.

3 Abbreviations

This Recomendation uses the following abbreviations.

- ACM Address Complete Message
- ANM Answer Message
- ATP Access Transport
- BCI Backward Call Indicator

1

BLA	Blocking Acknowledgement message
BLO	Blocking message
CCR	Continuity Check Request message
CFN	Confusion message
CGB	Circuit Group Blocking message
CGBA	Circuit Group Blocking Acknowledgement message
CGU	Circuit Group Unblocking message
CGUA	Circuit Group Unblocking Acknowledgement message
CHI	Call History Information
CIC	Circuit Identification Code
Comb.	combined
CON	Connect message
COT	Continuity message
CPC	Calling Party's Category
CPG	Call Progress message
CPT	Compatibility Test
DPC	Destination Point Code
FAA	Facility Accepted message
FAR	Facility Request message
FCI	Forward Call Indicator
FFS	For Further Study
FOT	Forward Transfer message
FRJ	Facility Reject message
GenNb	Generic Number
GenNot	Generic Notification
HLC	High Layer Compatibility
IAM	Initial Address Message
ISC	International Switching Centre
ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
MCI	Message Compatibility Information
MTP	Message Transfer Part
NCI	Nature of Connection Indicators
OBCI	Optional Backward Call Indicator
OFCI	Optional Forward Call Indicator
OPC	Originating Point Code

PCI	Parameter Compatibility Information
PDC	Propagation Delay Counter
REL	Release message
RES	Resume message
RLC	Release Complete message
RSC	Reset Circuit message
SAM	Subsequent Address Message
SGM	Segmentation Message
SP	Signalling Point
SPC	Signalling Point Code
SUS	Suspend message
TMR	Transmission Medium Requirement
TMR'	Transmission Medium Requirement Prime
TMU	Transmission Medium Used
UBA	Unblocking Acknowledgement message
UBL	Unblocking message
UPA	User Part Available message
UPT	User Part Test message
USI	User Service Information
USI'	User Service Information Prime
USR	User-to-User Information Message
UUI	User-to-User Information
VAT	Validation Test

4 **Objective of the test specification**

The objective of this test specification is to provide:

Validation – A level of confidence that a given implementation conforms to Recommendations Q.761 - Q.764 or Q.767 of SS No. 7 ISUP.

Compatibility – A level of confidence that two implementations of SS No. 7 ISUP are compatible.

In order to ensure that this test specification meets this objective, the following criteria are used:

- 1) The test specification is not intended to provide exhaustive testing of all aspects of the SS No. 7 ISUP.
- 2) All tests should add value in meeting the objective stated above. For example, the testing of timers of which the only function is to alert maintenance staff on expiry may not be useful.
- 3) All tests should be of a practical nature and implementable using the available technology.
- 4) The test list should concentrate on the testing of normal signalling sequences. Testing of abnormal signalling procedures will only be identified where this is regarded as particularly useful.

5) When upgrading existing ISUP relations, compatibility testing is required. The tests to be performed will be the subject of appropriate bilateral agreements and shall be executed before the new ISUP signalling capabilities are put into service.

NOTE – For the tests special trunks shall be assigned. Normal traffic shall continue over the other trunks of the signalling relation. The testing shall have no impact on this normal traffic. After successfully completing the testing, the new ISUP signalling capabilities can be put into service without disruption of the traffic.

5 Scope of the test list

The test list is composed based on ISUP'92Recommendations Q.761 – Q.764 and Q.767.

6 General principles of tests

The tests are described as "Validation" tests or "Validation" and "Compatibility" tests. Each test description indicates in the field "type of test" whether the test is a "Validation" or a "Validation" and "Compatibility" test. In addition to signalling protocol testing some call control functions are also verified, e.g. the transfer of speech/information.

7 Test environment

7.1 Signalling relation

A stable signalling relation is required between "SP A" and "SP B" in order to carry out effective tests. A tested MTP signalling link should be used for compatibility tests. In addition, telephony/data circuits are required for most tests.

7.2 Configuration

See 6.5/Q.780.

In validation testing, the signalling point under test is called SP "A".

In compatibility testing, each signalling point may in turn consider itself to be SP "A", i.e. tests are performed on both signalling points involved.

It is indicated in some test scripts that for validation testing the tests should be repeated in the reverse direction.

7.3 General pre-test conditions

For tests provided to a termination, it is assumed that this termination is free and the circuit is idle. Otherwise it is pointed out in the test script.

8 Different ISUP implementations

This Recommendation covers test cases for the ISUP implementations of Q.767, Q.761 – Q.764 and in case of compatibility testing as well as combinations between them. Since ISUP Q.767 is based on ISUP *Blue Book*, for tests between ISUP *Blue Book* and ISUP'92 the combined Compatibility tests of this Recommendation are applicable.

Q.767 VAT

Tests marked with "Q.767 VAT" describe Validation tests for an ISC with an ISUP implementation according to Recommendation Q.767.

Q.767 CPT

Tests marked with "Q.767 CPT" describe Compatibility tests for interconnections between two ISCs with ISUP Q.767 implemented. Presuppositions are the successful Validation tests for both ISCs according to Recommendation Q.767 VAT.

ISUP'92 VAT

Tests marked with "ISUP'92 VAT" describe Validation tests for an ISC with an ISUP implementation according to Recommendations Q.761 - Q.764.

ISUP'92 CPT

Tests marked with "ISUP'92 CPT" describe Compatibility tests for interconnections between two ISCs with ISUP Q.761 – Q.764 implemented. Presuppositions are the successful Validation tests for both ISCs according to ISUP'92 VAT.

Comb. CPT

Tests marked with "Comb. CPT" describe combined Compatibility tests for interconnections between one exchange with an ISUP implementation according to Recommendation Q.767 or *Blue Book* and another exchange with an ISUP implementation according to ISUP'92 Q.761 – Q.764. Presuppositions are the successful Validation tests for both exchanges according to Recommendations Q.767 or *Blue Book* VAT and ISUP'92 VAT.

	Title/subtitle	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
1	Circuit supervision and signalling supervision					
1.1	Non-allocated circuits	Х	Х	Х	Х	Х
1.2	Reset of circuits					
1.2.1	RSC received on an idle circuit	Х		Х		
1.2.2	RSC sent on an idle circuit	Х		Х		
1.2.3	RSC received on a locally blocked circuit	Х		Х		
1.2.4	RSC received on a remotely blocked circuit	Х		Х		
1.2.5	Circuit group reset received	Х		Х		
1.2.6	Circuit group reset sent	Х		Х		
1.2.7	Circuit group reset received on remotely blocked circuits	Х		Х		
1.3	Blocking of circuits					
1.3.1	Circuit group blocking/unblocking					
1.3.1.1	CGB and CGU received	Х	Х	Х	Х	Х
1.3.1.2	CGB and CGU sent	X	Х	Х	Х	Х
1.3.2	Circuit blocking/unblocking					
1.3.2.1	BLO received	X	Х	Х	Х	X

9 ISUP test list

Title/subtitle			Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
1.3.2.2	BLO sent	Х	Х	Х		
1.3.2.3	Blocking from both ends; removal of blocking from one end	Х	Х	Х	Х	Х
1.3.2.4	IAM received on a remotely blocked circuit	Х	Х	Х	Х	Х
1.3.2.5	Blocking with CGB, unblocking with UBL	Х		Х		
1.4	Continuity check procedure					
1.4.1	CCR received: successful	Х	Х	Х	Х	Х
1.4.2	CCR sent: successful	Х	Х	Х	Х	Х
1.4.3	CCR received: unsuccessful	Х		Х		
1.4.4	CCR sent: unsuccessful	Х		Х		
1.4.5	CCR not received: unsuccessful; verify T27 timer	Х		Х		
1.5	Receipt of unreasonable signalling information messages					
1.5.1	Receipt of unexpected messages	Х		Х		
1.5.2	Receipt of unexpected messages during call setup	Х		Х		
1.5.3	Receipt of unexpected messages during a call	X		Х		
1.6	Receipt of unknown signalling information					
1.6.1	Receipt of unknown messages					
1.6.1.1	Receipt of unknown messages in forward direction	Х				
1.6.1.2	Receipt of unknown messages in backward direction	Х				
1.6.2	Receipt of unknown parameters					
1.6.2.1	Receipt of unknown parameters in forward direction	Х				
1.6.2.2	Receipt of unknown parameters in backward direction	Х				
1.6.3	Receipt of unknown parameter values					
1.6.3.1	Receipt of unknown parameter values in forward direction	Х				
1.6.3.2	Receipt of unknown parameter values in backward direction	Х				
1.7	Receipt of unknown signalling information (Compatibility procedure)					
1.7.1	Receipt of unknown messages (Compatibility procedure)					
1.7.1.1	Message Compatibility Information: Release call			Х	Х	
1.7.1.2	Message Compatibility Information: Discard message			Х	Х	
1.7.1.3	Message Compatibility Information: Pass on			Х	Х	
1.7.1.4	Message Compatibility Information: Pass on not possible, release call			Х	Х	
1.7.1.5	Message Compatibility Information: Pass on not possible, discard information			Х	Х	

Title/subtitle			Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
1.7.1.6	Message Compatibility Information: Transit interpretation	npatibility Information: Transit				
1.7.1.7	Message Compatibility Information not received			Х	Х	
1.7.2	Receipt of unknown parameters (Compatibility procedure)					
1.7.2.1	Parameter Compatibility Information: Release call			Х	Х	
1.7.2.2	Parameter Compatibility Information: Discard message			Х	Х	
1.7.2.3	Parameter Compatibility Information: Discard parameter			Х	Х	
1.7.2.4	Parameter Compatibility Information: Pass on			Х	Х	
1.7.2.5	Parameter Compatibility Information: Pass on not possible, release call			Х	Х	
1.7.2.6	Parameter Compatibility Information: Pass on not possible, discard message			Х	Х	
1.7.2.7	Parameter Compatibility Information: Pass on not possible, discard parameter			Х	Х	
1.7.2.8	Parameter Compatibility Information: Transit interpretation			Х	Х	
1.7.2.9	Parameter Compatibility Information not received			Х	Х	
1.7.2.10	Parameter Compatibility Information not received in REL			Х	Х	
1.7.3	Receipt of unknown parameter values					
1.7.3.1	Receipt of unknown parameter values in forward direction			Х		
1.7.3.2	Receipt of unknown parameter values in backward direction			Х		
2	Normal call setup – ordinary speech calls					
2.1	Both way circuit selection					
2.1.1	IAM sent by controlling SP	Х	Х	Х	Х	Х
2.1.2	IAM sent by non-controlling SP	Х	Х	Х	Х	Х
2.2	Called address sending					
2.2.1	"en bloc" operation	Х	Х	Х	Х	Х
2.2.2	Overlap operation (with SAM)	Х	X	Х	Х	Х
2.3	Successful call setup					
2.3.1	Ordinary call (with various indications in ACM)	Х	Х	Х	Х	Х
2.3.2	Ordinary call (with ACM, CPG and ANM)		Х	Х	Х	Х
2.3.3	Ordinary call with CON		Х	Х	Х	Х
2.3.4	Call switched via a satellite		Х	Х	Х	X
2.3.5	Blocking and unblocking during a call (initiated)		Х	Х	Х	Х
2.3.6	Blocking and unblocking during a call (received)	X	X	Х	Х	X
2.4	Propagation delay determination procedure					
2.4.1	IAM sent containing the PDC			Х		
2.4.2	SP supporting the procedure to SP supporting the procedure			Х	Х	

7

Title/subtitle			Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
2.4.3	Abnormal procedure, PCD is not received			Х		
2.4.4	ISUP'92 supporting the procedure to Q.767	Х		Х		Х
2.4.5	Q.767 to ISUP'92 supporting the procedure	Х		Х		Х
3	Normal call release					
3.1	Calling party clears before address complete	Х	Х	Х	Х	Х
3.2	Calling party clears before answer	Х	Х	Х	Х	Х
3.3	Calling party clears after answer	Х	Х	Х	Х	Х
3.4	Called party clears after answer	Х	Х	Х	Х	Х
3.5	Suspend initiated by the network	Х	Х	Х	Х	Х
3.6	Suspend and resume initiated by a calling party	Х				
3.7	Suspend and resume initiated by a called party	Х				
3.8	Collision of REL messages	Х	Х	Х	Х	Х
4	Unsuccessful call setup					
4.1	Validate a set of known causes for release	Х	Х	Х	Х	Х
5	Abnormal situations during a call					
5.1	Inability to release in response to a REL after ANM	Х		Х		
5.2	Timers					
5.2.1	T7: waiting for ACM or CON	Х	Х	Х	Х	Х
5.2.2	T9: waiting for ANM	Х	Х	Х	Х	Х
5.2.3	T1 and T5: failure to receive a RLC	Х		Х		
5.2.4	T6: waiting for RES (Network) message	Х		Х		
5.2.5	T8: waiting for COT message if applicable	Х		Х		
5.2.6	T12 and T13: failure to receive a BLA	Х		Х		
5.2.7	T14 and T15: failure to receive a UBA	Х		Х		
5.2.8	T16 and T17: failure to receive a RLC	Х		Х		
5.2.9	T18 and T19: failure to receive a CGBA	Х		Х		
5.2.10	T20 and T21: failure to receive a CGUA	Х		Х		
5.2.11	T22 and T23: failure to receive a GRA	Х		Х		
5.3	Reset of circuits during a call					
5.3.1	Of an outgoing circuit	Х	Х	Х	Х	Х
5.3.2	Of an incoming circuit	Х	Х	Х	Х	Х
6	Special call setup					
6.1	Continuity check call					
6.1.1	Continuity check required	Х	Х	Х	Х	Х
6.1.2	COT applied on previous circuit	Х	Х	Х	Х	Х
6.1.3	Calling party clears during a COT			Х		
6.1.4	Delay of through connect		Х	Х	Х	X
6.1.5	COT unsuccessful	X		X		
6.2	Automatic repeat attempt					
6.2.1	Dual seizure for non-controlling SP	Х	X	Х	Х	X
6.2.2	Blocking of circuit	Х		Х		

Title/subtitle			Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
6.2.3	Circuit reset	X		Х		
6.2.4	Continuity check failure	X		Х		
6.2.5	Reception of unreasonable signalling information	Х		Х		
6.3	Dual seizure					
6.3.1	Dual seizure for controlling SP	Х	Х	Х	Х	Х
6.4	Semi-automatic operation					
6.4.1	FOT sent following a call to a subscriber	Х		Х		
6.4.2	FOT received following a call to a subscriber	Х		Х		
6.4.3	FOT sent following a call via codes 11 and 12	Х		Х		
6.4.4	FOT received following a call via codes 11 and 12	Х		Х		
6.5	Simple segmentation					
6.5.1	Sending of a SGM			Х	Х	
6.5.2	Receipt of a SGM			Х	Х	
6.5.3	Receipt of a SGM after timer T34 expired			Х		
6.5.4	Receipt of a SGM in forward direction	Х		Х		Х
6.5.5	Receipt of a SGM in backward direction	Х		Х		Х
6.6	Signalling procedures for connection type with Fallback capability					
6.6.1	Fallback does not occur			Х	Х	
6.6.2	Fallback occurs behind SP A			Х	Х	
6.6.3	Fallback occurs in SP A			Х		
6.6.4	Abnormal procedure, Fallback connection types sent to an exchange not supporting the fallback procedure	X		Х		X
7	Bearer services					
7.1	64 kbit/s unrestricted					
7.1.1	Successful call setup	Х	Х	Х	Х	Х
7.1.2	Unsuccessful call setup	Х	Х	Х	Х	Х
7.1.3	Dual seizure	X	Х	Х	Х	Х
7.2	3.1 kHz audio					
7.2.1	Successful call setup	Х	Х	Х	Х	Х
7.3	Multirate connection types					
7.3.1	Successful multirate outgoing call setup			Х	Х	
7.3.2	Successful multirate incoming call setup			Х	Х	
7.3.3	Unsuccessful multirate call setup – one circuit already busy			Х		
7.3.4	Dual seizure of different connection types: Controlling exchange			Х	X	
7.3.5	Dual seizure of different connection types: Non- controlling exchange			Х	X	
7.3.6	Abnormal procedure, Multirate connection types call sent to an exchange not supporting the procedure	X		Х		Х

9

	Title/subtitle	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
8	Congestion control and user flow control					
8.1	Automatic congestion control					
8.1.1	Receipt of a release message containing an automatic congestion level parameter	Х		Х		
8.1.2	Sending of a release message containing an automatic congestion level parameter	Х		Х		
8.2	ISDN User Part availability control					
8.2.1	Receipt of an UPT			Х		
8.2.2	Sending of an UPT			Х		
8.2.3	T4: failure to receive a response to a UPT			Х		
9	Echo control procedure					
9.1	Echo control procedure according to Q.767					
9.1.1	Q.767 echo control procedure for call setup (initiated in SP A)	Х	Х	Х	Х	Х
9.1.2	Q.767 echo control procedure for call setup (initiated in SP B)	Х		Х		
9.2	Dynamic Echo control procedure according to Q.764	FFS	FFS	FFS	FFS	FFS

10 ISUP test scripts

TEST N	ST NUMBER: 1.1									
TITLE:	Circuit supervision									
SUBTIT	LE:	LE: Non-allocated circuits								
PURPOS	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									
REFERI	ENCES:	Q.767:			ISUP'	92:				
PRE-TE	ST CONDITI	ONS: Arrar betwo	nge the data in SP een SP A and SP I	B such that th B	e CIC i	dentifies a circuit tha	t does not exist			
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT			
		Х	Х	Х		Х	Х			
EXPECT	TED MESSAC	BE SEQUENCE:								
	SP	A				SP B				
		\leftarrow			IA	Μ				
	TEST DESC	RIPTION								
1	1 Arrange for SP B to send an initial address message. Record the message sequence using a signal monitor.									
2	CHECK A: V	VAS THE MESSA	AGE SEQUENCE	E AS ABOVE?	·					
3	CHECK B: W	VAS THE INDICA	ATION GIVEN T	O THE MAIN	ITENA	NCE SYSTEM?				

TEST N	NUMBER: 1.2.1								
TITLE:		Reset of circuits							
SUBTIT	LE:	RSC received on an idle circuit							
PURPOS	SE:	To verify that on receipt of a reset circuit message SP A will respond by sending a release complete message							
REFERE	ENCES:	Q.767: D.2.10.3.1 b)/Q.767 ISUP'92: 2.9.3.1 b)/Q.764							
PRE-TE	ST CONDITI	ONS:							
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92 CPT	Comb. CPT		
		X		Х					
EXPECT	TED MESSAG	GE SEQUENCE:							
	SP A					SP B			
		-	<			RSC			
		RLC —		>	>				
	TEST DESCRIPTION								
1	Arrange for S Record the m	SP B to send a resence under the send a reserver of the sender of the se	t-circuit message	nitor.					
2	CHECK A: I	S THE CIRCUIT	IDLE?						
3	CHECK B: V	WAS THE MESSA	GE SEQUENCE	AS ABOVE?	·				

TEST N	ST NUMBER: 1.2.2									
TITLE:		Reset of circuits	Reset of circuits							
SUBTIT	LE:	RSC sent on an idle circuit								
PURPOS	SE: To verify that SP A is able to generate a reset-circuit message									
REFERE	ENCES:	Q.767: D.2.10.3.	1/Q.767		ISUP	92: 2.9.3.1/Q.764				
PRE-TE	PRE-TEST CONDITIONS:									
TYPE O	TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT									
X X X										
EXPECT	TED MESSAC	GE SEQUENCE:								
	SP A					SP B				
		rsc —		>	>					
		~	<			RLC				
TEST DESCRIPTION										
1 Arrange for SP A to send a reset-circuit message. Record the message sequence using a signal monitor.										
2 CHECK A: IS THE CIRCUIT IDLE?										
3	CHECK B: W	VAS THE MESSA	AGE SEQUENCE	AS ABOVE?						

TEST N	UMBER:	1.2.3							
TITLE:		Reset of circuits							
SUBTIT	LE:	RSC received on	a locally blocked	circuit					
PURPOS	POSE: 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								
REFERI	ENCES:	S: Q.767: D.2.10.3.1 c)/Q.767 ISUP'92: 2.9.3.1 c)/Q.764							
PRE-TEST CONDITIONS:									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT		
		Х		Х					
EXPECTED MESSAGE SEQUENCE:									
SP A SP B									
		BLO —		>	>				
		~	<			BLA			
		<	<			RSC			
		BLO —			>				
		RLC (Note) —			>				
		<pre></pre>	-			BLA (Note)			
	TEST DESC	RIPTION							
1	Arrange for S	SP A to send a bloc	cking message.						
Record the message sequence using a signal monitor.									
2 Arrange for SP B to send a reset-circuit message.									
3 CHECK A: DOES THE CIRCUIT REMAIN IN THE LOCALLY BLOCKED STATE?									
4	CHECK B: V	WAS THE MESSA	AGE SEQUENCE	AS ABOVE?	·				
	NOTE – The	message sequence	e for RLC and BL	A may occur i	in reve	rse sequence.			

TEST N	Г NUMBER: 1.2.4								
TITLE:		Reset of circuits							
SUBTIT	LE:	RSC received on a remotely blocked circuit							
PURPOS	SE:	To verify that SP	A is able to react	to a reset-circ	uit mes	ssage for a remotely b	locked circuit		
REFERE	ENCES:	Q.767: D.2.10.3.	Q.767: D.2.10.3.1 d)/Q.767 ISUP'92: 2.9.3.1 d)/Q.764						
PRE-TEST CONDITIONS:									
TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT									
		X		Х					
EXPECT	EXPECTED MESSAGE SEQUENCE:								
	SP A					SP B			
		<	<			BLO			
		BLA —			>				
		<	<			RSC			
		RLC —		>	>				
	TEST DESC	RIPTION							
1	1 Arrange for SP B to send a blocking message. Record the message sequence using a signal monitor.								
2	2 Arrange for SP B to send a reset-circuit message.								
3	CHECK A: I	S THE CIRCUIT	IDLE?						
4	CHECK B: V	WAS THE MESSA	GE SEQUENCE	AS ABOVE?					

TEST N	Γ NUMBER: 1.2.5								
TITLE:		Reset of circuits							
SUBTIT	ĽE:	Circuit group res	et received						
PURPOS	SE:	To verify that on receipt of one circuit group reset message SP A will respond by sending a circuit group reset acknowledge message							
REFERI	ENCES:	Q.767: D.2.10.3.	2/Q.767		ISUP'	92: 2.9.3.2/Q.764			
PRE-TEST CONDITIONS:									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92 CPT	Comb. CPT		
	X X								
EXPECTED MESSAGE SEQUENCE:									
	SP A					SP B			
		<	<			GRS			
		GRA —			>				
	TEST DESC	RIPTION							
1	Arrange for S Record the m	SP B to send a circ nessage sequence u	uit group reset me using a signal mon	essage. iitor.					
2	CHECK A: A	ARE THE CIRCU	ITS IDLE?						
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?								
4	CHECK C: ARE THE STATUS BITS IN GRA SET CORRECTLY?								
5	CHECK D: I	F RANGE VALU	E = 0, GRS IS DI	SCARDED A	ND GF	RA IS NOT SENT.			
6	CHECK E: I	F RANGE VALU	E > 31, GRS IS D	ISCARDED A	AND G	RA IS NOT SENT.			

TEST N	T NUMBER: 1.2.6								
TITLE:		Reset of circuits							
SUBTIT	LE:	Circuit group reset sent							
PURPOS	OSE: To verify that SP A is able to generate a circuit group reset message								
REFERE	ENCES:	Q.767: D.2.10.3.	2/Q.767		ISUP'	92: 2.9.3.2/Q.764			
PRE-TE	PRE-TEST CONDITIONS:								
TYPE O	YPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT								
	X X X								
EXPECT	TED MESSAG	GE SEQUENCE:							
	SP A					SP B			
		GRS —		>	>				
		<	<			GRA			
TEST DESCRIPTION									
1 Arrange for SP A to send a circuit group reset message. Record the message sequence using a signal monitor.									
2	CHECK A: A	ARE THE CIRCU	ITS IDLE?						
3	CHECK B: V	WAS THE MESSA	AGE SEQUENCE	AS ABOVE?					

TEST NUMBER: 1.2.7 TITLE: Reset of circuits SUBTITLE: Circuit group reset received on remotely blocked circuits PURPOSE: To verify that SP A is able to react to a circuit group reset message correctly for remotely blocked circuits **REFERENCES:** Q.767: D.2.10.3.2 d)/Q.767 ISUP'92: 2.9.3.2 d)/Q.764 PRE-TEST CONDITIONS: TYPE OF TEST: Q.767 CPT ISUP'92 VAT Q.767 VAT ISUP'92 CPT Comb. CPT Х Х EXPECTED MESSAGE SEQUENCE: SP A SP B BLO (CIC = x) BLA BLO (CIC = y) BLA -GRS (including CIC = x,y) GRA -TEST DESCRIPTION 1 Arrange for SP B to send a circuit group reset message including the blocked circuits x and y. Record the message sequence using a signal monitor. 2 CHECK A: ARE THE CIRCUITS IDLE?... 3 CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP	Basic	Call	Test	Spe	cificatior	n
-------------	-------	------	------	-----	------------	---

TEST N	UMBER:	1.3.1.1							
TITLE:		Circuit group blo	Circuit group blocking/unblocking						
SUBTIT	LE:	CGB and CGU r	eceived						
PURPO	SE:	To verify that the	e circuit group blo	cking feature c	can be c	orrectly initiated			
REFERI	ENCES:	Q.767: D.2.9.2/Q	.767		ISUP'9	92: 2.8.2/Q.764			
PRE-TE	ST CONDITI	ONS:							
TYPE O	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		X	Х	Х		Х	Х		
EXPEC	TED MESSAG	GE SEQUENCE:							
SP A SP B									
	CGB								
	CGBA — >								
	CGU								
		CGUA —		>	>				
	TEST DESC	RIPTION							
1	Arrange for S indicator set Record the m	SP B to send one c to "maintenance o nessage sequence t	ircuit group block riented". Ising a signal mor	ing message w	with the	circuit group supervi	sion message type		
2	CHECK A: V INDICATED	VERIFY THAT A D BY THE RANG	CALL CANNOT E AND STATUS	BE ORIGINA PARAMETEI	ATED F R IN TH	ROM SP A ON THE IE CGB MESSAGE.	E CIRCUITS		
3	Arrange for S to "maintena	SP B to send one c nce oriented".	ircuit group unblo	ocking message	e with c	ircuit group supervisi	on message type set		
4	CHECK B: V INDICATED	VERIFY THAT A D BY THE RANG	CALL CAN BE (E FIELD.	ORIGINATED	FROM	I EITHER SP ON TH	IE CIRCUITS		
5	CHECK C: V	WAS THE MESSA	AGE SEQUENCE	E AS ABOVE?					
6	CHECK D: I	F RANGE VALU	E = 0, CGB IS D	ISCARDED A	ND CG	BA IS NOT SENT.			
7	CHECK E: I NOT SENT.	F THE NUMBER	OF STATUS BIT	IS SET TO "1'	" > 32, (CGB IS DISCARDE	D AND CGBA IS		
8	Repeat steps	1 to 7 with the cire	cuit group supervi	ision message	type ind	licator set to "hardwa	re failure oriented".		
	NOTE – A C	CPC = "test call" sh	ould not be used	in CHECK A a	and CHI	ECK B.			

TEST N	UMBER:	1.3.1.2							
TITLE:		Circuit group blo	Circuit group blocking/unblocking						
SUBTIT	TLE:	CGB and CGU s	ent						
PURPO	SE:	To verify that SP A is able to generate one circuit group blocking message and one circuit group unblocking message							
REFERI	ENCES:	Q.767: D.2.9.2/Q.767 ISUP'92: 2.8.2/Q.764							
PRE-TE	PRE-TEST CONDITIONS:								
TYPE C)F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		X	X	X		X	X		
EXPEC	TED MESSA(GE SEQUENCE:	L	1					
SP A SP B									
		CGB —			\geq				
			<			CGBA			
		cgu —			\geq				
		~	<			CGUA			
	TEST DESC	RIPTION							
1	Arrange for S indicator set Record the n	SP A to send one c to "maintenance o nessage sequence t	ricuit group block riented". Jsing a signal mor	cing message v	with the	circuit group supervi	ision message type		
2	Arrange for S indicator set	SP A to send one c to "maintenance o	circuit group unblo riented".	ocking messag	e with g	circuit group supervis	ion message type		
3	3 CHECK A: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THE CIRCUITS INDICATED BY THE RANGE FIELD.								
4	CHECK B: V	WAS THE MESSA	AGE SEQUENCE	E AS ABOVE	?				
5	Repeat steps	1 to 4 with circuit	group supervision	n message typ	e indica	tor set to "hardware f	ailure oriented".		
	NOTE – A C	CPC = "test call" sh	nould not be used	in CHECK A.					

TEST N	UMBER:	1.3.2.1							
TITLE:		Circuit blocking/unblocking							
SUBTIT	LE:	BLO received							
PURPOS	SE:	To verify that the blocking/unblocking procedure can be correctly initiated.							
REFERE	ENCES:	Q.767: D.2.9.2/Q.767 ISUP'92: 2.8.2/Q.764							
PRE-TEST CONDITIONS:									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92 CPT	Comb. CPT		
		X	Х	X		Х	Х		
EXPECT	TED MESSAC	GE SEQUENCE:				11			
SP A SP B									
		<	\leq			BLO			
		BLA —		>	>				
		<	<			UBL			
		UBA —			>				
	TEST DESC	RIPTION							
1	Arrange for S	SP B to send a blo	cking message.	itor					
2	CHECK A: V	/ERIFY THAT A	CALL CANNOT	BE ORIGINA	ATED]	FROM SP A ON THI	S CIRCUIT.		
3	3 Arrange for SP B to send an unblocking message.								
4	4 CHECK B: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THIS CIRCUIT.								
5	5 CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?								
	NOTE – A C	PC = "test call" sh	ould not be used i	in CHECK A a	and CH	IECK B.			

TEST N	UMBER:	1.3.2.2							
TITLE:		Circuit blocking/	unblocking						
SUBTIT	LE:	BLO sent							
PURPOS	SE:	To verify that SP A is able to generate blocking messages							
REFERE	ENCES:	Q.767: D.2.9.2/Q.767 ISUP'92: 2.8.2/Q.764							
PRE-TEST CONDITIONS:									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT		
		Х	Х	Х		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
	SP A SP B								
		BLO —		>	>				
		<	<			BLA			
		UBL —		>	>				
		<	_			UBA			
			-			-			
	TEST DESC.	RIPTION							
1	Arrange for S Record the m	SP A to send a blo essage sequence u	cking message. Ising a signal mon	itor.					
2	2 Arrange for SP A to send an unblocking message.								
3	CHECK A: V	/ERIFY THAT A	CALL CAN BE	ORIGINATEI	O FROI	M EITHER SP ON TH	HIS CIRCUIT.		
4	CHECK B: W	WAS THE MESSA	AGE SEQUENCE	AS ABOVE?	·				
	NOTE – A C	PC = "test call" sh	nould not be used i	in CHECK A.					

TEST N	UMBER:	1.3.2.3								
TITLE:		Circuit blocking/unblocking								
SUBTIT	LE:	Blocking from be	oth ends; removal	of blocking fro	m one end					
PURPOS	SE:	To verify that the	e blocking/unbloc	king procedure	can be correctly initiated					
REFERI	ENCES:	Q.767: D.2.9.2/Q	0.767]	ISUP'92: 2.8.2/Q.764					
PRE-TE	PRE-TEST CONDITIONS:									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VA	AT ISUP'92 CPT	Comb. CPT				
		Х	Х	Х	X	X				
EXPEC	EXPECTED MESSAGE SEQUENCE:									
SP A SP B										
	BLO ———>									
	Sector BLA									
	BLO									
		BLA —		>	>					
		UBL —		>	>					
		<	<		– UBA					
		<			- UBL					
		UBA —		>	>					
	TEST DESC	RIPTION								
1	Arrange for S Record the m	SP A to send a blo essage sequence u	cking message. Ising a signal mon	iitor.						
2	Arrange for S	SP B to send a bloc	cking message.							
3	CHECK A: V	ERIFY THAT A	CALL CANNOT	BE ORIGINA	TED ON THIS CIRCUIT	BY EITHER SP.				
4	Arrange for S	SP A to send an un	blocking message	2.						
5	CHECK B: V	ERIFY THAT A	CALL CANNOT	BE ORIGINA	TED BY SP A.					
6	Arrange for SP B to send an unblocking message.									
7	CHECK C: VERIFY THAT A CALL CAN BE ORIGINATED ON THIS CIRCUIT BY EITHER SP.									
8	CHECK D: V	VAS THE MESSA	AGE SEQUENCE	E AS ABOVE?						
	NOTE – A C	PC = "test call" sh	ould not be used	in CHECKs A,	B and C.					

TEST N	UMBER:	1.3.2.4							
TITLE:		Circuit blocking/unblocking							
SUBTIT	LE:	IAM received on	a remotely block	ed circuit					
PURPOS	SE:	To verify that an	IAM will unblock	k a remotely blocke	d circuit				
REFERE	ENCES:	Q.767: D.2.9.2.3	xiv)/Q.767	ISU	P'92: 2.8.2.3 xiv)/Q.764	4			
PRE-TE	ST CONDITI	ONS:							
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT			
		Х	Х	Х	X	Х			
EXPEC	TED MESSA	GE SEQUENCE:							
	SP A				SP B				
		\sim			BLO				
		BLA —		\rightarrow					
		\leftarrow	.		IAM				
	ACM — >								
	Ringing tone Ringing tone								
		ANM —		\rightarrow					
	Co	mmunication —			Communication				
		\leftarrow	>		REL				
		RLC —		\longrightarrow					
	TEST DESC	RIPTION							
1	Arrange for S	SP B to send a bloc	king message						
-	Record the n	nessage sequence u	sing a signal mon	itor.					
2	CHECK A: Y	VERIFY THAT A	CALL CANNOT	BE ORIGINATEI	O FROM SP A ON THI	S CIRCUIT.			
3	Arrange for S	SP B to send an ini	tial address messa	age (non-test call).					
4	CHECK B: V STATUS FC	VERIFY THAT TH OR THIS CIRCUIT	IE CALL IS PRO IS REMOVED A	CESSED NORMA AT SP A.	LLY AT SP A AND T	HE BLOCKING			
5	CHECK C: 0	CAN RINGING TO	ONE BE HEARD	?					
6	The called pa	arty should answer	the call.						
7	CHECK D: I	S THE CONNEC	TION ESTABLIS	HED?					
8	The calling p	party should clear the	ne call.						
9	CHECK E: IS THE CIRCUIT IDLE?								
10	CHECK F: V	WAS THE MESSA	GE SEQUENCE	AS ABOVE?					
	NOTE – A C	CPC = "test call" sh	ould not be used i	in CHECK A.					

TEST N	UMBER:	1.3.2.5							
TITLE:		Circuit blocking/unblocking							
SUBTIT	LE:	Blocking with CGB, unblocking with UBL							
PURPO	SE:	To verify that a circuit blocked by a maintenance oriented group blocking message can be unblocked with an unblocking message							
REFERI	ENCES:	Q.767: 2.9.2/Q.767 ISUP'92: 2.8.2/Q.764							
PRE-TE	RE-TEST CONDITIONS:								
TYPE O	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT			
		X		Х					
EXPEC	TED MESSAC	GE SEQUENCE:	·						
	SP A				SP B				
			<		CGB (CIC = x,y)				
		CGBA –		\rightarrow					
		-	<		UBL (CIC = x)				
		UBA –		\longrightarrow					
	IA	-M(CIC = x) -		\longrightarrow					
ACM									
Ringing Tone Ringing Tone									
		-	<		ANM				
	Co	mmunication –			Communication				
		REL -		\rightarrow					
			<		RLC				
	TEST DESC	DIDTION							
1	Amongo for S	TD D to cond a size	wit group bloghin	-					
1	Record the m	lessage sequence i	using a signal mon	itor.					
2	CHECK A: V	/ERIFY THAT A	CALL CANNOT	BE ORIGINATED	FROM SP A ON THI	ESE CIRCUITS.			
3	Arrange for SP B to send an unblocking message for one of the circuits blocked by the circuit group blocking message.								
4	Make a call from SP A to SP B.								
5	CHECK B: C	CHECK B: CAN RINGING TONE BE HEARD?							
6	The called party should answer the call.								
7	CHECK C: I	CHECK C: IS THE CONNECTION ESTABLISHED?							
8	The calling p	arty should clear t	the call.						
9	CHECK D: I	S THE CIRCUIT	IDLE?						
10	CHECK E: W	VAS THE MESSA	AGE SEQUENCE	AS ABOVE?					
	NOTE – A CPC = "test call" should not be used in CHECK A or in step 4.								

TEST N	UMBER:	1.4.1							
TITLE:		Continuity check procedure							
SUBTIT	LE:	CCR received: successful							
PURPOS	SE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly performed							
REFERE	ENCES:	Q.767: D.2.1.8/Q	.767		ISUP	92: 2.1.8/Q.764			
PRE-TE	ST CONDITI	ONS:							
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		X	Х	Х		Х	Х		
EXPECT	TED MESSAG	GE SEQUENCE:							
		SP A				SP B			
		~	<			CCR			
						Check tone			
						REL			
		RLC —		_	>				
	TEST DESCRIPTION								
1	Initiate the continuity check procedure at SP B. Record the message sequence using a signal monitor.								
2	CHECK A: I	CK A: IS THE CIRCUIT IDLE?							
3	CHECK B: V	WAS THE MESSA	AGE SEQUENCE	AS ABOVE?	?				

TEST	EST NUMBER: 1.4.2							
TITLE	:	Continuity check procedure						
SUBT	TLE:	CCR sent: success	ful					
PURP	OSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly performed						
REFEI	RENCES:	Q.767: D.2.1.8/Q.	767		ISUP'9	2: 2.1.8/Q.764		
PRE-T	EST CONDITI	ONS:						
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	2VAT	ISUP'92CPT	Comb. CPT	
		X	Х	Х		Х	Х	
EXPE	CTED MESSAC	GE SEQUENCE:						
	SP A					SP B		
		CCR ——		\rightarrow	-			
	Cheo	ck tone						
					-			
		·····			- T	21 C		
TEST DESCRIPTION								
	ILSI DESCRI							
1	Initiate the continuity check procedure at SP A. Record the message sequence using a signal monitor.							
2	CHECK A: IS THE CIRCUIT IDLE?							
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?							

TEST NUMBER: 1.4.3									
TITLE	2:	Continuity check procedure							
SUBT	ITLE:	CCR received: unsuccessful							
PURPOSE: To verify that the messages associated with continuity check procedure for a proper alignment of circuits can be correctly received									
REFE	RENCES:	Q.767: D.2.1.8/Q.767 ISUP'92: 2.1.8/Q.764							
PRE-TEST CONDITIONS: Ensure that no backward check tone is detected within the specified time out									
TYPE	OF TEST:	Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT							
		X		Х					
EXPE	CTED MESSAGI	E SEQUENCE:							
	SP A				SP B				
		\leftarrow			TCCR				
					Check tone				
		\leftarrow			+COT (failed)				
					l				
	T26								
					Check tone				
					T24				
		<			+COT (failed) and	alert			
					the maintenance	system			
					126				
					-CCK				
	TEST DESCRIPTION								
1	Initiate the continuity check procedure at SP B.								
	Record the message sequence using a signal monitor.								
2	CHECK A: WA	S THE SECOND C	CONTINUITY C	CHECK INITIATE	D AFTER T26 EX	XPIRED?			
3	3 CHECK B: WAS THE MAINTENANCE SYSTEM ALERTED ON FAILURE OF THE SECOND CONTINUITY CHECK?								
4	4 CHECK C: WAS THE CHECK REPEATED AT INTERVALS OF T26?								
5	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?								

TEST	NUMBER:	1.4.4								
TITLE	:	Continuity check procedure								
SUBT	ITLE:	CCR sent: unsuccessful								
PURP	OSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly invoked								
REFE	RENCES:	Q.767: D.2.1.8/Q.767 ISUP'92: 2.1.8/Q.764								
PRE-T	EST CONDITIO	ST CONDITIONS: Ensure that no backward tone is detected within the specified time out								
TYPE	OF TEST:	Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT								
		X		Х						
EXPE	CTED MESSAG	E SEQUENC	E:							
	SP A			S	SP B					
	С	CR _T —		\rightarrow						
	Check to	one								
	L COT (fail	ad)								
	COT (Tall									
	п									
	С	 CR∔		~~						
	Check to	onel								
	1	[24]								
CC	OT (failed) and a	lert+		\rightarrow						
the	maintenance syst	tem								
	-									
	ľ	126								
	G									
	C	CR- —								
	TEST DESCRI	PTION								
1	Initiate the cont	inuity check p	rocedure at SP A.							
-	Record the message sequence using a signal monitor.									
2	CHECK A: WAS THE SECOND CONTINUITY CHECK INITIATED AFTER T26 EXPIRED?									
3	CHECK B: WAS THE CHECK REPEATED AT INTERVALS OF T26?									
4	CHECK C: WA	S THE MESS	AGE SEQUENC	E AS ABOVE?						

TEST	NUMBER:	1.4.5						
TITLE	:	Continuity check procedure						
SUBT	ITLE:	CCR not received: unsuccessful; verify T27 timer						
PURP	OSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly received						
REFE	RENCES:	Q.767: D.2.1.8	/Q.767		ISUP'92	2: 2.1.8/Q.764		
PRE-T	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.							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
		Х		Х				
EXPE	CTED MESSA	GE SEQUENCE	E:					
	SP A	L .				SP B		
		\leq			— I	AM		
					(Check tone		
						OT (failed)		
						cor (raned)		
		1						
		 T27						
		127						
		1						
				_				
RSC ± >								
	RLC							
		IDTION						
	TEST DESCR							
1	1 Make a call from SP B to SP A. Record the message sequence using a signal monitor.							
2	2 CHECK A: IS T27 INITIATED AT SP A TO WAIT FOR CCR?							
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?							
TEST	NUMBER:	1.5.1						
---	----------------	--	--------------------	-----------------	-----------	----------------------	-----------	--
TITLE	2:	Receipt of unre	easonable signall	ing informatio	on messa	ges		
SUBT	ITLE:	Receipt of une	xpected message	5				
PURP	OSE:	To verify that S	SP A is able to ha	undle unexpec	cted mess	sages		
REFE	RENCES:	Q.767: D.2.10.	5.1 a) b) d)/Q.76	7 IS	SUP'92:	2.9.5.1 a) b) e)/Q.7	/64	
 PRE-TEST CONDITIONS: a) Arrange the data in SP B such that REL, RLC and other unreasonable messages may be initiated. b) The circuit should be idle and unblocked. 								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT	
		Х		Х				
EXPE	CTED MESSA	GE SEQUENCE	3:		I			
	SP A	L Contraction of the second se				SP B		
Case A	Δ	<			— RI	EL		
		RLC —		>	\geq			
Case E	3	<			— RI	LC		
Case C		\leq			— X2	XX (Note 1)		
		RSC —		>	\geq			
		\leq			— RI	LC		
		_						
Case I)	\leq			— Y	YY		
	TEST DESCR							
1	Arrange for SP	'B to send a rele	ease message.					
2	CHECK A: IS		IDLE?					
3	CHECK B: W	AS THE MESS.	AGE SEQUENC	E AS IN CAS	SE A AB	OVE?		
4	CHECK C. IS		upl E2	essage.				
5	CHECK D. W		IDLE		SEDAD	OVE?		
7	Arrange for SF	$\mathbf{P}\mathbf{R}$ to send an \mathbf{u}	reasonable mess	age XXX	SE D AD	OVE:		
8	CHECK E. IS	THE CIRCUIT	IDLE?					
9	CHECK F: W/	AS THE MESS	AGE SEOUENC	E AS IN CAS	SE C AB	OVE?		
10	Arrange for SP	B to send an u	reasonable mess	age YYY.		0 1 2 1		
11	CHECK G: W	AS YYY DISC	ARDED AS IN C	CASE D ABO	OVE?			
	NOTE 1 – Not	all the unreasor	nable messages w	vill cause an R	RSC mes	sage to be sent.		
	NOTE 2 – This	s test covers onl	y some of the am	biguous mess	sages wh	ich could be receiv	ved.	

TEST	NUMBER:	1.5.2							
TITLE	2: 1	Receipt of unre	easonable signallin	ig informati	on messa	ages			
SUBT	ITLE:	Receipt of une	xpected messages	during call	setup				
PURP	OSE:	To verify that S	SP A is able to han	dle unexpe	cted mes	sages			
REFE	RENCES:	Q.767: D.2.10.	5.1 d)/Q.767		ISUP'92	2: 2.9.5.1 e)/Q.764			
PRE-T	PRE-TEST CONDITIONS: a) Arrange the data in SP B such that other unreasonable messages may be initiated.b) The circuit should be idle and unblocked.								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92CPT	Comb. CPT		
		X		Х					
EXPE	CTED MESSAG	E SEQUENCE	2:						
	SP A					SP B			
Case A	Δ	IAM —			\geq				
		<	•		A	ACM			
	Ringin	g tone			F	Ringing tone			
		\leq			<u> </u>	XXX (Note)			
		\leq			A	ANM			
	Communi	cation —			(Communication			
		REL —			\geq				
		<			— F	RLC			
Case E	3	\leq			— I	AM			
		\leq			Y	YYY (Note)			
		RSC —			\geq				
		\leq			— F	RCL			
	TEST DESCRI	PTION							
1	Make a call from Arrange for SP Record the mess	n SP A to SP E B to send an ur sage sequence	3. nreasonable messa using a signal mor	ge XXX aft iitor.	ter the ad	dress complete mes	ssage.		
2	CHECK A: IS 7	THE CONNEC	TION ESTABLIS	HED?					
3	CHECK B: WA	S THE MESS	AGE SEQUENCE	AS IN CA	SE A AI	BOVE?			
4	Make a call from Arrange for SP message.	m SP B to SP A B to send an ur	A. nreasonable messa	ge YYY im	mediatel	y after sending the	initial address		
5	CHECK C: IS 7	THE CIRCUIT	IDLE?						
6	CHECK D: WA	S THE MESS.	AGE SEQUENCE	E AS IN CA	SE B AI	BOVE?			
	NOTE – Messag	ges other than t	the call control me	ssages will	be used	for XXX and YYY.			

TEST	NUMBER:	1.5.3									
TITLE	2:	Receipt of unre	Receipt of unreasonable signalling information messages								
SUBT	ITLE:	Receipt of une	xpected message	s during a c	all						
PURP	OSE:	To verify that	SP A is able to ha	andle unexp	ected me	essages					
REFE	RENCES:	Q.767: D.2.10.5.1 c) d)/Q.767 ISUP'92: 2.9.5.1 c) e)/Q.764									
PRE-TEST CONDITIONS: a) Arrange the data in SPB such that an unexpected RLC and other unreasonable messages may be initiated.b) The circuit should be idle and unblocked.											
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	2VAT	ISUP'92CPT	Comb. CPT				
		X		Х							
EXPE	CTED MESSAC	GE SEQUENCI	Ξ:								
	SP A	L				SP B					
Case A	Ι	IAM —			\geq						
	Pingi	ng tone				ACM					
	Kingi					ANM					
	Commun	ication —	· · ·	·		Communication					
		\leq				RLC					
		REL —		•	\geq						
KIC RLC											
		TAN									
Case E	5					ACM					
	Ringi	ng tone				Ringing tone					
	i ingi					ANM					
	Commun	nication				Communication					
		\leq				XXX (Note)					
	Commun	ication —				Communication					
		\leq				REL					
		RLC —		•	\geq						
	TEST DESCR	IPTION									
1	Make a call fro	om SP A to SP F	3.								
	Record the mes	ssage sequence	using a signal mo	onitor.							
2	CHECK A: IS	THE CONNEC	TION ESTABL	ISHED?							
3	Arrange for SP	B to send a rel	ease complete me	essage.							
4	CHECK B: IS	THE CIRCUIT	IDLE?								
5	CHECK C. IS	THE CONNEC). דוחת בכדג סדי	SHED ³							
7	Arrange for SP	B to send an u	nreasonable mess								
8	CHECK D. IS	THE CONNEC	TION STILL ES	TABLISH	ED?						
9	CHECK E: WA	AS THE MESS	AGE SEOUENC	E AS IN C	ASE B A	BOVE?					
	NOTE – Messa	ages other than	REL, RLC, RSC	and SUS w	ill be use	ed for XXX.					

TEST	NUMBER: 1.6.1.1								
TITLE	3:	Receipt of unkno	own messages						
SUBT	ITLE:	Receipt of unkno	own messages in	forward direction					
PURP	OSE:	To verify that SF call handling	• A is able to dis	card an unknown n	nessage without disru	upting normal			
REFE	RENCES:	Q.767: 4.1.1.2/Q	.767	ISUP'	92:				
PRE-1	PRE-TEST CONDITIONS: Arrange the data in SP B such that a message not supported in Recommendation Q.767 is sent immediately after the IAM								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92CPT	Comb. CPT			
	X								
EXPE	CTED MESSA	GE SEQUENCE:				<u>.</u>			
	SP A				SP B				
		\leftarrow			IAM				
		\leftarrow			XXX (Note)				
		ACM —		\rightarrow					
	Ringi	ng tone			Ringing tone				
		ANM —		\rightarrow					
	Commun	ication — -			Communication				
		\leftarrow			REL				
		RLC —		\longrightarrow					
	TEST DESCR	IPTION							
1	Make a call fro Record the mes	om SP B to SP A.	ing a signal mor	nitor.					
2	CHECK A: CA	N RINGING TO	NE BE HEARD	0?					
3	The called part	y should answer t	he call.						
4	CHECK B: IS	THE CONNECT	ION ESTABLIS	HED?					
5	CHECK C: IS	THE UNKNOW	N MESSAGE D	ISCARDED BY S	P A?				
6	The calling par	ty should clear th	e call.						
7	CHECK D: IS	THE CIRCUIT I	DLE?						
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE?					
	NOTE – Any n	on-Q.767 messag	ge.						

TEST	NUMBER:	1.6.1.2							
TITLE	:	Receipt of unknown messages							
SUBT	ITLE:	Receipt of unknow	wn messages in b	ackward di	rection				
PURP	OSE:	To verify that SP call handling	A is able to disca	ard an unkno	own mes	sage without disruj	pting normal		
REFE	RENCES:	Q.767: 4.1.1.2/Q.	767		ISUP'92). 			
PRE-T	PRE-TEST CONDITIONS: Arrange the data in SP B such that a message not supported in Recommendation Q.767 is sent immediately after the ACM								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	.767 CPT ISUP'92 VAT		ISUP'92CPT	Comb. CPT		
X									
EXPE	CTED MESSA	GE SEQUENCE:							
	SP A	1				SP B			
		IAM ——			>				
		<			— A	АСМ			
	Ringing tone Ringing tone								
		\leftarrow			— X	XXX (Note)			
		<			— A	NM			
	Commun	nication — –				Communication			
		REL			>				
		\leftarrow			— F	RLC			
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP A to SP B. ssage sequence usi	ng a signal moni	tor.					
2	CHECK A: CA	AN RINGING TO	NE BE HEARD?	?					
3	The called part	ty should answer th	ne call.						
4	CHECK B: IS	THE CONNECTI	ON ESTABLISH	HED?					
5	CHECK C: IS	THE UNKNOWN	MESSAGE DIS	SCARDED	BY SP A	A?			
6	The calling par	rty should clear the	call.						
7	CHECK D: IS	THE CIRCUIT IE	DLE?						
8	CHECK E: W	AS THE MESSAC	E SEQUENCE	AS ABOVE	E?				
	NOTE – Any 1	non-Q.767 message	2.						

TEST	NUMBER:	1.6.2.1								
TITLE	3:	Receipt of unkne	Receipt of unknown parameters							
SUBT	ITLE:	Receipt of unkne	own parameters i	n forward direction						
PURP	OSE:	To verify that Sl call handling	P A is able to dis	card an unknown pa	rameter without dis	rupting normal				
REFE	RENCES:	Q.767: 4.1.1.2/Q) .767	ISUP'92	2					
PRE-1	PRE-TEST CONDITIONS: Arrange the data in SP B such that the IAM contains a parameter not supported in Recommendation Q.767									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92CPT	Comb. CPT				
	X									
EXPE	CTED MESSA	GE SEQUENCE:								
	SP A	A			SP B					
	IAM									
		ACM —		\rightarrow						
	Ringi	ng tone		F	Ringing tone					
		ANM —		\longrightarrow						
	Commu	nication —		(Communication					
		\leftarrow		I	REL					
		RLC —		\rightarrow						
	TEST DESCR	IPTION								
1	Make a call from Record the me	om SP B to SP A. ssage sequence u	sing a signal mor	nitor.						
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	?						
3	The called par	ty should answer	the call.							
4	CHECK B: IS	THE CONNECT	ION ESTABLIS	HED?						
5	CHECK C: IS	THE UNKNOW	N PARAMETEF	R DISCARDED BY	SP A?					
6	The calling par	rty should clear th	ne call.							
7	CHECK D: IS	THE CIRCUIT I	DLE?							
8	CHECK E: W	AS THE MESSA	GE SEQUENCE	AS ABOVE?						

ISUP	Basic	Call	Test	Specification	ì
-------------	--------------	------	------	---------------	---

TEST	NUMBER:	1.6.2.2							
TITLE	3:	Receipt of unkn	own parameters						
SUBT	ITLE:	Receipt of unkn	own parameters i	n backward	directio	n			
PURP	OSE:	To verify that S call handling	P A is able to dis	card an unkı	nown pa	rameter without dis	rupting normal		
REFE	RENCES:	Q.767: 4.1.1.2/0	Q .767		ISUP'92	2:			
PRE-7	PRE-TEST CONDITIONS: Arrange the data in SP B such that the ACM, CPG or ANM contains a parameter not supported in Recommendation Q.767								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92CPT	Comb. CPT		
		X							
EXPE	CTED MESSA	GE SEQUENCE							
	SP A	Α				SP B			
		IAM ——		\rightarrow	>				
Case A	A	<			— A	АСМ			
	Ringi	ng tone			F	Ringing tone			
		\leftarrow			— A	ANM			
	Commu	nication — —			_ (Communication			
		REL —		\longrightarrow	>				
		\leftarrow			— F	RLC			
Case H	3	\leftarrow			— A	ACM			
		\leftarrow			- (CPG			
	Ringi	ng tone			F	Ringing tone			
		\leftarrow			— A	ANM			
	Commu	nication — —			_ (Communication			
		REL —		\rightarrow	>				
		\leftarrow			— F	RLC			
	TEST DESCP	IDTION							
1	Make a call fro	m SP A to SP R							
	Record the me	ssage sequence u	sing a signal mor	nitor.					
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	?					
3	The called part	ty should answer	the call.						
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	HED?					
5	CHECK C: IS	THE UNKNOW	N PARAMETER	R DISCARD	DED BY	SP A?			
6	The calling par	rty should clear th	ne call.						
7	CHECK D: IS	THE CIRCUIT	DLE?						
8	CHECK E: W	AS THE MESSA	GE SEQUENCE	AS ABOV	E?				

TEST	NUMBER:	1.6.3.1								
TITLE	2:	Receipt of unkno	Receipt of unknown parameter values							
SUBT	ITLE:	Receipt of unkno	wn parameter val	ues in forw	vard dire	ction				
PURP	OSE:	To verify that SP	A is able to hand	le unknow	n parame	eter values				
REFE	RENCES:	Q.767: 4.1.1.2/Q	767		ISUP'9	2:				
PRE-T	EST CONDITI	ONS: Arrange	the data in SP B	such that th	ne IAM o	contains unknown p	barameter values			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	2VAT	ISUP'92CPT	Comb. CPT			
		Х								
EXPECTED MESSAGE SEQUENCE:										
	SP A SP B									
		<			- 1	IAM				
Case A	Δ	ACM —		\rightarrow	►					
(Note)	Ringi	ng tone			-]	Ringing tone				
		ANM —		\rightarrow	•					
	Commur	nication — —			_ (Communication				
		\leftarrow			- 1	REL				
		RLC —		\rightarrow	►					
Case B	3	REL —		\rightarrow						
(Note)		\leftarrow			- 1	RLC				
	TEST DESCR	IPTION								
1	Make a call from Record the met	om SP B to SP A. ssage sequence us	ing a signal moni	tor.						
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.767 TABLE 9 OR TABLE 8 IN THE CASE OF TRANSIT?									
3	Repeat step 1 a	and 2 for each para	meter in Q.767 T	able 9 or T	Table 8 ir	the case of transit.				
	NOTE – Case and "Ignore" at	A refers to the act nd case B refers to	ons in Table 8 or the actions in Ta	9 of "Disc ble 8 or 9 o	ard para	meter", "No Defaul ase".	t", "Default"			

TEST	NUMBER: 1.6.3.2								
TITLE): :	Receipt of unkno	own parameter v	alues					
SUBT	ITLE:	Receipt of unkno	own parameter v	alues in bac	kward di	rection			
PURP	OSE:	To verify that SF	A is able to har	idle unknov	vn param	eter values			
REFE	RENCES:	Q.767: 4.1.1.2/Q.767 ISUP'92:							
PRE-T	PRE-TEST CONDITIONS: Arrange the data in SP A such that the ACM and ANM contains unknown parameter values								
TYPE	E OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VA		2VAT	ISUP'92CPT	Comb. CPT				
		X							
EXPECTED MESSAGE SEQUENCE: (Note)									
SP A SP B									
IAM ————————————————————————————————————									
		\leftarrow				ACM			
	Ringi	ng tone			I	Ringing tone			
		\leftarrow				ANM			
	Commun	ication — —			_ (Communication			
		REL ——		>	>				
		\leftarrow			— I	RLC			
	TEST DESCR	IPTION							
1	Make a call fro Record the mes	om SP A to SP B. ssage sequence us	sing a signal mor	nitor.					
2	CHECK A: IS Q.767 TABLE	THE UNRECOG 9 OR TABLE 8	NIZED PARAM	IETER VA OF TRANS	LUE HA IT?	NDLED AS INDIC	CATED IN		
3	Repeat step 1 a	nd 2 for each par	ameter in Q.767	Table 9 or	Table 8 i	in the case of transit	. .		
	NOTE – The m Default", "Defa	nessage sequence ault" and "Ignore'	refers to the acti	ons in Tabl	e 8 or 9 o	of "Discard paramet	er", "No		

ISUP	Basic	Call	Test	Specificat	ion
-------------	-------	------	------	------------	-----

TEST	NUMBER:	ER: 1.7.1.1								
TITLE	2:	Receipt of unkno	own messages							
SUBT	ITLE:	Message Compa	tibility Informat	ion: Release	e call					
PURP	OSE:	To verify that SI Information	P A releases the c	call, if indic	ated in th	ne Message Compat	ibility			
REFE	RENCES:	Q.767:			ISUP'9	2: 2.9.5/Q.764				
PRE-TEST CONDITIONS: Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM with the Message Compatibility Information parameter coded as: $A = 1$, $B = 1$, $C = X$, $D = X$, $E = X$ (X' = don't care NOTE – For CPT find an unknown message in SP A.										
TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT							Comb. CPT			
	X X									
EXPECTED MESSAGE SEQUENCE:										
	SP A	L				SP B				
		\leftarrow			— I	AM				
		\leftarrow			— 2	XXX				
		REL ——		>	>					
		\leftarrow			— I	RLC				
	TEST DESCR	IPTION								
1	Make a call from Record the mes	om SP B to SP A. ssage sequence us	sing a signal mor	nitor.						
2	CHECK A: DO FIELD INCLU	DES THE REL C DE THE NAME	ONTAIN CAUS OF THE UNKN	E VALUE JOWN ME	#97 ANI SSAGE?	D DOES THE DIAG	GNOSTIC			
3	CHECK B: IS	THE CIRCUIT I	DLE?							
4	CHECK C: WA	AS THE MESSA	GE SEQUENCE	E AS ABOV	Έ?					
5	Repeat steps 1	to 4 with bit $A =$	0 for type A exc	hanges.						

TEST	ST NUMBER: 1.7.1.2						
TITLE	2:	Receipt of unkno	own messages				
SUBT	ITLE:	Message Compa	tibility Informati	on: Discard	message	:	
PURP	OSE:	To verify that SF Compatibility In	• A is able to disc formation	card an unkr	nown me	ssage, if indicated in	the Message
REFE	RENCES:	Q.767:			ISUP'92	2: 2.9.5/Q.764	
PRE-T	PRE-TEST CONDITIONS: Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM with the Message Compatibility Information parameter coded as: $A = 1$, $B = 0$, $C = 1$, $D = 1$, $E = X$ ('X' = don't care) NOTE – For CPT find an unknown message in SP A.						
TYPE OF TEST:Q.767 VATQ.767 CPT		ISUP'92	VAT	ISUP'92 CPT	Comb. CPT		
				X		Х	
EXPE	CTED MESS.	AGE SEQUENCE	3:	I			
	SP A SP B IAM XXX CFN ACM Ringing tone ANM Communication RLC SP B IAM XXX CFN Ringing tone Ringing tone Ringing tone Ringing tone REL						
	TEST DESC	RIPTION					
1	Make a call f Record the n	from SP B to SP A	A. using a signal mo	onitor			
2	CHECK A: 0	CAN RINGING T	ONE BE HEAR	D?			
3	The called pa	arty should answe	r the call.				
4	CHECK B: I	S THE CONNEC	TION ESTABL	ISHED?			
5	CHECK C: I	S THE UNKNOW	VN MESSAGE I	DISCARDE	D BY SF	P A?	
6	The calling p	party should clear	the call.				
7	CHECK D: I	S THE CIRCUIT	IDLE?				
8	CHECK E: V	WAS THE MESS	AGE SEQUENC	E AS ABO	VE?		
9	Repeat steps	1 to 8 with instru-	ction indicator bi	t C = 0.			
10	CHECK F: C	CFN MESSAGE S	HOULD NOT E	BE SENT.			

TEST	NUMBER:	1.7.1.3					
TITLE	:	Receipt of unknown messages					
SUBT	ITLE:	Message Compat	ibility Informatio	n: Pass on			
PURP	OSE:	To verify that SP	To verify that SP A is able to pass on an unknown message, without notification				
REFE	RENCES:	Q.767:			ISUP'9	2: 2.9.5/Q.764	
PRE-T	PRE-TEST CONDITIONS:Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM with the Message Compatibility Information parameter coded as: $A = 1, B = 0, C = 1, D = 0, E = 0$ NOTE – For CPT find an unknown message in SP A.						
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT
				Х		Х	
EXPE	EXPECTED MESSAGE SEQUENCE:						
	SP A	A				SP B	
IAM					AM		
		\leftarrow			- 2	XXX	
		АСМ ———		\rightarrow	-		
	Ringing tone Ringing tone						
		ANM ———		\rightarrow	-		
	Commur	nication — —			_ (Communication	
		\leftarrow			- 1	REL	
		RLC —		\rightarrow	-		
	TEST DESCR	IPTION					
1	Make a call from Record the mean	om SP B to SP A. ssage sequence usi	ng a signal moni	tor.			
2	CHECK A: CA	AN RINGING TO	NE BE HEARD?				
3	The called part	ty should answer th	ne call.				
4	CHECK B: IS	THE CONNECTI	ON ESTABLISH	IED?			
5	CHECK C: IS	THE UNKNOWN	MESSAGE PAS	SSED ON 1	BY SP A	A?	
6	The calling par	rty should clear the	e call.				
7	CHECK D: IS	THE CIRCUIT II	DLE?				
8	CHECK E: WA	AS THE MESSAC	GE SEQUENCE A	AS ABOVI	Ξ?		

ISUP	Basic	Call	Test	Specificat	ion
-------------	-------	------	------	------------	-----

TEST NUMBER:	MBER: 1.7.1.4						
TITLE:	Receipt of unkr	nown messages					
SUBTITLE:	Message Comp	atibility Informa	tion: Pass or	n not pos	sible, release call		
PURPOSE:	To verify that S Message Comp	SP A releases the atibility Informa	call if pass tion	on not po	ossible and if indicat	ed in the	
REFERENCES:	Q.767:			ISUP'92	2: 2.9.5/Q.764		
 PRE-TEST CONDITIONS: a) Arrange the data in SP A such that pass on is not possible. b) Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM with the Message Compatibility Information parameter coded as: A = 1, B = 0, C = 1, D = 0, E = 0. NOTE – For CPT find an unknown message in SP A. 							
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92 CPT	Comb. CPT	
			X		Х		
EXPECTED MESSA	EXPECTED MESSAGE SEQUENCE:						
SP A SP B							
	\leftarrow			— I	AM		
	\leftarrow			2	XXX		
	REL		>	>			
	\leftarrow			— I	RLC		
TEST DESCI	RIPTION						
1 Make a call fr Record the m	com SP B to SP A essage sequence	A. using a signal mo	onitor.				
2 CHECK A: D FIELD INCL	2 CHECK A: DOES THE REL CONTAIN CAUSE VALUE #97 AND DOES THE DIAGNOSTIC FIELD INCLUDE THE NAME OF THE UNKNOWN MESSAGE?						
3 CHECK B: IS	S THE CIRCUIT	IDLE?					
4 CHECK C: W	AS THE MESS.	AGE SEQUENC	E AS ABO	VE?			

TEST	NUMBER:	1.7.1.5						
TITLE	2:	Receipt of unknown messages						
SUBT	ITLE:	Message Compati	Message Compatibility information: Pass on not possible, discard information					
PURP	OSE:	To verify that SP A is able to discard an unknown message if pass on not possible and if indicated in the Message Compatibility Information						
REFE	RENCES:	Q.767:			ISUP'92	2: 2.9.5/Q.764		
 PRE-TEST CONDITIONS: a) Arrange the data in SP A such that pass on is not possible. b) Arrange the data in SP B such that a message (XXX) not supported in SP is sent immediately after the IAM with the Message Compatibility Information parameter coded as: A = 1, B = 0, C = 1, D = 0, E = 1. NOTE – For CPT find an unknown message in SP A. 						pported in SP A ibility E = 1.		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
				X		Х		
EXPE	CTED MESSA	GE SEQUENCE:						
	SP A					SP B		
<					— I	AM		
< XXX								
	CFN — >							
	ACM							
	Ringing	g tone			F	Ringing tone		
		ANM ——		\rightarrow	>			
	Communic	cation			– — Communication			
		\leftarrow		_	REL			
		RLC —			>			
	TEGT DEGOD	IDTION						
	TEST DESCR							
1	Record the me	om SP B to SP A. ssage sequence usi	ng a signal monit	tor.				
2	CHECK A: CA	AN RINGING TON	NE BE HEARD?					
3	The called part	y should answer th	e call.					
4	CHECK B: IS	THE CONNECTION	ON ESTABLISH	IED?				
5	CHECK C: IS	THE UNKNOWN	MESSAGE DIS	CARDED	BY SP A	A?		
6	The calling party should clear the call.							
7	CHECK D: IS	THE CIRCUIT ID	LE?					
8	CHECK E: WA	AS THE MESSAG	E SEQUENCE A	AS ABOVI	Ξ?			

TEST	Г NUMBER: 1.7.1.6							
TITLE	:	Receipt of unk	nown messages					
SUBT	ITLE:	Message Comp	Message Compatibility Information: Transit interpretation					
PURP	OSE:	To verify that s Instruction ind	To verify that SP A (Type B exchange) is able to ignore the remaining part of the Instruction indicator, if $A = 0$					
REFE	RENCES:	Q.767:		ISUP'9	02: 2.9.5/Q.764			
PRE-TEST CONDITIONS:Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM with the Message Compatibility Information parameter coded as: $A = 0, B = 1, C = X, D = X, E = X$ ('X' = don't care) 					rted in SP A is / Information			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT		
				Х	Х			
EXPE	CTED MESSAG	GE SEQUENCI	Ξ:					
	SP A SP B							
		\leftarrow			IAM			
	< XXX							
	ACM							
	Ringing tone Ringing tone							
		ANM —		\longrightarrow				
	Communic	cation —			Communication			
		\leftarrow			REL			
		RLC —		\rightarrow				
	TEST DESCR	IPTION						
1	Make a call fro Record the mea	om SP B to SP A ssage sequence	A. using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?				
3	The called part	y should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABL	SHED?				
5	CHECK C: IS	THE UNKNOW	WN MESSAGE I	PASSED ON BY SI	P A?			
6	The calling par	ty should clear	the call.					
7	CHECK D: IS	THE CIRCUIT	IDLE?					
8	CHECK E: WA	AS THE MESS	AGE SEQUENC	E AS ABOVE?				

TEST	NUMBER:	R: 1.7.1.7						
TITLE	3:	Receipt of unknown messages						
SUBT	ITLE:	Message Compatibility Information not received						
PURP	OSE:	To verify that S Compatibility I	To verify that SP A is able to discard an unknown message without Message Compatibility Information					
REFE	RENCES:	Q.767:		ISUP'9	2: 2.9.5/Q.764			
PRE-T	PRE-TEST CONDITIONS: Arrange the data in SP B such that a message (XXX) not supported in SP A is sent immediately after the IAM without the Message Compatibility Information parameter NOTE – For CPT find an unknown message in SP A.							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT		
				Х	Х			
EXPE	CTED MESSA	GE SEQUENCE	2:		l			
	SP A SP B							
		<]	IAM			
		\leq		2	XXX			
	CFN							
	ACM							
	Ringi	ng tone]	Ringing tone			
	-	ANM —		\longrightarrow				
	Commu	nication —		(Communication			
		<]	REL			
		RLC —		\longrightarrow				
				-				
	TEST DESCR	IPTION						
1	Make a call fro	om SP B to SP A	۱.					
	Record the me	ssage sequence	using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?				
3	The called part	ty should answer	the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABLI	SHED?				
5	CHECK C: IS	THE UNKNOW	VN MESSAGE I	DISCARDED BY SI	P A?			
6	The calling par	rty should clear	the call.					
7	CHECK D: IS	THE CIRCUIT	IDLE?					
8	CHECK E: W	AS THE MESSA	AGE SEQUENC	E AS ABOVE?				

TEST	T NUMBER: 1.7.2.1							
TITLE	:	Receipt of unk	nown parameters					
SUBTI	TLE:	Parameter Con	npatibility Inform	ation: Rele	ase call			
PURPO	DSE:	To verify that S Information	SP A is able to re	lease the ca	ll, if indi	cated in Parameter C	Compatibility	
REFEF	RENCES:	Q.767: ISUP'92: 2.9.5/Q.764						
PRE-TEST CONDITIONS: Arrange the data in SP B such that a parameter not supported in SP A is sent in the IAM with the Parameter Compatibility Information parameter coded as: A = 1, B = 1, C = X, D = X, E = X, F = X, G = X X' = don't care NOTE – For CPT find an unknown parameter in SP A.								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
				X		Х		
EXPECTED MESSAGE SEQUENCE:								
	SP A SP B							
	REL IAM							
	TEST DESCR	IPTION						
1	Make a call fro Record the mes	om SP B to SP A ssage sequence	A. using a signal mo	onitor.				
2	CHECK A: DO FIELD INCLU	DES THE REL (DE THE NAM	CONTAIN CAU E OF THE UNK	SE VALUE NOWN PA	E #99 AN RAMET	D DOES THE DIA ER?	GNOSTIC	
3	CHECK B: IS	THE CIRCUIT	IDLE?					
4	CHECK C: WA	AS THE MESS	AGE SEQUENC	E AS ABO	VE?			
5	Repeat steps 1	to 4 with bit A	= 0 for type A ex	changes.				

TEST	Г NUMBER: 1.7.2.2							
TITLE	:	Receipt of unknown parameters						
SUBT	ITLE:	Parameter Comp	atibility Informa	tion: Discar	rd messag	ge		
PURP	OSE:	To verify that SF indicated in Para	• A is able to disc meter Compatibi	card a messa lity Inform	age conta ation	iining an unknown j	parameter, if	
REFEI	ERENCES: Q.767: ISUP'92: 2.9.5/Q.764							
PRE-T	PRE-TEST CONDITIONS:Arrange the data in SP B such that a parameter not supported in SP A is sent in the CPG with the Parameter Compatibility Information parameter coded as: $A =$ 1, $B = 0$, $C = 1$, $D = 1$, $E = X$, $F = X$, $G = X$ $X' = don't careNOTE – For CPT find an unknown parameter in SP A.$							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
				X		Х		
EXPE	EXPECTED MESSAGE SEQUENCE:							
	SP A SP B							
	ACM							
		CEN			> (.ru		
	Ringi	ng tone			F	Ringing tone		
	6	\sim			A	ANM		
	Commur	nication —			(Communication		
		REL			\geq			
		\leftarrow			RLC			
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP A to SP B. ssage sequence us	sing a signal mor	nitor.				
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	?				
3	The called par	ty should answer	the call.					
4	CHECK B: IS	THE CONNECT	TON ESTABLIS	HED?				
5	CHECK C: IS	THE CPG DISC.	ARDED BY SP .	A?				
6	The calling par	rty should clear th	ne call.					
7	CHECK D: IS	THE CIRCUIT I	DLE?					
8	CHECK E: W	AS THE MESSA	GE SEQUENCE	AS ABOV	νE?			
9	Repeat steps 1	to 8 with instruct	ion indicator bit	C = 0.				
10	CHECK F: CF	'N MESSAGE SH	HOULD NOT BE	E SENT.				

TEST	NUMBER:	1.7.2.3				
TITLE	3:	Receipt of unknown parameters				
SUBT	ITLE:	Parameter Com	patibility Informa	tion: Discard pa	rameter	
PURP	OSE:	To verify that SP A is able to discard an unknown parameter, if indicated in the Parameter Compatibility Information				
REFE	RENCES:	Q.767:		ISU	IP'92: 2.9.5/Q.764	
PRE-1	PRE-TEST CONDITIONS: Arrange the data in SP B such that a parameter not supported in SP A is sent in the IAM with the Parameter Compatibility Information parameter coded as: A = 1, B = 0, C = 1, D = 0, E = 1, F = X, G = X'X' = don't care NOTE – For CPT find an unknown parameter in SP A.					
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VA	T ISUP'92 CPT	Comb. CPT
				Х	Х	
EXPE	CTED MESSAG	GE SEQUENCE	:			
SP A SP B						
		<			IAM	
		CFN —		\rightarrow		
ACM						
	Ringing tone Ringing tone					
	ANM>					
	Commun	nication —			Communication	
		\leq			REL	
		RLC —		\rightarrow		
	TEST DESCR	IPTION				
1	Make a call fro	om SP B to SP A		vitor		
2	CHECK A · CA	AN RINGING T	ONE RE HEARD	ntor. 19		
3	The called part	y should answer	the call.	••••		
4	CHECK B: IS	THE CONNECT	FION ESTABLIS	HED?		
5	CHECK C: IS	THE UNKNOW	'N PARAMETEF	R DISCARDED	BY SP A?	
6	The calling par	ty should clear t	he call.			
7	CHECK D: IS	THE CIRCUIT	IDLE?			
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	AS ABOVE?		
9	Repeat steps 1	to 8 with instruc	tion indicator bit	C = 0.		
10	CHECK F: CF	N MESSAGE S	HOULD NOT BE	E SENT.		

TEST	NUMBER:	1.7.2.4					
TITLE	3:	Receipt of unknow	Receipt of unknown parameters				
SUBT	ITLE:	Parameter Compa	tibility Informati	on: Pass or	ı		
PURP	OSE:	To verify that SP	A is able to pass	on an unkr	nown par	ameter, without no	tification
REFE	RENCES:	Q.767:	Q.767: ISUP'92: 2.9.5/Q.764				
PRE-1 CONE	EST DITIONS:	CSTArrange the data in SP B such that a parameter not supported in SP A is sent in the IAM with the Parameter Compatibility Information parameter coded as: $A = 1, B = 0, C = 1, D = 0, E = 0, F = X, G = X$ $X' = don't careNOTE – For CPT find an unknown parameter in SP A.$					
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT
				X		Х	
EXPE	CTED MESSA	GE SEQUENCE:					
	SP A	L Contraction of the second seco				SP B	
	IAM						
	ACM						
	Ringing tone Ringing tone						
		ANM ——			\geq		
	Commur	nication — –			(Communication	
		\leftarrow			— I	REL	
		RLC —			>		
	TEST DESCR	IPTION					
1	Make a call fro Record the me	om SP B to SP A. ssage sequence usin	ng a signal monit	tor.			
2	CHECK A: CA	AN RINGING TON	VE BE HEARD?				
3	The called part	y should answer th	e call.				
4	CHECK B: IS	THE CONNECTIO	ON ESTABLISH	IED?			
5	CHECK C: IS	THE UNKNOWN	PARAMETER	PASSED C	ON BY S	P A?	
6	The calling par	ty should clear the	call.				
7	CHECK D: IS	THE CIRCUIT ID	LE?				
8	CHECK E: W	AS THE MESSAG	E SEQUENCE A	AS ABOVI	E?		

ISUP	Basic	Call	Test	Specification
------	--------------	------	------	---------------

TEST	NUMBER: 1.7.2.5							
TITLE	2:	Receipt of unknow	vn parameters					
SUBT	ITLE:	Parameter Compa	tibility Informati	on: Pass or	n not pos	sible, release call		
PURP	OSE:	To verify that SP A Compatibility Info	A releases call if ormation	pass on is	not possi	ble and if indicated	l in Parameter	
REFE	RENCES:	Q.767:			ISUP'92	2: 2.9.5/Q.764		
 PRE-TEST CONDITIONS: a) Arrange the data in SP A such that passing on the message with the involved parameter is not possible. b) Arrange the data in SP B such that a parameter not supported in SP A is sent in the IAM with the Parameter Compatibility Information parameter coded as: A = 1, B = 0, C = 1, D = 0, E = 0, F = 0, G = 0 'X' = don't care. NOTE – For CPT find an unknown parameter in SP A; bits F and G are not used in all implementations. 								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
				X		Х		
EXPE	EXPECTED MESSAGE SEQUENCE:							
	SP A	L				SP B		
		REL			— I > — F	AM RLC		
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP B to SP A. ssage sequence usir	ng a signal monit	tor.				
2	CHECK A: DO FIELD INCLU	DES THE REL CO IDE THE NAME C	NTAIN CAUSE OF THE UNKNO	VALUE # OWN PAR.	99 AND AMETEI	DOES THE DIAC R?	SNOSTIC	
3	CHECK B: IS	THE CIRCUIT ID	LE?					
4	CHECK C: WA	AS THE MESSAG	E SEQUENCE A	AS ABOVI	E?			

ISUP Basic Call T	est Specification
--------------------------	-------------------

TEST	NUMBER:	1.7.2.6					
TITLE	1:	Receipt of unk	nown parameters				
SUBT	ITLE:	Parameter Con	npatibility Inform	nation: Pass	on not p	ossible, discard mess	sage
PURP	OSE:	To verify that S pass on is not p	SP A is able to di possible and if ind	scard a mes dicated in Pa	sage con arameter	taining an unknown Compatibility Infor	parameter if mation
REFE	RENCES:	Q.767:			ISUP'9	2: 2.9.5/Q.764	
 PRE-TEST CONDITIONS: a) Arrange the data in SP A such that passing on the message with the involved parameter is not possible. b) Arrange the data in SP B such that a parameter not supported in SP A is sent in the CPG with the Parameter Compatibility Information parameter coded as: A = 1, B = 0, C = 1, D = 0, E = 0, F = 1, G = 0 X' = don't care. NOTE – For CPT find an unknown parameter in SP A; bits F and G are not used in all implementations. 							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT
				Х		Х	
EXPE	EXPECTED MESSAGE SEQUENCE: SP A SP B						
		\leftarrow				ACM	
		CFN —			\geq	UFU	
	Ringi	ng tone			· ·]	Ringing tone	
		<				ANM	
	Commun	nication —			(Communication	
					<u> </u>	RLC	
	TEST DESCR	IPTION					
1	Make a call from	om SP A to SP E	B. Using a signal mo	nitor			
2	CHECK A · CA	AN RINGING T	ONE BE HEAR	D^{9}			
3	The called part	y should answer	the call.				
4	CHECK B: IS	THE CONNEC	TION ESTABLI	SHED?			
5	CHECK C: IS	THE CPG DISC	CARDED BY SP	PA?			
6	The calling par	ty should clear	the call.				
7	CHECK D: IS	THE CIRCUIT	IDLE?				
8	CHECK E: WA	AS THE MESS	AGE SEQUENC	E AS ABO	VE?		
9	Repeat steps 1	to 8 with instrue	ction indicator bi	t C = 0.			
10	CHECK F: CF	N MESSAGE S	HOULD NOT B	E SENT.			

TEST	NUMBER:	1.7.2.7						
TITLE	2:	Receipt of unk	Receipt of unknown parameters					
SUBT	ITLE:	Parameter Cor	npatibility Inform	nation: Pass	on not p	ossible, discard para	meter	
PURP	OSE:	To verify that and if indicate	To verify that SP A is able to discard an unknown parameter if pass on is not possible and if indicated in Parameter Compatibility Information					
REFE	RENCES:	Q.767:	Q.767: ISUP'92: 2.9.5/Q.764					
 PRE-TEST CONDITIONS: a) Arrange the data in SP A such that passing on the message with the in parameter is not possible. b) Arrange the data in SP B such that a parameter not supported in SP A in the IAM with the Parameter Compatibility Information parameter c as: A = 1, B = 0, C = 1, D = 0, E = 0, F = 0, G = 1 'X' = don't care. NOTE – For CPT find an unknown parameter in SP A; bits F and G are n used in all implementations. 					vith the involved d in SP A is sent arameter coded nd G are not			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT	
				X		Х		
EXPE	CTED MESSA	GE SEQUENC	Е:					
	SP A	L				SP B		
		\leq			— I	AM		
		CFN —			\geq			
		ACM —			\geq			
	Ringiı	ng tone			l	Ringing tone		
		ANM —			\geq			
	Commun	ication —			(Communication		
		<			— I	REL		
		RLC —			\geq			
	TEST DESCR	IPTION						
1	Make a call from Record the met	om SP B to SP A ssage sequence	A. using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	TONE BE HEAR	D?				
3	The called part	ty should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABL	ISHED?				
5	CHECK C: IS	THE UNKNOV	WN PARAMETE	ER DISCAR	DED BY	(SP A?		
6	The calling par	rty should clear	the call.					
7	CHECK D: IS	THE CIRCUIT	IDLE?					
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?							
9	Repeat steps 1 to 8 with instruction indicator bit $C = 0$.							
10	CHECK F: CF	N MESSAGE S	SHOULD NOT E	BE SENT.				

TEST	NUMBER:	1.7.2.8					
TITLE	:	Receipt of unk	nown parameters				
SUBT	ITLE:	Parameter Con	npatibility Inform	nation: Trans	sit interp	retation	
PURP	OSE:	To verify that Instruction ind	SP A (Type B exicator, if $A = 0$	change) is al	ble to igi	nore the remaining p	art of the
REFE	RENCES:	Q.767:			ISUP'92	2: 2.9.5/Q.764	
PRE-TEST CONDITIONS: Arrange the data in SP B such that a parameter not supported in SP A is sent in the IAM with the Parameter Compatibility Information parameter coded as: A = 0, B = 1, C = X, D = X, E = X, F = X, G = X X' = don't care NOTE – For CPT find an unknown parameter in SP A.					SP A is sent in er coded as:		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92 CPT	Comb. CPT
				Х		Х	
EXPE	CTED MESSA	GE SEQUENCI	Ξ:				
	SP A	X				SP B	
		<			— I	AM	
		ACM —		-	\geq		
	Ringi	ng tone			I	Ringing tone	
		ANM —			\geq		
	Commur	nication —			(Communication	
		\leq			— I	REL	
		RLC —			\geq		
	TEST DESCR	IPTION					
1	Make a call from Record the mean	om SP B to SP A ssage sequence	A. using a signal mo	onitor.			
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?			
3	The called part	y should answe	r the call.				
4	CHECK B: IS	THE CONNEC	TION ESTABL	SHED?			
5	CHECK C: IS	THE UNKNOV	WN PARAMETE	ER PASSED	ON BY	SP A?	
6	The calling par	ty should clear	the call.				
7	CHECK D: IS	THE CIRCUIT	IDLE?				
8	CHECK E: WA	AS THE MESS	AGE SEQUENC	E AS ABOV	VE?		

TEST	NUMBER:	1.7.2.9					
TITLE	8:	Receipt of unkr	nown parameters				
SUBT	ITLE:	Parameter Com	patibility Inform	ation not receive	ed		
PURP	OSE:	To verify that S Compatibility I	P A is able to han nformation	ndle an unknown	n parameter without Para	ameter	
REFE	RENCES:	Q.767: ISUP'92: 2.9.5/Q.764					
PRE-TEST CONDITIONS: Arrange the data in SP B such that a parameter not supported in SP A is sent in the IAM without the Parameter Compatibility Information parameter NOTE – For CPT find an unknown parameter in SP A.						SP A is sent in neter	
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	Г ISUP'92 CPT	Comb. CPT	
				X	X		
EXPE	CTED MESSA	GE SEQUENCE	E:				
	SP A	Ą			SP B		
	IAM						
				_			
Case A	Α	CFN —		\geq			
(Note)	D: .	ACM —		\rightarrow			
	Ringi	ng tone		·····	Ringing tone		
	C	ANM —			C		
	Commu	incation —			Communication		
Case F	2	ACM —					
(Note)	, Ringi	ng tone		_	Ringing tone		
(11000)	Tungi	ANM —		\rightarrow	Tranging tone		
	Commu	nication —			Communication		
		\leq			REL		
		RLC —		\rightarrow			
1	TEST DESCR						
1	Make a call fr Record the me	om SP B to SP A essage sequence	A. using a signal me	onitor.			
2	CHECK A: C	AN RINGING T	ONE BE HEAR	D?			
3	The called par	ty should answe	r the call.				
4	CHECK B: IS	THE CONNEC	TION ESTABLI	SHED?			
5	CHECK C: IS	THE UNKNOW	VN PARAMETE	ER DISCARDED	OR PASSED ON BY S	SP A? (Note)	
6	5 The calling party should clear the call.						
7	CHECK D: IS THE CIRCUIT IDLE?						
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?						
	NOTE – The behaviour of SP A is implementation dependent.						

TEST	NUMBER:	1.7.2.10						
TITLE	3:	Receipt of unkr	nown parameters					
SUBT	ITLE:	Parameter Com	patibility Inform	ation not received in	REL			
PURP	OSE:	To verify that S Compatibility I	To verify that SP A is able to discard an unknown parameter in a REL without Parameter Compatibility Information					
REFE	RENCES:	Q.767:		ISUP'92	2: 2.9.5/Q.764			
PRE-TEST CONDITIONS: Arrange the data in SP B such that a parameter not supported in SP A is sent the REL without the Parameter Compatibility Information parameter NOTE – For CPT find an unknown parameter in SP A.					SP A is sent in meter			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT		
				Х	Х			
EXPE	CTED MESSA	GE SEQUENCE	3:					
	SP A	A			SP B			
		<		I	AM			
		АСМ ——		\rightarrow				
	Ringi	ng tone		I	Ringing tone			
		ANM ——		\longrightarrow				
	Commu	nication — –			Communication			
		\leftarrow		I	REL			
		RLC —		\rightarrow				
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP B to SP A	a. using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?				
3	The called par	ty should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABL	SHED?				
5	The calling pa	rty should clear	the call.					
6	CHECK C: IS	THE UNKNOW	VN PARAMETE	ER DISCARDED BY	Y SP A?			
7	CHECK D: IS THE CIRCUIT IDLE?							
8	CHECK E: W	AS THE MESS	AGE SEQUENC	E AS ABOVE?				

TEST	NUMBER:	1.7.3.1						
TITLE	3:	Receipt of unknown parameter values						
SUBT	ITLE:	Receipt of unknown parameter values in forward direction						
PURP	OSE:	To verify that	SP A is able to ha	ndle unknown par	ameter values			
REFE	RENCES:	Q.767:		ISUP	92: 2.9.5.3.3/Q.764			
PRE-7	TEST CONDI	ΓIONS: Unk	nown parameter v	alues should be in	cluded in the IAM			
TYPE	OF TEST:	Q.767 VAT Q.767 CPT ISUP'92 VAT		ISUP'92CPT	Comb. CPT			
				Х				
EXPE	CTED MESS	AGE SEQUEN	CE:					
	SF	A			SP B			
		<	<		IAM			
Case A	A	ACM —		\longrightarrow				
(Note)	Rin	ging tone			Ringing tone			
		ANM —		\rightarrow				
	Comm	unication —			Communication			
		<	<		REL			
		RLC —		\rightarrow				
Case E	3	REL —		\longrightarrow				
(Note)		<	<		RLC			
	TEST DESC	RIPTION						
1	Make a call f Record the n	rom SP B to SP nessage sequenc	PA. e using a signal n	nonitor.				
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.763, Annex A?							
3	Repeat steps	1 and 2 for eacl	h parameter in Q.7	763, Annex A.				
	NOTE – Cas "Default" and	e A refers to the d "Ignore" and c	e actions in Q.763 ase B refers to the	, Annex A, of "Dis actions in Q.763,	scard parameter", "No l Annex A, of "Release"	Default", '.		

TEST NUMBER: 1.7.3.2 TITLE: Receipt of unknown parameter values SUBTITLE: Receipt of unknown parameter values in backward direction PURPOSE: To verify that SP A is able to handle unknown parameter values ISUP'92: 2.9.5.3.3/Q.764 **REFERENCES:** Q.767: PRE-TEST CONDITIONS: Unknown parameter values should be included in the ACM or ANM TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92VAT ISUP'92CPT Comb. CPT Х EXPECTED MESSAGE SEQUENCE: (Note) SP A SP B IAM _____ \geq < ACM Ringing tone -----Ringing tone ANM Communication -_ ___ __ __ Communication REL - \rightarrow RLC TEST DESCRIPTION Make a call from SP A to SP B. 1 Record the message sequence using a signal monitor. 2 CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.763, Annex A?... 3 Repeat steps 1 and 2 for each parameter in Q.763, Annex A. NOTE - The message sequence refers to the actions in Q.763, Annex A, of "Discard parameter", "No Default", "Default" and "Ignore".

TEST	NUMBER:	2.1.1						
TITLE	3:	Both way circuit selection						
SUBT	ITLE:	IAM sent by c	controlling SP					
PURP	OSE:	To verify that operation whe	To verify that SP A can initiate an outgoing call on a circuit capable of bothway operation when the controlling SP is A					
REFE	RENCES:	Q.767: D.2.1/	Q.767		ISUP	'92: 2.1/Q.764		
PRE-T	EST CONDITI	ONS: a) Cir b) SP	rcuit selected is c A is the controll	apable of both	nway o point.	peration.		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPE	CTED MESSA	GE SEQUENCI	Ξ:					
	SP A SP B							
	IAM ————————————————————————————————————							
		\leq				ACM		
	Ring	ing tone			I	Ringing tone		
		\leq				ANM		
	Commu	nication —			(Communication		
		REL —			>			
		<			— I	RLC		
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP A to SP I ssage sequence	3. using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?				
3	The called part	ty should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABLI	SHED?				
5	The calling par	rty should clear	the call.					
6	CHECK C: IS	THE CIRCUIT	IDLE?					
7	CHECK D: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?			

TEST	NUMBER:	2.1.2						
TITLE	3:	Both way circuit selection						
SUBT	ITLE:	IAM sent by r	IAM sent by non-controlling SP					
PURP	OSE:	To verify that operation whe	To verify that SP A can initiate an outgoing call on a circuit capable of both way operation when the non-controlling SP is A					
REFE	RENCES:	Q.767: D.2.1/Q.767 ISUP'92: 2.1/Q.764						
PRE-7	EST CONDITI	ONS: a) Cir b) SP	rcuit selected is c A is the non-cor	apable of both atrolling signa	h way c Illing po	operation. pint.		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPE	CTED MESSA	GE SEQUENCH	Ξ:					
	SP A SP B							
	IAM ————————————————————————————————————							
		<			— A	ACM		
	Ring	ing tone			F	Ringing tone		
		\leftarrow			— A	ANM		
	Commu	nication —			_ (Communication		
		<			— I	REL		
		RLC —		>	>			
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP A to SP I ssage sequence	3. using a signal mo	onitor.				
2	CHECK A: CA	AN RINGING T	ONE BE HEAR	D?				
3	The called part	ty should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABL	SHED?				
5	5 The called party should clear the call.							
6	CHECK C: IS	THE CIRCUIT	IDLE?					
7	CHECK D: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?			

TEST	NUMBER:	2.2.1						
TITLE	:	Called addre	Called address sending					
SUBT	ITLE:	" <i>en bloc</i> " op	"en bloc" operation					
PURP	OSE:	To verify that	at a call can be su	ccessfully esta	ablished	d (all digits included	in the IAM)	
REFE	RENCES:	Q.767: D.2.1	1.1, 2.1.4, 2.1.7, 2	2.3/Q.767	ISUP'	92: 2.1.1, 2.1.4, 2.1.7	7, 2.3/Q.764	
PRE-T	EST CONDITI	ONS: The	exchange data is	arranged such	that all	digits are included i	n the IAM	
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPE	CTED MESSA	GE SEQUENC	CE:					
	SP A	A				SP B		
		IAM —		>	>			
	ACM							
	Ring	ing tone			I	Ringing tone		
		<	-		A	ANM		
	Commu	nication —			(Communication		
		REL —		>	>			
		<	-		— I	RLC		
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP A to SP ssage sequenc	B. B. B. B	nonitor.				
2	CHECK A: CA	AN RINGING	TONE BE HEAD	RD?				
3	The called part	ty should answ	ver the call.					
4	CHECK B: IS	THE CONNE	CTION ESTABI	LISHED?				
5	The calling par	rty should clea	r the call.					
6	CHECK C: IS	THE CIRCUI	T IDLE?					
7	CHECK D: W	AS THE MES	SAGE SEQUEN	CE AS ABOV	/E?			
8	For validation	testing repeat	this test in the rev	verse direction	l .			

TEST	NUMBER:	2.2.2							
TITLE	:	Called address sending							
SUBT	ITLE:	Overlap opera	ation (with SAM)						
PURP	OSE:	To verify that	SP A can initiate	a call using a	an IAM	I followed by a SAM	I		
REFERENCES: Q.767: D.2.1.2/Q.767 ISUP'92: 2.1.2/Q.764									
PRE-TEST CONDITIONS: The SP data is arranged such that digits are generated in an IAM followed by SAM					I followed by a				
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		Х	X	Х		Х	Х		
EXPE	CTED MESSA	GE SEQUENC	E:						
	SP A	A				SP B			
		IAM ——		>	>				
		SAM —		>	>				
ACM									
Ringing tone Ringing tone									
		\leq			— 4	ANM			
	Commu	nication —			(Communication			
		REL —		\rightarrow	>				
		<			— I	RLC			
	TEST DESCR	IPTION							
1	Make a call from Record the mean	om SP A to SP I ssage sequence	B. using a signal mo	onitor.					
2	CHECK A: CA	AN RINGING T	TONE BE HEAR	D?					
3	The called part	y should answe	er the call.						
4	CHECK B: IS	THE CONNEC	CTION ESTABL	SHED?					
5	The calling par	ty should clear	the call.						
6	CHECK C: IS	THE CIRCUIT	IDLE?						
7	CHECK D: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?				
8	For validation	testing repeat th	nis test in the reve	erse direction.					
	Where SP A is end-of-pulsing	in a position to (ST) signal is i	how by digit ar ncluded in the las	alysis that the st address mes	e final (ssage.	digit has been sent. (Confirm that an		
	NOTE – Multi	ple SAMs may	be used.						

TEST	NUMBER:	BER: 2.3.1							
TITLE	3:	Successful Call setup							
SUBTITLE:		Ordinary call (with various indications in ACM)							
PURPOSE:		To verify that a call can be successfully completed using various indications in address complete messages							
REFE	RENCES:	Q.767: D.2.1.4.1, 2.1.7/Q.767			ISUP'92: 2.1.4.1, 2.1.7/Q.764				
PRE-TEST CONDITIONS:									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92CPT	Comb. CPT		
		Х	Х	X		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
SP A SP B									
	ACM								
Ringing tone Ringing tone									
ANM									
Communication Communication									
REL>									
	RLC								
	TEST DESCRIPTION								
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.								
2	CHECK A: CAN RINGING TONE BE HEARD?								
3	The called party should answer the call.								
4	CHECK B: IS THE CONNECTION ESTABLISHED?								
5	The calling party should clear the call.								
6	CHECK C: IS THE CIRCUIT IDLE?								
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?								
8	 Repeat steps 1 to 7 with the following combinations of backward call indicators in the address complete message: Called party status indicator = "subscriber free", or, "no indication" ISDN access indicator = "ISDN" or "NON ISDN" 								
9	For validation testing repeat this test in the reverse direction.								

TEST	Γ NUMBER: 2.3.2								
TITLE	3:	Successful Call setup							
SUBTITLE:		Ordinary call (with ACM, CPG, and ANM)							
PURPOSE:		To verify that a call be successfully completed using address complete message, call progress message and answer message							
REFERENCES:		Q.767: D.2.1.5/Q.767		ISUP	SUP'92: 2.1.5/Q.764				
PRE-T	EST CONDITI	ONS:							
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92 CPT	Comb. CPT		
		Х	Х	Х		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
	SP A SP B								
IAM — >									
	ACM								
	CPG								
	Ringing tone Ringing tone								
	ANM								
Communication Communication									
	REL>								
		\leftarrow			– I	RLC			
	TEST DESCRIPTION								
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.								
2	CHECK A: CA	IECK A: CAN RINGING TONE BE HEARD?							
3	The called part	The called party should answer the call.							
4	CHECK B: IS THE CONNECTION ESTABLISHED?								
5	The calling par	The calling party should clear the call.							
6	CHECK C: IS THE CIRCUIT IDLE?								
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?								
8	Repeat steps 1 to 7 with the event indicator = "alerting" or "progress" or "in-band information or an appropriate pattern is now available" set in the event information parameter in CPG.								
9	For validation testing repeat this test in the reverse direction.								

TEST	NUMBER:	ER: 2.3.3						
TITLE	:	Successful Call setup						
SUBT	ITLE:	Ordinary call with CON						
PURP	OSE:	To verify that a call can be successfully completed with a connect message						
REFEI	RENCES:	Q.767: D.2.1.4.2/Q.767 ISUP'92: 2.1.4.1/Q.764						
PRE-TEST CONDITIONS: A connect message is returned instead of an answer message from SP B								
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92 CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPE	CTED MESSA	GE SEQUENCE:	:					
SP A SP B								
IAM ————————————————————————————————————								
		<			— (CON		
Communication Communication								
					- T			
< RLC								
	TEST DESCRIPTION							
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.							
2	The called party should answer the call.							
3	CHECK A: IS THE CONNECTION ESTABLISHED?							
4	The calling party should clear the call.							
5	CHECK B: IS THE CIRCUIT IDLE?							
6	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?							
7	For validation testing repeat this test in the reverse direction .							

TEST	EST NUMBER: 2.3.4								
TITLE	2:	Successful Call setup							
SUBT	ITLE:	Call switched via a satellite							
PURPOSE:		To verify the sa	atellite indicator	in the initial a	ddress	message is correctly	y set		
REFE	RENCES:	Q.767: D.2.1/Q	2.767		ISUP	ISUP'92: 2.1/Q.764			
PRE-TEST CONDITIONS: The SP data is arranged such that the call is switched via satellite connection has a satellite connection already included in the path						te connection or			
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92VAT		ISUP'92 CPT	Comb. CPT		
		Х	Х	X		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
SP A SP B									
IAM ————————————————————————————————————									
	ACM								
Ringing tone Ringing tone									
ANM									
Communication Communication									
REL>									
< RI						RLC			
	TEST DESCR	IPTION							
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.								
2	CHECK A: CAN RINGING TONE BE HEARD?								
3	The called part	The called party should answer the call.							
4	CHECK B: IS THE CONNECTION ESTABLISHED?								
5	The calling party should clear the call.								
6	CHECK C: IS THE CIRCUIT IDLE?								
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?								
8	CHECK E: WAS THE SATELLITE INDICATOR "BA" BIT IN THE NATURE OF CONNECTION INDICATORS IN THE IAM SET TO "01"?								
9	For validation testing repeat this test in the reverse direction.								
TEST	NUMBER:	2.3.5							
-------	--	--------------------------------------	---	-------------------	----------	-----------------	---------------	--	--
TITLE	E:	Successful call	setup						
SUBT	ITLE:	Blocking and u	nblocking during	g a call (initia	ted)				
PURP	OSE:	To verify that t can be correctly	To verify that the circuit blocking (during a call) and unblocking (after clearing the call) can be correctly performed						
REFE	RENCES:	Q.767: D.2.9.2	Q.767: D.2.9.2.1/Q.767 ISUP'92: 2.8.2.1/Q.764						
PRE-7	TEST CONDITI	ONS:							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		Х	Х	Х		Х	Х		
EXPE	CTED MESSA	GE SEQUENCE	:						
	SP A	A				SP B			
		IAM ——		\longrightarrow	>				
		\leftarrow				ACM			
	Ring	ing tone			I	Ringing tone			
		<			_ /	ANM			
	Commu	nication — –			_ (Communication			
		BLO —		\longrightarrow	>				
		\leftarrow			- 1	BLA			
	Commu	nication — –			_ (Communication			
		REL ——		\longrightarrow	>				
		\leftarrow			- I	RLC			
		UBL —		\longrightarrow	>				
		\leftarrow			– ı	UBA			
	r								
	TEST DESCR	IPTION							
1	Make a call from Record the mean	om SP A to SP B. ssage sequence u	sing a signal mo	nitor.					
2	CHECK A: CA	AN RINGING TO	ONE BE HEARI	D?					
3	The called part	y should answer	the call.						
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?					
5	SP A should in	itiate circuit bloc	king relating to	the circuit use	ed for t	his call.			
6	CHECK C: IS	THE CONNECT	TION STILL EST	FABLISHED	?				
7	The calling par	ty should clear th	he call						
8	CHECK D: VE	ERIFY THAT A	CALL CANNO	Г BE ORIGIN	NATEI	O ON THIS CIRCU	IT BY SP B.		
9	9 SP A should send an unblocking signal.								
10	CHECK E: VE	ERIFY THAT A	CALL CAN BE	SUCCESSFU	JLLY (ORIGINATED FRC	OM EITHER SP.		
11	CHECK F: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE	E?				
12	For validation	testing repeat thi	s test in the rever	se direction.					

TEST	NUMBER:	2.3.6								
TITLE	:	Successful call	Successful call setup							
SUBT	ITLE:	Blocking and u	nblocking during	a call (receiv	ved)					
PURP	OSE:	To verify that the can be correctly	he circuit blockir / performed	ng (during a ca	all) an	d unblocking (after c	elearing the call)			
REFE	RENCES:	Q.767: D.2.9.2.1/Q.767 ISUP'92: 2.8.2.1/Q.764								
PRE-T	PRE-TEST CONDITIONS:									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT			
		Х	Х	X		X	Х			
EXPE	CTED MESSA	GE SEQUENCE:								
	SP A	Α				SP B				
		IAM ——		\rightarrow	-					
	ACM									
	Ringing tone Ringing tone									
		\leftarrow				ANM				
	Commu	nication –			_	Communication				
		\leftarrow			- :	BLO				
		BLA ——		\longrightarrow	-					
	Commu	nication –			_	Communication				
		REL		\rightarrow						
		\leftarrow			- :	RLC				
		\leftarrow				UBL				
		UBA ——		\longrightarrow	-					
	TEST DESCR	IPTION								
1	Make a call fro Record the mea	om SP A to SP B. ssage sequence us	sing a signal mo	nitor.						
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD) ?						
3	The called part	y should answer	the call.							
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?						
5	SP B should in	itiate circuit bloc	king relating to t	he circuit use	d for t	his call.				
6	CHECK C: IS	THE CONNECT	TION STILL EST	TABLISHED [®]	?					
7	The calling par	ty should clear th	ne call.							
8	8 CHECK D: VERIFY THAT A CALL CANNOT BE ORIGINATED ON THIS CIRCUIT BY SP A.									
9	9 SP B should send an unblocking signal.									
10	CHECK E: VE	RIFY THAT A	CALL CAN BE	SUCCESSFU	ILLY	ORIGINATED FRO	M EITHER SP.			
11	CHECK F: WA	AS THE MESSA	GE SEQUENCE	AS ABOVE	?					
12	For validation	testing repeat this	s test in the rever	se direction.						

TEST	NUMBER:	2.4.1							
TITLE	2:	Propagation delay determination procedure							
SUBT	ITLE:	IAM sent conta	ining the PDC						
PURP	OSE:	To verify that S (D ms)	SP A is able to inc	crease the PDC	C by the	e delay value of the	outgoing route		
REFE	RENCES:	Q.767: ISUP'92: 2.6/Q.764							
PRE-T	EST CONDITI	ONS: Arrange	e the data such the	at the received	1 PDC	value in SP A is X n	ns		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT		
				Х					
EXPE	CTED MESSA	GE SEQUENCE:							
SP A SP B									
IAM — >									
	ACM								
	Ringing tone Ringing tone								
		\leftarrow			- /	ANM			
ĺ	Commu	inication — –			- (Communication			
		REL ——		\rightarrow	-				
		\leftarrow			- I	RLC			
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP A to SP B. ssage sequence us	sing a signal mon	itor.					
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	?					
3	CHECK B: IS	THE VALUE OF	F PDC = (X+D) n	ns IN THE OU	UTGOI	ING SP A?			
4	The called part	y should answer	the call.						
5	5 CHECK C: IS THE CONNECTION ESTABLISHED?								
6	6 The calling party should clear the call.								
7	CHECK D: IS	THE CIRCUIT I	DLE?						
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	AS ABOVE?	?				

TEST	NUMBER:	2.4.2							
TITLE	2:	Propagation de	Propagation delay determination procedure						
SUBT	ITLE:	SP supporting	the procedure to	SP supporting the p	rocedure				
PURP	OSE:	To verify that a higher as the va	a call can be succ alue of the PDC	essfully completed	and the value of the	call history is			
REFERENCES: Q.767: ISUP'92: 2.6/Q.764									
PRE-T	EST CONDITI	ONS: Arrang	e that the PDC in	n the IAM is set to X	K ms				
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92CPT	Comb. CPT			
				Х	X				
EXPECTED MESSAGE SEQUENCE:									
	SP A SP B								
		\leftarrow			IAM				
	ACM ————————————————————————————————————								
	Ring	ing tone			Ringing tone				
		ANM ——		\longrightarrow					
	Commu	nication — –			Communication				
		\leftarrow			REL				
		RLC —		\longrightarrow					
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP B to SP A ssage sequence u	sing a signal mo	nitor.					
2	CHECK A: CA	AN RINGING TO	ONE BE HEARI	D?					
3	The called part	ty should answer	the call.						
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?					
5	CHECK C: IS	A CALL HISTC	ORY INFORMAT	ΓΙΟN ≥ X ms INCL	UDED IN THE AN	M?			
6	The calling par	rty should clear the	he call.						
7	CHECK D: IS	THE CIRCUIT	IDLE?						
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE?					
9	For validation testing repeat this test in the reverse direction.								
	NOTE – X rep	resents the propa	gation delay valu	ue in SP B to SP A.					

TEST	NUMBER:	2.4.3								
TITLE	:	Propagation de	Propagation delay determination procedure							
SUBT	ITLE:	Abnormal proc	edure, PDC is no	ot received						
PURP	OSE:	To verify that a	a call can be succ	essfully complete	l and the PDC is gene	rated in SP A				
REFE	RENCES:	Q.767:	Q.767: ISUP'92 2.6/Q.764							
PRE-T	EST CONDITI	ONS: Arrang	ge the data such the	nat there is no PD	C parameter received	by SP A				
TYPE	OF TEST:	Q.767 VAT	Q.767 VAT Q.767 CPT ISUP'92 VAT			Comb. CPT				
				Х						
EXPE	CTED MESSA	GE SEQUENCE	:		I					
	SP A	A			SP B					
		IAM —		\longrightarrow						
ACM										
	Ringing tone Ringing tone									
		<			ANM					
	Commu	nication —			Communication					
		REL		\rightarrow						
		<			RLC					
	TEST DESCR	IPTION								
1	Make a call fro	om SP A to SP B								
2	Record the me	ssage sequence u	one pe ue a pi	nitor.						
2	CHECK A: CA	THE VALUE O	JNE BE HEAKL	D'						
4	The called part	v should answer	the call							
5	CHECK C: IS	THE CONNEC	TION ESTABLIS	SHED?						
6	The calling party should clear the call.									
7	CHECK D: IS	THE CIRCUIT	IDLE?							
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE?						

TEST	NUMBER:	2.4.4								
TITLE	2:	Propagation	Propagation delay determination procedure							
SUBT	ITLE:	ISUP'92 sup	ISUP'92 supporting the procedure to Q.767							
PURP	OSE:	To verify that	at a call can be su	ccessfully com	pleted and	l the PDC is disc	arded			
REFE	RENCES:	Q.767: 4.1.1.2/Q.767 ISUP'92: 2.6/Q.764								
PRE-T	PRE-TEST CONDITIONS: SP A: Q.767 SP B: ISUP'92 supporting the procedure									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VA	AT 1	ISUP'92 CPT	Comb. CPT			
		(Note 1)		(Note 2)			Х			
EXPE	CTED MESSA	GE SEQUENC	CE:							
SP A SP B										
	IAM									
	ACM —									
	Ringing tone Ringing tone									
	ANM									
Communication Communication										
		\leftarrow			— REL					
		RLC —		>	>					
	TEST DESCR	IPTION								
1	Make a call fro Record the me	om SP B to SP ssage sequence	A. e using a signal n	nonitor.						
2	CHECK A: CA	AN RINGING	TONE BE HEAD	RD?						
3	The called par	ty should answ	er the call.							
4	CHECK B: IS	THE CONNE	CTION ESTABI	LISHED?						
5	CHECK C: IS	THE PDC DI	SCARDED BY S	SP A?						
6	The calling pa	rty should clea	r the call.							
7	7 CHECK D: IS THE CIRCUIT IDLE?									
8	CHECK E: W	AS THE MES	SAGE SEQUEN	CE AS ABOVE	Ξ?					
	NOTE 1 – The	e test 1.6.2.1 ha	as to be performe	d with the appro	opriate pa	rameter.				
	NOTE 2 – The	e test 2.4.1 has	to be performed.							

TEST	NUMBER:	2.4.5						
TITLE	:	Propagation	delay determinati	on procedure				
SUBT	ITLE:	Q.767 to ISU	JP'92 supporting	the procedure				
PURP	OSE:	To verify that if received	at a call can be su	ccessfully com	npleted	and CHI is discarde	d	
REFE	RENCES:	Q.767: 4.1.1	.2/Q.767		ISUP'	92: 2.6/Q.764		
PRE-T CONE	ÈST DITIONS:	SP A: SP B:	Q.767 ISUP'92 support	ing the proced	ure			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT	
		(Note 1)		(Note 2))		Х	
EXPE	CTED MESSA	GE SEQUENC	CE:					
	SP A SP B							
		IAM —			\geq			
		\leftarrow	-			ACM		
	Ring	ing tone			I	Ringing tone		
		<	<			ANM		
	Commu	nication —			(Communication		
		REL —			\geq			
		\leq	<		— I	RLC		
	TEST DESCR	IPTION						
1	Make a call from Record the mean	om SP A to SP ssage sequenc	B. B. B. B	nonitor.				
2	CHECK A: CA	AN RINGING	TONE BE HEAD	RD?				
3	The called part	y should answ	ver the call.					
4	CHECK B: IS	THE CONNE	CTION ESTABL	LISHED?				
5	CHECK C: IS	THE CALL H	IISTORY INFOR	MATION DIS	SCARI	DED BY SP A?		
6	The calling par	ty should clea	r the call.					
7	CHECK D: IS	THE CIRCUI	T IDLE?					
8	CHECK E: WA	AS THE MES	SAGE SEQUEN	CE AS ABOV	Е?			
	NOTE 1 – The	test 1.6.2.2 h	as to be performed	d with the appr	ropriat	e parameter.		
	NOTE 2 – The	tests 2.4.2 and	d 2.4.3 have to be	performed.				

TEST	ST NUMBER: 3.1							
TITLE	2:	Normal call rel	ease					
SUBT	ITLE:	Calling party cl	lears before addr	ess complete				
PURP	OSE:	To verify that t backward mess	he calling party c age	can successful	lly rele	ase a call prior to re	ceipt of any	
REFE	RENCES:	Q.767: D.2.3/Q.767 ISUP'92: 2.3/Q.764						
PRE-TEST CONDITIONS:								
TYPE	TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92 CPT Comb. CPT							
	X X X X X X							
EXPECTED MESSAGE SEQUENCE:								
	SP A SP B							
		IAM —		>	>			
		REL		>	>			
		\leftarrow			— F	RLC		
	TEST DESCR	IPTION						
1	Make a call from Record the mean	om SP A to SP B. ssage sequence u	ising a signal mo	nitor.				
2	The calling par	ty should clear th	he call prior to re	ceipt of any b	oackwa	rd messages.		
3	CHECK A: IS	THE CIRCUIT	IDLE?					
4	CHECK B: W.	AS THE MESSA	GE SEQUENCI	E AS ABOVE	E?			
5	For validation	testing repeat thi	s test in the rever	se direction.				

TEST	NUMBER:	3.2							
TITLE	:	Normal call rel	Normal call release						
SUBT	ITLE:	Calling party cl	Calling party clears before answer						
PURP	OSE:	To verify that t	To verify that the calling party can successfully release a call prior to receipt of answer						
REFE	RENCES:	Q.767: D.2.3/Q.767 ISUP'92: 2.3/Q.764							
PRE-T	PRE-TEST CONDITIONS:								
TYPE	TYPE OF TEST:Q.767 VATQ.767 CPTISUP'92 VATISUP'92 CPTComb. CPT								
	X X X X X						X		
EXPE	CTED MESSA	GE SEQUENCE:	:						
SP A SP B									
IAM>									
		\leftarrow			— A	ACM			
	Ring	ing tone			F	Ringing tone			
		REL —			>				
				-	т				
					— r				
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP A to SP B. ssage sequence u	sing a signal mo	nitor.					
2	CHECK A: CA	AN RINGING TO	ONE BE HEARI	D?					
3	The calling par	rty should clear th	he call prior to re	ceipt of an an	iswer n	nessage.			
4	CHECK B: IS	THE CIRCUIT I	DLE?						
5	CHECK C: W	AS THE MESSA	GE SEQUENCE	E AS ABOVE	3?				
6	For validation	testing repeat thi	s test in the rever	se direction.					

TEST	NUMBER:	3.3								
TITLE	3:	Normal call rel	Normal call release							
SUBT	ITLE:	Calling party cl	lears after answe	r						
PURP	OSE:	To verify that t	To verify that the calling party can successfully release a call after answer							
REFE	RENCES:	Q.767: D.2.3/Q.767 ISUP'92: 2.3/Q.764								
PRE-T	EST CONDITI	IONS:								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92CPT	Comb. CPT			
		X	Х	X		X	Х			
EXPE	CTED MESSA	GE SEQUENCE	:							
SP A SP B										
ACM										
	Ping	ing tone			T	Pinging tone				
	King				1					
		<				ANM				
	Commu	inication —			(Communication				
		REL		>	>					
		\leftarrow			— I	RLC				
	TEST DESCR	IPTION								
1	Make a call fro	om SP A to SP B								
	Record the me	ssage sequence u	sing a signal mo	nitor.						
2	CHECK A: CA	AN RINGING TO	ONE BE HEARI	D?						
3	The called part	ty should answer	the call.							
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?						
5	5 The calling party should clear the call.									
6	6 CHECK C: IS THE CIRCUIT IDLE?									
7	CHECK D: W	AS THE MESSA	GE SEQUENCI	E AS ABOVE	E?					
8	For validation	testing repeat thi	s test in the rever	se direction.						

TEST	NUMBER:	3.4								
TITLE	:	Normal call rel	Normal call release							
SUBT	ITLE:	Called party cle	ears after answer							
PURP	OSE:	To verify that a	To verify that a call can be successfully released in the backward direction							
REFE	RENCES:	Q.767: D.2.3/Q	Q.767: D.2.3/Q.767 ISUP'92: 2.3/Q.764							
PRE-T	EST CONDITI	ONS:								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT			
		X	X	X		X	X			
EXPE	CTED MESSA	GE SEQUENCE	:							
SP A SP B										
		IAM ——		>	>					
ACM										
	Ring	ing tone			1	Ringing tone				
	Kinging tone Kinging tone									
	~									
	Commu	nication —			(Communication				
		<			— I	REL				
		RLC —		\longrightarrow	>					
	TEST DESCR	IPTION								
1	Make a call from Record the me	om SP A to SP B. ssage sequence u	sing a signal mor	nitor.						
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	D?						
3	The called part	ty should answer	the call.							
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?						
5	The called part	ty should clear th	e call.							
6	CHECK C: IS	THE CIRCUIT I	DLE?							
7	CHECK D: W	AS THE MESSA	GE SEQUENCI	E AS ABOVE	?					
8	For validation	testing repeat thi	s test in the rever	se direction.						

TEST	NUMBER:	3.5				
TITLE	3:	Normal call r	elease			
SUBT	ITLE:	Suspend initia	ated by the netwo	rk		
PURP	OSE:	To verify that	the called subscr	iber can successfully	v clear back and rear	nswer a call
REFE	RENCES:	Q.767: D.2.5.	1.3/Q.767	ISUP	'92: 2.4/Q.764	
PRE-1	TEST CONDITI	IONS: Arran initiat	ich that SUS and RE	ES both network prov	vided can be	
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT
		X	Х	X	Х	
EXPE	CTED MESSA	GE SEQUENC	E:			
	SP /	A			SP B	
		IAM —		\rightarrow		
		<			ACM	
	Ring	ing tone]	Ringing tone	
		<			ANM	
	Commu	inication —			Communication	
		<		\$	SUS	
		<]	RES	
	Commu	inication —			Communication	
		REL —		\rightarrow		
		\leq]	RLC	
	TEST DESCR	IPTION				
1	Make a call fro Record the me	om SP A to SP a ssage sequence	B. using a signal mo	onitor.		
2	CHECK A: CA	AN RINGING	TONE BE HEAR	D?		
3	The called par	ty should answe	er the call.			
4	CHECK B: IS	THE CONNEC	CTION ESTABLI	SHED?		
5	The called par	ty should clear	back the call.			
6	The called par	ty should re-ans	swer the call.			
7	CHECK C: IS	THE CONNEC	CTION STILL ES	TABLISHED?		
8	The calling par	rty should clear	the call.			
9	CHECK D: IS	THE CIRCUIT	TIDLE?			
10	CHECK E: W	AS THE MESS	AGE SEQUENC	E AS ABOVE?		
11	For validation	testing repeat th	nis test in the reve	rse direction.		

TEST	NUMBER:	3.6						
TITLE	E:	Normal call release						
SUBT	ITLE:	Suspend and r	esume initiated by	y a calling party				
PURP	OSE:	To verify that the calling subscriber can successfully suspend and resume a call						
REFE	RENCES:	Q.767: D.2.5.	1.1, 2.5.2.1/Q.767	ISUP	'92:			
PRE-7	EST CONDIT	IONS: Arran	ge the stimulus su	ich that SUS and RE	ES both user provide	d can be initiated		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT		
		X						
EXPE	CTED MESSA	GE SEQUENCE	3:					
	SP .	A			SP B			
		IAM —		\longrightarrow				
		<			ACM			
	Ring	ging tone]	Ringing tone			
		\leq			ANM			
	Commu	inication —			Communication			
		SUS —		\longrightarrow				
		RES —		\longrightarrow				
	Commu	inication			Communication			
		REL —		\longrightarrow				
		\leq]	RLC			
	TEST DESCR	RIPTION						
1	Make a call fro Record the me	om SP A to SP E essage sequence	8. using a signal mo	nitor.				
2	CHECK A: C	AN RINGING T	ONE BE HEARI	D?				
3	The called par	ty should answe	r the call.					
4	CHECK B: IS	THE CONNEC	TION ESTABLI	SHED?				
5	The calling pa	rty should suspe	nd the call.					
6	The calling pa	rty should resum	e the call.					
7	CHECK C: IS	THE CONNEC	TION STILL ES	TABLISHED?				
8	The calling pa	rty should clear	the call.					
9	CHECK D: IS	THE CIRCUIT	IDLE?					
10	CHECK E: W	AS THE MESS	AGE SEQUENCI	E AS ABOVE?				
11	For validation	testing repeat th	is test in the reven	rse direction.				

TEST	NUMBER:	3.7									
TITLE	3:	Normal call	Normal call release								
SUBT	ITLE:	Suspend and	Suspend and resume initiated by a called party								
PURP	OSE:	To verify the	To verify that the called subscriber can successfully suspend and resume a call								
REFE	RENCES:	Q.767: D.2.5	Q.767: D.2.5.1.2, 2.5.2.2/Q.767 ISUP'92:								
PRE-1 CONE	PRE-TEST Arrange the stimulus such that SUS and RES both user provided can be initiated CONDITIONS:										
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT					
		Х									
EXPE	CTED MESSA	GE SEQUENC	CE:								
	SP A	A			SP B						
		IAM —		\longrightarrow							
		<	-		ACM						
	Ring	ging tone			Ringing tone						
		<	<u>< </u>		ANM						
Communication				Communication	Communication						
		<	<u></u>		SUS	SUS					
		<			RES						
	Commu	inication —			Communication						
		REL —		\longrightarrow							
		<			RLC						
	TEST DESCR	IPTION									
1	Make a call fro Record the me	om SP A to SP essage sequence	B. e using a signal m	nonitor.							
2	CHECK A: CA	AN RINGING	TONE BE HEAI	RD?							
3	The called par	ty should answ	er the call.								
4	CHECK B: IS	THE CONNE	CTION ESTABL	LISHED?							
5	The called par	ty should suspe	end the call.								
6	The called par	ty should resur	me the call.								
7	CHECK C: IS	THE CONNE	CTION STILL E	STABLISHED?							
8	The calling pa	rty should clea	r the call.								
9	CHECK D: IS	THE CIRCUI	T IDLE?								
10	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?										
11	For validation	testing repeat	this test in the rev	verse direction.							

TEST	NUMBER:	3.8									
TITLE	2:	Normal call release									
SUBT	ITLE:	Collision of REL messages									
PURP	OSE:	To verify that a preceding exch	To verify that a release message may be received at an exchange from a succeeding or preceding exchange after the release of the switch path is initiated								
REFE	RENCES:	Q.767: D.2.3.1 e)/Q.767 ISUP'92: 2.3.1 e)/Q.764									
PRE-T	EST CONDITI	IONS:									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92	VAT	ISUP'92CPT	Comb. CPT				
		X	Х	Х		X	Х				
EXPE	CTED MESSA	GE SEQUENCE	:								
	SP /	A				SP B					
		IAM —			>						
	ACM										
	Ring	ing tone				Ringing tone					
		<			<u> </u>	ANM					
	Commu	inication —				Communication					
		REL	\rightarrow	<		REL					
	RLO	C (Note)			>						
		<				RLC (Note)					
	TEST DESCR	IPTION									
1	Make a call fro Record the me	om SP A to SP B ssage sequence u	sing a signal mo	nitor.							
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD) ?							
3	The called par	ty should answer	the call.								
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?							
5	The calling an	d called parties sl	hould clear the ca	all at the same	e time.						
6	CHECK C: IS	THE CIRCUIT	IDLE?								
7	CHECK D: W	AS THE MESSA	AGE SEQUENCI	E AS ABOVE	E?						
	NOTE – The F	RLC messages ma	ay occur in the re	verse sequen	ce.						

TEST	NUMBER:	4.1						
TITLE	:	Unsuccessfu	Unsuccessful call setup					
SUBT	ITLE:	Validate a se	et of known cause	s for release				
PURP	OSE:	To verify tha release mess calling party	at the call will be sage with a given	immediately r cause is receiv	eleased ved and	l by the outgoing sig the correct indication	nalling point if a on is given to the	
REFE	RENCES:	Q.767: D.2.2	2/Q.767		ISUP'	92: 2.2/Q.764		
PRE-T	EST CONDITI	ONS: Arra retur	nge the data in SF ned to the request	P B such that a t	a releas	e message with a giv	en cause is	
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPE	CTED MESSA	GE SEQUENO	CE:					
	SP A	4				SP B		
Case A	1	IAM —	IAM ————————————————————————————————————					
		\leq			— F	REL (cause = xxx)		
		RLC —		>	\geq			
Case E	8	IAM —		>	>			
		\leq			— A	ACM		
		${\longleftarrow} REL (cause = xxx)$						
		RLC —		>	\geq			
	TEST DESCR	IPTION						
1	Attempt to mail Record the me	ke a call from ssage sequenc	SP A to SP B. e using a signal m	nonitor.				
2	CHECK A: IS CALLING PA	THE APPRO RTY FROM 7	PRIATE TONE (THE ORIGINATI	OR ANNOUN ING EXCHAI	ICEME NGE?	NT RETURNED TO	O THE	
3	CHECK B: IS	THE CIRCUI	T IDLE?					
4	CHECK C: W	AS THE MES	SAGE SEQUEN	CE AS ABOV	/E?			
5	Not all the cau The suggested congestion.	se values are r causes are: un	required to be testa allocated number	ed. , no circuit av	ailable,	, and switching equij	pment	
	NOTE – It may this case it mus	y not be possit st be verified t	ble to confirm that hat the signalling	t the appropria point under te	ate tone est trans	e is returned to the ca smits the signalling r	lling party. In eceived.	

TEST N	UMBER:	5.1							
TITLE:		Abnormal situation during a call							
SUBTIT	LE:	Inability to release in response to a REL after ANM							
PURPOS	SE:	To verify that if the SP is unable to return a circuit to the idle condition in response to a release message, the circuit will be blocked							
REFERI	ENCES:	Q.767: D.2.10.	8.1/Q.767		ISUP'9	02: 2.9.8.1/Q.764			
PRE-TE	ST CONDITI	ONS: Arrange response	the data in SP A s to a release mess	uch that it is u age	nable to	return the circuit to	the idle condition in		
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT		
		Х		Х					
EXPEC	EXPECTED MESSAGE SEQUENCE:								
	SP A SP B								
<						IAM			
ACM									
Ringing tone						Ringing tone			
		ANM			\rightarrow				
	Cor	nmunication			— — Communication				
			\leftarrow		REL				
	BI	O and alert the			\rightarrow	-			
	mair	itenance system	_						
			<			BLA			
		RLC			\rightarrow				
	TEST DESC	RIPTION							
1	Make a call f Record the m	rom SP B to SP lessage sequence	A. e using a signal mo	nitor.					
2	CHECK A: C	CAN RINGING	TONE BE HEARI	D?					
3	The calling p	arty should answ	ver the call.						
4	CHECK B: I	S THE CONNE	CTION ESTABLI	SHED?					
5	The calling party should release the call.								
6	CHECK C: V	VAS THE MESS	SAGE SEQUENC	E AS ABOVE	?				

TEST N	UMBER:	5.2.1					
TITLE:		Timers					
SUBTIT	LE:	T7: waiting for	ACM or CON				
PURPOS	SE:	To check that a	t the expiry of T7	the circuit will	l be rele	eased	
REFERE	ENCES:	Q.767: D.2.10.8	8.3/Q.767		ISUP'	92: 2.9.8.3/Q.764	
PRE-TE	ST CONDITI	ONS: Arrange request	the data in SP B s	such that an add	dress co	omplete message is no	t returned to the call
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92 CPT	Comb. CPT
		Х	Х	Х		Х	Х
EXPECT	TED MESSAC	GE SEQUENCE:	:	<u> </u>			
		SP A				SP B	
		IAM _T			\rightarrow		
		I					
		T7					
		I					
		REL⊥			\rightarrow		
			<			RLC	
	TEST DESC	RIPTION					
1	Attempt to m Record the m	ake a call from S ressage sequence	SP A to SP B. e using a signal me	onitor.			
2	CHECK A: V	WAS THE RELE	EASE MESSAGE	SENT AFTER	R T7 EX	XPIRED?	
3	CHECK B: I	S THE CIRCUIT	Г IDLE?				
4	CHECK C: V	WAS THE MESS	SAGE SEQUENC	E AS ABOVE	?		

TEST N	UMBER:	5.2.2							
TITLE:		Timers							
SUBTIT	TLE:	T9: waiting for ANM							
PURPO	SE:	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							
REFERI	ENCES:	Q.767: D.2.10	.8.3 a)/Q.767		ISUP'	92: 2.9.8.3 a)/Q.764			
PRE-TE	ST CONDITI	ONS: The c	alled party should	not answer the	e call				
TYPE O	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92 CPT	Comb. CPT		
		Х	Х	Х		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
	SP A SP B								
	IAM $_{T}$ \longrightarrow								
		I	<			ACM			
		I				Ringing tone			
		T9							
		I							
		REL ⊥			\rightarrow				
			<			RLC			
	TEST DESC	RIPTION							
1	Attempt to m Record the m	ake a call from lessage sequenc	SP A to SP B. e using a signal m	onitor.					
2	CHECK A: 0	CAN RINGING	TONE BE HEAR	2D?					
3	The called pa	arty should NOT	f answer the call.						
4	CHECK B: V	VAS THE REL	EASE MESSAGE	SENT AFTE	R T9 EX	XPIRED?			
5	CHECK C: I	S THE CIRCUI	T IDLE?						
6	CHECK D: V	WAS THE MES	SAGE SEQUENC	CE AS ABOVI	E?				
	NOTE – The	timer needs on	ly be run at the out	tgoing internat	ional ex	change or national co	ntrolling exchange.		

TEST N	UMBER:	5.2.3							
TITLE:		Timers							
SUBTIT	LE:	T1 and T5: fai	lure to receive a R	LC					
PURPO	SE:	To verify that	appropriate action	s take place at the	expiry of timers T1 and	Т5			
REFERI	ENCES:	Q.767: D.2.2 a	and 2.10.6/Q.767	IS	UP'92: 2.2 and 2.9.6/Q.7	64			
PRE-TE	PRE-TEST CONDITIONS: Arrange the data in SP B such that a release complete message is not returned in response to a release message								
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92CPT	Comb. CPT			
		X		Х					
EXPEC	TED MESSAG	GE SEQUENCI	2:						
	SF	РА			SP B				
			<		— IAM				
		ACM			\geq				
		Ringing tone			Ringing tone				
		ANM			\geq				
	С	ommunication			— Communication	l			
	REL TT>								
		T1							
			Т5						
	R	EL(Note) ⊥			\geq				
		RSC ⊥		>	>				
	Alert the main	ntenance system							
			<		- RLC				
	TEST DESC	RIPTION							
1	Make a call f Record the m	From SP B to SP nessage sequence	A. e using a signal m	onitor.					
2	The called pa	arty at SP A sho	uld clear the call.						
3	CHECK A: V INITIAL RE	WAS A RELEA LEASE MESSA	SE MESSAGE SH AGE?	ENT AFTER T1 E	XPIRED AFTER SEND	DING OF THE			
4	CHECK B: V INITIAL RE	WAS A RESET LEASE MESSA	CIRCUIT MESSA AGE?	AGE SENT AFTE	R T5 EXPIRED AFTER	SENDING OF THE			
5	CHECK C: V	WAS THE MES	SAGE SEQUENC	CE AS ABOVE?					
	NOTE – T1 i	is repeated and	REL is retransmitt	ed during T5 inter	val.				

TEST N	UMBER:	5.2.4						
TITLE:		Timers						
SUBTIT	LE:	T6: waiting for	RES (Network) r	nessage				
PURPOS	SE:	To verify that	the call is released	at the expiry	of timer '	Т6		
REFERE	ENCES:	Q.767: D.2.5.1	.3, 2.5.2.3 and 2.5	.3/Q.767	ISUP'9	2: 2.4.1.3, 2.4.2.3 and	2.4.3/Q.764	
PRE-TE	PRE-TEST CONDITIONS: Arrange the data in SP B such that it is unable to return a resume message (called party will not re-answer)							
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT	
		Х		Х				
EXPECT	FED MESSAC	GE SEQUENCE	:		·			
		SP A				SP B		
		IAM			\rightarrow			
			<			ACM		
		Ringing tone				Ringing tone		
			\leftarrow			— ANM		
	С	ommunication		·		— Communication		
		Т	\leftarrow			SUS (Network)		
		T6						
		REL \perp			\rightarrow			
			<			RLC		
	1							
	TEST DESC	RIPTION						
1	Make a call f Record the m	from SP A to SP nessage sequence	B. e using a signal mo	onitor.				
2	CHECK A: 0	CAN RINGING	TONE BE HEAR	D?				
3	The called pa	arty should answ	er the call.					
4	CHECK B: I	S THE CONNE	CTION ESTABL	ISHED?				
5	Arrange SP I	B to send a suspe	end message.					
6	CHECK C: V	WAS A RELEA	SE MESSAGE SE	ENT AFTER 7	6 EXPII	RED?		
7	CHECK D: I	S THE CIRCUI	T IDLE?					
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?							
	NOTE – T6 t	imer needs only	to be run at the in	ternational or	national	controlling exchange		

TEST N	ST NUMBER: 5.2.5								
TITLE:		Timers							
SUBTIT	LE:	T8: waiting fo	or COT message if	fapplicable					
PURPO	SE:	 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 							
REFERI	ENCES:	Q.767: D.2.10.8.3/Q.767 ISUP'92: 2.9.8.3/Q.764							
PRE-TE	 PRE-TEST CONDITIONS: Arrange the data in SP B such that: a) the signalling information in the IAM indicates 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. 								
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92 CPT	Comb. CPT		
		Х		X					
EXPEC	TED MESSAG	GE SEQUENC	E:						
		SP A				SP B			
		т	<			IAM			
		I							
		T8							
		I							
		REL ⊥			\rightarrow				
			<			RLC			
	TEST DESC	RIPTION							
1	Attempt to m Record the m	ake a call from	1 SP B to SP A. ce using a signal n	nonitor.					
2	CHECK A: V	WAS THE REI	LEASE MESSAG	E SENT AFTE	R T8 E2	XPIRED?			
3	CHECK B: I	S THE CIRCU	IT IDLE?						
4	CHECK C: V	WAS THE ME	SSAGE SEQUEN	CE AS ABOV	E?				









TEST NUMBER: 5.2.10 TITLE: Timers SUBTITLE: T20 and T21: failure to receive a CGUA PURPOSE: To verify that appropriate actions take place the expiry of timers T20 and T21 **REFERENCES:** Q.767 : D.2.10.4/Q.767 ISUP'92: 2.9.4/O.764 PRE-TEST CONDITIONS: Arrange the data in SP B such that a circuit group unblocking acknowledgement message is not returned in response to a circuit group unblocking message TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92CPT Comb. CPT Х Х EXPECTED MESSAGE SEQUENCE: SP A SP B CGB — \leftarrow CGBA CGU T T -T20 | | | | T21 CGU (Note) \perp | -CGU + -Alert the maintenance system | T21 CGU ⊥ − TEST DESCRIPTION 1 Send circuit group blocking and unblocking messages from SP A to SP B. Record the message sequence using a signal monitor. CHECK A: WAS A CIRCUIT GROUP UNBLOCKING MESSAGE SENT AFTER T20 EXPIRED AFTER 2 SENDING OF THE INITIAL CIRCUIT GROUP UNBLOCKING MESSAGE?... CHECK B: WAS A CIRCUIT GROUP UNBLOCKING MESSAGE SENT AFTER T21 EXPIRED AFTER 3 SENDING OF THE INITIAL CIRCUIT GROUP UNBLOCKING MESSAGE?... 4 CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?... NOTE - T20 is repeated and CGU is retransmitted during the first T21 interval.

TEST NUMBER: 5.2.11 TITLE: Timers SUBTITLE: T22 and T23: failure to receive a GRA PURPOSE: To verify that appropriate actions take place at the expiry of timers T22 and T23 ISUP'92: 2.9.3.2/Q.764 **REFERENCES:** Q.767: D.2.10.3.2/Q.767 PRE-TEST CONDITIONS: Arrange the data in SP B such that a circuit group reset acknowledgement message (GRA) is not returned in response to a circuit group reset message TYPE OF TEST: Q.767 VAT Q.767 CPT ISUP'92 VAT ISUP'92CPT Comb. CPT Х Х EXPECTED MESSAGE SEQUENCE: SP A SP B GRS TT T22 | | | | T23 GRS (Note) \perp GRS + Alert the maintenance system T23 GRS ⊥ TEST DESCRIPTION 1 Send a circuit group reset message from SP A to SP B. Record the message sequence using a signal monitor. 2 CHECK A: WAS A CIRCUIT GROUP RESET MESSAGE SENT AFTER T22 EXPIRED AFTER SENDING OF THE INITIAL CIRCUIT GROUP RESET MESSAGE?... CHECK B: WAS A CIRCUIT GROUP RESET MESSAGE SENT AFTER T23 EXPIRED AFTER SENDING 3 OF THE INITIAL CIRCUIT GROUP RESET MESSAGE?... 4 CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?... NOTE - T22 is repeated and GRS is retransmitted during the first T23 interval.

TEST N	UMBER:	5.3.1							
TITLE:		Reset of circuits during a call							
SUBTIT	LE:	Of an outgoing circuit							
PURPO	SE:	To verify that on receipt of a reset message the call is immediately released – outgoing call							
REFERI	ENCES:	Q.767: D.2.10.3.	1 a)/Q.767	2: 2.9.3.1 a)/Q.764					
PRE-TEST CONDITIONS:									
TYPE C	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92 CPT	Comb. CPT		
		Х	Х	Х		Х	Х		
EXPEC	EXPECTED MESSAGE SEQUENCE:								
SP A						SP B			
		IAM			\rightarrow				
			<			ACM			
		Ringing tone	Ringing tone						
			<			- ANM			
		Communication				- Communication			
			<			RSC			
		RLC			\rightarrow				
					-				
	TEST DESC	RIPTION							
1	Make a call f Record the m	rom SP A to SP B lessage sequence u	sing a signal mor	nitor.					
2	CHECK A: C	CAN RINGING TO	ONE BE HEARD	?					
3	The called pa	rty should answer	the call.						
4	CHECK B: I	S THE CONNECT	FION ESTABLIS	HED?					
5	Arrange for S	SP B to send a rese	t-circuit message						
6	CHECK C: I	S THE CIRCUIT	IDLE?						
7	CHECK D: V	WAS THE MESSA	AGE SEQUENCE	E AS ABOVE?	?				

TEST N	UMBER:	5.3.2								
TITLE:		Reset of circuit during a call								
SUBTIT	ĽE:	Of an incoming circuit								
PURPO	SE:	To verify that on receipt of a reset message, a call is immediately released – incoming call								
REFERI	ENCES:	Q.767: D.2.10.3.1 a)/Q.767 ISUP'92: 2.9.3.1 a)/Q.764								
PRE-TEST CONDITIONS:										
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	57 CPT ISUP'92 VAT		ISUP'92 CPT	Comb. CPT			
		Х	Х	Х		Х	Х			
EXPEC	FED MESSAC	GE SEQUENCE:								
		SP A				SP B				
			\leftarrow			- IAM				
		ACM			\rightarrow	-				
		Ringing tone				- Ringing tone				
		ANM			\rightarrow	-				
		Communication				- Communication				
			←───			- RSC				
		RLC			\rightarrow	-				
	TEST DESC	RIPTION								
1	Make a call f Record the m	From SP B to SP A nessage sequence u	sing a signal mon	iitor.						
2	CHECK A: 0	CAN RINGING TO	ONE BE HEARD	?						
3	The called pa	arty should answer	the call.							
4	CHECK B: IS THE CONNECTION ESTABLISHED?									
5	Arrange for SP B to send a reset-circuit message.									
6	CHECK C: IS THE CIRCUIT IDLE?									
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?									

TEST N	UMBER:	6.1.1							
TITLE:		Continuity check call							
SUBTIT	LE:	Continuity check required							
PURPO	SE:	To verify that	a call can be set up	o on a circuit requiring	g a continuity check				
REFERI	ENCES:	Q.767: D.2.1.8	3/Q.767	ISUP'	92: 2.1.8/Q.764				
PRE-TEST CONDITIONS: Arrange the data signalling point A such that a continuity check is required on this ci									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92 CPT	Comb. CPT			
		X	Х	Х	Х	Х			
EXPEC	FED MESSAC	GE SEQUENCE	2:						
		SP A			SP B				
		IAM		\rightarrow	-				
		Check tone			_				
	CO	T (successful)			_ _				
	60		$\boldsymbol{<}$		- ACM				
		Ringing tone	`		Ringing tone				
		Tranging tone	$\boldsymbol{\leftarrow}$		- ANM				
	C	ommunication	`		— Communication				
		REL		>					
			<	-	- RLC				
	TEST DESC	RIPTION							
1	Make a call from SP A to SP B with the continuity check indicator bits "DC" in the Nature of Connection indicators in the IAM set to "01". Record the message sequence using a signal monitor.								
2	CHECK A: C	CAN RINGING	TONE BE HEAR	D?					
3	The called party should answer the call.								
4	CHECK B: IS THE CONNECTION ESTABLISHED?								
5	The calling party should clear the call.								
6	CHECK C: I	S THE CIRCUI	T IDLE?						
7	CHECK D: V	WAS THE MES	SAGE SEQUENC	CE AS ABOVE?					
8	For validation testing repeat this test in the reverse direction.								

TEST N	UMBER:	6.1.2								
TITLE:		Continuity check call								
SUBTIT	LE:	COT applied on a previous circuit								
PURPOS	SE:	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								
REFERE	ENCES:	Q.767: D.2.1.8	8/Q.767	ISU	JP'92: 2.1.8/Q.764					
PRE-TEST CONDITIONS: Arrange the data in SP B such that the signalling information in the IAM indicate continuity check has been performed on a previous circuit										
TYPE O	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT				
		Х	Х	Х	X	X				
EXPEC	TED MESSA	GE SEQUENCE	:							
	SI	РА			SP B					
			<		— IAM					
			delay while check	k performed on pre-	vious					
			<		— COT (successful)				
		ACM			>	,				
		Ringing tone	- Ringing tone							
		ANM	>							
	С	ommunication	Communication							
			<		- REL					
		RLC			>					
	TEST DESC	RIPTION								
1	Make a call f	from SP B to SP	A with the contin	uity check indicato	or bits in the Nature of Co	onnection indicators				
	in the IAM s	et to "10".	o using a signal m	anitan						
2		iessage sequenc	e using a signal in	omtor.						
2	Arrange for s			nessage.						
3	CHECK A: C		IONE BE HEAR	D?						
4	The called pa	The called party should answer the call.								
	The cell's	CHECK B: IS THE CONNECTION ESTABLISHED?								
6	The calling p	s THE CIDCH	r me call.							
	CHECK C: I	ECK C: IS THE CIRCUIT IDLE?								
8	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?									

TEST N	ST NUMBER: 6.1.3									
TITLE:		Continuity check call								
SUBTIT	LE:	E: Calling party clears during a COT								
PURPOS	RPOSE: To verify that the calling party can successfully clear the call during the continuity check phase									
REFERE	ENCES:	Q.767: D.2.3/	Q.767		ISUP'9	92: 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.										
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT			
		Х		X						
EXPECT	TED MESSAC	E SEQUENC	E:	I						
		SP A				SP B				
		IAM			\rightarrow					
		Check tone								
		REL			\rightarrow					
			<──			RLC				
	TEST DESCRIPTION									
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor									
2	The calling party should clear the call during the continuity check phase.									
3	CHECK A: IS THE CIRCUIT IDLE?									
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?									
5	For validation testing repeat this test in the reverse direction.									

TEST N	UMBER:	6.1.4								
TITLE:		Continuity check call								
SUBTIT	LE:	Delay of through connect								
PURPO	SE:	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								
REFERI	ENCES:	Q.767 : D.2.1.	8/Q.767	ISUP	92: 2.1.8/Q.764					
PRE-TEST CONDITIONS: Arrange the data in SP A such that a continuity check is applied on this circuit										
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT				
		Х	Х	Х	X	Х				
EXPEC	TED MESSAG	GE SEQUENCE								
		SP A			SP B					
		IAM		\rightarrow	•					
		Check tone]					
	CO	T (augaaaaful)								
	0	I (successiui)								
		Binging tone		Ringing tone						
Kinging tone			<u> </u>		– ANM					
	C	ommunication	<u> </u>		- Communication					
	U.	REL		>						
		1.22	<──		- RLC					
	TEST DESC	RIPTION								
1	Make a call f Record the m	From SP A to SP nessage sequence	B. e using a signal m	onitor.						
2	CHECK A: WAS THE CONTINUITY CHECK TONE HEARD BY EITHER CALLED OR CALLING PARTY (IT SHOULD NOT BE HEARD)?									
3	CHECK B: C	CAN RINGING	TONE BE HEAR	D?						
4	The called pa	arty should answ	ver the call.							
5	CHECK C: I	CHECK C: IS THE CONNECTION ESTABLISHED?								
6	The calling p	The calling party should clear the call.								
7	CHECK D: I	CHECK D: IS THE CIRCUIT IDLE?								
8	CHECK E: V	HECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?								
9	For validation testing repeat this test in the reverse direction.									

TEST N	UMBER:	6.1.5								
TITLE:		Continuity check call								
SUBTIT	LE:	COT unsuccessful								
PURPOS	SE:	To verify that a repeat attempt of the continuity check is made on the failed circuit								
REFERI	ENCES:	Q.767: D.2.1.8/Q	2.767		ISUP'9	92: 2.1.8/Q.764				
PRE-TE	PRE-TEST CONDITIONS: a) Arrange data in SP A such that a COT is applied on this circuit. b) Ensure that no backward tone is detected within the specified time out.									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT			
		X		Х						
EXPEC	TED MESSAC	GE SEQUENCE:								
		SP A				SP B				
		IAM			\rightarrow					
		Check tone T								
	~~~	T24								
	COT	failed) (Note) +			$\rightarrow$					
		T25								
		123								
	CCR (on the	failed circuit) +			_>					
	Corr (on the	Check tone								
		T24								
	COT (fa	iled) and alert $+$			$\rightarrow$					
	the mainte	enance system								
		126								
					_					
		Chask tons								
		T24								
		COT (failed) $\perp$			$\rightarrow$					
					-					
	TEST DESC	RIPTION								
1	Make a call f	from SP A to SP B								
	Record the m	nessage sequence u	ising a signal mon	nitor.						
2	CHECK A: V	WAS THE SECON	ID CONTINUITY	Y CHECK IN	ITIATEI	D AFTER T25 EXPI	RY?			
3	CHECK B: WAS THE MAINTENANCE SYSTEM ALERTED ON FAILURE OF THE SECOND CONTINUITY CHECK?									
4	CHECK C: WAS THE CHECK REPEATED AT INTERVALS OF T26?									
5	CHECK D: V	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?								
	NOTE – The call should be reattempted.									

TEST N	UMBER:	6.2.1							
TITLE:	LE: Automatic repeat attempt								
SUBTIT	TLE:	Dual seizure for non-controlling SP							
PURPOSE: To verify that an automatic repeat attempt will be made on detection of a dual seizure									
REFERI	ENCES:	Q.767: D.2.9.1 i)/	Q.767	ISUP'92:	2.8.1 i)/Q.764				
PRE-TEST CONDITIONS: Arrange the SP data such that SP B is the controlling exchange for CIC = x									
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT			
		Х	Х	Х	X	Х			
EXPEC		•							
1		SP A			SP B				
		IAM (CIC = $x$ )	$\longrightarrow$	←──	IAM (CIC = $x$ )				
		ACM (CIC = $x$ )		>					
		Ringing tone		-	Ringing tone				
		ANM (CIC = $x$ )		>					
		Communication			Communication				
		IAM (CIC = $y$ )		>					
			<		ACM (CIC = $y$ )				
		Ringing tone	Ringing tone						
			$\boldsymbol{\leftarrow}$		ANM (CIC = $y$ )				
		Communication			Communication				
		REL (CIC = $y$ )		>					
		· · · · · · · · · · · · · · · · · · ·			RLC (CIC = v)				
					$\mathbf{REI}  (\mathbf{CIC} - \mathbf{x})$				
		PIC(CIC - v)			RLL(CIC = X)				
		$\frac{RLC(CIC = x)}{RLC(CIC = x)}$		$\rightarrow$					
	TEST DESC	RIPTION							
1	Simultaneous Record the m	sly transmit an IAN	1 (containing the same sing a signal monitor.	value of CIC) from e	each end of the link for	a both way circuit.			
2	CHECK A: C	CAN RINGING TO	ONE BE HEARD ON '	THE CALL ORIGIN	ATED FROM SP B?				
3	The called pa	rty at SP A should	answer the call.						
4	CHECK B: I	S THE CONNECT	ION ESTABLISHED	?					
5	CHECK C: WAS A REPEAT ATTEMPT MADE BY SP A, WITH A DIFFERENT VALUE OF CIC IN THE								
6	CHECK D: C	CAN RINGING TO	NE BE HEARD ON	THE CALL ORIGIN	ATED FROM SP A?				
7	The called pa	rty at SP B should	answer the call.						
8	CHECK E: IS THE CONNECTION ESTABLISHED?								
9	Clear both calls down.								
10	CHECK F: A	RE THE CIRCUI	IS IDLE?						
11	CHECK G: V	VAS THE MESSA	GE SEQUENCE AS A	ABOVE?					
	NOTE – The	message sequence	may not be as shown	above.					
TEST N	UMBER:	6.2.2							
---------------	-----------------------------------------	---------------------------------	------------------------------------------	----------------------------------------------------	---------------------------------------------------	-------------------------------------	--		
TITLE:		Automatic rep	eat attempt						
SUBTIT	TLE:	Blocking of a	circuit						
PURPOS	SE:	To verify that sending an init	an automatic repea ial address messag	at attempt will be mad ge and before any bacl	e on receipt of the bloc kward messages have b	king message after been received			
REFERI	ENCES:	Q.767: D.2.9.1	ii)/Q.767	ISUP'	92: 2.8.1 ii)/Q.764				
PRE-TE	ST CONDITI	ONS: Arran initial	ge the data in SP l address message	B such that a blocking of the first call reques	message is returned in t	response to the			
TYPE C	)F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT			
		X		X					
EXPEC	TED MESSAC	GE SEQUENCE	):						
		SP A			SP B				
	Ι	AM (CIC = $x$ )		>	-				
			- BLO (CIC = $x$ )						
	E	BLA(CIC = x)	$\rightarrow$	-					
REL (CIC = x)					-				
<					- RLC (CIC = $x$ )				
	Ι	AM (CIC = y)		$\longrightarrow$	-				
			$\leftarrow$		- ACM (CIC = $y$ )				
		Ringing tone			- Ringing tone				
			$\leftarrow$		- ANM (CIC = y)				
	С	ommunication			- Communication				
	F	REL (CIC = y)		$\longrightarrow$	-				
			<		- RLC (CIC = y)				
	T								
	TEST DESC	RIPTION							
1	Make a call f Record the n	from SP A to SP nessage sequenc	B. e using a signal m	onitor.					
2	CHECK A: (	CAN RINGING	TONE BE HEAR	LD?					
3	The called pa	arty should answ	ver the call.						
4	CHECK B: I	S THE CONNE	CTION ESTABL	ISHED?					
5	The called party should clear the call.								
6	CHECK C: I	S THE CIRCUI	T (CIC = Y) IDLE	Ξ?					
7	CHECK D: V	WAS THE MES	SAGE SEQUENC	CE AS ABOVE?					
	NOTE – The	e message seque	nce may not be as	shown above.					

TEST N	UMBER:	6.2.3								
TITLE:		Automatic repo	eat attempt							
SUBTIT	LE:	Circuit reset								
PURPOS	SE:	To verify that a an initial addre	an automatic repea ss message and be	at attempt will be mad efore a backward mess	le on receipt of circuit i sage has been received	reset after sending of				
REFERI	ENCES:	Q.767: D.2.9.1	iii)/Q.767	ISUP'	92: 2.8.1 iii)/Q.764					
PRE-TE	ST CONDITI	ONS: Arran addres	ge the data in SP I ss message of the t	B such that a circuit re first call request	eset signal is sent in res	sponse to the initial				
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92 CPT	Comb. CPT				
		Х		Х						
EXPEC	EXPECTED MESSAGE SEQUENCE:									
SP A SP B										
	I	AM (CIC = x)		$\rightarrow$	-					
			$\leftarrow$		- RSC (CIC = $x$ )					
	F	RLC (CIC = x)	-							
IAM (CIC = y) $$				$\longrightarrow$	-					
			<		- ACM (CIC = $y$ )					
Ringing tone					- Ringing tone					
			<		- ANM (CIC = y)					
	С	ommunication			- Communication					
	F	$\operatorname{REL}\left(\operatorname{CIC}=y\right)$		$\rightarrow$	-					
			$\leftarrow$		- RLC (CIC = y)					
	TEST DESC	RIPTION								
1	Make a call f Record the m	from SP A to SP nessage sequence	B. e using a signal m	onitor.						
2	CHECK A: 0	CAN RINGING	TONE BE HEAR	D?						
3	The called pa	arty should answ	er the call.							
4	CHECK B: IS THE CONNECTION ESTABLISHED?									
5	The calling party should clear the call.									
6	CHECK C: A	ARE THE CIRC	UITS IDLE?							
7	CHECK D: V	WAS THE MES	SAGE SEQUENC	CE AS ABOVE?						
	NOTE – The	message sequer	nce may not be as	shown above.						

TEST NU	MBER:	6.2.4						
TITLE:	Automatic repeat attempt							
SUBTITL	Æ:	Continuity che	ck failure					
PURPOSI	E:	To verify that	an automatic repea	at attempt will	be made	e on continuity check	failure	
REFEREN	NCES:	Q.767: D.2.9.1	iv)/Q.767		ISUP'	92: 2.8.1 iv)/Q.764		
PRE-TES	T CONDITIO	ONS: Arran to the	ge the data in SP I first call request	B such that che	ck tone	is not returned within	the specified limits	
TYPE OF	TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT	
		Х		Х				
EXPECT	ED MESSAC	E SEQUENCE	2:					
		SP A				SP B		
	IA	AM (CIC = x)			$\rightarrow$			
		Check tone				Ĵ		
	COT (fail	ed) (CIC = $x$ )			$\geq$			
A repe	eat of the con	tinuity check of	the failed circuit	will be made w	ithin 1-	10 secs. See Q.764, 2	.1.8.	
	I	AM (CIC = y)			$\rightarrow$	-		
		Check tone				_		
C	COT (success	ful) (CIC = y)			$\geq$			
			<			- ACM (CIC = $y$ )		
		Ringing tone	Ringing tone					
			$\checkmark \qquad \qquad$					
	Co	ommunication		·		Communication		
	R	EL(CIC = y)			$\rightarrow$	-		
			$\leftarrow$			- RLC (CIC = $y$ )		
,	TEST DESC	RIPTION						
1	Make a call f Record the m	rom SP A to SF essage sequenc	' B. e using a signal me	onitor.				
2	CHECK A: C	CAN RINGING	TONE BE HEAR	D?				
3 '	The called pa	rty should answ	ver the call.					
4	CHECK B: IS THE CONNECTION ESTABLISHED?							
5 7	The calling party should clear the call.							
6	CHECK C: IS THE CIRCUIT IDLE?							
7	CHECK D: V	VAS THE MES	SAGE SEQUENC	CE AS ABOVE	E?			
]	NOTE – The	message seque	nce may not be as	shown above.				

TEST N	UMBER:	6.2.5							
TITLE:		Automatic rep	eat attempt						
SUBTIT	LE:	Receipt of unr	easonable signalli	ng information					
PURPOS	SE:	To verify that information af been received	an automatic repeater sending the ini	at attempt will t tial address me	oe made ssage ar	e on receipt of unrease nd before one of the b	onable signalling ackward signals has		
REFERI	ENCES:	Q.767: D.2.9.	l v), 2.10.5.1 d)/Q	.767	ISUP'9	92: 2.8.1 v), 2.9.5.1 d)	/Q.764		
PRE-TE	ST CONDITI	ONS: Arrar is retu	nge the data in SP aurned in response	B such that unre to the initial add	easonab dress me	ble signalling informa essage of the first call	tion (see Note below) request		
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT		
		Х		Х					
EXPEC	TED MESSAC	GE SEQUENCE	E:						
	SP A SP B								
	L	AM (CIC = x)			$\rightarrow$				
				• $XXX (CIC = x) ($	Note 1)				
	F	ASC (CIC = x)			$\rightarrow$				
$\checkmark \qquad \qquad$									
	L	AM (CIC = y)			$\rightarrow$				
			<			• ACM (CIC = $y$ )	I(CIC = y)		
		Ringing tone			Ringing tone				
			<			• ANM (CIC = $y$ )			
	C	ommunication				Communication			
	F	$\operatorname{REL}\left(\operatorname{CIC}=\mathrm{y}\right)$			$\rightarrow$				
			$\leftarrow$	<					
	TEST DESC	RIPTION							
1	Make a call f Record the m	rom SP A to SH lessage sequenc	<b>'</b> B. e using a signal m	onitor.					
2	CHECK A: C	CAN RINGING	TONE BE HEAR	RD?					
3	The called pa	rty should ansv	ver the call.						
4	CHECK B: I	S THE CONNE	ECTION ESTABL	ISHED?					
5	The calling p	arty should clea	ar the call.						
6	CHECK C: ARE THE CIRCUITS IDLE?								
7	CHECK D: V	WAS THE MES	SAGE SEQUEN	CE AS ABOVE	2?				
	NOTE 1 – TI For example,	nis may be any s SUS or RES m	message that, if re-	ceived at this po	oint, wo	ould be either ambigue	ous or inappropriate.		
	NOTE 2 – The message sequence may not be as shown above.								

TEST N	UMBER:	6.3.1								
TITLE:		Dual seizure								
SUBTIT	TLE:	Dual seizure for	controlling SP							
PURPO	SE:	To verify that on completed and the	detection of dual he non-controlling	seizure, the call initia signalling point is ba	ated by the controlling	g signalling point is				
REFER	ENCES:	Q.767: D.2.10.1.	4/Q.767	ISUP'	92: 2.9.1.4/Q.764					
PRE-TE	ST CONDITI	ONS: Arrai	nge the SP data su	ch that SP A is the co	ontrolling signalling p	oint				
TYPE C	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT				
		X	Х	Х	Х	X				
EXPEC	EXPECTED MESSAGE SEQUENCE:									
		SP A			SP B					
		IAM	$\longrightarrow$	$\sim$	- IAM (Note)					
			$\leftarrow$		– ACM					
Ringing tone Ringing tone										
	ANM									
		Communication			– Communication					
		REL		>	-					
			$\leftarrow$		– RLC					
	TEST DESC	RIPTION								
1	Simultaneou circuit. Reco	sly transmit an IAl rd the message sec	M (containing the quence using a sig	same value of CIC) f nal monitor.	rom each end of the l	ink for a both way				
2	CHECK A: 0	CAN RINGING T	ONE BE HEARD	ON THE CALL OR	IGINATED FROM S	SP A?				
3	The called pa	arty at SP B should	l answer the call.							
4	CHECK B: I	S THE CONNEC	ΓΙΟΝ ESTABLIS	HED?						
5	The calling p	party at SP A shoul	d clear the call.							
6	CHECK C: I	S THE CIRCUIT	IDLE?							
7	CHECK D: Y	WAS THE MESSA	AGE SEQUENCE	E AS ABOVE?						
8	For validatio	n testing repeat thi	is test in the revers	se direction.						
	NOTE – The	e call initiated by S	P B should be re-	attempted, see test nu	mber 6.2.1.					

TEST N	UMBER:	6.4.1						
TITLE:		Semi-automat	ic operation					
SUBTIT	TLE:	FOT sent follo	owing a call to a s	ubscriber				
PURPO	SE:	To verify that	the FOT is correct	ctly sent				
REFER	ENCES:	Q.767: D.2.1.	12/Q.767		ISUP'92	: 2.1.10/Q.764		
PRE-TE	EST CONDITI	ONS: a) F b) A c) A	OT message is ge controlling opera rrange the data so	nerated at SP A ator is at SP A. that an assista	nce operat	or is at SP B.		
TYPE C	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT	
		Х		Х				
EXPEC	TED MESSAG	GE SEQUENCI	Ξ:					
		SP A				SP B		
IAM Communication (controlling operator) FOT Communication (controlling operator) REL KEL					$\uparrow \qquad \uparrow \qquad$	<ul> <li>ACM</li> <li>ANM</li> <li>Communication (subscriber)</li> <li>Communication (assistance operator) (Note 2)</li> <li>RLC</li> </ul>		
	TEST DESC	RIPTION						
1	Make a call f Record the m	From SP A to SI nessage sequence	PB. e using a signal n	nonitor.				
2	The called pa	arty should answ	wer the call.					
3	CHECK A: I SUBSCRIBE	S THE CONNI ER?	ECTION ESTAB	LISHED BETV	VEEN A C	CONTROLLING C	PERATOR AND A	
4	CHECK B: I	S FOT MESSA	GE SENT BY SH	P A?				
5	CHECK C: I OPERATOR	S THE CONNI S? (Note 2)	ECTION ESTABI	LISHED BETW	VEEN CO	NTROLLING AN	D ASSISTANCE	
6	CHECK D: V	WAS THE MES	SSAGE SEQUEN	ICE AS ABOV	E?			
	NOTE 1 – FO	OT may be sent	between ACM and	nd REL.				
	NOTE 2 – The functions are	he support of the implemented is	e FOT message in n each gateway (e	n the internation e. g. language as	nal interfactsistance).	ce does not impose	that the related	

Г

TEST N	UMBER:	6.4.2						
TITLE:		Semi-automati	c operation					
SUBTIT	TLE:	FOT received	following a call to	a subscriber				
PURPO	SE:	To verify that	the FOT is correct	ly received				
REFER	ENCES:	Q.767: D.2.1.1	2/Q.767		ISUP'92:	2.1.10/Q.764		
PRE-TE	ST CONDITI	ONS: a) FO b) Ai c) Ai	OT message is gen range the data so assistance operat	erated at SP B that a controlli tor is at SP A.	ing operato	or is at SP B.		
TYPE C	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92CPT	Comb. CPT	
		Х		Х				
EXPEC	TED MESSA	GE SEQUENCE	:					
SP A SP B								
$\leftarrow$						IAM		
		ACM			$\rightarrow$			
	ANM>							
Communication						- — Communication (controlling operator)		
		(subscriber)				EOT	ator)	
	C	ommunication				Communication		
(8	assistance oper	rator) (Note 2)				(controlling oper	ator)	
			$\leftarrow$			REL		
		RLC			$\rightarrow$			
	TEST DESC	RIPTION						
1	Make a call f	From controlling	operator at SP B t	OSP A				
1	Record the m	nessage sequence	e using a signal m	onitor.				
2	The called pa	arty should answ	er the call.					
3	CHECK A: I SUBSCRIBE	S THE CONNE ER?	CTION ESTABL	ISHED BETW	VEEN A C	ONTROLLING O	PERATOR AND A	
4	CHECK B: I	S THE FOT ME	ESSAGE RECEIV	ED CORREC	TLY BY S	SP A?		
5	CHECK C: I OPERATOR	S THE CONNE A? (Note 2)	CTION ESTABL	ISHED BETW	EEN CON	NTROLLING AND	O ASSISTANCE	
6	CHECK D: V	WAS THE MES	SAGE SEQUENC	CE AS ABOV	E?			
	NOTE 1 – F	OT may be recei	ved between ACM	A and REL.				
	NOTE 2 – The functions are	he support of the implemented in	FOT message in each gateway (e.	the internatior g. language as	nal interfac ssistance).	e does not impose	that the related	

TEST N	UMBER:	6.4.3					
TITLE:		Semi-automati	c operation				
SUBTIT	LE:	FOT sent follo	wing a call via co	des 11 and 12			
PURPOS	SE:	To verify that	a FOT is correctly	sent			
REFERE	ENCES:	Q.767: D.2.1.1	2/Q.767	ISUP'	92: 2.1.10/Q.764		
PRE-TE	ST CONDITI	ONS: a) F( b) A c) A	OT message is gen controlling operat range the data so	erated at SP A. or is at SP A. that an incoming oper	ator is at SP B.		
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT	
		Х		Х			
EXPEC	FED MESSAC	GE SEQUENCE	:				
		SP A			SP B		
		IAM		>	-		
			<		- ACM		
			$\leftarrow$		- ANM		
Communication (controlling operator)					<ul> <li>Communication (incoming operat</li> </ul>	or)	
	Control	ommunication lling operator)			- Communication (subscriber)		
		FOT		>	-		
	Control	ommunication	Communication (incoming operator) (Note 2)			tor) (Note 2)	
		REL	<	>	- RLC		
	TEST DESC	DIDTION					
1	Malaa aall f		an anotan at CD A	:	an at CD D aris and as 1	1 and 10	
	Pacord the m	rom controlling	operator at SPA	to an incoming operat	or at SP B Via codes 1	1 and 12.	
2	The incomin	a operator shoul	d answer the call	and make a call to a cr	·	user should ensuer	
2	the call.	g operator shou	u answer the can		aneu user. The caneu	user should answer	
3	CHECK A: I SUBSCRIBE	S THE CONNE ER?	CTION ESTABL	ISHED BETWEEN A	A CONTROLLING O	PERATOR AND A	
4	CHECK B: I	S FOT MESSA	GE SENT BY A S	SP A?			
5	CHECK C: I OPERATOR	S THE CONNE S? (Note 2)	CTION RE-ESTA	ABLISHED BETWEE	EN CONTROLLING A	AND INCOMING	
6	CHECK D: V	WAS THE MES	SAGE SEQUEN	CE AS ABOVE?			
	NOTE 1 – FO	OT may be sent	between ACM an	d REL.			
	NOTE 2 – Th functions are	ne support of the implemented ir	e FOT message in each gateway (e.	the international inter g. language assistance	face does not impose ().	that the related	

TEST N	UMBER:	6.4.4						
TITLE:		Semi-automatic o	operation					
SUBTIT	LE:	FOT received fol	lowing a call via	codes 11 and 1	12			
PURPOS	SE:	To verify that a FOT is correctly received						
REFERE	ENCES:	Q.767: D.2.1.12/	Q.767		ISUP'	92: 2.1.10/Q.764		
PRE-TE	PRE-TEST CONDITIONS:       a) FOT message is generated at SP B.         b) A controlling operator is at SP B.         c) Arrange the data so that an incoming operator is at SP A.							
TYPE O	F TEST:	Q.767 VAT	Q.767 CPT ISUP'92 VAT ISUP'92 CPT			Comb. CPT		
		Х		Х				
X       X         EXPECTED MESSAGE SEQUENCE:       SP A         SP A       SP B         ACM       IAM         ANM       Communication         Communication       Communication         (incoming operator)       Communication         V       Communication         Communication       Communication         (incoming operator)       FOT         Communication       FOT         Communication       Communication         (incoming operator)       REL					rator) rator)			
	TEST DESC	RIPTION						
1	Make a call f	rom controlling op	perator at SP B to	an incoming o	perator	at SP A via codes 11	and 12.	
2	The incoming the call.	g operator should a	answer the call and	d make a call	to a call	led user. The called u	ser should answer	
3	CHECK A: I SUBSCRIBE	S THE CONNECT	ΓΙΟΝ ESTABLIS	HED BETWE	EEN A (	CONTROLLING OP	ERATOR AND A	
4	CHECK B: I	S THE FOT MESS	SAGE RECEIVE	D CORRECTI	LY BY	SP A?		
5	CHECK C: IS OPERATOR	S THE CONNECT S? (Note 2)	ΓΙΟΝ RE-ESTAB	LISHED BET	WEEN	CONTROLLING A	ND INCOMING	
6	CHECK D: W	VAS THE MESSA	AGE SEQUENCE	AS ABOVE?	?			
	NOTE 1 – FO	OT may be receive	d between ACM	and REL.				
	NOTE 2 – Th functions are	ne support of the F implemented in ea	OT message in th ach gateway (e.g.	e international language assis	l interfa stance).	ce does not impose th	hat the related	

TEST	NUMBER:	6.5.1							
TITLE	:	Simple segment	tation						
SUBT	ITLE:	Sending of SGM	Sending of SGM						
PURP	OSE:	To verify that a	To verify that a call can be successfully completed if segmentation is applied						
REFE	RENCES:	Q.767:			ISUP'	92: 2.1.12/Q.764			
PRE-T	EST CONDITI	ONS: a) Arra	inge that the OFC	CI in the IAM i	is set to	o "additional inform	nation will be		
	sent". b) The SGM may include UUI, GenNb, GenNot and ATP.								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	AT	ISUP'92CPT	Comb. CPT		
				Х		Х			
EXPE	CTED MESSA	GE SEQUENCE:							
	SP A	A				SP B			
		IAM —		>	>				
		SGM —		>	>				
	ACM								
	Ringing tone Ringing tone								
		$\leftarrow$			– A	NM			
	Commu	nication —			– C	communication			
		REL		>	>				
		$\leftarrow$			– R	LC			
	TEST DESCR	IPTION							
1	Make a call fro Record the mes	om SP A to SP B. ssage sequence us	sing a signal mon	nitor.					
2	CHECK A: CA	AN RINGING TO	NE BE HEARD	?					
3	CHECK B: IS	THE SGM MES	SAGE SENT?						
4	The called part	y should answer	the call.						
5	5 CHECK C: IS THE CONNECTION ESTABLISHED?								
6	6 The calling party should clear the call.								
7	CHECK D: IS	THE CIRCUIT I	DLE?						
8	CHECK E: WA	AS THE MESSA	GE SEQUENCE	AS ABOVE?	·				

TEST	NUMBER:	6.5.2							
TITLE	2:	Simple segm	Simple segmentation						
SUBT	ITLE:	Receipt of S	GM						
PURP	OSE:	To verify that	at a call can be su	ccessfully completed	d if segmentation is a	pplied			
REFE	RENCES:	Q.767:		ISUP	'92: 2.1.12/Q.764				
PRE-T	EST CONDIT	IONS: a) A	Arrange that the O	FCI in the IAM is se	et to "additional infor	mation will be			
	sent". b) The SGM may include UUI, GenNb, GenNot and ATP.								
TYPE OF TEST: Q.767 VAT Q.76			Q.767 CPT	ISUP'92VAT	ISUP'92 CPT	Comb. CPT			
				Х	Х				
EXPE	CTED MESSA	GE SEQUENC	CE:						
	SP 2	A			SP B				
		<			IAM				
		$\leq$			COT (Note)				
		<	<u>&lt;                                    </u>		SGM				
		АСМ —		$\rightarrow$					
	Ring	ing tone			Ringing tone				
		ANM —		$\rightarrow$					
	Commu	inication —			Communication				
		$\leq$			REL				
		RLC —		$\rightarrow$					
	TEST DESCR	IPTION							
1	Make a call fro	om SP B to SP	A.						
-	Record the me	ssage sequence	e using a signal m	nonitor.					
2	CHECK A: CA	AN RINGING	TONE BE HEAI	RD?					
3	CHECK B: IS	THE SGM M	ESSAGE PASSE	D ON?					
4	The called par	ty should answ	er the call.						
5	CHECK C: IS	THE CONNE	CTION ESTABL	LISHED?					
6	The calling pa	rty should clea	r the call.						
7	CHECK D: IS	THE CIRCUI	T IDLE?						
8	CHECK E: W	AS THE MES	SAGE SEQUEN	CE AS ABOVE?					
9	If the policing	of information	is included in the	e ISC :					
10	CHECK F: IS	THE CALL C	ONTINUED AF	FER RECEIVING T	HE SGM?				
11	CHECK G: IS	THE RESEGN	MENTATION PE	ERFORMED?					
	NOTE – The C	COT message i	s an optional mes	ssage.					

TEST	NUMBER:	6.5.3							
TITLE	:	Simple segme	Simple segmentation						
SUBT	ITLE:	Receipt of a S	GM after timer T	34 expired					
PURP	OSE:	To verify that	a call can be succ	cessfully com	pleted	and the SGM will be	e discarded		
REFE	RENCES:	Q.767:			ISUP	'92: 2.1.12/Q.764			
PRE-T	EST CONDITI	ONS: a) Ai se b) Th	rrange that the OF nt". he SGM should in	CI in the IAM	I is set	to "additional inform	nation will be		
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92CPT	Comb. CPT		
				X					
EXPE	CTED MESSA	GE SEQUENC	E:						
	SP A SP B								
		<			– I	AM			
		$\sqrt{T>T3}$	4						
		,			- 5	SGM			
	Ringing tone Ringing tone								
		ANM —		>	>				
	Commu	nication —			_ (	Communication			
		$\leftarrow$			– I	REL			
		RLC —		>	>				
	TEST DESCR	IPTION							
1	Make a call from Record the mes	om SP B to SP A ssage sequence	A. using a signal mo	onitor.					
2	CHECK A: CA	AN RINGING T	TONE BE HEAR	D?					
3	The called part	y should answe	er the call.						
4	CHECK B: IS	THE CONNEC	CTION ESTABLI	SHED?					
5	The calling par	ty should clear	the call.						
6	6 CHECK C: IS THE CIRCUIT IDLE?								
7	CHECK D: W	AS THE MESS	SAGE SEQUENC	E AS ABOVI	E?				
8	CHECK E: IS	THE CALL CO	ONTINUED AFT	ER TIMER E	XPIRY	ť?			
9	CHECK F: IS	IAM WITHHE	LD AND THE SO	GM MESSAC	E DIS	CARDED?			

TEST	NUMBER:	6.5.4						
TITLE	3:	Simple segmentation						
SUBT	UBTITLE: Receipt of a SGM in forward direction							
PURPOSE: To verify that SP A is able to discard a SGM message without disrupting normal can handling					g normal call			
REFE	RENCES:	Q.767: 4.1.1.2/	Q.767	IS	SUP'92: 2.1.12/Q.764			
PRE-1	EST CONDITI	ONS: SP SP	A: Q.767 B: ISUP'92 supp	porting the SGM	procedure.			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	Г ISUP'92CPT	Comb. CPT		
		(Note 1)		(Note 2)		Х		
EXPE	CTED MESSA	GE SEQUENCE	:					
	SP A	4			SP B			
		<			IAM			
		<			SGM			
	ACM — >							
	Ringing tone Ringing tone							
		ANM —		$\longrightarrow$				
	Communication Communication							
		$\leq$			REL			
		RLC —		$\longrightarrow$				
	TEST DESCR	IPTION						
1	Make a call fro Record the me	om SP B to SP A ssage sequence u	Ising a signal mo	nitor.				
2	CHECK A: CA	AN RINGING TO	ONE BE HEARI	D?				
3	The called part	ty should answer	the call.					
4	CHECK B: IS	THE CONNECT	FION ESTABLIS	SHED?				
5	CHECK C: IS	THE BIT C IN 1	THE IAM IN TH	E OFCI IGNOR	ED?			
6	CHECK D: IS	THE SGM DISC	CARDED BY SP	PA?				
7	The calling par	rty should clear t	he call.					
8	CHECK E: IS	THE CIRCUIT	IDLE?					
9	CHECK F: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE?				
	NOTE 1 – The	tests 1.6.1.1 and	1 1.6.3.1 have to	be performed wit	th the appropriate param	neter.		
	NOTE 2 – The	test 6.5.1 has to	be performed.					

TEST	NUMBER:	6.5.5						
TITLE	2:	Simple segmen	Simple segmentation					
SUBT	ITLE:	Receipt of a SGM in backward direction						
PURP	OSE:	To verify that S	SP A is able to di	scard a SGM	withou	it disrupting normal	call handling	
REFE	RENCES:	Q.767: 4.1.1.2/	Q.767		ISUP	'92: 2.1.12/Q.764		
PRE-1	EST CONDITI	ONS: SP SP	A: Q.767 B: ISUP'92 supp	oorting the SC	GM pro	cedure.		
TYPE	OF TEST:	0.767 VAT	0.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT	
		(Note 1)		(Note 2	()		X	
EXPE	CTED MESSA	GE SEQUENCE	:	<b>(</b>	,		<u></u>	
	SP A	A				SP B		
		IAM —		>	>			
		<				ACM		
		$\leftarrow$			<u> </u>	SGM		
	Ringing tone Ringing tone							
		$\leftarrow$				ANM		
	Commu	nication —			(	Communication		
		REL —		>	>			
		<			— I	RLC		
	TEST DESCR	IPTION						
1	Make a call from Record the mean	om SP A to SP B ssage sequence u	sing a signal mo	nitor.				
2	CHECK A: CA	AN RINGING TO	ONE BE HEARD	D?				
3	The called part	y should answer	the call.					
4	CHECK B: IS	THE CONNECT	TION ESTABLIS	SHED?				
5	CHECK C: IS	THE BIT C IN T	THE ACM IN TH	IE OBCI IGN	IOREI	D?		
6	CHECK D: IS	THE SGM DISC	CARDED BY SP	A?				
7	The calling par	ty should clear th	he call.					
8	CHECK E: IS	THE CIRCUIT I	DLE?					
9	CHECK F: WA	AS THE MESSA	GE SEQUENCE	E AS ABOVE	2?			
	NOTE 1 – The	tests 1.6.1.2 and	1.6.3.2 have to l	be performed	with th	ne appropriate paran	neter.	
	NOTE 2 – The	test 6.5.1 has to	be performed.					

TEST	NUMBER:	6.6.1						
TITLE	:	Fallback						
SUBT	ITLE:	Fallback does not occur						
PURP	URPOSE: To verify that a call can be successfully completed							
REFE	RENCES:	Q.767:		ISU	P'92: 2.5.4/Q.764			
PRE-T	EST CONDITI	IONS: Ari	ange data such th	nat Fallback does no	ot occur behind SP A			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT		
				Х	Х			
EXPE	CTED MESSA	GE SEQUENC	CE:					
	SP A	A			SP B			
	IAM         (TMR = 64 kbit/s pref)         (TMR' = speech)         (USI = speech)         (USI' = 7 kHz)         ACM         Ringing tone         ANM         Communication         Communication         REL							
		RLC —		$\longrightarrow$				
	TEST DESCR	IPTION						
1	Make a call from Record the me	om SP B to SP ssage sequence	A. e using a signal m	nonitor.				
2	CHECK A: CA	AN RINGING	TONE BE HEAI	RD?				
3	The called part	ty should answ	er the call.					
4	CHECK B: IS	THE CONNE	CTION ESTABL	LISHED?				
5	The calling par	rty should clea	r the call.					
6	CHECK C: IS	THE CIRCUI	T IDLE?					
7	CHECK D: W	AS THE MES	SAGE SEQUEN	CE AS ABOVE?				
8	For validation	testing repeat	this test in reverse	e direction.				

TEST	NUMBER:	6.6.2		•					
TITLE	:	Fallback							
SUBT	ITLE:	Fallback occurs behind SP A							
PURP	OSE:	To verify that a call can be successfully completed using Fallback that was indicated behind SP A							
REFE	RENCES:	Q.767: ISUP'92: 2.5/Q.764							
PRE-T	PRE-TEST CONDITIONS: Arrange data such that Fallback occurs behind SP A								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VA	Г ISUP'92C	CPT Comb. CPT			
				X	X				
EXPECTED MESSAGE SEQUENCE: SP A SP B IAM (TMR = 64 kbit/s pref) (TMR'= speech) (USI = speech) (USI = speech)						kbit/s pref) eech) ch) Iz)			
Case A	(TMU = Ring	ACM speech) ing tone ANM		> >	Ringing ton	e			
Case E	Rings (TMU =	ACM ing tone CPG speech) ANM		> >	Ringing ton	e			
Case C	Ringi (TMU =	ACM ing tone ANM speech)		>	Ringing ton	e			
Case I	) (TMU = Commu	CON speech) nication RLC		> 	Communica REL	tion			
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP B to SP A. ssage sequence us	ing a signal mo	nitor.					
2	CHECK A: CA	AN RINGING TO	NE BE HEARI	D?					
3	The called part	y should answer t	he call.						
4	CHECK B: IS	THE CONNECT	ION ESTABLIS	SHED WITH F	ALLBACK CON	NNECTION TYPE?			
5	CHECK C: 19	THE CIPCUIT U	e call.						
7	CHECK C: IS THE CIRCUIT IDLE? CHECK D: WAS THE MESSAGE SEQUENCE AS ADOVE?								
8	For validation	testing repeat this	test in reverse of	lirection.	• • • •				
8	For validation	testing repeat this	test in reverse o	irrection.					

<b>ISUP</b>	Basic	Call	Test	Sp	ecific	ation
-------------	-------	------	------	----	--------	-------

TEST	NUMBER:	6.6.3							
TITLE	3:	Fallback							
SUBT	ITLE:	Fallback occurs in SP A							
PURP	OSE:	To verify that SP A is able to perform Fallback							
REFE	RENCES:	Q.767: ISUP'92: 2.5/Q.764							
PRE-T	EST CONDITI	ONS: Arra	nge the data in SI	A such that l	Fallbac	k occurs			
TYPE	OF TEST:	Q.767 VAT Q.767 CPT ISUP'92 VA			'AT	ISUP'92 CPT	Comb. CPT		
				Х					
EXPE	CTED MESSA	GE SEQUENC	CE:						
	SP A SP B								
	ACM								
	(TMU =	speech)		-					
	Ring	ing tone			· ]	Ringing tone			
		ANM —			>				
	Commu	nication —		·	(	Communication			
		RLC	- - -		— 1 —	REL			
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP B to SP ssage sequence	A. e using a signal m	nonitor.					
2	CHECK A: CA	AN RINGING	TONE BE HEAI	RD?					
3	The called par	ty should answ	er the call.						
4	CHECK B: IS TYPE?	THE CONNE	CTION ESTABL	LISHED WITI	H THE	FALLBACK CONN	NECTION		
5	The calling par	rty should clear	r the call.						
6	CHECK C: IS	THE CIRCUI	T IDLE?						
7	CHECK D: W	AS THE MES	SAGE SEQUEN	CE AS ABOV	/E?				
8	For validation	testing repeat t	his test in the rev	erse direction					

TEST	NUMBER:	6.6.4							
TITLE	3:	Fallback	Fallback						
SUBT	ITLE:	Abnormal procedure, Fallback connection types sent to an exchange not supporting the fallback procedure							
PURP	OSE:	: To verify that SPA is able to release the call							
REFE	RENCES:	Q.767: 4.1.1.2/	Q.767		ISUP	'92: 2.5.1/Q.764			
PRE-TEST CONDITIONS:a) SP A: Q.767 SP B: ISUP'92 supporting the procedure. b) Arrange the data in SP B such that Fallback does not occur.									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
		(Note 1)		(Note 2	)		Х		
EXPECTED MESSAGE SEQUENCE:									
	SP A	A				SP B			
					- I (( ( ( (	(AM (TMR = 64 kbit/s pr (TMR'= speech) (USI = speech) (USI'= 7 kHz)	ef)		
					- I	RLC			
	TEST DESCR	IPTION							
1	Make a call fro Record the mes	m SP B to SP A	Ising a signal mo	nitor.					
2	CHECK A: IS	THE CIRCUIT	IDLE?						
3	CHECK B: WA	AS THE MESSA	GE SEQUENCI	E AS ABOVE	E?				
	NOTE 1 – The	test 1.6.3.1 (case	e B) has to be per	rformed with	the app	propriate parameter.			
	NOTE 2 – The	test 6.6.1 has to	be performed.						

TEST	NUMBER:	7.1.1							
TITLE	2:	64 kbit/s unrestricted							
SUBT	ITLE:	Successful call setup							
PURP	OSE:	To verify that a 64 kbit/s call can be successfully completed using appropriate transmission medium requirement and user service information parameters							
REFE	RENCES:	Q.767: D.2.1/Q	2.767	ISUP	'92: 2.1/Q.764				
PRE-7	PRE-TEST CONDITIONS:								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT	ISUP'92CPT	Comb. CPT			
		Х	Х	Х	X	Х			
EXPE	CTED MESSA	GE SEQUENCE	:						
	SP A	4			SP B				
	IAM (TM	R; USI) —		$\rightarrow$					
Case A	A	<			ACM				
		<			ANM				
		Data ——		l	Data				
Case I	}	CON			CON				
		Data ——		l	Data				
		REL —		$\longrightarrow$					
		<		]	RLC				
	TEST DESCR	IPTION							
1	Make a 64 kbi	t/s call from SP A	A to SP B.						
2	CHECK A: IS	THE TMR SET	TO "64 kbit/s UI	NRESTRICTED"?					
3	CHECK B: DO FOR EXAMP	DES THE USI (II LE, USI HAS TV TE.	F INCLUDED) H VO OCTETS FO	IAVE APPROPRIA R 64 kbit/s AND A'	TE INFORMATIO T LEAST FOUR O	N? CTETS FOR			
4	CHECK C: IS INDICATORS	THE "ECHO CO S PARAMETER	ONTROL DEVIC SET TO "NOT I	CE INDICATOR" IN NCLUDED"?	NATURE OF CO	NNECTION			
5	CHECK D: IS CIRCUIT SEL	THE ECHO CO LECTED?	NTROL DEVIC	E DISABLED OR I	S A NON-ECHO C	ONTROLLED			
6	The called part	ty should answer	the call.						
7	CHECK E: IS	IT POSSIBLE T	O PASS DATA	BETWEEN SP A A	ND SP B?				
8	The calling par	rty should clear t	he call.						
9	CHECK F: IS THE ECHO C	THE CIRCUIT I ONTROL DEVI	DLE? FOR CI CE RE-ENABLE	RCUITS EQUIPPE ED?	D WITH ECHO CO	NTROL, IS			
10	CHECK G: W	AS THE MESSA	AGE SEQUENCI	E AS ABOVE?					
11	Repeat this tes	Repeat this test for any subrate calls.							
12	For validation	testing repeat thi	s test in the rever	se direction.					

TEST	NUMBER:	7.1.2						
TITLE	:	64 kbit/s unrestricted						
SUBT	ITLE:	Unsuccessful c	all setup					
PURP	OSE:	To verify that the call will be immediately released by the outgoing SP if a release message with a given cause is received and, for circuits equipped with echo control, the echo control device is enabled						
REFE	RENCES:	Q.767: D.2.2/Q	.767		ISUP	92: 2.2/Q.764		
PRE-T	EST CONDITI	ONS:						
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT	
		Х	Х	Х		Х	Х	
EXPECTED MESSAGE SEQUENCE:								
	SP A SP B							
		IAM —		>	>			
		<			— F	REL (cause = xxx)		
		RLC —		>	>			
	TEST DESCR	IPTION						
1	Attempt to mail Record the me	ke a 64 kbit/s cal ssage sequence u	l from SP A to S sing a signal mor	P B. nitor.				
2	CHECK A: IS	THE APPROPR	IATE CAUSE R	ETURNED T	ГО ТНІ	E CALLING PART	Y?	
3	CHECK B: IS THE ECHO C	THE CIRCUIT I	DLE? FOR CI CE RE-ENABLE	RCUITS EQ ED?	UIPPE	D WITH ECHO CC	ONTROL, IS	
4	CHECK C: W	AS THE MESSA	GE SEQUENCE	E AS ABOVE	E?			
5	Repeat steps 1 suggested caus capability not	to 4 with "xxx" s ses are: unallocate presently availab	set to various cau ed number, no cin le, and bearer cap	ses which are rcuit available pability not in	e based e, beare npleme	on bilateral agreem er capability not autl nted.	ents. The norized, bearer	

TITLE:     64 kbit/s unrestricted       SUBTITI F:     Dual seizure							
SUBTITI F: Dual seizure							
3TITLE: Dual seizure							
PURPOSE:         To verify that an automatic repeat attempt will be made on detection of a dual seizure							
REFERENCES: Q.767: D.2.9.1 i)/Q.767 ISUP'92: 2.8.1 i)/Q.764							
PRE-TEST CONDITIONS: Arrange the SP data such that SP B is the controlling exchange for CIC = x							
TYPE OF TEST:     Q.767 VAT     Q.767 CPT     ISUP'92 VAT     ISUP'92 CPT     Comb. CP'	Γ						
X X X X X X							
EXPECTED MESSAGE SEQUENCE:							
SP A SP B							
$IAM (CIC = x) \qquad \longrightarrow \qquad IAM (CIC = x)$							
$ACM (CIC = x)$ $\longrightarrow$							
ANM (CIC = $x$ ) $\longrightarrow$							
Data Data							
IAM (CIC = y) $\longrightarrow$							
$\checkmark \qquad \qquad$							
$\checkmark \qquad \qquad$							
Data Data Data							
$\operatorname{REL}\left(\operatorname{CIC}=y\right)$							
$\overset{\text{RLC}}{\leftarrow} (\text{CIC} = \text{y})$							
$\overset{\text{REL}}{\leftarrow} (\text{CIC} = \mathbf{x})$							
$RLC (CIC = x) \longrightarrow$							
TEST DESCRIPTION							
1 Simultaneously transmit an IAM (containing the same value of CIC) from each end of the link for a b way circuit Both IAMs have appropriate indicators set for TMR and USI	oth						
Record the message sequence using a signal monitor.							
2 CHECK A: IS THE ECHO CONTROL DEVICE DISABLED FOR CIC = X?							
3 The called party a SP A should answer the call.							
4 CHECK B: IS IT POSSIBLE TO PASS DATA BETWEEN SP A AND SP B?							
5 CHECK C: WAS A REPEAT ATTEMPT MADE BY SP A, WITH A DIFFERENT VALUE OF CIC							
IN THE IAM?							
6 CHECK D: IS THE ECHO CONTROL DEVICE DISABLED FOR CIC = Y?							
7 The called party a SP B should answer the call.							
8 CHECK E: IS IT STILL POSSIBLE TO PASS DATA BETWEEN SP A AND SP B?							
9 Clear both calls down.							
10 CHECK C: WAS THE MESSAGE SEQUENCE AS ADOVE?	0 CHECK F: ARE THE CIRCUITS IDLE?						
11 CHECK G: WAS THE MESSAGE SEQUENCE AS ABOVE							

TEST	NUMBER:	7.2.1						
TITLE	2:	3.1 kHz audio						
SUBT	ITLE:	Successful call setup						
PURP	OSE:	To verify that a transmission m	a 3.1 kHz audio c edium requireme	all can be successfu ant and user service i	lly completed using	appropriate ters		
REFE	RENCES:	Q.767: D.2.1/Q	2.767	ISUP	'92: 2.1/Q.764			
PRE-T	EST CONDITI	ONS:						
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT		
		Х	Х	Х	Х	Х		
EXPE	CTED MESSA	GE SEQUENCE	:					
SP A SP B								
	IAM (TMR; USI)							
	ACM							
Ringing tone Ringing tone								
	ANM							
	Commu	nication —		(	Communication			
		REL —		$\rightarrow$				
		<		I	RLC			
	TEST DESCR	IPTION						
1	Make a 3.1 kH Record the me	z audio call from ssage sequence u	n SP A to SP B. sing a signal mor	nitor.				
2	CHECK A: IS	THE TMR SET	TO "3.1 KHZ A	UDIO"?				
3	CHECK B: DO FOR EXAMPI	DES THE USI IF LE; USI HAS TV	INCLUDED HA	AVE APPROPRIAT OCTETS FOR 3.1 F	E INFORMATION KHZ AUDIO.	?		
4	The called part	ty should answer	the call.					
5	CHECK C: IS	DATA/SPEECH	I POSSIBLE?					
6	The calling par	rty should clear th	he call.					
7	CHECK D: IS	THE CIRCUIT	IDLE?					
8	CHECK E: WAS THE MESSAGE AS ABOVE?							
9	For validation	testing repeat thi	s test in the rever	rse direction.				

TEST	T NUMBER: 7.3.1								
TITLE	:	Multirate connection types							
SUBT	JBTITLE: Successful multirate outgoing call setup								
PURP	OSE:	To verify that	at SP A is able to	set up an outgo	oing ca	ll with a multirate be	earer service		
REFE	RENCES:	Q.767:			ISUP'	92: 1.2/Q.763; 2.1/Q	.764		
PRE-T	PRE-TEST CONDITIONS: Assure that there are enough circuits available for the call								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VA	AT	ISUP'92 CPT	Comb. CPT		
				Х		Х			
EXPE	CTED MESSA	GE SEQUENC	CE:						
	SP A SP B								
	IAM — — — — — — — — — — — — — — — — — — —								
	ACM								
	ANM								
	Communication Communication								
		$\prec$			— R	EL			
		RLC —		>	>				
	TEST DESCR	IPTION							
1	Make a $2 \times 64$ Record the me	kbit/s multirat ssage sequence	e call from SP A e using a signal m	to SP B. nonitor.					
2	CHECK A: IS	THE TMR SE	ET TO " $2 \times 64$ kb	it/s unrestricted	d"?				
3	CHECK B: DO	DES THE USI	(IF INCLUDED)	CONTAIN T	HE AF	PROPRIATE INFO	RMATION?		
4	The called part	ty should answ	er the call.						
5	CHECK C: IS	THE CONNE	CTION ESTABL	ISHED?					
6	The called part	ty should clear	the call.						
7	CHECK D: AI	RE THE CIRC	UITS IDLE?						
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?								
9	Repeat the test	for the follow	ing multirate con	nection types:	384 kl	bit/s, 1536 kbit/s and	l 1920 kbit/s.		

TEST	EST NUMBER: 7.3.2								
TITLE	8:	Multirate con	nection types						
SUBT	ITLE:	Successful mu	Iltirate incoming	call setup					
PURP	OSE:	To verify that	SP A is able to h	andle an inco	ming c	all with a multirate b	bearer service		
REFE	RENCES:	Q.767:	Q.767: ISUP'92: 1.2/Q.763; 2.1/Q.764						
PRE-T CONE	TEST DITIONS:	Assure that there are enough circuits available for the call							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	/AT	ISUP'92 CPT	Comb. CPT		
				X		X			
EXPE	EXPECTED MESSAGE SEQUENCE:								
SP A SP B									
	IAM								
	ACM								
		ANM —			>				
	Commi	inication —			(	Communication			
	Comme	PEI —		_	_	communication			
		REL							
			-		— I	KLU			
	TEST DESCR	IPTION							
1	Make a $2 \times 64$ Record the me	kbit/s multirate ssage sequence	call from SP B to using a signal mo	o SP A. onitor.					
2	The called par	ty should answe	r the call.						
3	CHECK A: IS	THE CONNEC	TION ESTABL	ISHED?					
4	The called par	ty should clear t	he call.						
5	CHECK B: A	RE THE CIRCU	ITS IDLE?						
6	CHECK C: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?				
7	Repeat the test	t for the followir	ng multirate conn	ection types:	384 kł	oit/s, 1536 kbit/s and	1920 kbit/s.		

TEST	NUMBER:	7.3.3								
TITLE	:	Multirate connection types								
SUBT	ITLE:	Unsuccessful	Unsuccessful multirate call setup – one circuit already busy							
PURP	OSE:	To verify that necessary for t	To verify that a 1920 kbit/s multirate call setup is rejected by SP A if one of the circuits necessary for the call is already busy							
REFE	RENCES:	Q.767:		Ι	ISUP'92	2: 1.2/Q.763; 2.1/Q	<b>)</b> .764			
PRE-TEST CONDITIONS: Assure that there is a sufficient number of circuits available for the mul 1920 kbit/s call							the multirate			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VA	АT	ISUP'92 CPT	Comb. CPT			
				Х						
EXPE	CTED MESSAG	GE SEQUENCE	3:							
	SP A	A				SP B				
<b>IAM</b> (CIC = 31)										
		ACM —		$\longrightarrow$	-					
		ANM ——		$\longrightarrow$	-					
	Communication — — — — — Communication									
		$\leftarrow$			- IA	M (CIC = 1; 1920	)			
	REL (C	CIC = 1) —		>	-					
	, , , , , , , , , , , , , , , , , , ,	$\leftarrow$			- RL	.C				
		$\leftarrow$			RE	EL (CIC = 31)				
		RLC —		$\rightarrow$	-					
	TEST DESCR	IPTION								
1	Make a speech Record the mes	call from SP B	to SP A using Cl using a signal mo	C = 31.						
2	The called part	y should answe	r the call.							
3	Make a 1920 k	bit/s multirate c	all from SP B to	SP A using CIC	C = 1.					
4	CHECK A: IS	THE MULTIRA	ATE CALL REL	EASED?						
5	The calling par	ty should clear	the speech call.							
6	CHECK B: AR	RE THE CIRCU	ITS IDLE?							
7	CHECK C: WA	AS THE MESS	AGE SEQUENC	E AS ABOVE?	?					
	NOTE – This t	est may be adap	ted for any bitrat	e specified for	multira	te connection type	·S			

TEST	NUMBER:	7.3.4								
TITLE	2:	Multirate conr	Multirate connection types							
SUBT	ITLE:	Dual seizure o	Dual seizure of different connection types: Controlling exchange							
PURP	OSE:	To verify that connection typ	To verify that SP A is able to detect dual seizure for calls of different multirate connection types and it completes the call involving the greater number of circuits							
REFE	RENCES:	Q.767:			ISUP'92: 1	.2/Q.763; 2.9.1.4/Q.	764			
PRE-7	EST CONDITI	ONS: Assure calls	e that there is a su	ıfficient ı	number of c	eircuits available for	both multirate			
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'	'92 VAT	ISUP'92CPT	Comb. CPT			
					Х	X				
EXPE	CTED MESSA	GE SEQUENCE	3:			·				
	SP	A				SP B				
	IAM (CIC =	= 1; 1536)	$\longrightarrow$	< -	— I	AM (CIC = 9; $2 \times 6$	4)			
		$\prec$	<u></u>			ACM (CIC = 1)				
		<				ANM (CIC = 1)				
Co	Communication (CIC = 1)					Communication (CIC = 1)				
		$\leq$	I	• IAM (CIC = $26; 2 \times 64$ )						
ACM (CIC = 26)										
	ANM (0	CIC = 26) —			$\rightarrow$					
1	Communicat	ion (CIC = 26)				Communication (CI	C = 26)			
		<	<u>-                                     </u>		— I	REL (CIC = 26)				
	RLC (0	CIC = 26) —			$\rightarrow$					
		$\leftarrow$	<u>.</u>		—— I	- REL (CIC = 1)				
	RLC	(CIC = 1)			$\rightarrow$					
	TEST DESCR	IPTION								
1	Make a 1536 k	bit/s multirate c	all from SP A to	SP B. Th	ne CIC will	be 1 (the only possil	oility). Make a			
	$2 \times 64$ kbit/s m	ultirate call from	n SP B to SP A u	using CIC	C = 9.					
	Record the me	ssage sequence	using a signal mo	onitor.						
2	CHECK A: IS THROUGH?	THE 1536 kbit/	s MULTIRATE	CALL (I	T USES M	ORE CIRCUITS) P	JT			
3	The $2 \times 64$ kbi	t/s multirate call	is reattempted o	on the unu	used CIC =	26.				
4	CHECK B: AF	RE BOTH CON	NECTIONS EST	TABLISH	IED?					
5	Release both c	alls.								
6	CHECK C: AF	RE THE CIRCU	ITS IDLE?							
7	CHECK D: W	AS THE MESS	AGE SEQUENC	E AS AE	BOVE?					
	NOTE 1 – The	message seque	nce may not be a	s shown a	above.					
	NOTE 2 – This	s test may be ad	apted for any bit	rate speci	fied for mu	ltirate connection ty	pes.			

TEST	NUMBER:	7.3.5							
TITLE	3:	Multirate connection types							
SUBT	ITLE:	Dual seizure	of different conn	ection typ	es: Non-co	ontrolling exchange			
PURP	OSE:	To verify that connection ty	tt SP A is able to types and it reatter	detect dua mpts the c	ıl seizure f all involvi	or calls of different n ng the smaller numbe	nultirate er of circuits		
REFE	RENCES:	Q.767:			ISUP'92:	1.2/Q.763; 2.9.1.4 /0	Q.764		
PRE-T	TEST CONDITI	NDITIONS: Assure that there is a sufficient number of circuits available for both multirate calls							
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'	92VAT	ISUP'92 CPT	Comb. CPT		
					X	X			
EXPE	EXPECTED MESSAGE SEQUENCE:								
	SP /	4				SP B			
	IAM (CIC < 2	26; 384) —	$\rightarrow$	$\leftarrow$	]	IAM (CIC = 1; 1536)	)		
	ACM (C	CIC = 1)			$\rightarrow$				
	ANM (CIC = 1)								
C	Communication (CIC = 1) Communication (CIC = 1)								
	IAM (CIC = 26; 384)								
		$\leq$				ACM (CIC = 26)			
		$\leq$				ANM (CIC = 26)			
Co	mmunication (C	CIC = 26)				Communication (CIC	C = 26)		
		$\leq$			]	REL (CIC = 1)			
	RLC (C	CIC = 1)			$\rightarrow$				
		$\leq$			]	REL (CIC = 26)			
	RLC (C	IC = 26) —			$\rightarrow$				
	TEST DESCR	IPTION							
1	Make a 384 kt dual seizure w Record the me	oit/s multirate c ill not occur. N ssage sequence	all from SP A to Iake a 1536 kbit/ e using a signal n	SP B. The s multirate nonitor.	e CIC shall e call from	be less than 26 beca SP B to SP A using	use otherwise CIC = 1.		
2	CHECK A: IS	THE 384 kbit/	s MULTIRATE	CALL RE	EATTEMP	TED ON CIC = $26$ ?.			
3	CHECK B: AI	RE BOTH COM	NNECTIONS ES	TABLISH	IED?				
4	Release both c	alls.							
5	CHECK C: AI	RE THE CIRC	UITS IDLE?						
6	CHECK D: W	AS THE MES	SAGE SEQUEN	CE AS AI	BOVE?				
	NOTE 1 – The	e message sequ	ence may not be	as shown	above.				
	NOTE 2 – Thi	s test may be a	dapted for any bi	trate speci	ified for m	ultirate connection ty	/pes.		

TEST	NUMBER:	7.3.6							
TITLE	:	Multirate conr	ection types						
SUBT	ITLE:	Abnormal protection the procedure	cedure, Multirate	connection t	ypes ca	Ill sent to an exchang	ge not supporting		
PURP	OSE:	To verify that	SPA is able to re	lease the call					
REFE	RENCES:	Q.767: 4.1.1.2/Q.767 ISUP'92: 1.2/Q.763; 2.1/Q.764							
PRE-1	PRE-TEST CONDITIONS: SP A: Q.767 or ISUP'92 not supporting the procedure. SP B: ISUP'92 supporting the procedure.								
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT		ISUP'92CPT	Comb. CPT		
		(Note 1)		(Note 2)		Х	Х		
EXPECTED MESSAGE SEQUENCE:									
	SP A	A				SP B			
		<			— I	AM			
		REL			>				
		<			— I	RLC			
	TEST DESCR	IPTION							
1	Make a $2 \times 64$ Record the me	kbit/s multirate	call from SP B to using a signal mo	o SP A. onitor.					
2	CHECK A: IS	THE CIRCUIT	IDLE?						
3	CHECK B: W.	AS THE MESS	AGE SEQUENC	E AS ABOV	E?				
4	Repeat the test	for the followin	g multirate conn	ection types:	384 kb	it/s, 1536 kbit/s and	1920 kbit/s.		
	NOTE 1 – The	test 1.6.3.1 (cas	se B) has to be pe	erformed with	the ap	propriate parameter.			
	NOTE 2 – SP SP A	B: The test 7.3.1 A: The test 1.7.3	has to be perfor .1 (case B) has to	med. o be performe	d.				

TEST	NUMBER:	8.1.1							
TITLE	): :	Automatic cor	ngestion control						
SUBT	ITLE:	Receipt of a re	elease message co	ontaining an a	utomatic	congestion level pa	arameter		
PURP	OSE:	To verify that the adjacent exchange (SP A), after receiving a release message containing an automatic congestion level parameter reduces the traffic to the overload affected exchange (SP B)							
REFE	RENCES:	Q.767: D.2.12/Q.767 ISUP'92: 2.11/Q.764							
PRE-TEST CONDITIONS: Arrange the data in signalling point B such that a release message with an automatic congestion level parameter is send to SP A									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT		ISUP'92CPT	Comb. CPT		
		Х		Х					
EXPE	EXPECTED MESSAGE SEQUENCE:								
	SP A	A				SP B			
		IAM ——		>	>				
		<			_	REI (congestion le	vel 1 or 2)		
		RLC ——		>	>				
	TEST DESCR	IPTION							
	TEST DESCR								
1	1 Make an appropriate number of calls from SP A to SP B. Record the message sequence using a signal monitor.								
2	2 CHECK A: IS THE TRAFFIC FROM SP A TO SP B REDUCED?								
3	3 CHECK B: IS THE CIRCUIT IDLE?								
4	CHECK C: W	AS THE MESS.	AGE SEQUENC	E AS ABOVI	E?				

TEST	NUMBER:	R: 8.1.2							
TITLE	:	Automatic cor	ngestion control						
SUBT	ITLE:	Sending of a r	elease message c	ontaining an a	automa	tic congestion level	parameter		
PURP	OSE:	To verify that congestion lev	SP A is able to s rel parameter	end a release	messag	ge containing an auto	omatic		
REFE	RENCES:	Q.767: D.2.12/Q.767 ISUP'92: 2.11/Q.764							
PRE-TEST CONDITIONS: Arrange traffic such that SP A becomes overloaded									
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92VAT		ISUP'92 CPT	Comb. CPT		
		Х		Х					
EXPECTED MESSAGE SEQUENCE:									
	SP A	A				SP B			
		$\leftarrow$			- 1	AM			
	REL			>	>				
(coi	igestion level 1	or 2)							
		<			— J	RLC			
	TEST DESCR	IPTION							
1	Make a call fro Record the me	om SP B to SP A ssage sequence	A. using a signal mo	onitor.					
2	CHECK A: IS	AN AUTOMA	TIC CONGESTI	ON LEVEL F	PARAN	METER SENT IN T	HE REL?		
3	CHECK B: IS	THE CIRCUIT	IDLE?						
4	CHECK C: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?				

TEST	NUMBER:	8.2.1								
TITLE	:	ISUP availabili	ty control							
SUBT	ITLE:	Receipt of an U	JPT							
PURP	OSE:	To verify that c part available n	To verify that on receipt of a user part test message SP A will respond by sending a user part available message							
REFEI	RENCES:	Q.767:			ISUP	'92: 2.13/Q.764				
PRE-TEST CONDITIONS:										
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92VAT		ISUP'92CPT	Comb. CPT			
				Х	Х					
EXPE	CTED MESSA	GE SEQUENCE:								
	SP A	A				SP B				
		$\leftarrow$			— ı	UPT				
		UPA —		>	>					
	TEST DESCRIPTION									
1	Arrange for SP B to send a user part test message. Record the message sequence using a signal monitor									
2	CHECK A: W	AS THE MESSA	GE SEQUENCI	E AS ABOVE	E?					

TEST	NUMBER:	8.2.2					
TITLE	:	ISUP availabilit	ty control				
SUBT	ITLE:	Sending of an U	JPT				
PURP	OSE:	To verify that S	P A is able to ser	nd a user part	test me	essage	
REFE	RENCES:	Q.767:			ISUP'	92: 2.13/Q.764	
PRE-T	PRE-TEST CONDITIONS: Arrange that ISUP of SP B becomes unavailable for SP A, e.g. by sending a MTP user part unavailable message (UPU) with the cause "user part unavailability – inaccessible remote user" from SP B to SP A						
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT
				Х			
EXPE	CTED MESSAG	GE SEQUENCE:					
	SP A	X				SP B	
		UPT —		>	>		
		$\leftarrow$			— t	JPA	
	TEST DESCR	IPTION					
1	Arrange for SP Record the mes	A to send a user	part test message	e. iitor.			

CHECK A: WAS THE MESSAGE SEQUENCE AS ABOVE?...

CHECK B: IS THE ISDN USER PART OF SP B MARKED AVAILABLE IN SP A?...

#### **ISUP Basic Call Test Specification**

2

3

TEST	NUMBER:	8.2.3								
TITLE	:	ISUP availabi	ISUP availability control							
SUBT	ITLE:	T4: failure to	T4: failure to receive a response to a UPT							
PURP	OSE:	To verify that SP A is able to restart the availability test procedure after expiry of timer T4								
REFE	RENCES:	Q.767: ISUP'92: 2.13/Q.764								
PRE-TEST CONDITIONS: Arrange that ISUP of SP B becomes unavailable for SP A, e.g. by sending a MTP user part unavailable message (UPU) with the cause "user part unavailability – inaccessible remote user" from SP B to SP A. Arrange for SP B that a user part available message will not be returned										
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	ΆT	ISUP'92 CPT	Comb. CPT			
				Х						
EXPE	CTED MESSAC	GE SEQUENCE	3:							
	SP A	A				SP B				
		UPA _T —		>	>					
		I								
		T4								
		I								
		UPT ⊥			>					
	TEST DESCR	IPTION								
1	Arrange for SP Record the mes	• A to send a use ssage sequence	er part test messa using a signal mo	ge. onitor.						
2	CHECK A: W	AS A USER PA	RT TEST MESS	SAGE SENT .	AFTEF	R T4 EXPIRED?				
3	CHECK B: WA	AS THE MESS.	AGE SEQUENC	E AS ABOV	E?					

TEST	NUMBER:	9.1.1				9.1.1							
TITLE	E:	Echo control p	procedure accord	ing to Q.767									
SUBT	'ITLE:	Q.767 echo co	ontrol procedure	for call set up	(initiate	ed in SP A)							
PURP	OSE:	To verify that devices	a call can be suc	cessfully estal	blished	with the inclusion of	of echo control						
REFE	RENCES:	Q.767: D.2.8/	Q.767		ISUP'	92: 2.7.1/Q.764							
PRE-T	TEST CONDITI	ONS: The SI contro connec are ava	P data is arranged l devices or alrea ction. For CPT an ailable in SP B	l such that the dy has an ech range data su	call is to contr ch that	routed over a route ol device included i incoming half echo	requiring echo n the control devices						
TYPE	OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 V	'AT	ISUP'92CPT	Comb. CPT						
		Х	Х	Х		Х	Х						
EXPE	CTED MESSA	GE SEQUENCI	3:										
	SP A	A				SP B							
		IAM —			>								
	ACM												
	Ring	ing tone			R	Ringing tone							
	ANM												
	Commu	nication —			— 0	Communication							
		REL —			$\geq$								
		$\leq$			— R	RLC							
	TEST DESCR	IPTION											
1	Make a call from Record the me	om SP A to SP E ssage sequence	3. using a signal me	onitor.									
2	CHECK A: IS CONTROL DI SET TO "1"?	THE ECHO CO EVICE INCLUI	ONTROL DEVIC DED) IN NATUI	CE INDICATO RE OF CONN	OR BIT	T "E" (OUTGOING ON INDICATORS I	HALF ECHO N THE IAM						
3	CHECK B: IS CONTROL DI TO "1"?	THE ECHO CO EVICE INCLUI	ONTROL DEVIC DED) IN THE B.	CE INDICATO ACKWARD O	OR BIT CALL I	"N" (INCOMING INDICATORS IN T	HALF ECHO HE ACM SET						
4	CHECK C: CA	AN RINGING T	ONE BE HEAR	D?									
5	The called part	y should answe	r the call.										
6	CHECK D: IS	THE CONNEC	TION ESTABL	ISHED?									
7	CHECK E: AF	RE THE ECHO	DEVICES OPER	RATING COF	RECT	LY?							
8	The calling par	ty should clear	the call.										
9	CHECK F: IS	THE CIRCUIT	IDLE?										
10	CHECK G: W	AS THE MESS	AGE SEQUENC	E AS ABOV	E?								
11	For validation	testing repeat th	is test in the reve	erse direction.									

TEST NUMBER:		9.1.2						
TITLE:		Echo control procedure according to Q.767						
SUBT	ITLE:	Q.767 echo control procedure for call setup (initiated in SP B)						
PURP	OSE:	To verify that a call can be successfully established, if SP A does not include an outgoing half echo control device						
REFERENCES:		Q.767: D.2.8/Q.767			ISUP'92: 2.7.1/Q.764			
PRE-T CONE	EST DITIONS:	Arrange the data in SP A such that the echo control device indicator "E" in the nature of connection indicators in the IAM is set to "0". Arrange the data in SP B such that the ACM indicates in the BCI the presence (incoming echo control device included) of echo control device (bit "N" set to "1")						
TYPE OF TEST:		Q.767 VAT	Q.767 CPT	ISUP'92VAT		ISUP'92 CPT	Comb. CPT	
		Х		Х				
EXPECTED MESSAGE SEQUENCE:								
SP A						SP B		
ACM								
Ringing tone					l	Ringing tone		
<						- ANM		
Communication Communication						Communication		
REL>								
RLC								
	TEST DESCRIPTION							
1	Make a call from SP A to SP B. Record the message using a signal monitor.							
2	CHECK A: CAN RINGING TONE BE HEARD?							
3	The called party should answer the call.							
4	CHECK B: IS THE CONNECTION ESTABLISHED?							
5	The calling party should clear the call.							
6	CHECK C: IS THE CIRCUIT IDLE?							
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?							
## **ITU-T RECOMMENDATIONS SERIES**

- Series A Organization of the work of the ITU-T
- Series B Means of expression
- Series C General telecommunication statistics
- Series D General tariff principles
- Series E Telephone network and ISDN
- Series F Non-telephone telecommunication services
- Series G Transmission systems and media
- Series H Transmission of non-telephone signals
- Series I Integrated services digital network
- Series J Transmission of sound-programme and television signals
- Series K Protection against interference
- Series L Construction, installation and protection of cables and other elements of outside plant
- Series M Maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
- Series N Maintenance: international sound-programme and television transmission circuits
- Series O Specifications of measuring equipment
- Series P Telephone transmission quality
- Series Q Switching and signalling
- Series R Telegraph transmission
- Series S Telegraph services terminal equipment
- Series T Terminal equipments and protocols for telematic services
- Series U Telegraph switching
- Series V Data communication over the telephone network
- Series X Data networks and open system communication
- Series Z Programming languages