INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.784.1

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TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING

Specifications of Signalling System No. 7 – Test specification

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ISUP basic call test specification:

Validation and compatibility for ISUP'92 and Q.767 protocols

ITU-T Recommendation Q.784.1

(Previously CCITT Recommendation)

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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.

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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.

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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

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'92 Recommendations 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.

9 ISUP test list

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	X	X	X	X	X
1.2	**Reset of circuits**					
1.2.1	RSC received on an idle circuit	X		X		
1.2.2	RSC sent on an idle circuit	X		X		
1.2.3	RSC received on a locally blocked circuit	X		X		
1.2.4	RSC received on a remotely blocked circuit	X		X		
1.2.5	Circuit group reset received	X		X		
1.2.6	Circuit group reset sent	X		X		
1.2.7	Circuit group reset received on remotely blocked circuits	X		X		
1.3	**Blocking of circuits**					
1.3.1	Circuit group blocking/unblocking					
1.3.1.1	CGB and CGU received	X	X	X	X	X
1.3.1.2	CGB and CGU sent	X	X	X	X	X
1.3.2	**Circuit blocking/unblocking**					
1.3.2.1	BLO received	X	X	X	X	X

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

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

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

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

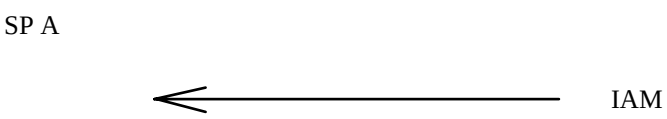
Title/subtitle		Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
8	**Congestion control and user flow control**					
8.1	Automatic congestion control					
8.1.1	Receipt of a release message containing an automatic congestion level parameter	X		X		
8.1.2	Sending of a release message containing an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

10 ISUP test scripts

ISUP Basic Call Test Specification

TEST NUMBER:	1.1				
TITLE:	Circuit supervision				
SUBTITLE:	Non-allocated circuits				
PURPOSE:	To verify that on receipt of a CIC relating to a circuit which does not exist, SP A will discard the message and alert the maintenance system				
REFERENCES:	Q.767:		ISUP'92:		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that the CIC identifies a circuit that does not exist between SP A and SP B				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

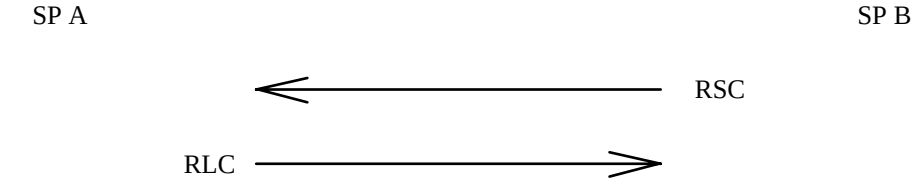


	TEST DESCRIPTION
1	Arrange for SP B to send an initial address message. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE MESSAGE SEQUENCE AS ABOVE?...
3	CHECK B: WAS THE INDICATION GIVEN TO THE MAINTENANCE SYSTEM?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.2.1				
TITLE:	Reset of circuits				
SUBTITLE:	RSC received on an idle circuit				
PURPOSE:	To verify that on receipt of a reset circuit message SP A will respond by sending a release complete message				
REFERENCES:	Q.767: D.2.10.3.1 b)/Q.767		ISUP'92: 2.9.3.1 b)/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Arrange for SP B to send a reset-circuit message. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

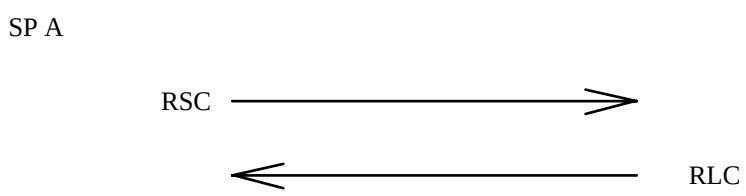
ISUP Basic Call Test Specification

TEST NUMBER:	1.2.2	
TITLE:	Reset of circuits	
SUBTITLE:	RSC sent on an idle circuit	
PURPOSE:	To verify that SP A is able to generate a reset-circuit message	
REFERENCES:	Q.767: D.2.10.3.1/Q.767	ISUP'92: 2.9.3.1/Q.764

PRE-TEST CONDITIONS:

TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

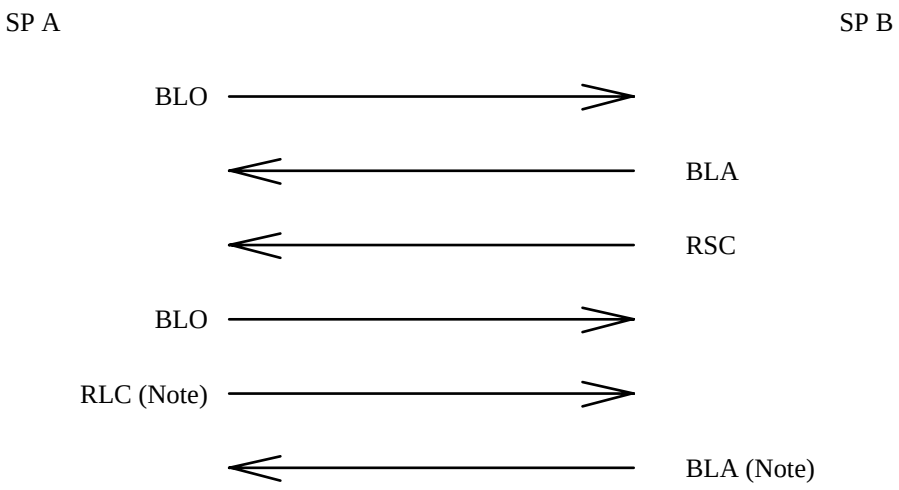


	TEST DESCRIPTION
1	Arrange for SP A to send a reset-circuit message. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.2.3				
TITLE:	Reset of circuits				
SUBTITLE:	RSC received on a locally blocked circuit				
PURPOSE:	To verify that on receipt of a reset circuit message while in its locally blocked state, SP A will respond by sending blocking and release complete messages				
REFERENCES:	Q.767: D.2.10.3.1 c)/Q.767		ISUP'92: 2.9.3.1 c)/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

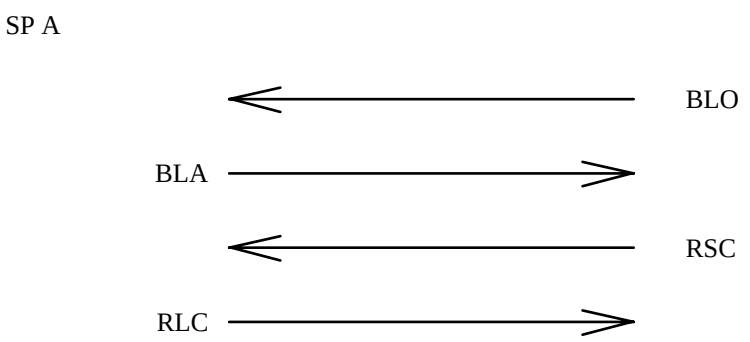


	TEST DESCRIPTION
1	Arrange for SP A to send a blocking message. Record the message sequence using a signal monitor.
2	Arrange for SP B to send a reset-circuit message.
3	CHECK A: DOES THE CIRCUIT REMAIN IN THE LOCALLY BLOCKED STATE?...
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence for RLC and BLA may occur in reverse sequence.

ISUP Basic Call Test Specification

TEST NUMBER:	1.2.4				
TITLE:	Reset of circuits				
SUBTITLE:	RSC received on a remotely blocked circuit				
PURPOSE:	To verify that SP A is able to react to a reset-circuit message for a remotely blocked circuit				
REFERENCES:	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		X		

EXPECTED MESSAGE SEQUENCE:

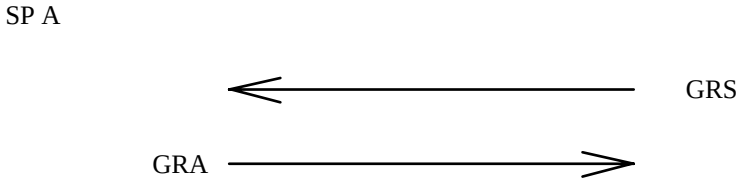


	TEST DESCRIPTION
1	Arrange for SP B to send a blocking message. Record the message sequence using a signal monitor.
2	Arrange for SP B to send a reset-circuit message.
3	CHECK A: IS THE CIRCUIT IDLE?...
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.2.5				
TITLE:	Reset of circuits				
SUBTITLE:	Circuit group reset received				
PURPOSE:	To verify that on receipt of one circuit group reset message SP A will respond by sending a circuit group reset acknowledge message				
REFERENCES:	Q.767: D.2.10.3.2/Q.767		ISUP'92: 2.9.3.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Arrange for SP B to send a circuit group reset message. Record the message sequence using a signal monitor.
2	CHECK A: ARE THE CIRCUITS IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
4	CHECK C: ARE THE STATUS BITS IN GRA SET CORRECTLY?...
5	CHECK D: IF RANGE VALUE = 0, GRS IS DISCARDED AND GRA IS NOT SENT.
6	CHECK E: IF RANGE VALUE > 31, GRS IS DISCARDED AND GRA IS NOT SENT.

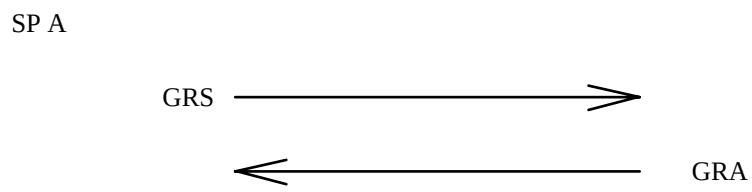
ISUP Basic Call Test Specification

TEST NUMBER:	1.2.6	
TITLE:	Reset of circuits	
SUBTITLE:	Circuit group reset sent	
PURPOSE:	To verify that SP A is able to generate a circuit group reset message	
REFERENCES:	Q.767: D.2.10.3.2/Q.767	ISUP'92: 2.9.3.2/Q.764

PRE-TEST CONDITIONS:

TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

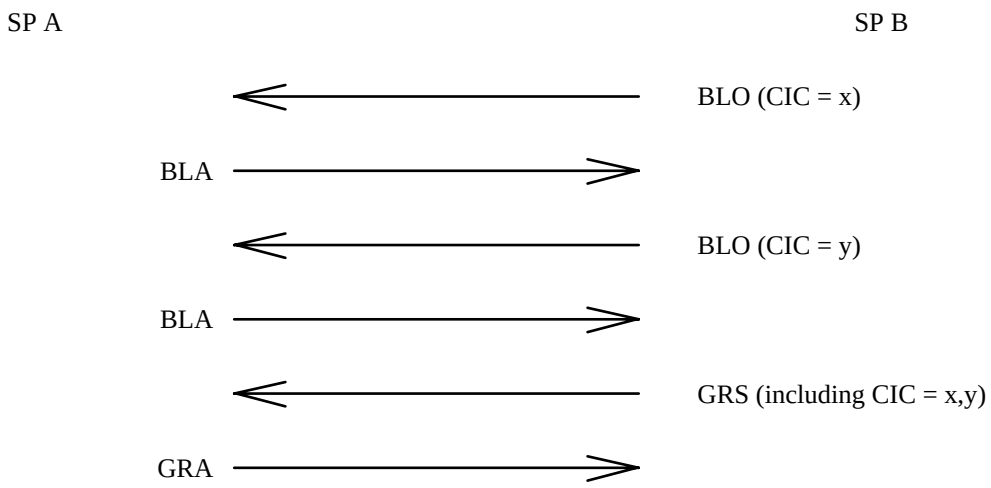


	TEST DESCRIPTION
1	Arrange for SP A to send a circuit group reset message. Record the message sequence using a signal monitor.
2	CHECK A: ARE THE CIRCUITS IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

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 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

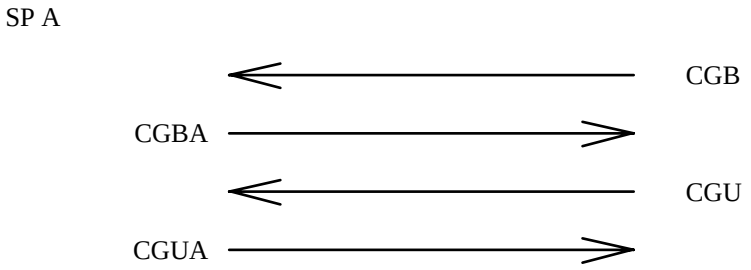


	TEST DESCRIPTION
1	Arrange for SP B to send a circuit group reset message including the blocked circuits x and y. Record the message sequence using a signal monitor.
2	CHECK A: ARE THE CIRCUITS IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.3.1.1				
TITLE:	Circuit group blocking/unblocking				
SUBTITLE:	CGB and CGU received				
PURPOSE:	To verify that the circuit group blocking feature can be correctly initiated				
REFERENCES:	Q.767: D.2.9.2/Q.767		ISUP'92: 2.8.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

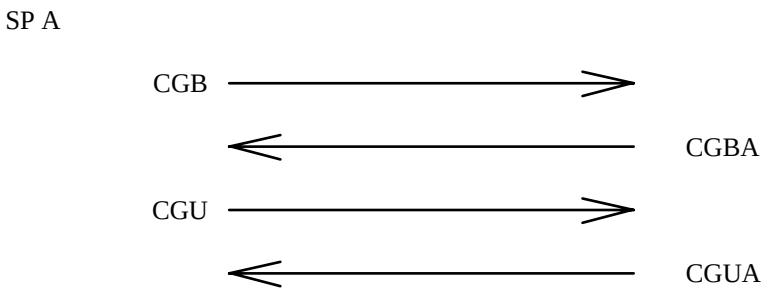


	TEST DESCRIPTION
1	Arrange for SP B to send one circuit group blocking message with the circuit group supervision message type indicator set to "maintenance oriented". Record the message sequence using a signal monitor.
2	CHECK A: VERIFY THAT A CALL CANNOT BE ORIGINATED FROM SP A ON THE CIRCUITS INDICATED BY THE RANGE AND STATUS PARAMETER IN THE CGB MESSAGE.
3	Arrange for SP B to send one circuit group unblocking message with circuit group supervision message type set to "maintenance oriented".
4	CHECK B: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THE CIRCUITS INDICATED BY THE RANGE FIELD.
5	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
6	CHECK D: IF RANGE VALUE = 0, CGB IS DISCARDED AND CGBA IS NOT SENT.
7	CHECK E: IF THE NUMBER OF STATUS BITS SET TO "1" > 32, CGB IS DISCARDED AND CGBA IS NOT SENT.
8	Repeat steps 1 to 7 with the circuit group supervision message type indicator set to "hardware failure oriented".
	NOTE – A CPC = "test call" should not be used in CHECK A and CHECK B.

ISUP Basic Call Test Specification

TEST NUMBER:	1.3.1.2				
TITLE:	Circuit group blocking/unblocking				
SUBTITLE:	CGB and CGU sent				
PURPOSE:	To verify that SP A is able to generate one circuit group blocking message and one circuit group unblocking message				
REFERENCES:	Q.767: D.2.9.2/Q.767		ISUP'92: 2.8.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Arrange for SP A to send one circuit group blocking message with the circuit group supervision message type indicator set to "maintenance oriented". Record the message sequence using a signal monitor.
2	Arrange for SP A to send one circuit group unblocking message with circuit group supervision message type indicator set to "maintenance oriented".
3	CHECK A: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THE CIRCUITS INDICATED BY THE RANGE FIELD.
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	Repeat steps 1 to 4 with circuit group supervision message type indicator set to "hardware failure oriented".
	NOTE – A CPC = "test call" should not be used in CHECK A.

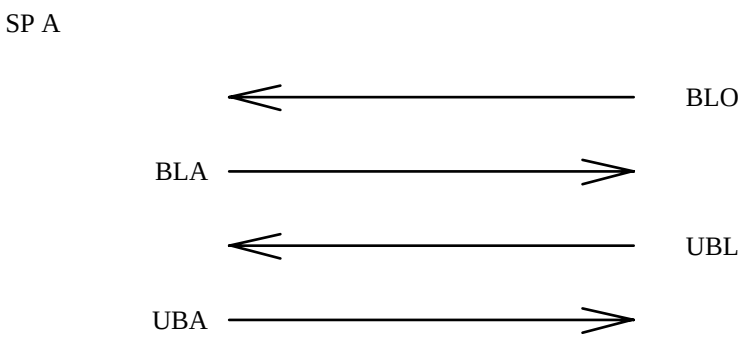
ISUP Basic Call Test Specification

TEST NUMBER:	1.3.2.1	
TITLE:	Circuit blocking/unblocking	
SUBTITLE:	BLO received	
PURPOSE:	To verify that the blocking/unblocking procedure can be correctly initiated.	
REFERENCES:	Q.767: D.2.9.2/Q.767	ISUP'92: 2.8.2/Q.764

PRE-TEST CONDITIONS:

TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Arrange for SP B to send a blocking message. Record the message sequence using a signal monitor.
2	CHECK A: VERIFY THAT A CALL CANNOT BE ORIGINATED FROM SP A ON THIS CIRCUIT.
3	Arrange for SP B to send an unblocking message.
4	CHECK B: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THIS CIRCUIT.
5	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – A CPC = "test call" should not be used in CHECK A and CHECK B.

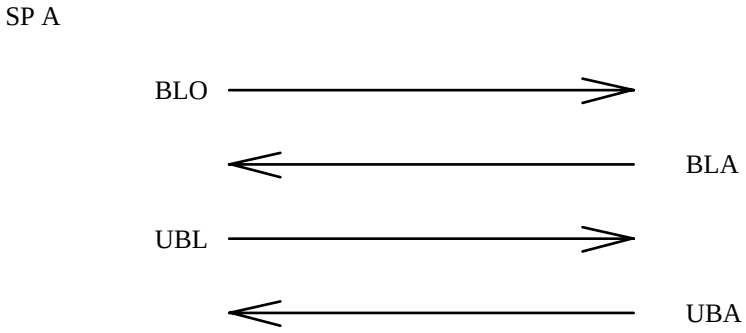
ISUP Basic Call Test Specification

TEST NUMBER:	1.3.2.2	
TITLE:	Circuit blocking/unblocking	
SUBTITLE:	BLO sent	
PURPOSE:	To verify that SP A is able to generate blocking messages	
REFERENCES:	Q.767: D.2.9.2/Q.767	ISUP'92: 2.8.2/Q.764

PRE-TEST CONDITIONS:

TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

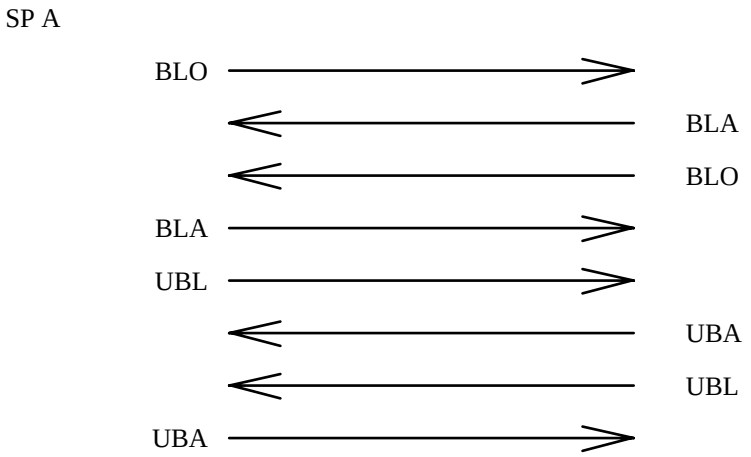


	TEST DESCRIPTION
1	Arrange for SP A to send a blocking message. Record the message sequence using a signal monitor.
2	Arrange for SP A to send an unblocking message.
3	CHECK A: VERIFY THAT A CALL CAN BE ORIGINATED FROM EITHER SP ON THIS CIRCUIT.
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – A CPC = "test call" should not be used in CHECK A.

ISUP Basic Call Test Specification

TEST NUMBER:	1.3.2.3				
TITLE:	Circuit blocking/unblocking				
SUBTITLE:	Blocking from both ends; removal of blocking from one end				
PURPOSE:	To verify that the blocking/unblocking procedure can be correctly initiated				
REFERENCES:	Q.767: D.2.9.2/Q.767		ISUP'92: 2.8.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

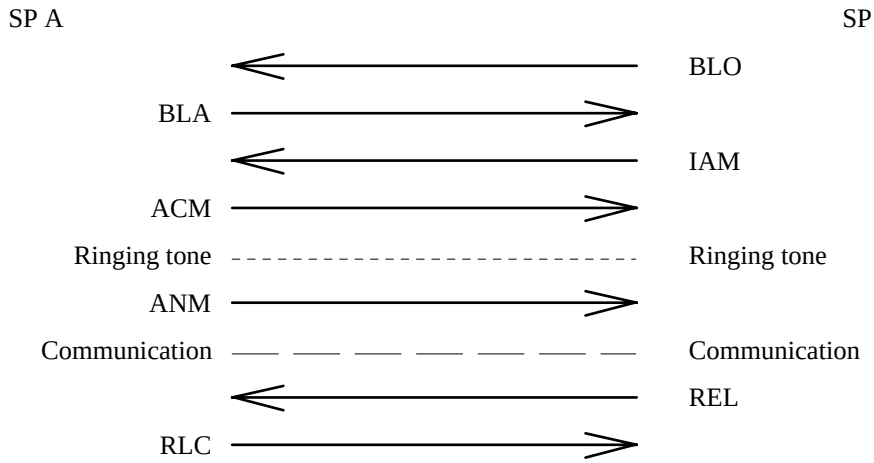


	TEST DESCRIPTION
1	Arrange for SP A to send a blocking message. Record the message sequence using a signal monitor.
2	Arrange for SP B to send a blocking message.
3	CHECK A: VERIFY THAT A CALL CANNOT BE ORIGINATED ON THIS CIRCUIT BY EITHER SP.
4	Arrange for SP A to send an unblocking message.
5	CHECK B: VERIFY THAT A CALL CANNOT BE ORIGINATED 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: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – A CPC = "test call" should not be used in CHECKs A, B and C.

ISUP Basic Call Test Specification

TEST NUMBER:	1.3.2.4				
TITLE:	Circuit blocking/unblocking				
SUBTITLE:	IAM received on a remotely blocked circuit				
PURPOSE:	To verify that an IAM will unblock a remotely blocked circuit				
REFERENCES:	Q.767: D.2.9.2.3 xiv)/Q.767	ISUP'92: 2.8.2.3 xiv)/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

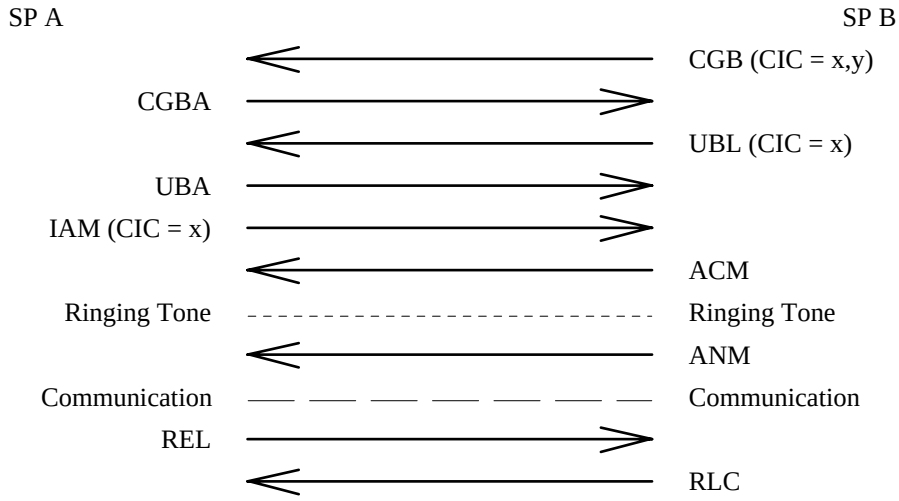


	TEST DESCRIPTION
1	Arrange for SP B to send a blocking message. Record the message sequence using a signal monitor.
2	CHECK A: VERIFY THAT A CALL CANNOT BE ORIGINATED FROM SP A ON THIS CIRCUIT.
3	Arrange for SP B to send an initial address message (non-test call).
4	CHECK B: VERIFY THAT THE CALL IS PROCESSED NORMALLY AT SP A AND THE BLOCKING STATUS FOR THIS CIRCUIT IS REMOVED AT SP A.
5	CHECK C: CAN RINGING TONE BE HEARD?...
6	The called party should answer the call.
7	CHECK D: IS THE CONNECTION ESTABLISHED?...
8	The calling party should clear the call.
9	CHECK E: IS THE CIRCUIT IDLE?...
10	CHECK F: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – A CPC = "test call" should not be used in CHECK A.

ISUP Basic Call Test Specification

TEST NUMBER:	1.3.2.5				
TITLE:	Circuit blocking/unblocking				
SUBTITLE:	Blocking with CGB, unblocking with UBL				
PURPOSE:	To verify that a circuit blocked by a maintenance oriented group blocking message can be unblocked with an unblocking message				
REFERENCES:	Q.767: 2.9.2/Q.767		ISUP'92: 2.8.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

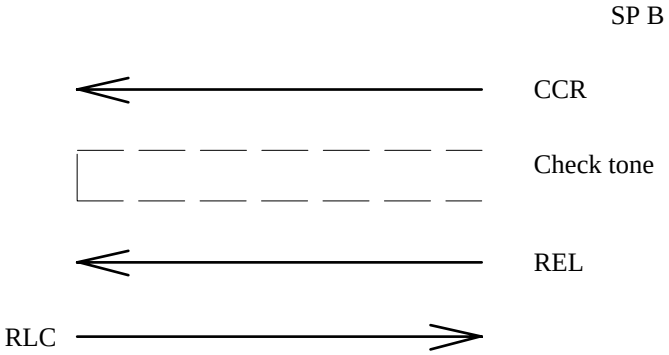


	TEST DESCRIPTION
1	Arrange for SP B to send a circuit group blocking message. Record the message sequence using a signal monitor.
2	CHECK A: VERIFY THAT A CALL CANNOT BE ORIGINATED FROM SP A ON THESE CIRCUITS.
3	Arrange for SP B to send an unblocking message for one of the circuits blocked by the circuit group blocking message.
4	Make a call from SP A to SP B.
5	CHECK B: CAN RINGING TONE BE HEARD?....
6	The called party should answer the call.
7	CHECK C: IS THE CONNECTION ESTABLISHED?...
8	The calling party should clear the call.
9	CHECK D: IS THE CIRCUIT IDLE?...
10	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – A CPC = "test call" should not be used in CHECK A or in step 4.

ISUP Basic Call Test Specification

TEST NUMBER:	1.4.1				
TITLE:	Continuity check procedure				
SUBTITLE:	CCR received: successful				
PURPOSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly performed				
REFERENCES:	Q.767: D.2.1.8/Q.767	ISUP'92: 2.1.8/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

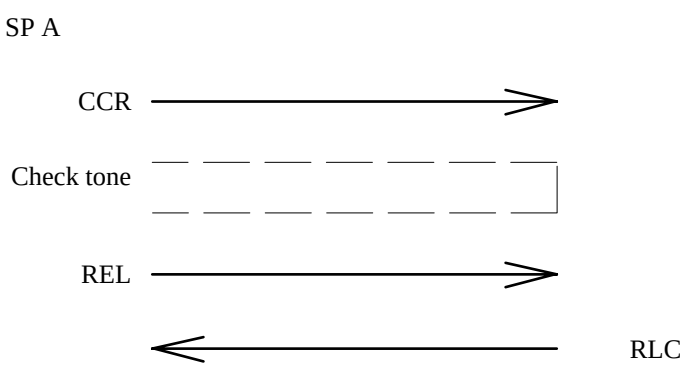


	TEST DESCRIPTION
1	Initiate the continuity check procedure at SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?..
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.4.2				
TITLE:	Continuity check procedure				
SUBTITLE:	CCR sent: successful				
PURPOSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly performed				
REFERENCES:	Q.767: D.2.1.8/Q.767	ISUP'92: 2.1.8/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

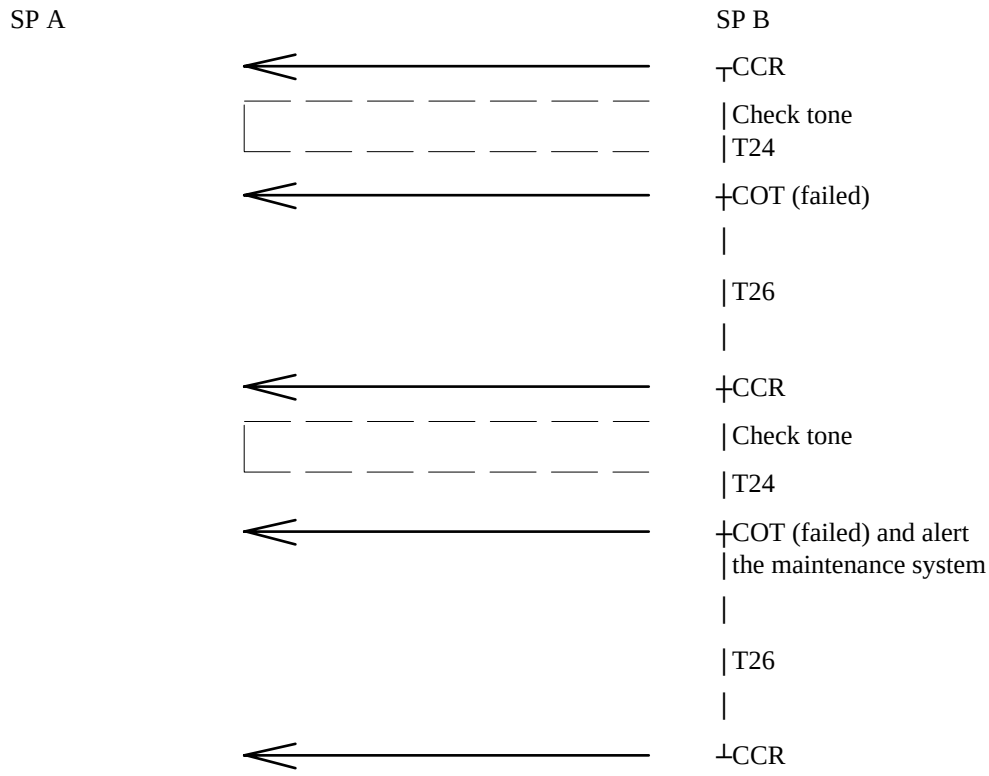


	TEST DESCRIPTION
1	Initiate the continuity check procedure at SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?..
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.4.3				
TITLE:	Continuity check procedure				
SUBTITLE:	CCR received: unsuccessful				
PURPOSE:	To verify that the messages associated with continuity check procedure for a proper alignment of circuits can be correctly received				
REFERENCES:	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		X		

EXPECTED MESSAGE SEQUENCE:

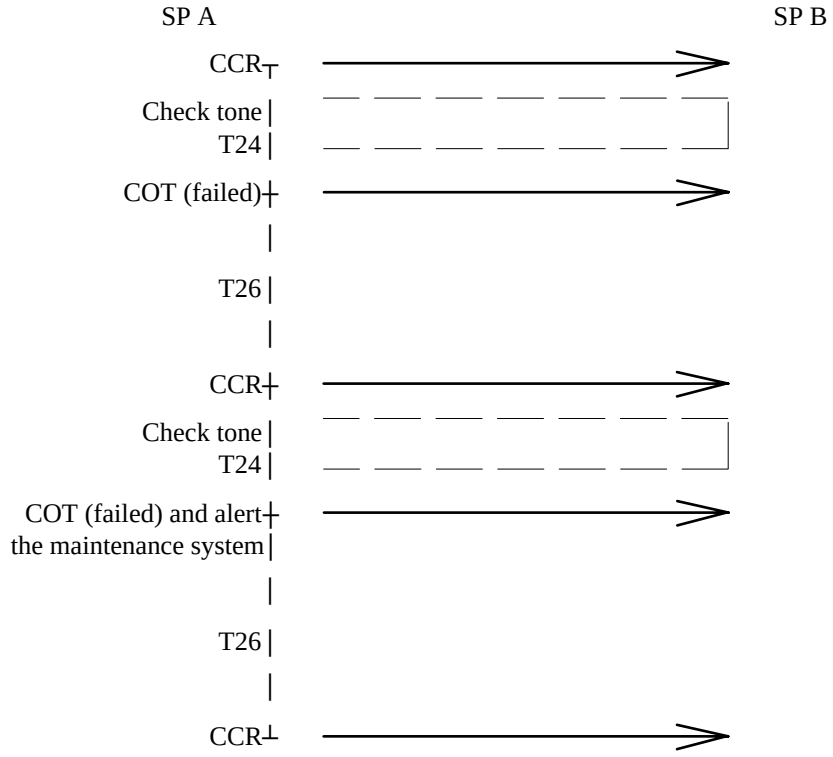


	TEST DESCRIPTION
1	Initiate the continuity check procedure at SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE SECOND CONTINUITY CHECK INITIATED AFTER T26 EXPIRED?...
3	CHECK B: WAS THE MAINTENANCE SYSTEM ALERTED ON FAILURE OF THE SECOND CONTINUITY CHECK?...
4	CHECK C: WAS THE CHECK REPEATED AT INTERVALS OF T26?...
5	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.4.4				
TITLE:	Continuity check procedure				
SUBTITLE:	CCR sent: unsuccessful				
PURPOSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly invoked				
REFERENCES:	Q.767: D.2.1.8/Q.767		ISUP'92: 2.1.8/Q.764		
PRE-TEST 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		X		

EXPECTED MESSAGE SEQUENCE:

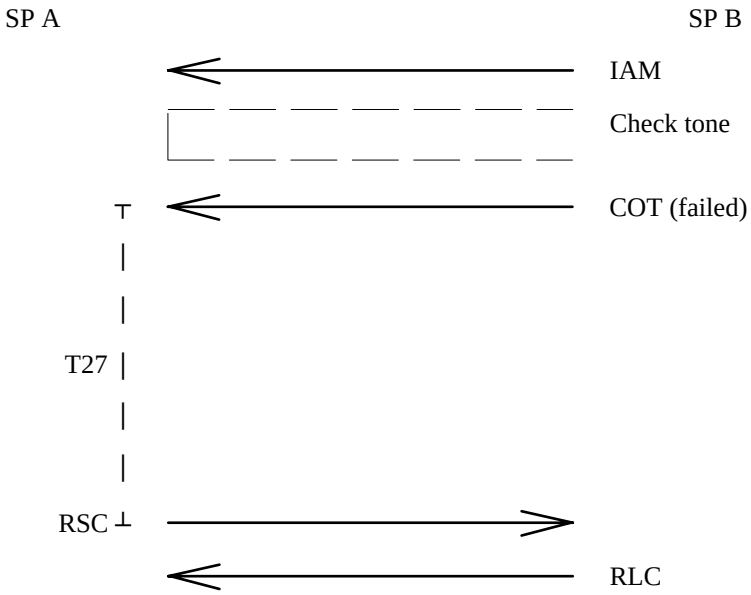


	TEST DESCRIPTION
1	Initiate the continuity check procedure at SP A. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE SECOND CONTINUITY CHECK INITIATED AFTER T26 EXPIRED?...
3	CHECK B: WAS THE CHECK REPEATED AT INTERVALS OF T26?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.4.5				
TITLE:	Continuity check procedure				
SUBTITLE:	CCR not received: unsuccessful; verify T27 timer				
PURPOSE:	To verify that the continuity check procedure for the proper alignment of circuits can be correctly received				
REFERENCES:	Q.767: D.2.1.8/Q.767	ISUP'92: 2.1.8/Q.764			
PRE-TEST CONDITIONS:	a) Continuity check is required. b) Ensure that no backward check tone is detected within the specified time out. c) The data in SP B is arranged such that a second CCR is not generated.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS T27 INITIATED AT SP A TO WAIT FOR CCR?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

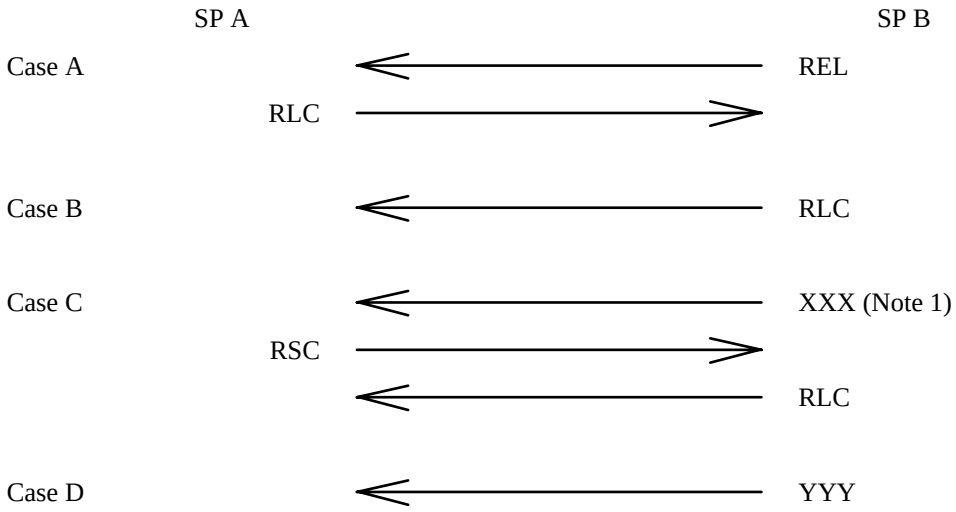
ISUP Basic Call Test Specification

TEST NUMBER:	1.5.1	
TITLE:	Receipt of unreasonable signalling information messages	
SUBTITLE:	Receipt of unexpected messages	
PURPOSE:	To verify that SP A is able to handle unexpected messages	
REFERENCES:	Q.767: D.2.10.5.1 a) b) d)/Q.767	ISUP'92: 2.9.5.1 a) b) e)/Q.764

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 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Arrange for SP B to send a release message.
2	CHECK A: IS THE CIRCUIT IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS IN CASE A ABOVE?...
4	Arrange for SP B to send a release complete message.
5	CHECK C: IS THE CIRCUIT IDLE?...
6	CHECK D: WAS THE MESSAGE SEQUENCE AS IN CASE B ABOVE?...
7	Arrange for SP B to send an unreasonable message XXX.
8	CHECK E: IS THE CIRCUIT IDLE?...
9	CHECK F: WAS THE MESSAGE SEQUENCE AS IN CASE C ABOVE?...
10	Arrange for SP B to send an unreasonable message YYY.
11	CHECK G: WAS YYY DISCARDED AS IN CASE D ABOVE?...
	NOTE 1 – Not all the unreasonable messages will cause an RSC message to be sent.
	NOTE 2 – This test covers only some of the ambiguous messages which could be received.

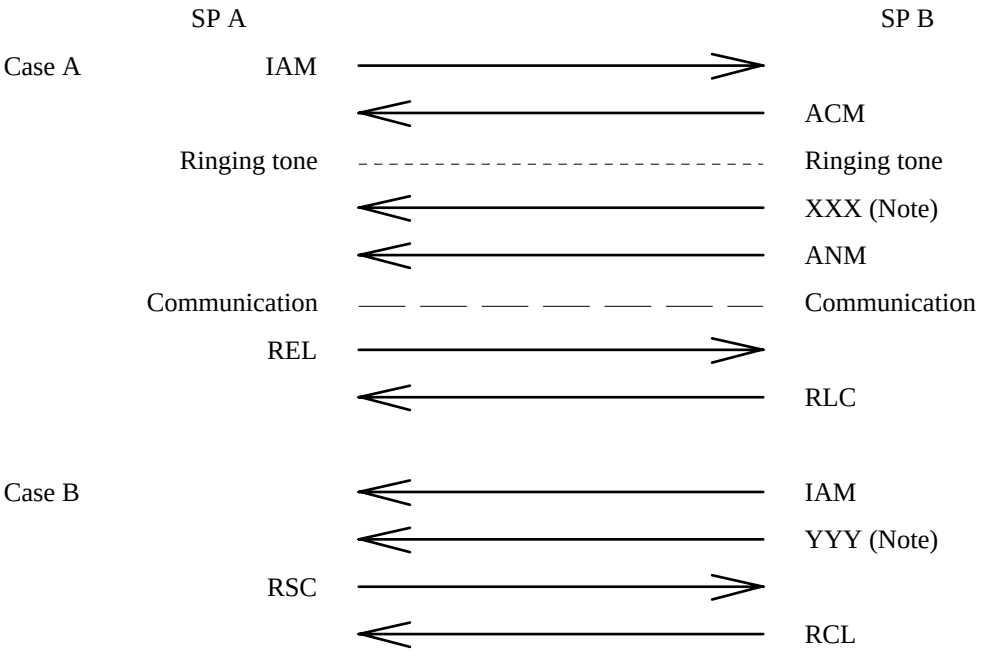
ISUP Basic Call Test Specification

TEST NUMBER:	1.5.2	
TITLE:	Receipt of unreasonable signalling information messages	
SUBTITLE:	Receipt of unexpected messages during call setup	
PURPOSE:	To verify that SP A is able to handle unexpected messages	
REFERENCES:	Q.767: D.2.10.5.1 d)/Q.767	ISUP'92: 2.9.5.1 e)/Q.764

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'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

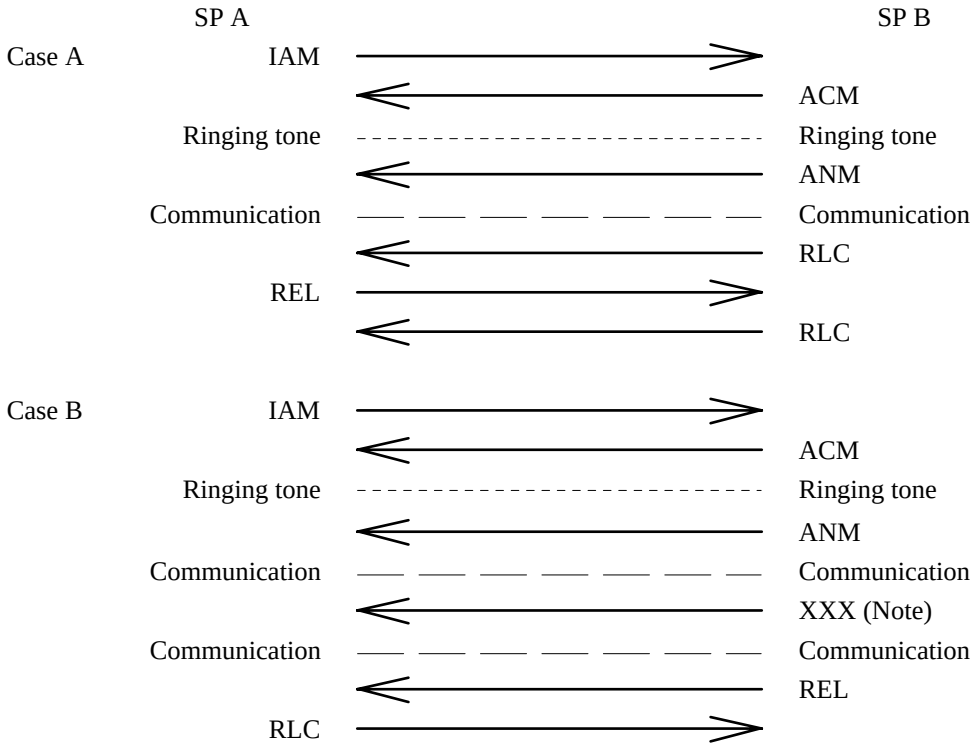


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Arrange for SP B to send an unreasonable message XXX after the address complete message. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CONNECTION ESTABLISHED?
3	CHECK B: WAS THE MESSAGE SEQUENCE AS IN CASE A ABOVE?...
4	Make a call from SP B to SP A. Arrange for SP B to send an unreasonable message YYY immediately after sending the initial address message.
5	CHECK C: IS THE CIRCUIT IDLE?...
6	CHECK D: WAS THE MESSAGE SEQUENCE AS IN CASE B ABOVE?...
	NOTE – Messages other than the call control messages will be used for XXX and YYY.

ISUP Basic Call Test Specification

TEST NUMBER:	1.5.3				
TITLE:	Receipt of unreasonable signalling information messages				
SUBTITLE:	Receipt of unexpected messages during a call				
PURPOSE:	To verify that SP A is able to handle unexpected messages				
REFERENCES:	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 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

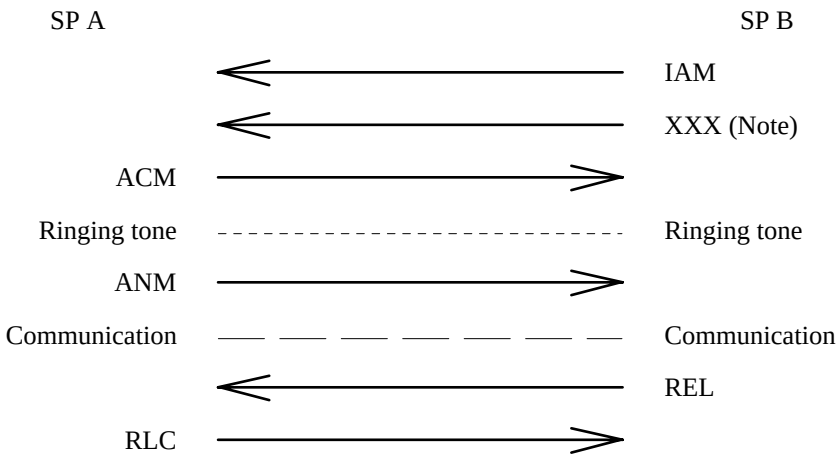


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CONNECTION ESTABLISHED?...
3	Arrange for SP B to send a release complete message.
4	CHECK B: IS THE CIRCUIT IDLE?...
5	Make a call from SP A to SP B.
6	CHECK C: IS THE CONNECTION ESTABLISHED?...
7	Arrange for SP B to send an unreasonable message XXX.
8	CHECK D: IS THE CONNECTION STILL ESTABLISHED?...
9	CHECK E: WAS THE MESSAGE SEQUENCE AS IN CASE B ABOVE?...
	NOTE – Messages other than REL, RLC, RSC and SUS will be used for XXX.

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.1.1				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Receipt of unknown messages in forward direction				
PURPOSE:	To verify that SP A is able to discard an unknown message without disrupting normal call handling				
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:			
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'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:



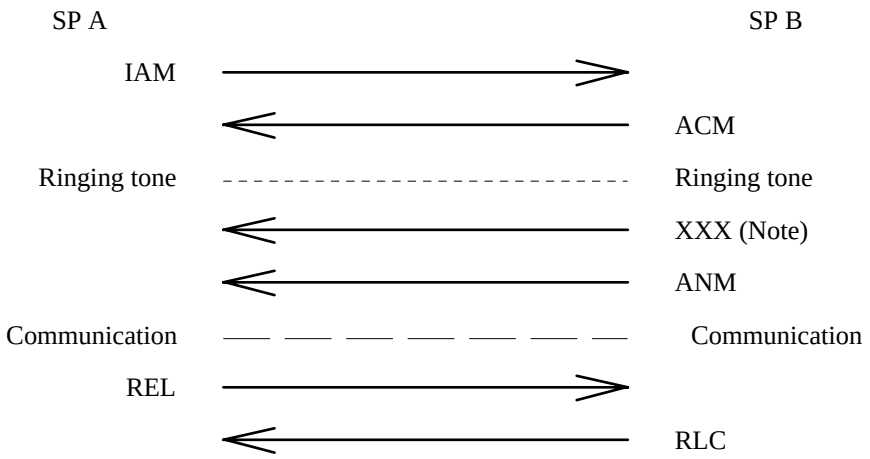
	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – Any non-Q.767 message.

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.1.2				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Receipt of unknown messages in backward direction				
PURPOSE:	To verify that SP A is able to discard an unknown message without disrupting normal call handling				
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:			
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	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:



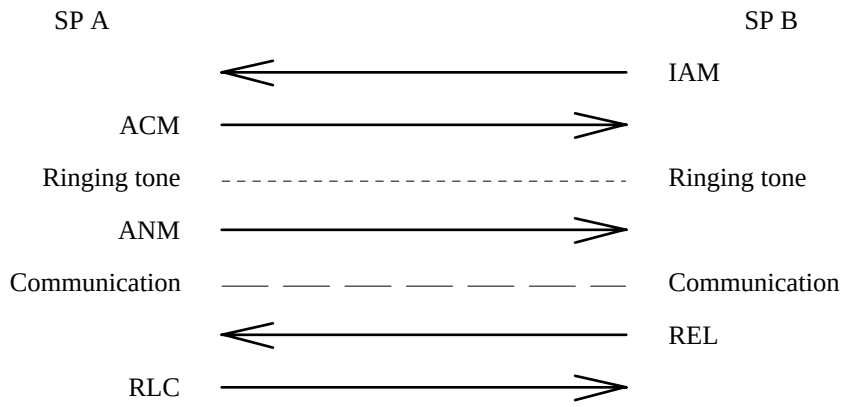
	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – Any non-Q.767 message.

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.2.1				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Receipt of unknown parameters in forward direction				
PURPOSE:	To verify that SP A is able to discard an unknown parameter without disrupting normal call handling				
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:			
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'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:



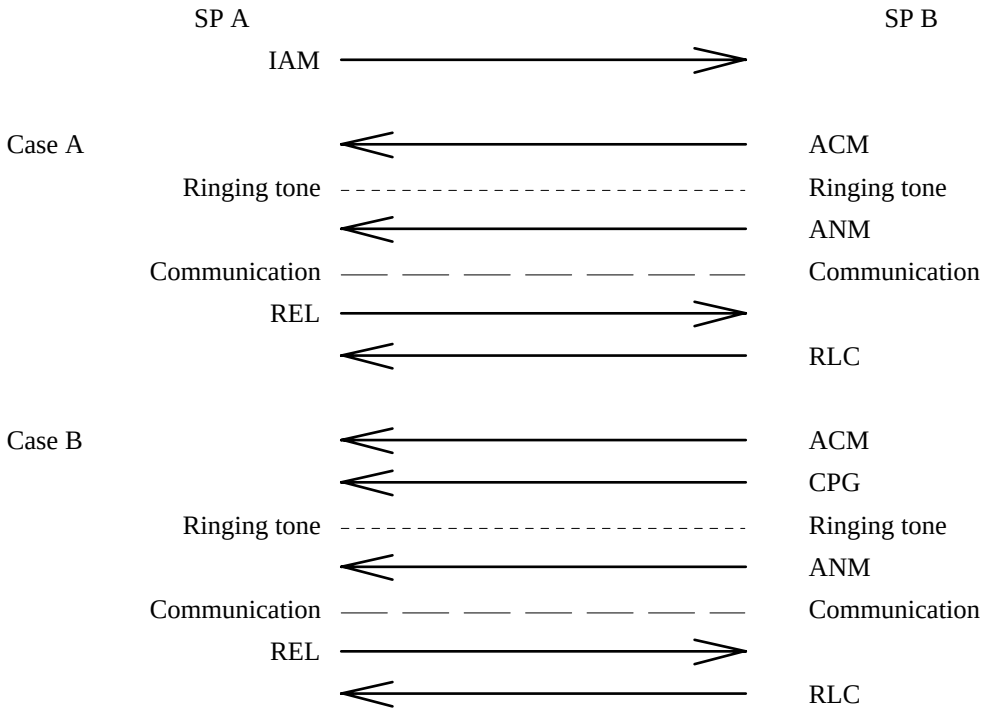
	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.2.2	
TITLE:	Receipt of unknown parameters	
SUBTITLE:	Receipt of unknown parameters in backward direction	
PURPOSE:	To verify that SP A is able to discard an unknown parameter without disrupting normal call handling	
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:
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'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:

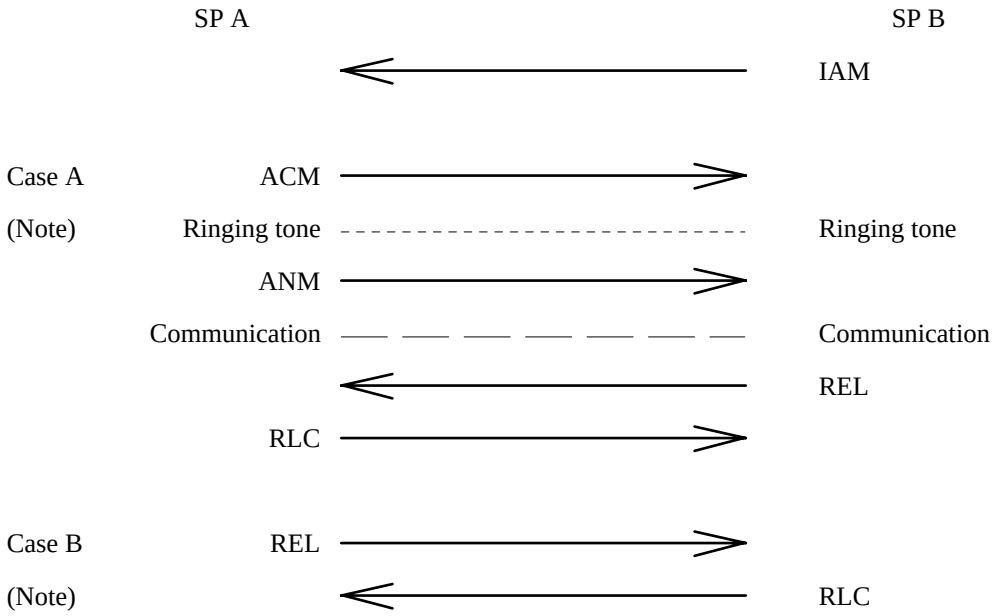


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.3.1				
TITLE:	Receipt of unknown parameter values				
SUBTITLE:	Receipt of unknown parameter values in forward direction				
PURPOSE:	To verify that SP A is able to handle unknown parameter values				
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:			
PRE-TEST CONDITIONS:	Arrange the data in SP B such that the IAM contains unknown parameter values				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:

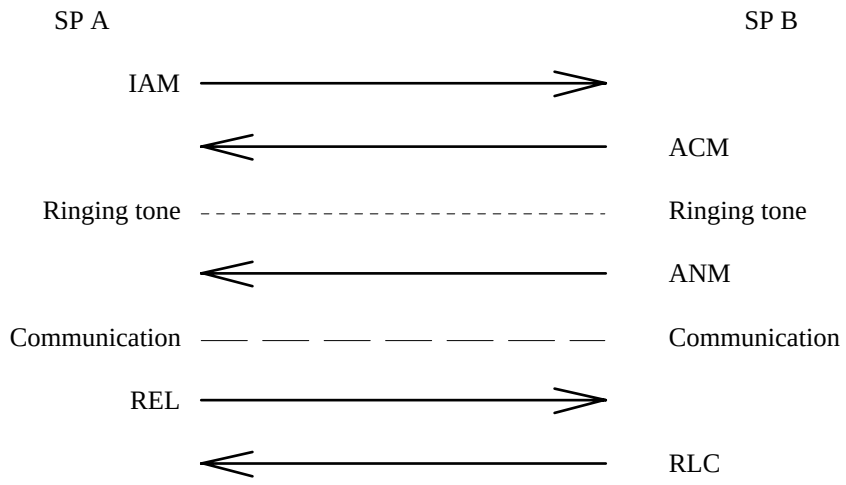


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.767 TABLE 9 OR TABLE 8 IN THE CASE OF TRANSIT?...
3	Repeat step 1 and 2 for each parameter in Q.767 Table 9 or Table 8 in the case of transit. NOTE – Case A refers to the actions in Table 8 or 9 of "Discard parameter", "No Default", "Default" and "Ignore" and case B refers to the actions in Table 8 or 9 of "Release".

ISUP Basic Call Test Specification

TEST NUMBER:	1.6.3.2				
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				
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92:			
PRE-TEST CONDITIONS:	Arrange the data in SP A such that the ACM and ANM contains unknown parameter values				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE: (Note)

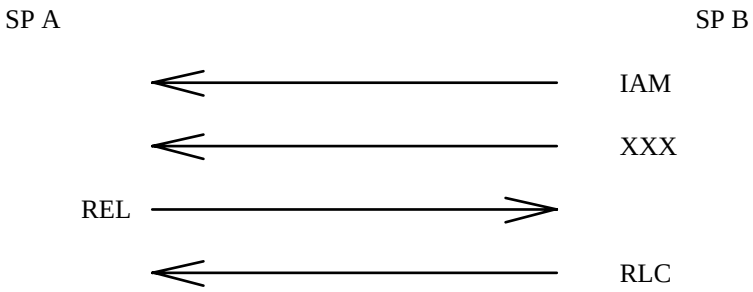


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.767 TABLE 9 OR TABLE 8 IN THE CASE OF TRANSIT?...
3	Repeat step 1 and 2 for each parameter in Q.767 Table 9 or Table 8 in the case of transit. NOTE – The message sequence refers to the actions in Table 8 or 9 of "Discard parameter", "No Default", "Default" and "Ignore".

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.1				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility Information: Release call				
PURPOSE:	To verify that SP A releases the call, if indicated in the Message Compatibility Information				
REFERENCES:	Q.767:		ISUP'92: 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
			X	X	

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
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 THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	Repeat steps 1 to 4 with bit A = 0 for type A exchanges.

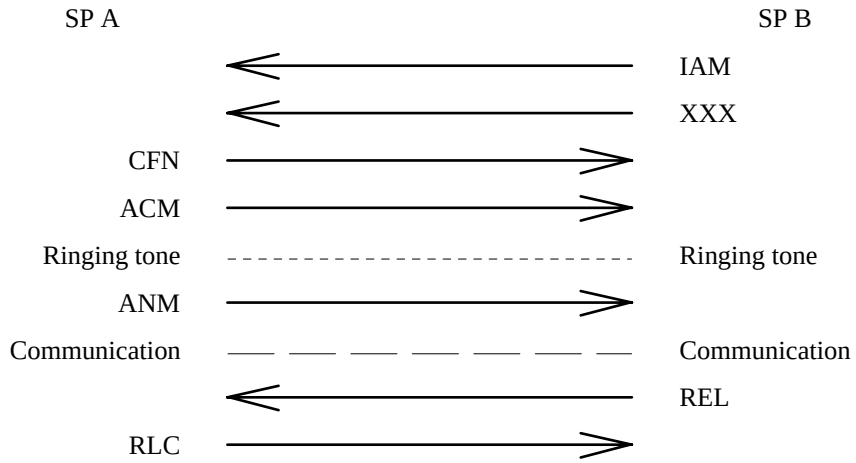
ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.2	
TITLE:	Receipt of unknown messages	
SUBTITLE:	Message Compatibility Information: Discard message	
PURPOSE:	To verify that SP A is able to discard an unknown message, if indicated in the Message Compatibility Information	
REFERENCES:	Q.767:	ISUP'92: 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 = 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 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

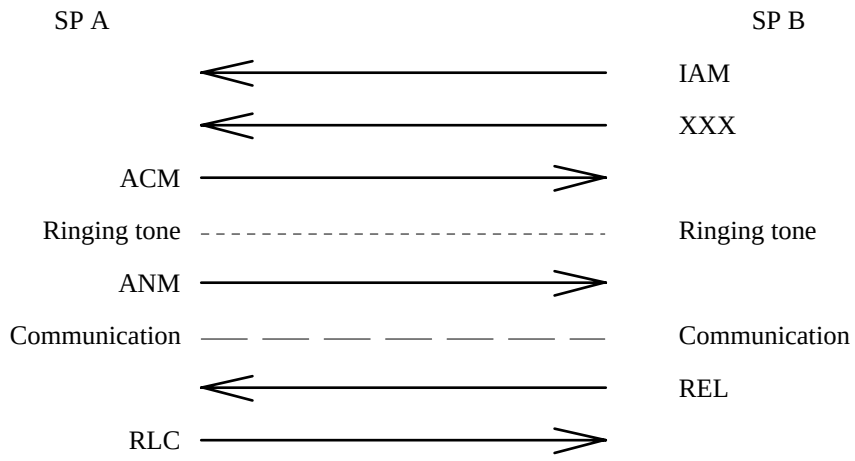


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE DISCARDED BY SP A?...
6	The calling party 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: CFN MESSAGE SHOULD NOT BE SENT.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.3				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility Information: Pass on				
PURPOSE:	To verify that SP A is able to pass on an unknown message, without notification				
REFERENCES:	Q.767:		ISUP'92: 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 = 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	X	

EXPECTED MESSAGE SEQUENCE:

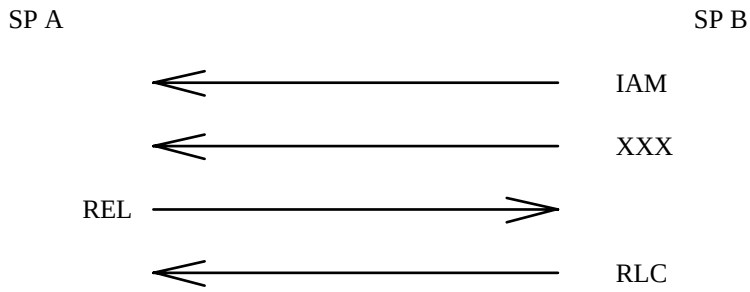


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE PASSED ON BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.4				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility Information: Pass on not possible, release call				
PURPOSE:	To verify that SP A releases the call if pass on not possible and if indicated in the Message Compatibility Information				
REFERENCES:	Q.767:		ISUP'92: 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	X	

EXPECTED MESSAGE SEQUENCE:

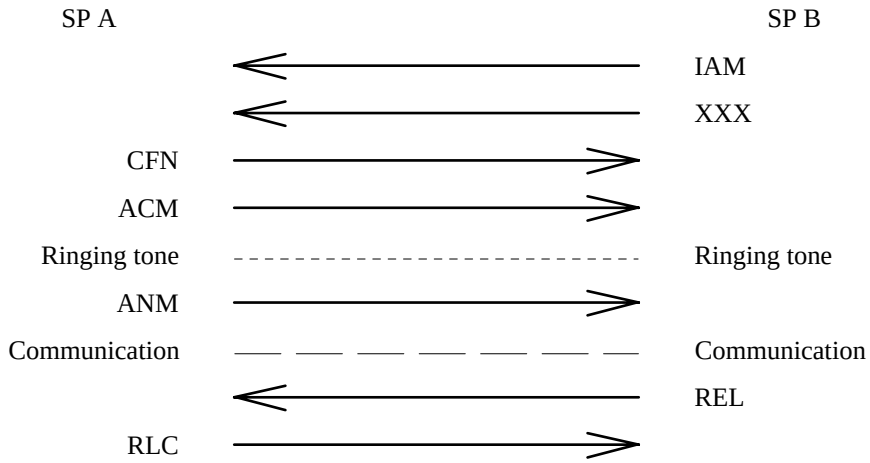


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: DOES THE REL CONTAIN CAUSE VALUE #97 AND DOES THE DIAGNOSTIC FIELD INCLUDE THE NAME OF THE UNKNOWN MESSAGE?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.5				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility information: Pass on not possible, discard information				
PURPOSE:	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				
REFERENCES:	Q.767:		ISUP'92: 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 = 1. 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	X	

EXPECTED MESSAGE SEQUENCE:

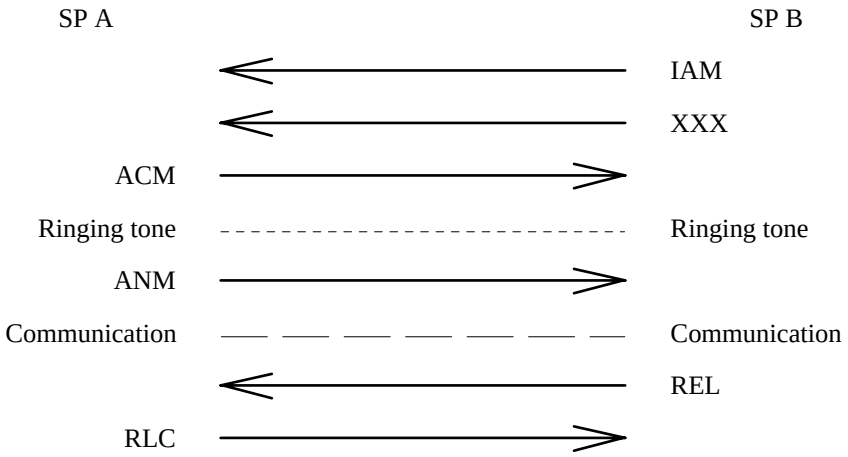


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.6				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility Information: Transit interpretation				
PURPOSE:	To verify that SP A (Type B exchange) is able to ignore the remaining part of the Instruction indicator, if A = 0				
REFERENCES:	Q.767:		ISUP'92: 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) 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	X	

EXPECTED MESSAGE SEQUENCE:

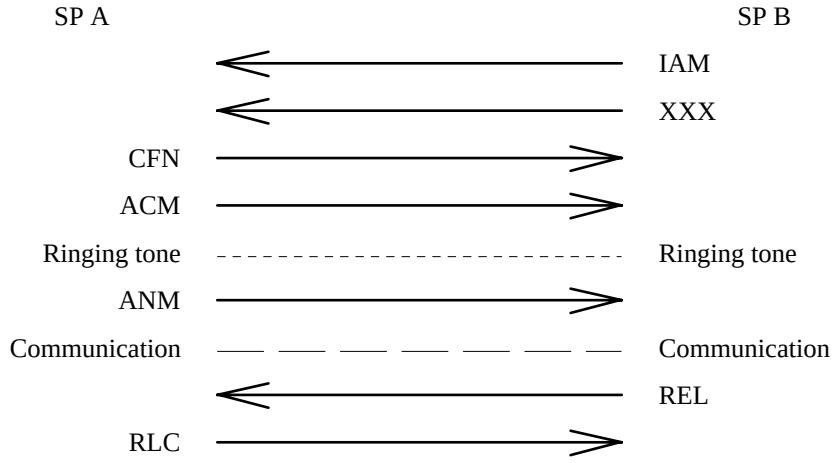


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN MESSAGE PASSED ON BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.1.7				
TITLE:	Receipt of unknown messages				
SUBTITLE:	Message Compatibility Information not received				
PURPOSE:	To verify that SP A is able to discard an unknown message without Message Compatibility Information				
REFERENCES:	Q.767:		ISUP'92: 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 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
			X	X	

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A. 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	CHECK C: IS THE UNKNOWN MESSAGE DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

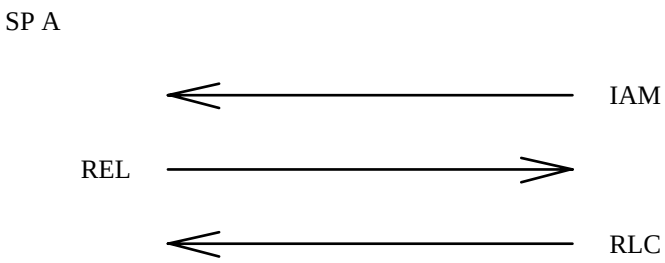
ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.1	
TITLE:	Receipt of unknown parameters	
SUBTITLE:	Parameter Compatibility Information: Release call	
PURPOSE:	To verify that SP A is able to release the call, if indicated in Parameter Compatibility Information	
REFERENCES:	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	X	

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: DOES THE REL CONTAIN CAUSE VALUE #99 AND DOES THE DIAGNOSTIC FIELD INCLUDE THE NAME OF THE UNKNOWN PARAMETER?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	Repeat steps 1 to 4 with bit A = 0 for type A exchanges.

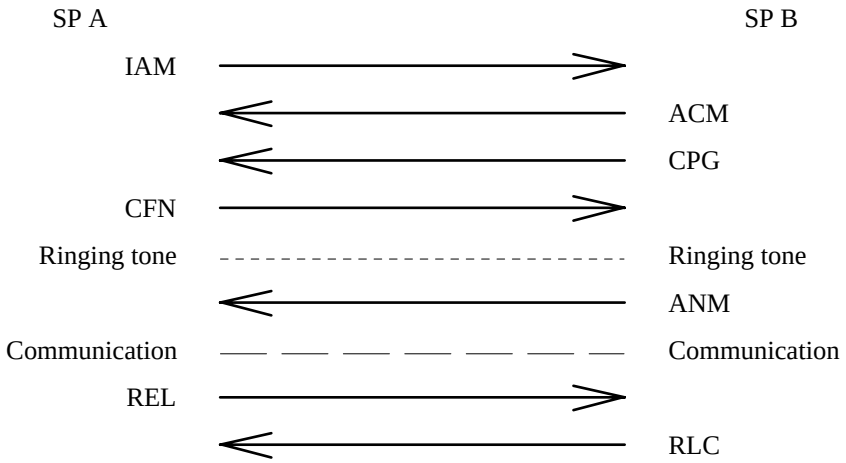
ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.2	
TITLE:	Receipt of unknown parameters	
SUBTITLE:	Parameter Compatibility Information: Discard message	
PURPOSE:	To verify that SP A is able to discard a message containing an unknown parameter, if indicated in Parameter Compatibility Information	
REFERENCES:	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 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 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	X	

EXPECTED MESSAGE SEQUENCE:

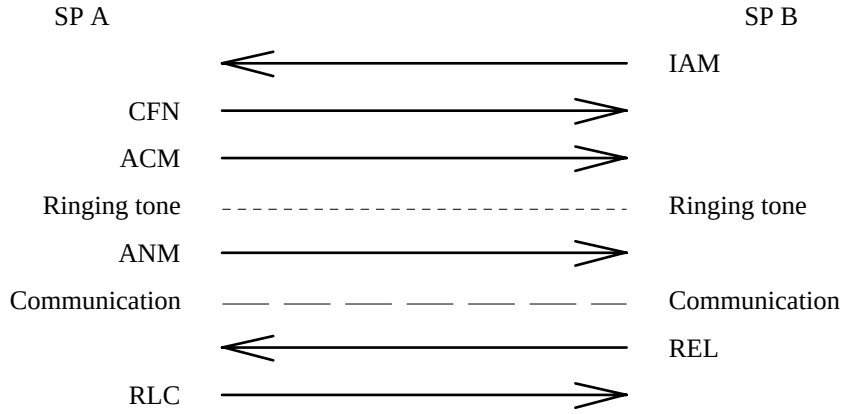


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE CPG DISCARDED BY SP A?...
6	The calling party should 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: CFN MESSAGE SHOULD NOT BE SENT.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.3				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information: Discard parameter				
PURPOSE:	To verify that SP A is able to discard an unknown parameter, if indicated in the Parameter Compatibility Information				
REFERENCES:	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 = 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 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

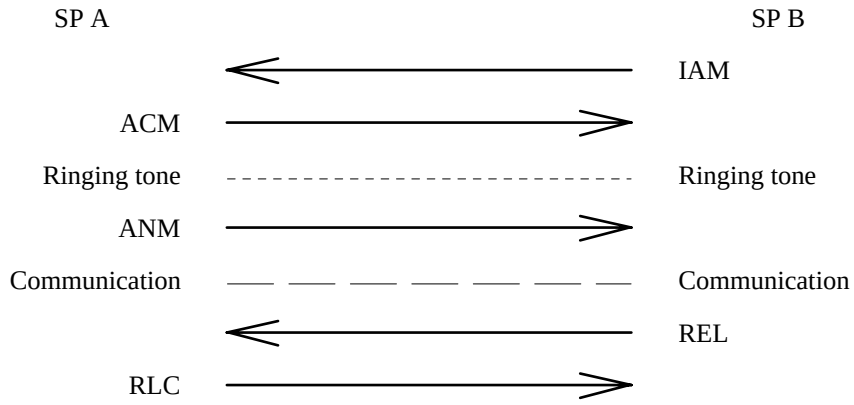


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED BY SP A?...
6	The calling party 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: CFN MESSAGE SHOULD NOT BE SENT.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.4				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information: Pass on				
PURPOSE:	To verify that SP A is able to pass on an unknown parameter, without notification				
REFERENCES:	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 = 0, C = 1, D = 0, E = 0, 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	X	

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A. 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	CHECK C: IS THE UNKNOWN PARAMETER PASSED ON BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.5	
TITLE:	Receipt of unknown parameters	
SUBTITLE:	Parameter Compatibility Information: Pass on not possible, release call	
PURPOSE:	To verify that SP A releases call if pass on is not possible and if indicated in Parameter Compatibility Information	
REFERENCES:	Q.767:	ISUP'92: 2.9.5/Q.764

PRE-TEST CONDITIONS:

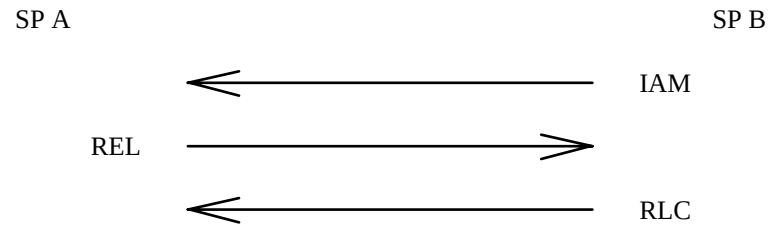
a) Arrange the data in SP A such that passing on the message with the involved parameter is not possible.

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	X	

EXPECTED MESSAGE SEQUENCE:

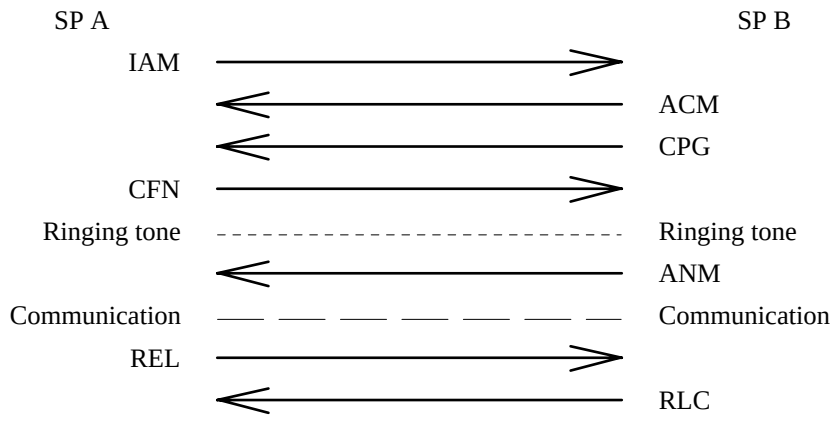


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: DOES THE REL CONTAIN CAUSE VALUE #99 AND DOES THE DIAGNOSTIC FIELD INCLUDE THE NAME OF THE UNKNOWN PARAMETER?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.6				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information: Pass on not possible, discard message				
PURPOSE:	To verify that SP A is able to discard a message containing an unknown parameter if pass on is not possible and if indicated in Parameter Compatibility Information				
REFERENCES:	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 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
			X	X	

EXPECTED MESSAGE SEQUENCE:

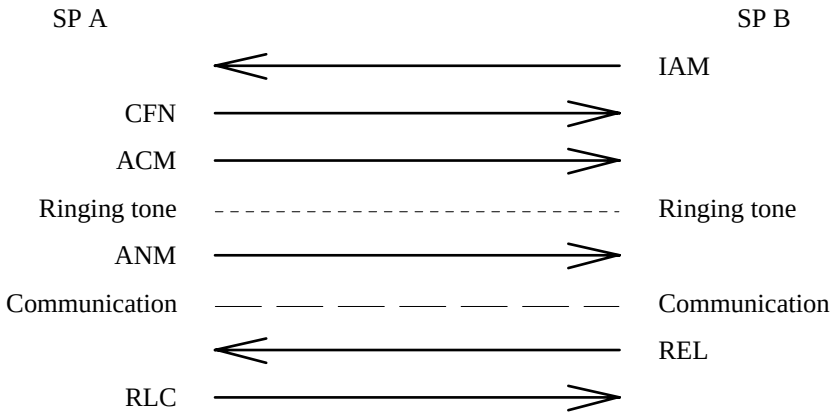


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE CPG DISCARDED BY SP A?...
6	The calling party should 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: CFN MESSAGE SHOULD NOT BE SENT.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.7				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information: Pass on not possible, discard parameter				
PURPOSE:	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				
REFERENCES:	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 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 = 1 ´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	X	

EXPECTED MESSAGE SEQUENCE:

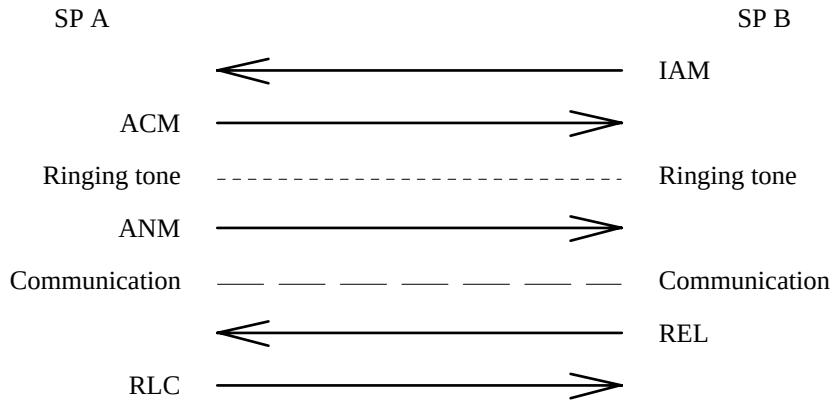


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED BY SP A?...
6	The calling party 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: CFN MESSAGE SHOULD NOT BE SENT.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.8				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information: Transit interpretation				
PURPOSE:	To verify that SP A (Type B exchange) is able to ignore the remaining part of the Instruction indicator, if A = 0				
REFERENCES:	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 = 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.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

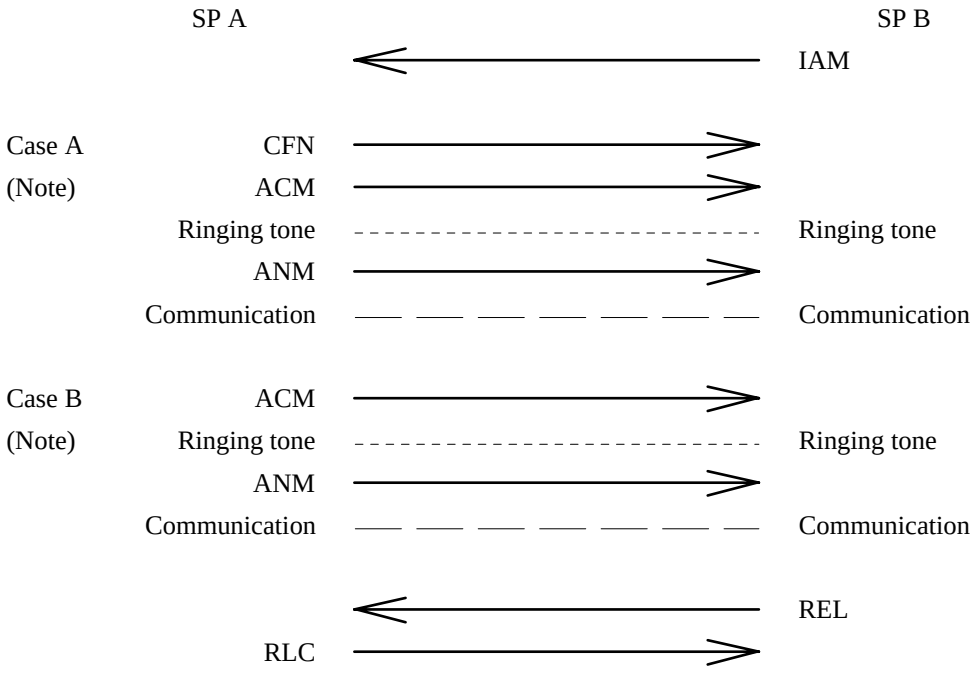


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER PASSED ON BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.9				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information not received				
PURPOSE:	To verify that SP A is able to handle an unknown parameter without Parameter Compatibility Information				
REFERENCES:	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.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

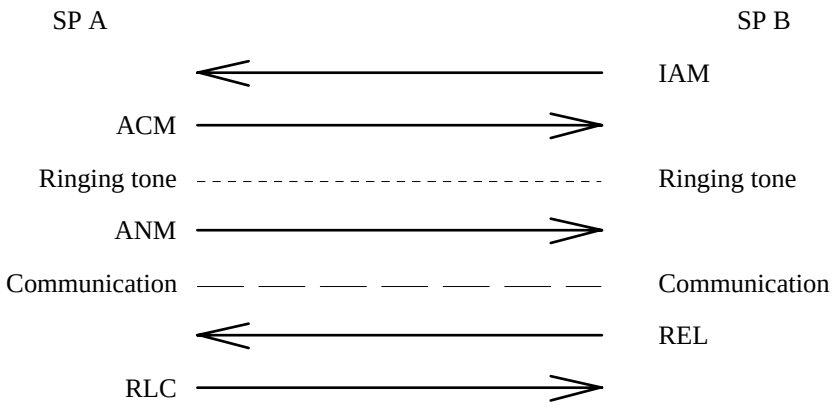


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED OR PASSED ON BY SP A?... (Note)
6	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.

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.2.10				
TITLE:	Receipt of unknown parameters				
SUBTITLE:	Parameter Compatibility Information not received in REL				
PURPOSE:	To verify that SP A is able to discard an unknown parameter in a REL without Parameter Compatibility Information				
REFERENCES:	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 REL without the Parameter Compatibility Information parameter 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	X	

EXPECTED MESSAGE SEQUENCE:

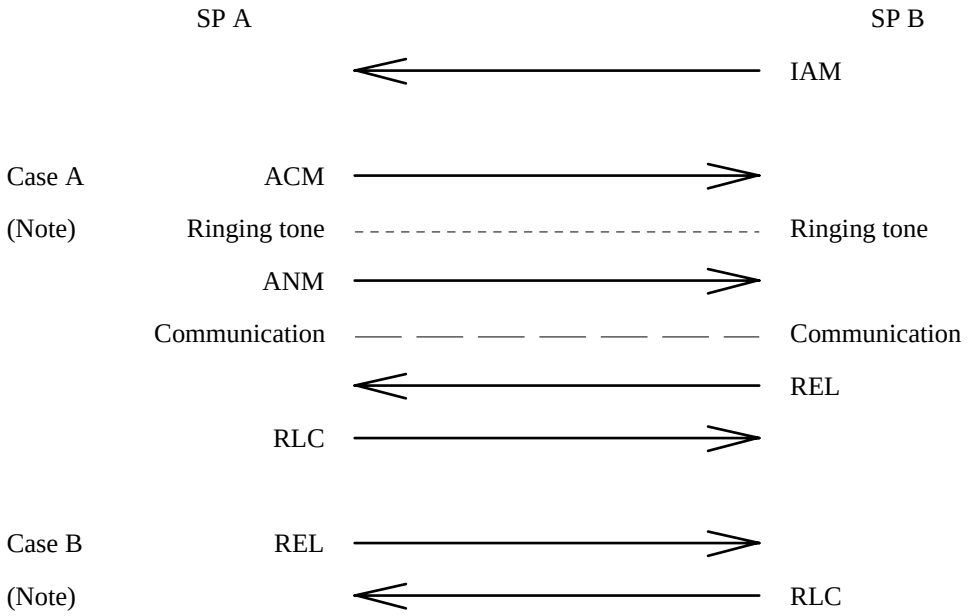


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE UNKNOWN PARAMETER DISCARDED BY SP A?...
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	1.7.3.1				
TITLE:	Receipt of unknown parameter values				
SUBTITLE:	Receipt of unknown parameter values in forward direction				
PURPOSE:	To verify that SP A is able to handle unknown parameter values				
REFERENCES:	Q.767:		ISUP'92: 2.9.5.3.3/Q.764		
PRE-TEST CONDITIONS:	Unknown parameter values should be included in the IAM				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

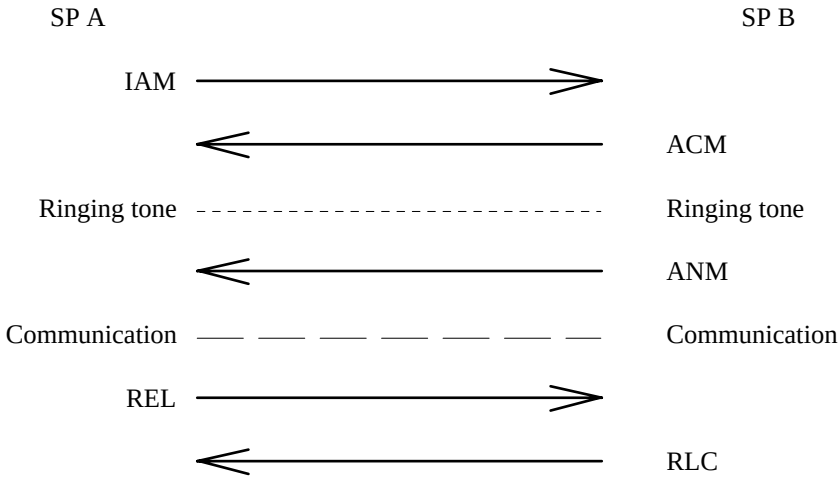


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.763, Annex A?...
3	Repeat steps 1 and 2 for each parameter in Q.763, Annex A.
	NOTE – Case A refers to the actions in Q.763, Annex A, of "Discard parameter", "No Default", "Default" and "Ignore"and case B refers to the actions in Q.763, Annex A, of "Release".

ISUP Basic Call Test Specification

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				
REFERENCES:	Q.767:		ISUP'92: 2.9.5.3.3/Q.764		
PRE-TEST CONDITIONS:	Unknown parameter values should be included in the ACM or ANM				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE: (Note)

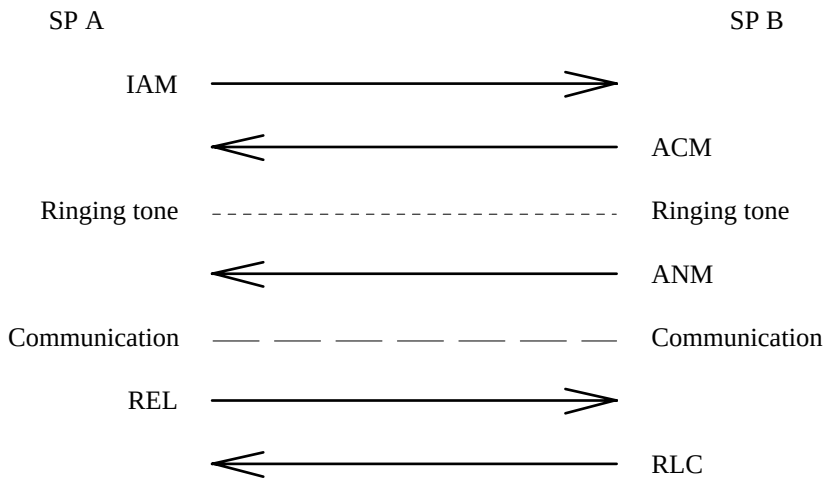


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE UNRECOGNIZED PARAMETER VALUE HANDLED AS INDICATED IN Q.763, Annex A?...
3	Repeat steps 1 and 2 for each parameter in Q.763, Annex A.
	NOTE – The message sequence refers to the actions in Q.763, Annex A, of "Discard parameter", "No Default", "Default" and "Ignore".

ISUP Basic Call Test Specification

TEST NUMBER:	2.1.1				
TITLE:	Both way circuit selection				
SUBTITLE:	IAM sent by controlling SP				
PURPOSE:	To verify that SP A can initiate an outgoing call on a circuit capable of bothway operation when the controlling SP is A				
REFERENCES:	Q.767: D.2.1/Q.767	ISUP'92: 2.1/Q.764			
PRE-TEST CONDITIONS:	a) Circuit selected is capable of bothway operation. b) SP A is the controlling signalling point.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

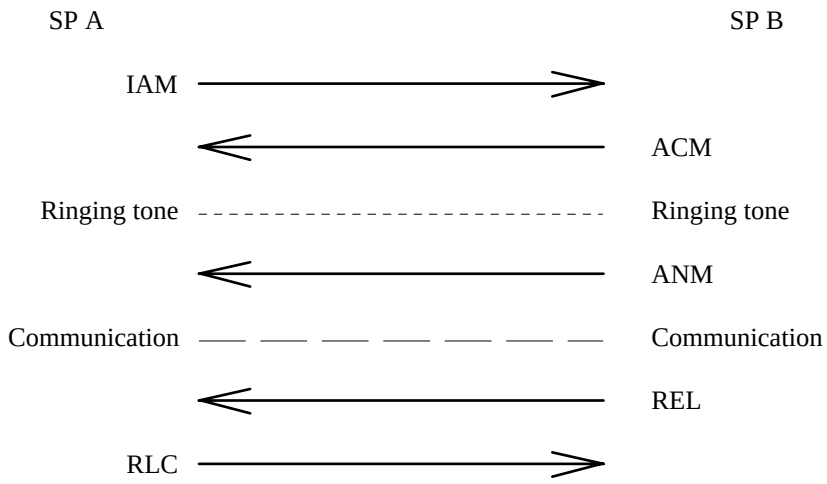


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	2.1.2				
TITLE:	Both way circuit selection				
SUBTITLE:	IAM sent by non-controlling SP				
PURPOSE:	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				
REFERENCES:	Q.767: D.2.1/Q.767	ISUP'92: 2.1/Q.764			
PRE-TEST CONDITIONS:	a) Circuit selected is capable of both way operation. b) SP A is the non-controlling signalling point.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

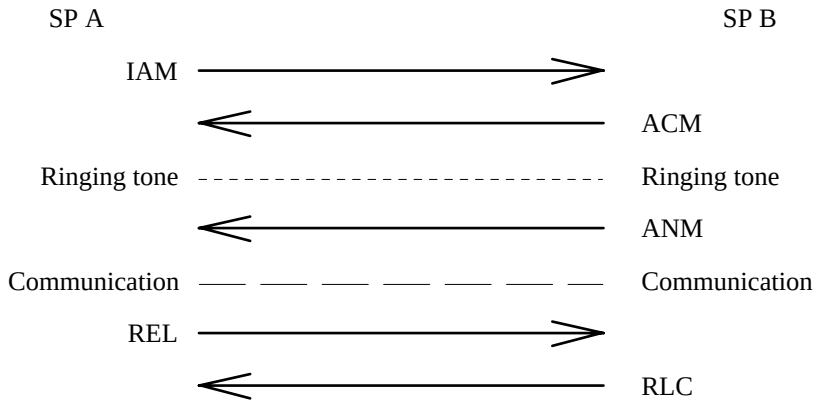


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The called party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	2.2.1				
TITLE:	Called address sending				
SUBTITLE:	"*en bloc*" operation				
PURPOSE:	To verify that a call can be successfully established (all digits included in the IAM)				
REFERENCES:	Q.767: D.2.1.1, 2.1.4, 2.1.7, 2.3/Q.767		ISUP'92: 2.1.1, 2.1.4, 2.1.7, 2.3/Q.764		
PRE-TEST CONDITIONS:	The exchange data is arranged such that all digits are included in the IAM				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

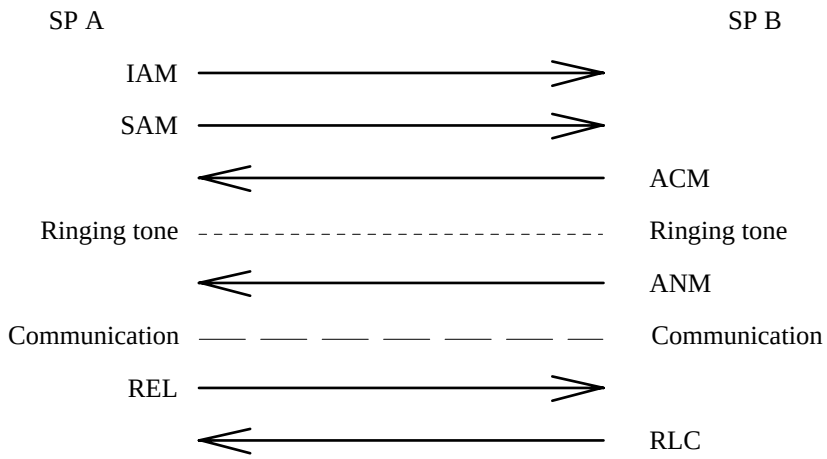


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	2.2.2				
TITLE:	Called address sending				
SUBTITLE:	Overlap operation (with SAM)				
PURPOSE:	To verify that SP A can initiate a call using an IAM followed by a SAM				
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 a SAM				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

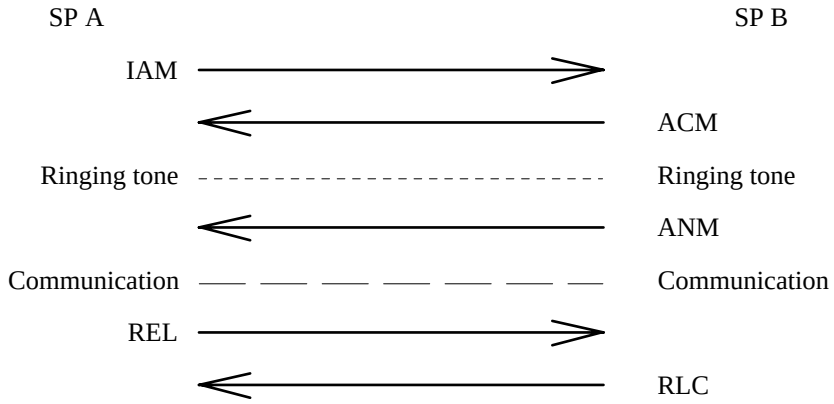


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.
	Where SP A is in a position to know by digit analysis that the final digit has been sent. Confirm that an end-of-pulsing (ST) signal is included in the last address message.
	NOTE – Multiple SAMs may be used.

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.1				
TITLE:	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				
REFERENCES:	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'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

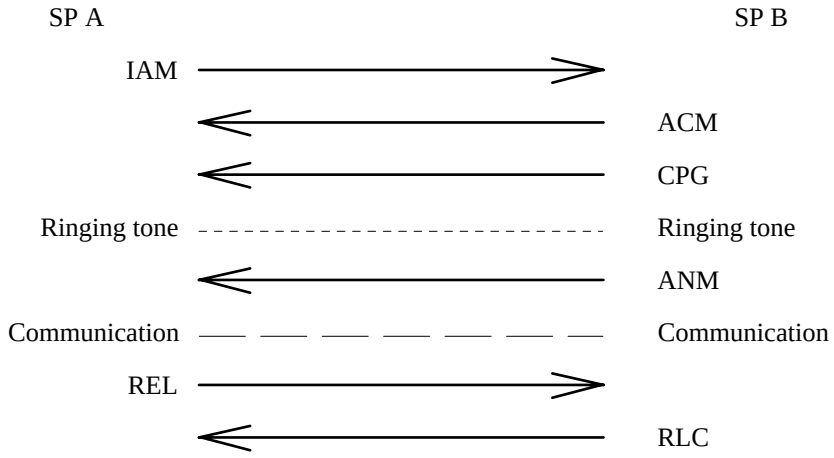


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
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.

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.2				
TITLE:	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'92: 2.1.5/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

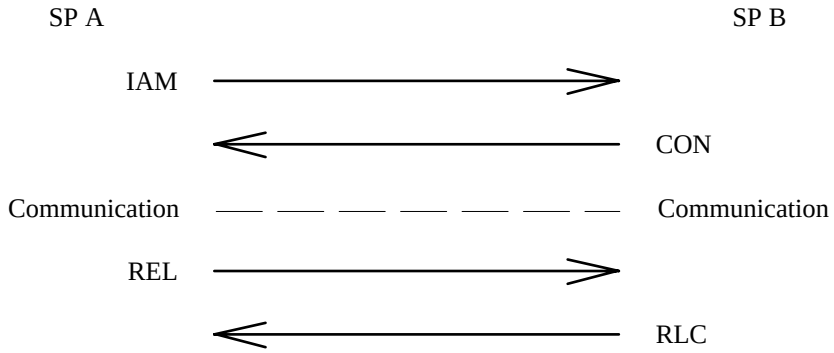


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	Repeat steps 1 to 7 with the 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.

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.3				
TITLE:	Successful Call setup				
SUBTITLE:	Ordinary call with CON				
PURPOSE:	To verify that a call can be successfully completed with a connect message				
REFERENCES:	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
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

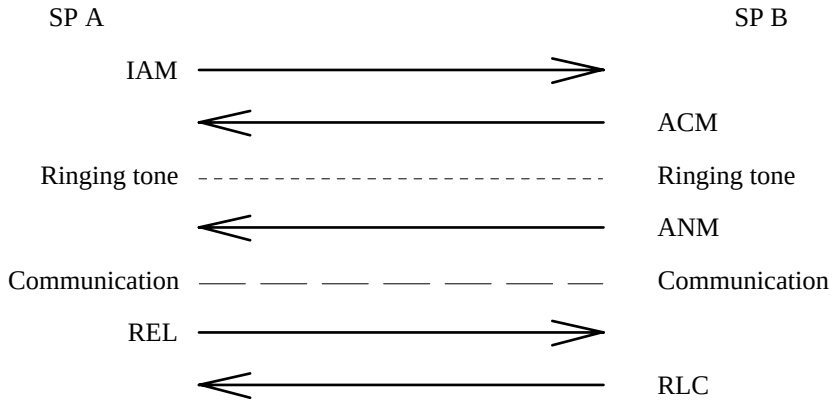


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	The called party should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED?...
4	The calling party should clear the call.
5	CHECK B: IS THE CIRCUIT IDLE?...
6	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
7	For validation testing repeat this test in the reverse direction .

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.4				
TITLE:	Successful Call setup				
SUBTITLE:	Call switched via a satellite				
PURPOSE:	To verify the satellite indicator in the initial address message is correctly set				
REFERENCES:	Q.767: D.2.1/Q.767		ISUP'92: 2.1/Q.764		
PRE-TEST CONDITIONS:	The SP data is arranged such that the call is switched via satellite connection or has a satellite connection already included in the path				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

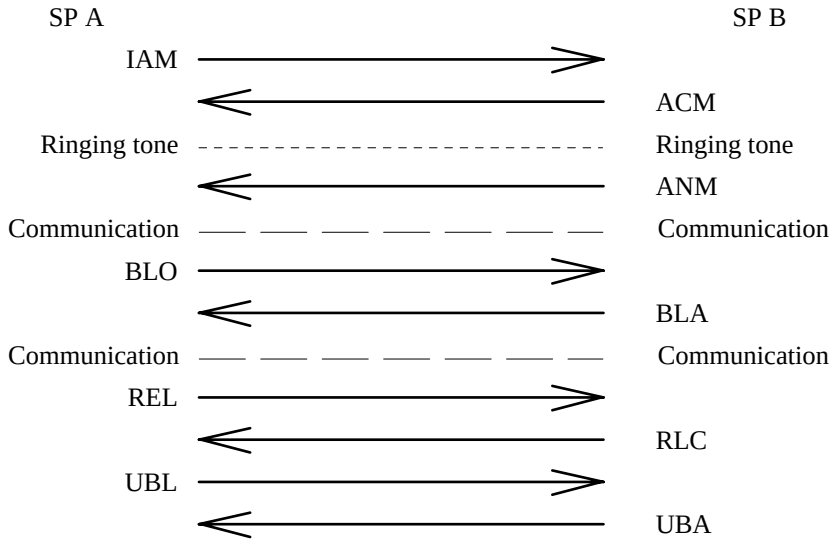


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	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.

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.5				
TITLE:	Successful call setup				
SUBTITLE:	Blocking and unblocking during a call (initiated)				
PURPOSE:	To verify that the circuit blocking (during a call) and unblocking (after clearing the call) can be correctly performed				
REFERENCES:	Q.767: D.2.9.2.1/Q.767		ISUP'92: 2.8.2.1/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

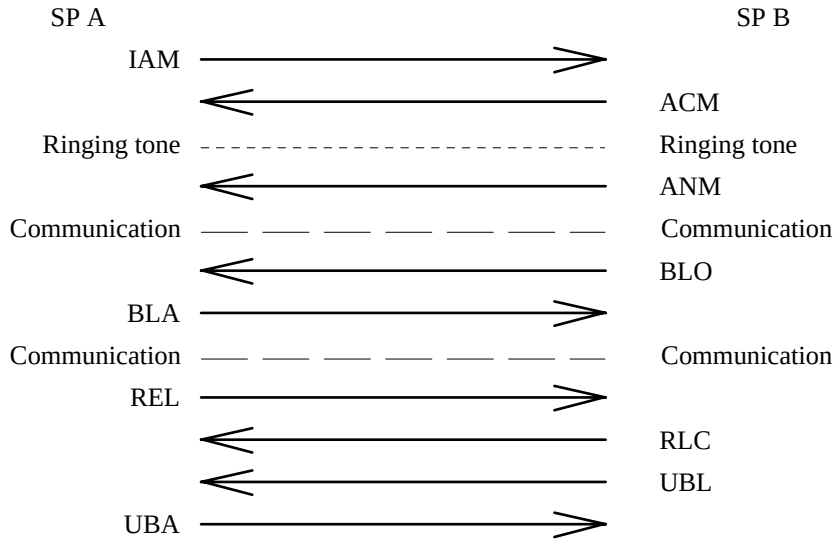


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	SP A should initiate circuit blocking relating to the circuit used for this call.
6	CHECK C: IS THE CONNECTION STILL ESTABLISHED?...
7	The calling party should clear the call
8	CHECK D: VERIFY THAT A CALL CANNOT BE ORIGINATED ON THIS CIRCUIT BY SP B.
9	SP A should send an unblocking signal.
10	CHECK E: VERIFY THAT A CALL CAN BE SUCCESSFULLY ORIGINATED FROM EITHER SP.
11	CHECK F: WAS THE MESSAGE SEQUENCE AS ABOVE?...
12	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	2.3.6				
TITLE:	Successful call setup				
SUBTITLE:	Blocking and unblocking during a call (received)				
PURPOSE:	To verify that the circuit blocking (during a call) and unblocking (after clearing the call) can be correctly performed				
REFERENCES:	Q.767: D.2.9.2.1/Q.767	ISUP'92: 2.8.2.1/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

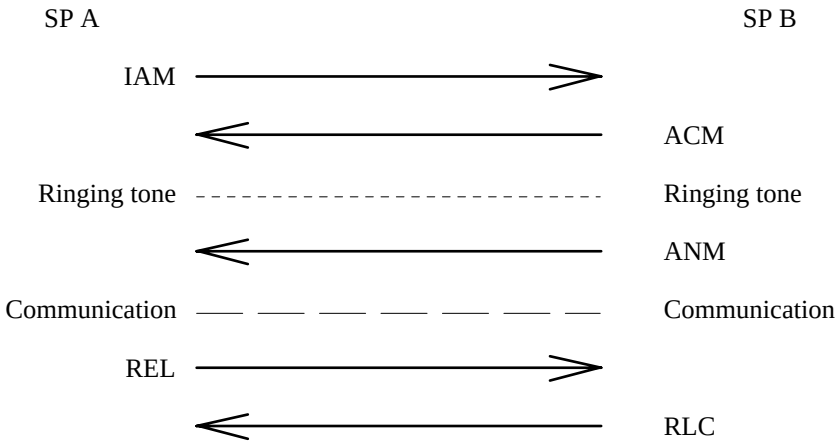


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	SP B should initiate circuit blocking relating to the circuit used for this call.
6	CHECK C: IS THE CONNECTION STILL ESTABLISHED?...
7	The calling party should clear the call.
8	CHECK D: VERIFY THAT A CALL CANNOT BE ORIGINATED ON THIS CIRCUIT BY SP A.
9	SP B should send an unblocking signal.
10	CHECK E: VERIFY THAT A CALL CAN BE SUCCESSFULLY ORIGINATED FROM EITHER SP.
11	CHECK F: WAS THE MESSAGE SEQUENCE AS ABOVE?...
12	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	2.4.1				
TITLE:	Propagation delay determination procedure				
SUBTITLE:	IAM sent containing the PDC				
PURPOSE:	To verify that SP A is able to increase the PDC by the delay value of the outgoing route (D ms)				
REFERENCES:	Q.767:		ISUP'92: 2.6/Q.764		
PRE-TEST CONDITIONS:	Arrange the data such that the received PDC value in SP A is X ms				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

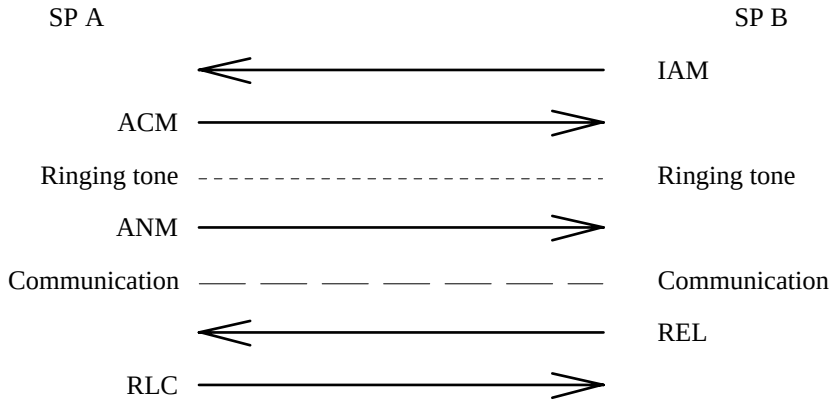


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	CHECK B: IS THE VALUE OF PDC = (X+D) ms IN THE OUTGOING SP A?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	2.4.2				
TITLE:	Propagation delay determination procedure				
SUBTITLE:	SP supporting the procedure to SP supporting the procedure				
PURPOSE:	To verify that a call can be successfully completed and the value of the call history is higher as the value of the PDC				
REFERENCES:	Q.767:		ISUP'92: 2.6/Q.764		
PRE-TEST CONDITIONS:	Arrange that the PDC in the IAM is set to X ms				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

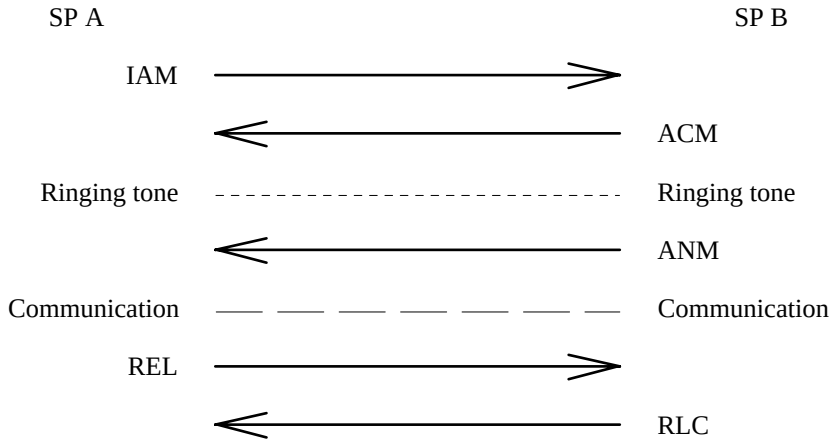


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS A CALL HISTORY INFORMATION ≥ X ms INCLUDED IN THE ANM?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
9	For validation testing repeat this test in the reverse direction.
	NOTE – X represents the propagation delay value in SP B to SP A.

ISUP Basic Call Test Specification

TEST NUMBER:	2.4.3				
TITLE:	Propagation delay determination procedure				
SUBTITLE:	Abnormal procedure, PDC is not received				
PURPOSE:	To verify that a call can be successfully completed and the PDC is generated in SP A				
REFERENCES:	Q.767:		ISUP'92: 2.6/Q.764		
PRE-TEST CONDITIONS:	Arrange the data such that there is no PDC parameter received by SP A				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

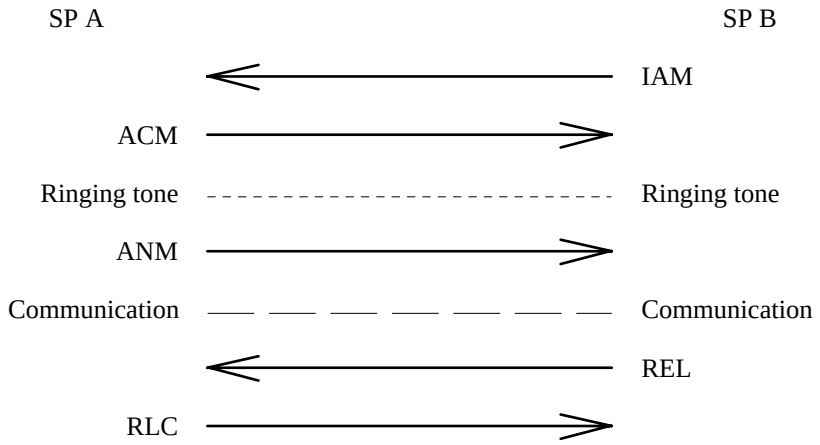


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	CHECK B: IS THE VALUE OF PDC INSERTED BY SP A?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	2.4.4				
TITLE:	Propagation delay determination procedure				
SUBTITLE:	ISUP'92 supporting the procedure to Q.767				
PURPOSE:	To verify that a call can be successfully completed and the PDC is discarded				
REFERENCES:	Q.767: 4.1.1.2/Q.767		ISUP'92: 2.6/Q.764		
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 VAT	ISUP'92 CPT	Comb. CPT
	(Note 1)		(Note 2)		X

EXPECTED MESSAGE SEQUENCE:

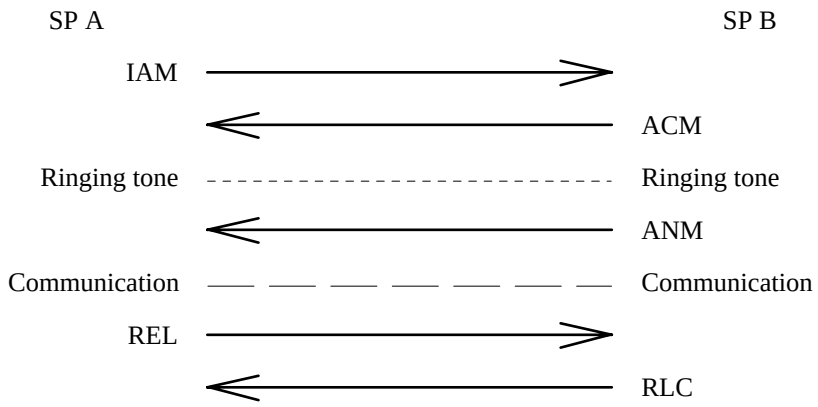


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE PDC DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The test 1.6.2.1 has to be performed with the appropriate parameter.
	NOTE 2 – The test 2.4.1 has to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	2.4.5				
TITLE:	Propagation delay determination procedure				
SUBTITLE:	Q.767 to ISUP'92 supporting the procedure				
PURPOSE:	To verify that a call can be successfully completed and CHI is discarded if received				
REFERENCES:	Q.767: 4.1.1.2/Q.767		ISUP'92: 2.6/Q.764		
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 VAT	ISUP'92 CPT	Comb. CPT
	(Note 1)		(Note 2)		X

EXPECTED MESSAGE SEQUENCE:

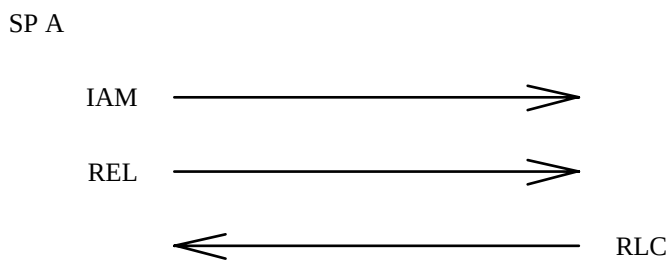


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE CALL HISTORY INFORMATION DISCARDED BY SP A?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?..
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The test 1.6.2.2 has to be performed with the appropriate parameter.
	NOTE 2 – The tests 2.4.2 and 2.4.3 have to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	3.1				
TITLE:	Normal call release				
SUBTITLE:	Calling party clears before address complete				
PURPOSE:	To verify that the calling party can successfully release a call prior to receipt of any backward message				
REFERENCES:	Q.767: D.2.3/Q.767		ISUP'92: 2.3/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

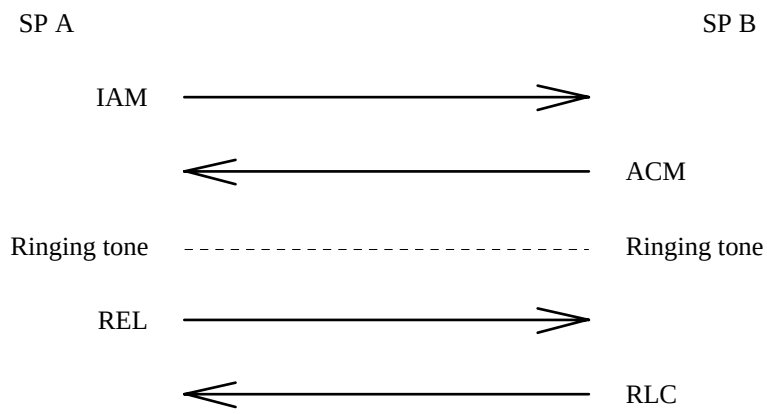


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	The calling party should clear the call prior to receipt of any backward messages.
3	CHECK A: IS THE CIRCUIT IDLE?...
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.2				
TITLE:	Normal call release				
SUBTITLE:	Calling party clears before answer				
PURPOSE:	To verify that the calling party can successfully release a call prior to receipt of answer				
REFERENCES:	Q.767: D.2.3/Q.767	ISUP'92: 2.3/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

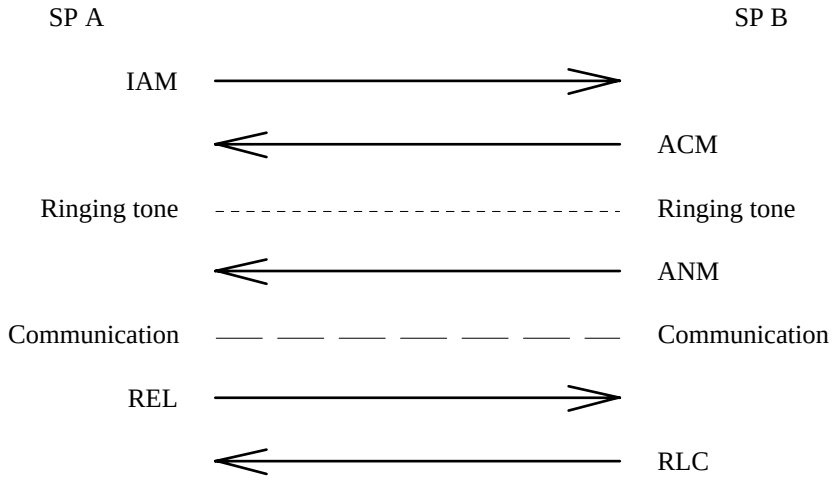


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The calling party should clear the call prior to receipt of an answer message.
4	CHECK B: IS THE CIRCUIT IDLE?...
5	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
6	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.3				
TITLE:	Normal call release				
SUBTITLE:	Calling party clears after answer				
PURPOSE:	To verify that the calling party can successfully release a call after answer				
REFERENCES:	Q.767: D.2.3/Q.767		ISUP'92: 2.3/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

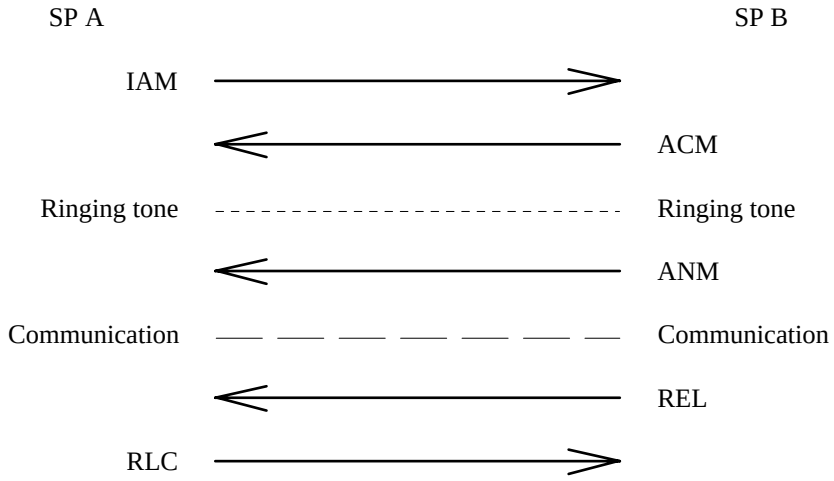


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.4				
TITLE:	Normal call release				
SUBTITLE:	Called party clears after answer				
PURPOSE:	To verify that a call can be successfully released in the backward direction				
REFERENCES:	Q.767: D.2.3/Q.767		ISUP'92: 2.3/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

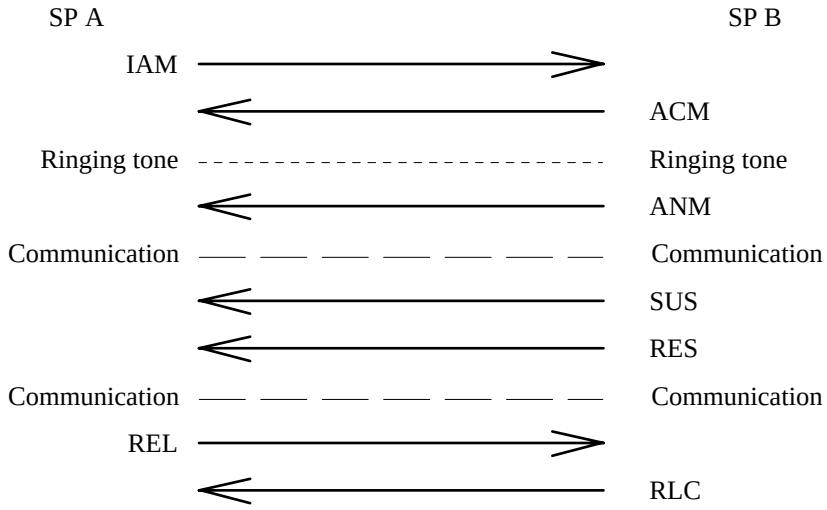


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The called party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.5				
TITLE:	Normal call release				
SUBTITLE:	Suspend initiated by the network				
PURPOSE:	To verify that the called subscriber can successfully clear back and reanswer a call				
REFERENCES:	Q.767: D.2.5.1.3/Q.767	ISUP'92: 2.4/Q.764			
PRE-TEST CONDITIONS:	Arrange the stimulus such that SUS and RES both network provided can be initiated				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

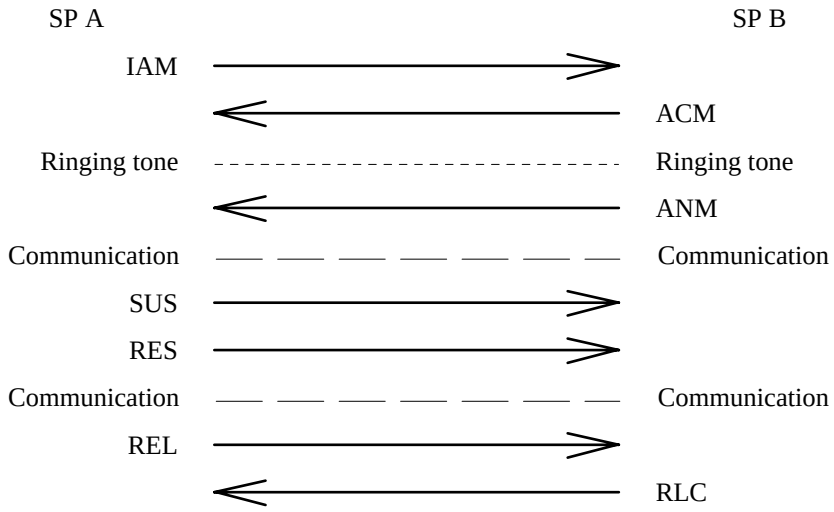


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The called party should clear back the call.
6	The called party should re-answer the call.
7	CHECK C: IS THE CONNECTION STILL ESTABLISHED?...
8	The calling party should clear the call.
9	CHECK D: IS THE CIRCUIT IDLE?...
10	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
11	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.6				
TITLE:	Normal call release				
SUBTITLE:	Suspend and resume initiated by a calling party				
PURPOSE:	To verify that the calling subscriber can successfully suspend and resume a call				
REFERENCES:	Q.767: D.2.5.1.1, 2.5.2.1/Q.767		ISUP'92:		
PRE-TEST CONDITIONS:	Arrange the stimulus such that SUS and RES both user provided can be initiated				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:

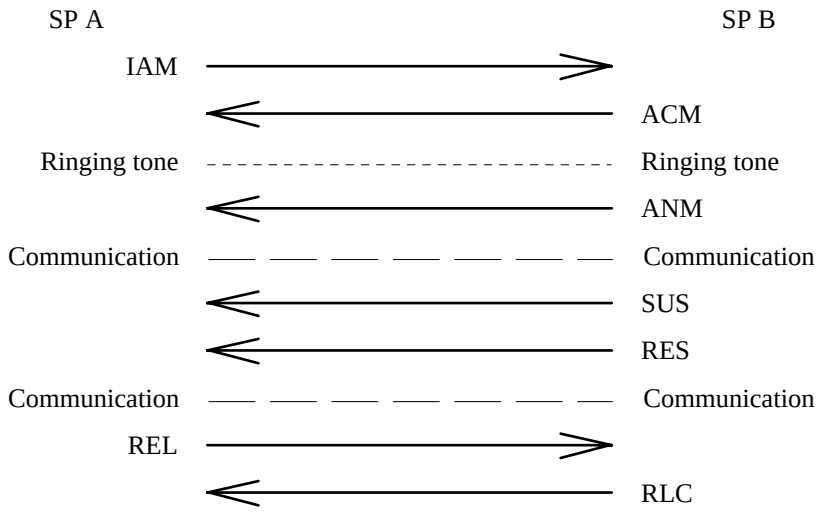


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should suspend the call.
6	The calling party should resume the call.
7	CHECK C: IS THE CONNECTION STILL ESTABLISHED?...
8	The calling party should clear the call.
9	CHECK D: IS THE CIRCUIT IDLE?...
10	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
11	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.7				
TITLE:	Normal call release				
SUBTITLE:	Suspend and resume initiated by a called party				
PURPOSE:	To verify that the called subscriber can successfully suspend and resume a call				
REFERENCES:	Q.767: D.2.5.1.2, 2.5.2.2/Q.767		ISUP'92:		
PRE-TEST CONDITIONS:	Arrange the stimulus such that SUS and RES both user provided can be initiated				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X				

EXPECTED MESSAGE SEQUENCE:

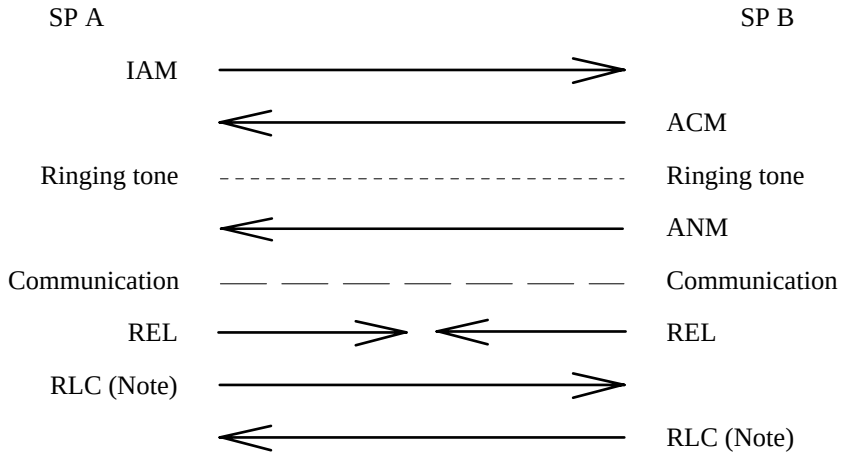


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The called party should suspend the call.
6	The called party should resume the call.
7	CHECK C: IS THE CONNECTION STILL ESTABLISHED?...
8	The calling party should clear the call.
9	CHECK D: IS THE CIRCUIT IDLE?...
10	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
11	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	3.8				
TITLE:	Normal call release				
SUBTITLE:	Collision of REL messages				
PURPOSE:	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				
REFERENCES:	Q.767: D.2.3.1 e)/Q.767	ISUP'92: 2.3.1 e)/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

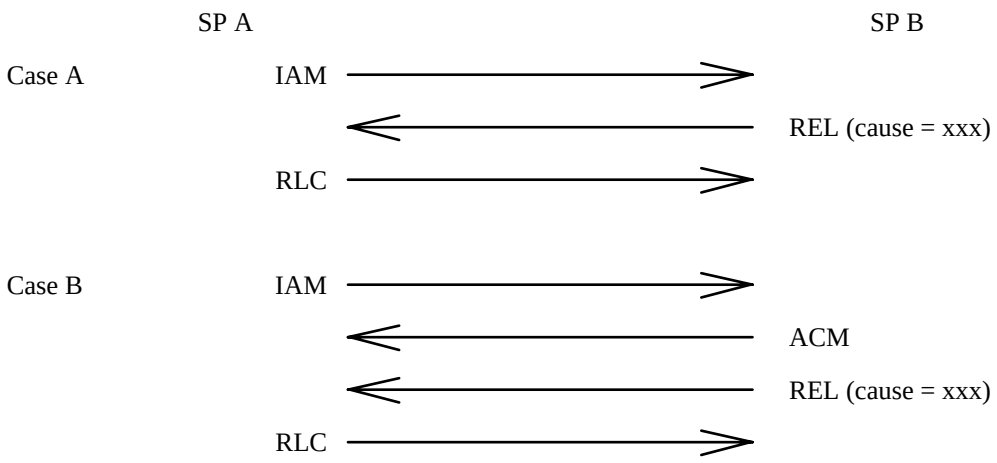


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling and called parties should clear the call at the same time.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The RLC messages may occur in the reverse sequence.

ISUP Basic Call Test Specification

TEST NUMBER:	4.1				
TITLE:	Unsuccessful call setup				
SUBTITLE:	Validate a set of known causes for release				
PURPOSE:	To verify that the call will be immediately released by the outgoing signalling point if a release message with a given cause is received and the correct indication is given to the calling party				
REFERENCES:	Q.767: D.2.2/Q.767		ISUP'92: 2.2/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a release message with a given cause is returned to the request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

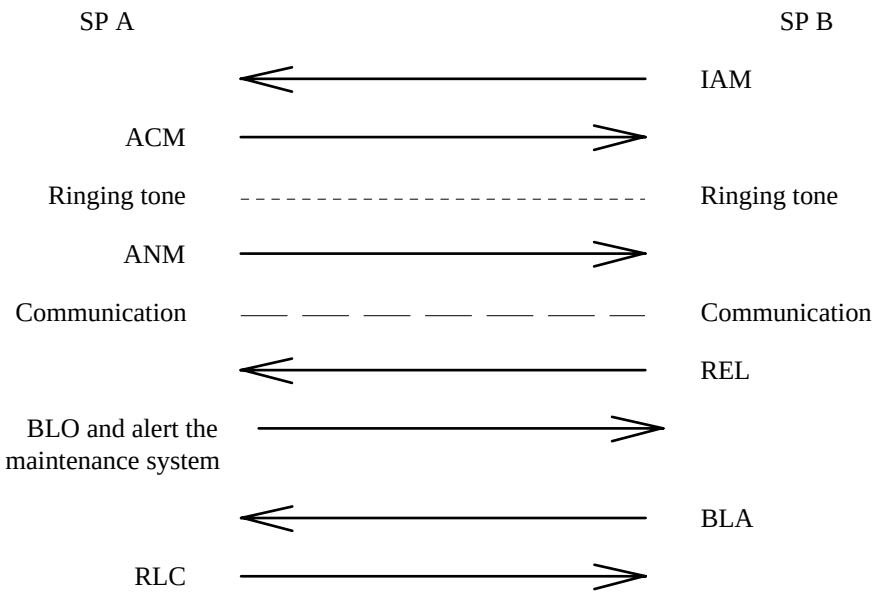


	TEST DESCRIPTION
1	Attempt to make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE APPROPRIATE TONE OR ANNOUNCEMENT RETURNED TO THE CALLING PARTY FROM THE ORIGINATING EXCHANGE?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	Not all the cause values are required to be tested. The suggested causes are: unallocated number, no circuit available, and switching equipment congestion. NOTE – It may not be possible to confirm that the appropriate tone is returned to the calling party. In this case it must be verified that the signalling point under test transmits the signalling received.

ISUP Basic Call Test Specification

TEST NUMBER:	5.1				
TITLE:	Abnormal situation during a call				
SUBTITLE:	Inability to release in response to a REL after ANM				
PURPOSE:	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				
REFERENCES:	Q.767: D.2.10.8.1/Q.767		ISUP'92: 2.9.8.1/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP A such that it is unable to return the circuit to the idle condition in response to a release message				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

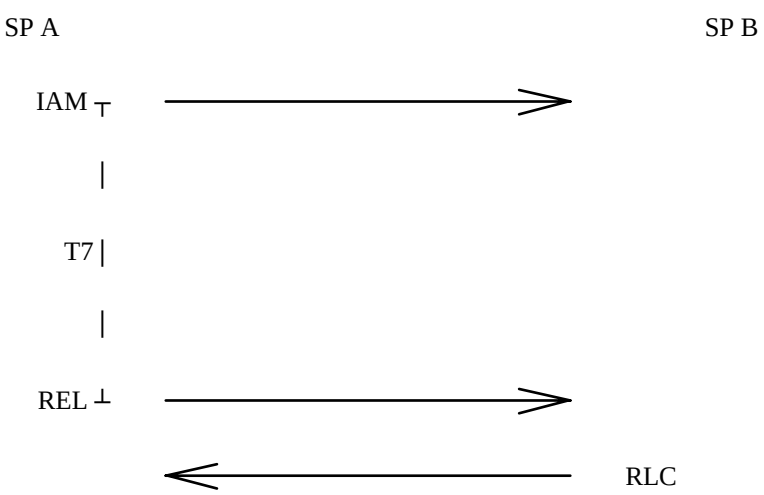


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The calling party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should release the call.
6	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.1				
TITLE:	Timers				
SUBTITLE:	T7: waiting for ACM or CON				
PURPOSE:	To check that at the expiry of T7 the circuit will be released				
REFERENCES:	Q.767: D.2.10.8.3/Q.767	ISUP'92: 2.9.8.3/Q.764			
PRE-TEST CONDITIONS:	Arrange the data in SP B such that an address complete message is not returned to the call request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

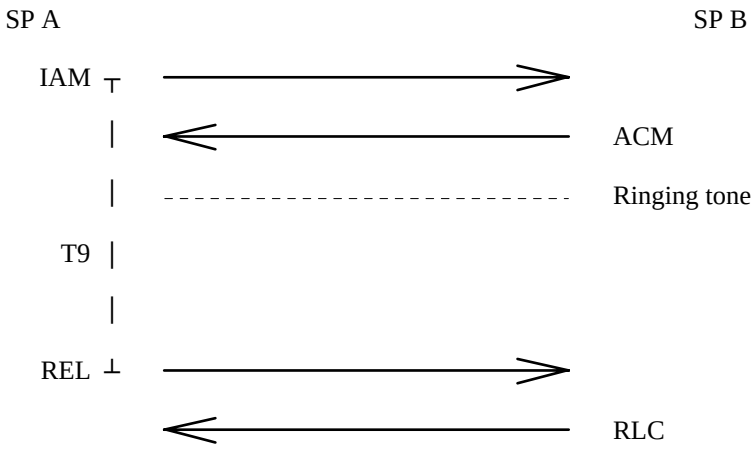


	TEST DESCRIPTION
1	Attempt to make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE RELEASE MESSAGE SENT AFTER T7 EXPIRED?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.2				
TITLE:	Timers				
SUBTITLE:	T9: waiting for ANM				
PURPOSE:	To verify that if an answer message is not received within T9 after receiving an address complete message the connection is released by the outgoing signalling point				
REFERENCES:	Q.767: D.2.10.8.3 a)/Q.767		ISUP'92: 2.9.8.3 a)/Q.764		
PRE-TEST CONDITIONS:	The called party should not answer the call				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

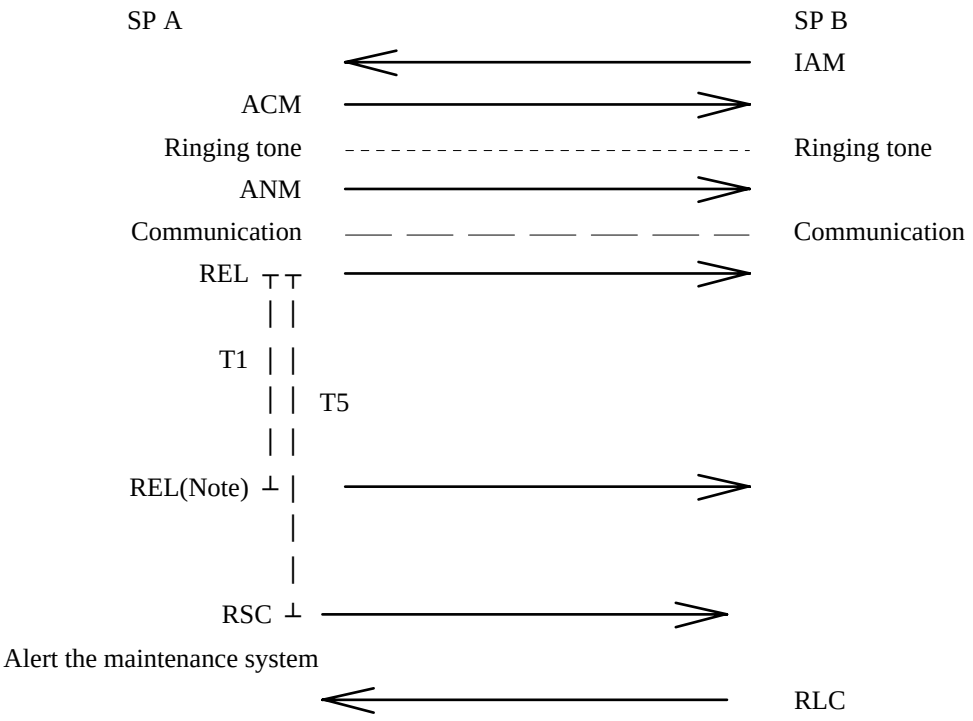


	TEST DESCRIPTION
1	Attempt to make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should NOT answer the call.
4	CHECK B: WAS THE RELEASE MESSAGE SENT AFTER T9 EXPIRED?...
5	CHECK C: IS THE CIRCUIT IDLE?...
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The timer needs only be run at the outgoing international exchange or national controlling exchange.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.3				
TITLE:	Timers				
SUBTITLE:	T1 and T5: failure to receive a RLC				
PURPOSE:	To verify that appropriate actions take place at the expiry of timers T1 and T5				
REFERENCES:	Q.767: D.2.2 and 2.10.6/Q.767		ISUP'92: 2.2 and 2.9.6/Q.764		
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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

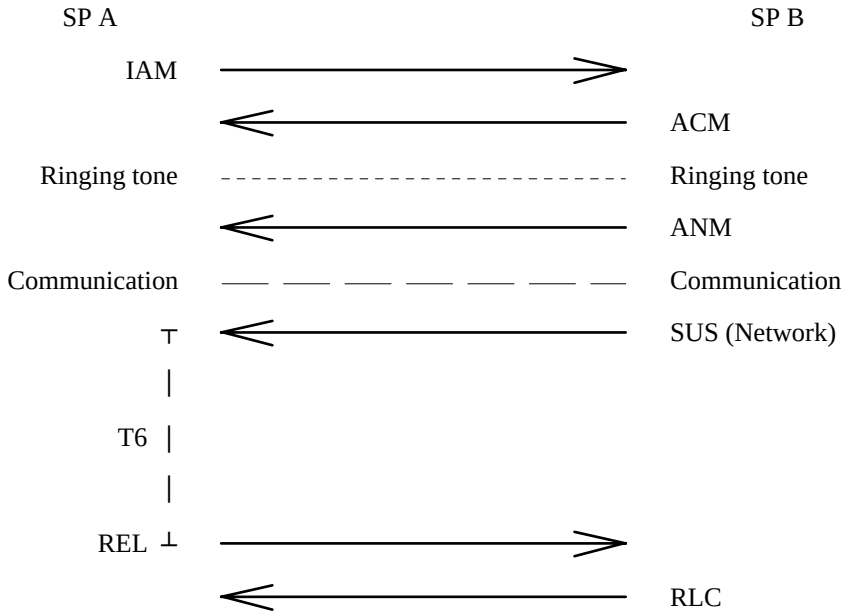


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	The called party at SP A should clear the call.
3	CHECK A: WAS A RELEASE MESSAGE SENT AFTER T1 EXPIRED AFTER SENDING OF THE INITIAL RELEASE MESSAGE?...
4	CHECK B: WAS A RESET CIRCUIT MESSAGE SENT AFTER T5 EXPIRED AFTER SENDING OF THE INITIAL RELEASE MESSAGE?...
5	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – T1 is repeated and REL is retransmitted during T5 interval.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.4				
TITLE:	Timers				
SUBTITLE:	T6: waiting for RES (Network) message				
PURPOSE:	To verify that the call is released at the expiry of timer T6				
REFERENCES:	Q.767: D.2.5.1.3, 2.5.2.3 and 2.5.3/Q.767		ISUP'92: 2.4.1.3, 2.4.2.3 and 2.4.3/Q.764		
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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

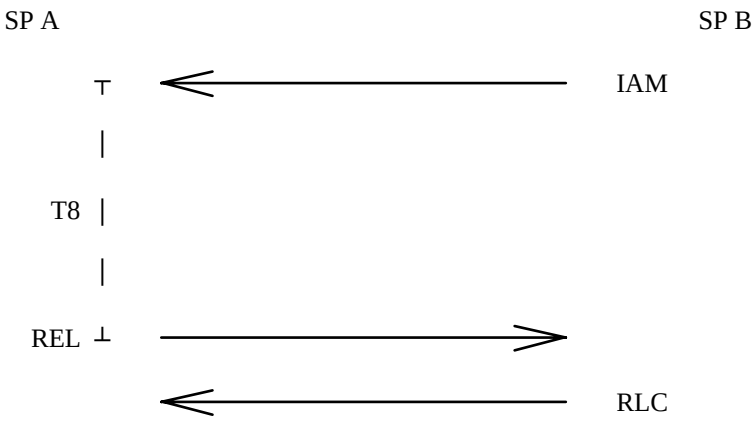


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	Arrange SP B to send a suspend message.
6	CHECK C: WAS A RELEASE MESSAGE SENT AFTER T6 EXPIRED?...
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – T6 timer needs only to be run at the international or national controlling exchange.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.5				
TITLE:	Timers				
SUBTITLE:	T8: waiting for COT message if applicable				
PURPOSE:	To verify that when the IAM indicates that the continuity check: – is required; or – is performed on the previous circuit, and the COT message is not received within T8, the connection is released by the incoming signalling point				
REFERENCES:	Q.767: D.2.10.8.3/Q.767		ISUP'92: 2.9.8.3/Q.764		
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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

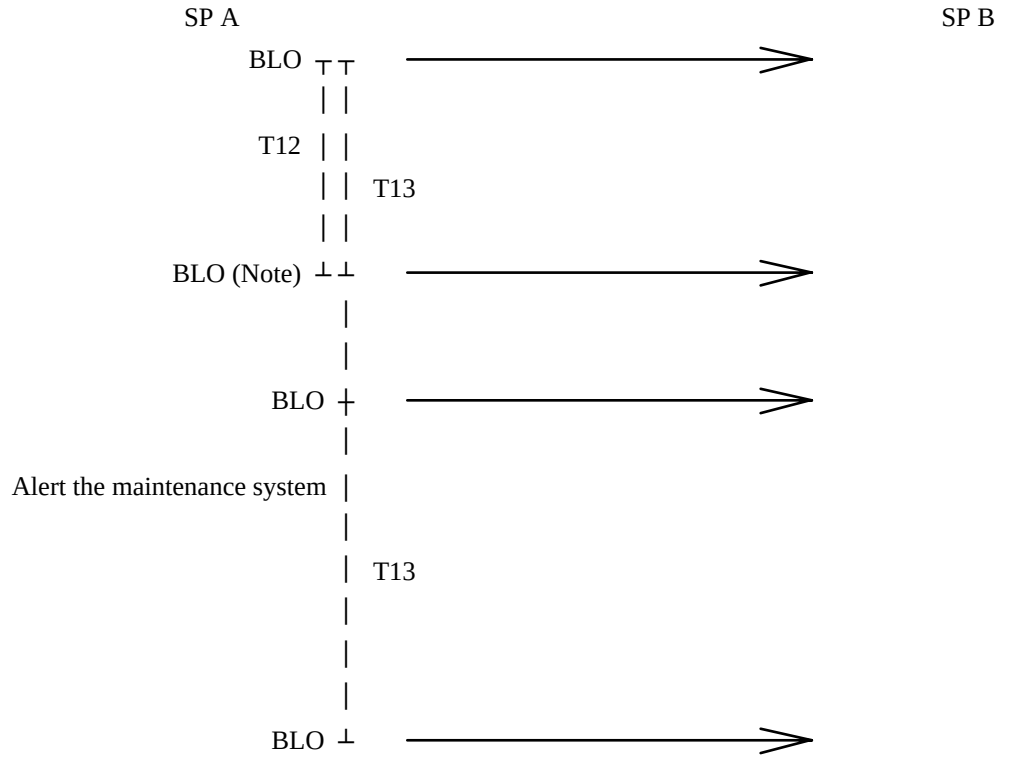


	TEST DESCRIPTION
1	Attempt to make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE RELEASE MESSAGE SENT AFTER T8 EXPIRED?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.6				
TITLE:	Timers				
SUBTITLE:	T12 and T13: failure to receive a BLA				
PURPOSE:	To verify that appropriate actions take place at the expiry of timers T12 and T13				
REFERENCES:	Q.767: D.2.10.4/Q.767		ISUP'92: 2.9.4/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a blocking acknowledgement message is not returned in response to a blocking message				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

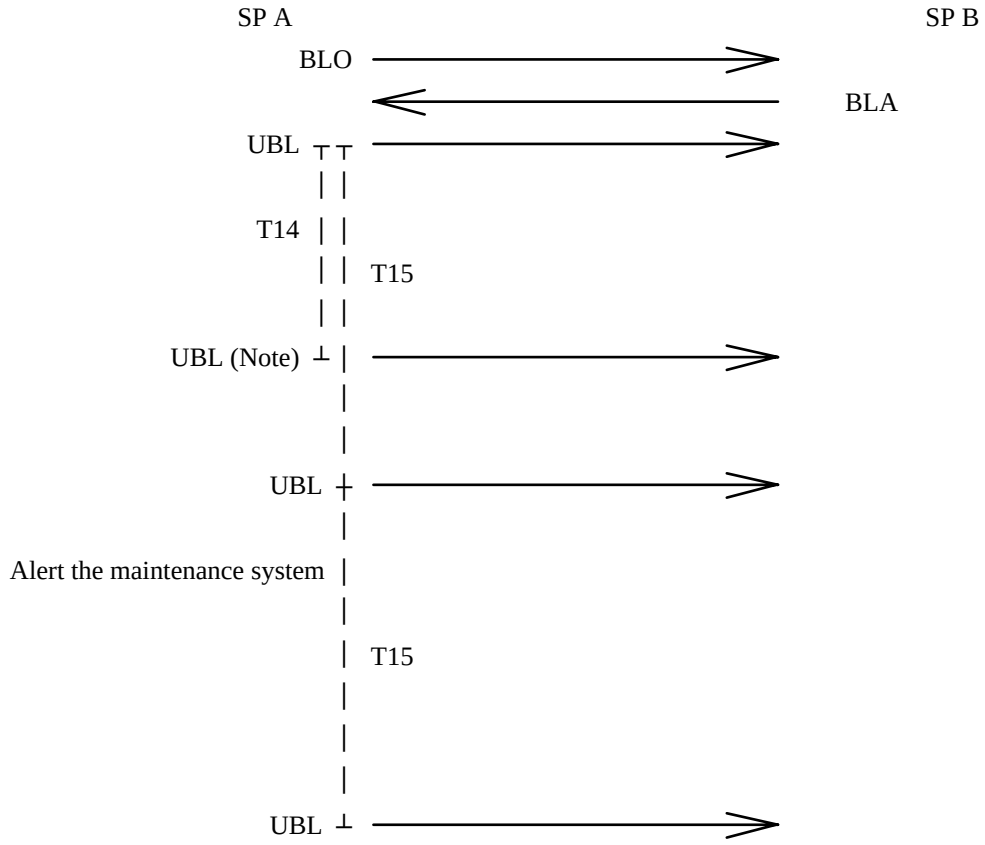


	TEST DESCRIPTION
1	Send a blocking message from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS A BLOCKING MESSAGE SENT AFTER T12 EXPIRED AFTER SENDING OF THE INITIAL BLOCKING MESSAGE?...
3	CHECK B: WAS A BLOCKING MESSAGE SENT AFTER T13 EXPIRED AFTER SENDING OF THE INITIAL BLOCKING MESSAGE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?... NOTE – T12 is repeated and BLO is retransmitted during the first T13 interval.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.7				
TITLE:	Timers				
SUBTITLE:	T14 and T15: failure to receive a UBA				
PURPOSE:	To verify that appropriate actions take place at the expiry of timers T14 and T15				
REFERENCES:	Q.767: D.2.10.4/Q.767		ISUP'92: 2.9.4/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that an unblocking acknowledgement message is not returned in response to an unblocking message				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

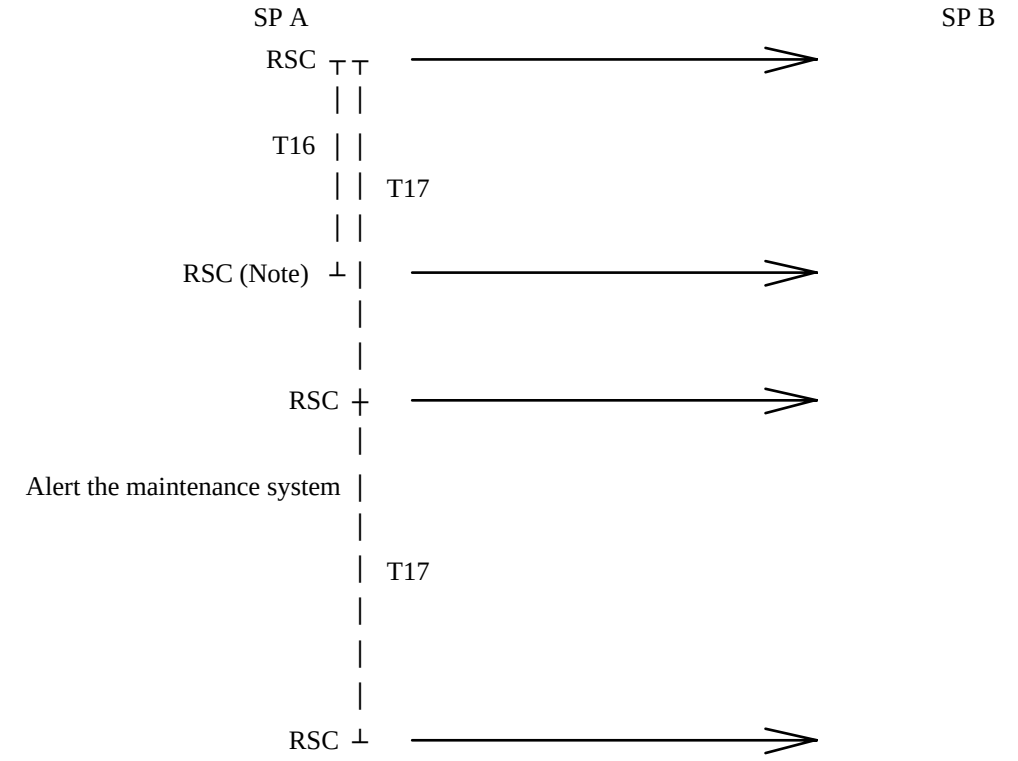


	TEST DESCRIPTION
1	Send a blocking and unblocking message from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS AN UNBLOCKING MESSAGE SENT AFTER T14 EXPIRED AFTER SENDING OF THE INITIAL UNBLOCKING MESSAGE?...
3	CHECK B: WAS AN UNBLOCKING MESSAGE SENT AFTER T15 EXPIRED AFTER SENDING OF THE INITIAL UNBLOCKING MESSAGE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – T14 is repeated and UBL is retransmitted during the first T15 interval.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.8				
TITLE:	Timers				
SUBTITLE:	T16 and T17: failure to receive a RLC				
PURPOSE:	To verify that appropriate actions take place at the expiry of timers T16 and T17				
REFERENCES:	Q.767: D.2.10.3.1/Q.767		ISUP'92: 2.9.3.1/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a release complete message is not returned in response to a reset circuit message				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

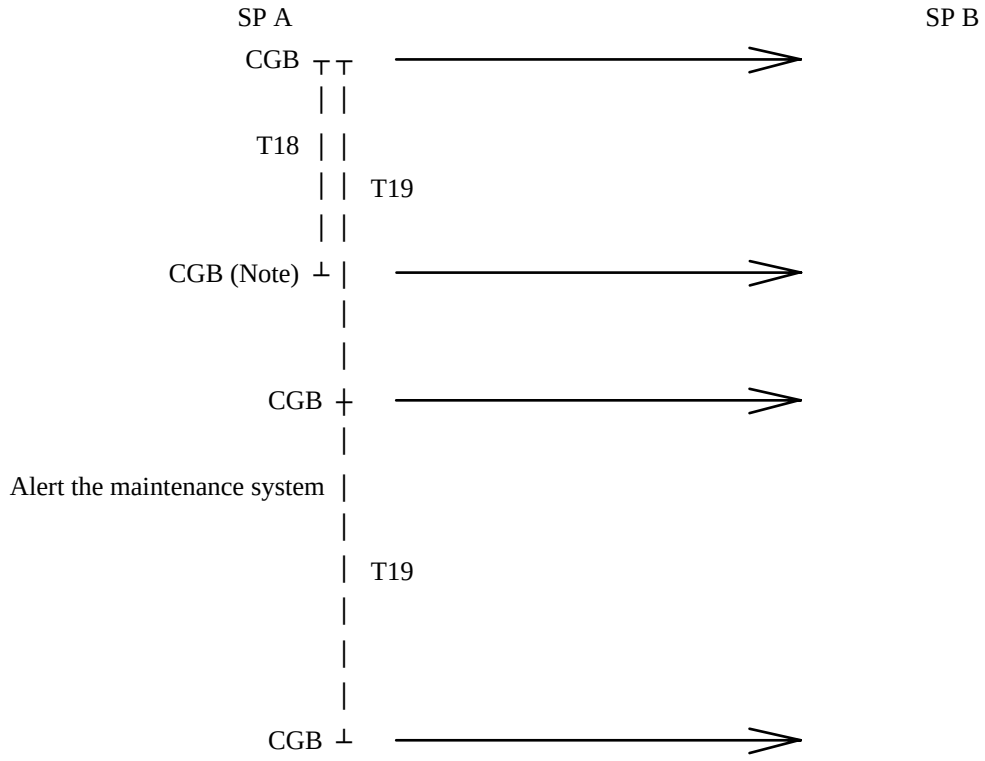


	TEST DESCRIPTION
1	Send a reset circuit message from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS A RESET CIRCUIT MESSAGE SENT AFTER T16 EXPIRED AFTER SENDING OF THE INITIAL RESET CIRCUIT MESSAGE?...
3	CHECK B: WAS A RESET CIRCUIT MESSAGE SENT AFTER T17 EXPIRED AFTER SENDING OF THE INITIAL RESET CIRCUIT MESSAGE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?... NOTE – T16 is repeated and RSC is retransmitted during the first T17 interval.

ISUP Basic Call Test Specification

TEST NUMBER:	5.2.9				
TITLE:	Timers				
SUBTITLE:	T18 and T19: failure to receive a CGBA				
PURPOSE:	To verify that appropriate actions take place at the expiry of timers T18 and T19				
REFERENCES:	Q.767: D.2.10.4/Q.767		ISUP'92: 2.9.4/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a circuit group blocking acknowledgement message is not returned in response to a circuit group blocking message				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

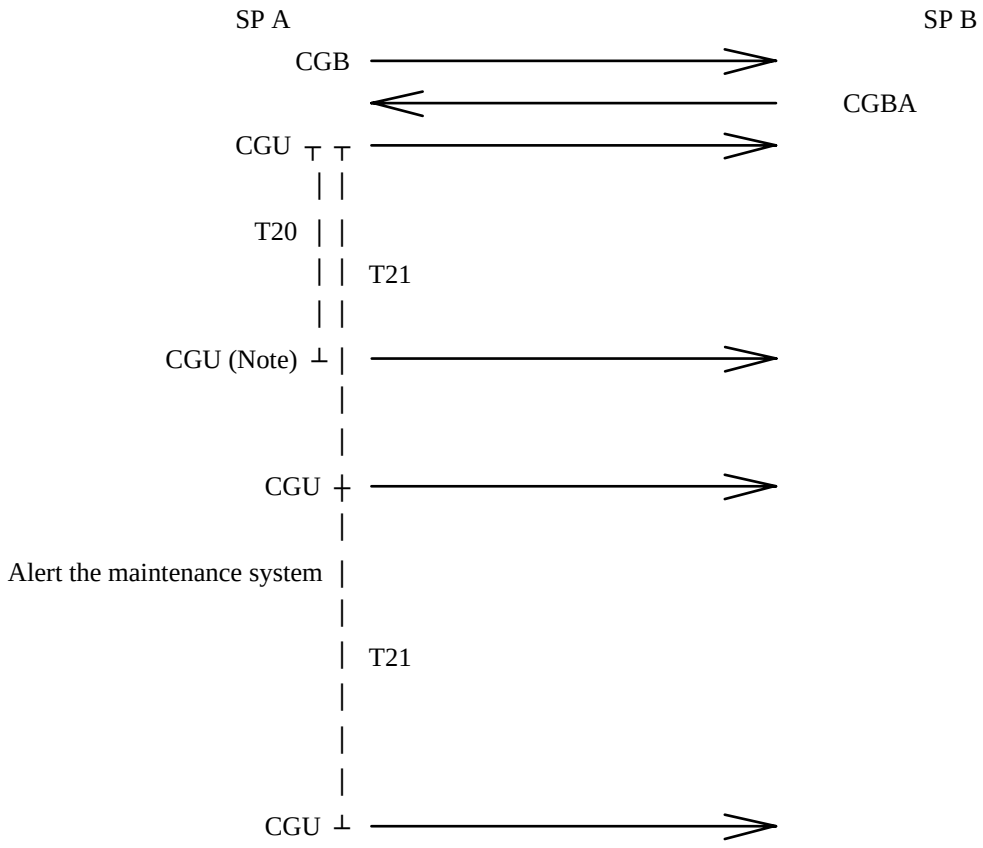


	TEST DESCRIPTION
1	Send a circuit group blocking message from SP A and SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS A CIRCUIT GROUP BLOCKING MESSAGE SENT AFTER T18 EXPIRED AFTER SENDING OF THE INITIAL CIRCUIT GROUP BLOCKING MESSAGE?...
3	CHECK B: WAS A CIRCUIT GROUP BLOCKING MESSAGE SENT AFTER T19 EXPIRED AFTER SENDING OF THE INITIAL CIRCUIT GROUP BLOCKING MESSAGE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?... NOTE – T18 is repeated and CGB is retransmitted during the first T19 interval.

ISUP Basic Call Test Specification

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/Q.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'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

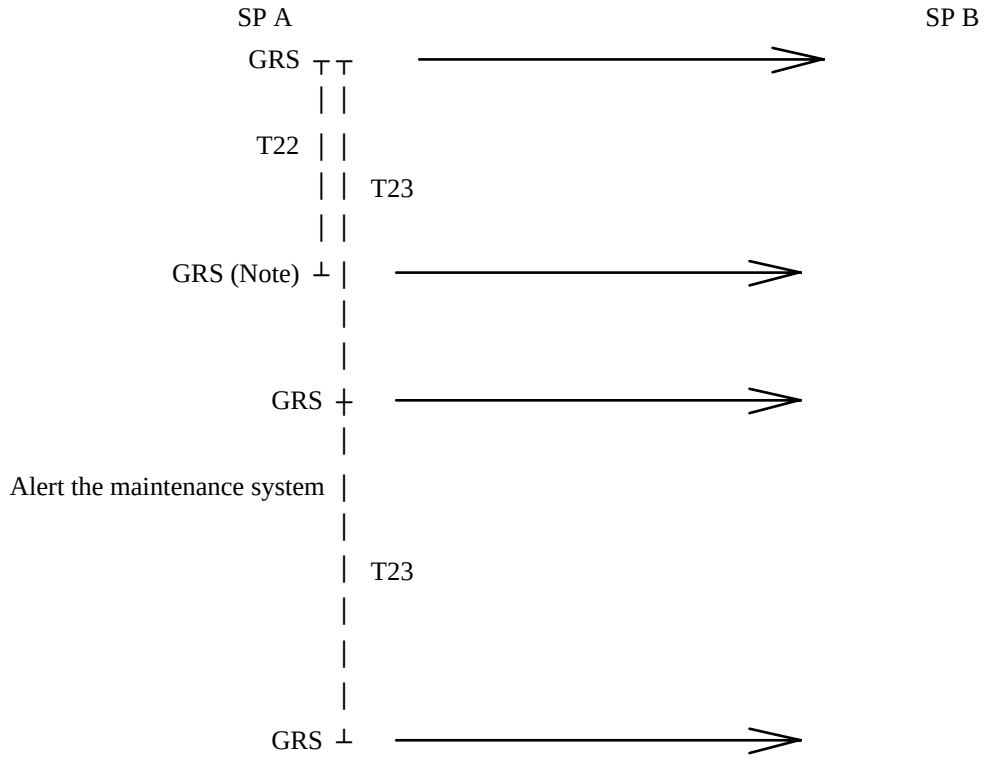


	TEST DESCRIPTION
1	Send circuit group blocking and unblocking messages from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS A CIRCUIT GROUP UNBLOCKING MESSAGE SENT AFTER T20 EXPIRED AFTER SENDING OF THE INITIAL CIRCUIT GROUP UNBLOCKING MESSAGE?...
3	CHECK B: WAS A CIRCUIT GROUP UNBLOCKING MESSAGE SENT AFTER T21 EXPIRED AFTER 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.

ISUP Basic Call Test Specification

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				
REFERENCES:	Q.767: D.2.10.3.2/Q.767		ISUP'92: 2.9.3.2/Q.764		
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'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

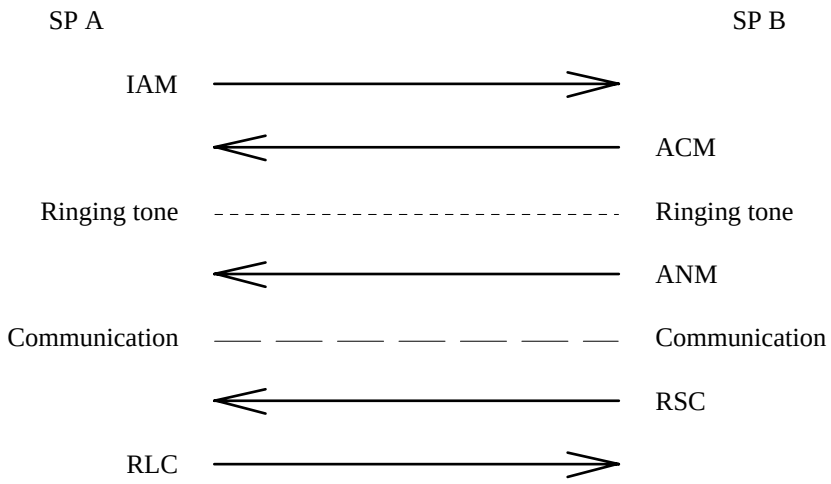


	TEST DESCRIPTION
1	Send a circuit group reset message from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS A CIRCUIT GROUP RESET MESSAGE SENT AFTER T22 EXPIRED AFTER SENDING OF THE INITIAL CIRCUIT GROUP RESET MESSAGE?...
3	CHECK B: WAS A CIRCUIT GROUP RESET MESSAGE SENT AFTER T23 EXPIRED AFTER SENDING 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.

ISUP Basic Call Test Specification

TEST NUMBER:	5.3.1				
TITLE:	Reset of circuits during a call				
SUBTITLE:	Of an outgoing circuit				
PURPOSE:	To verify that on receipt of a reset message the call is immediately released – outgoing call				
REFERENCES:	Q.767: D.2.10.3.1 a)/Q.767		ISUP'92: 2.9.3.1 a)/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

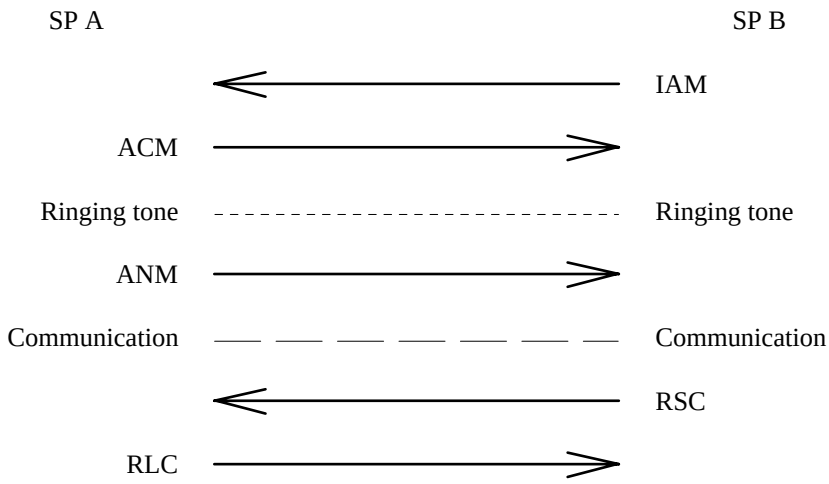


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	Arrange for SP B to send a reset-circuit message.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	5.3.2				
TITLE:	Reset of circuit during a call				
SUBTITLE:	Of an incoming circuit				
PURPOSE:	To verify that on receipt of a reset message, a call is immediately released – incoming call				
REFERENCES:	Q.767: D.2.10.3.1 a)/Q.767		ISUP'92: 2.9.3.1 a)/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

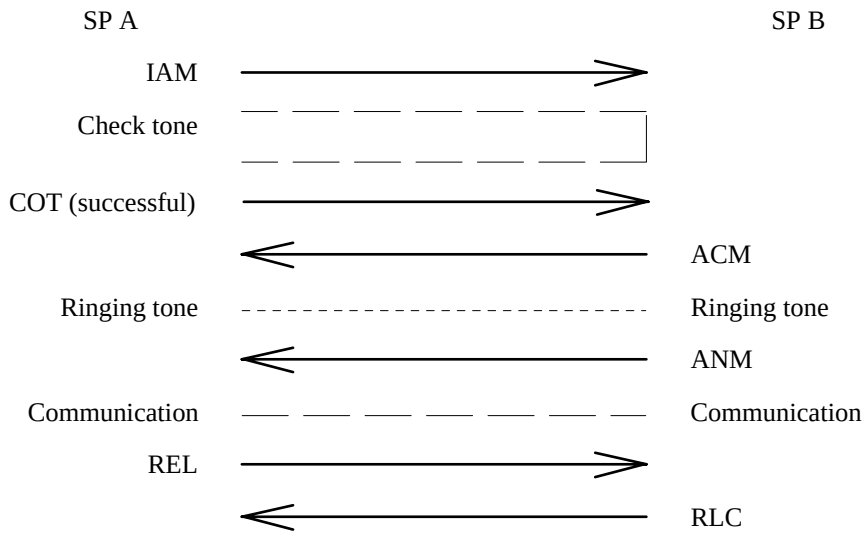


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	Arrange for SP B to send a reset-circuit message.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	6.1.1				
TITLE:	Continuity check call				
SUBTITLE:	Continuity check required				
PURPOSE:	To verify that a call can be set up on a circuit requiring a continuity check				
REFERENCES:	Q.767: D.2.1.8/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 circuit				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

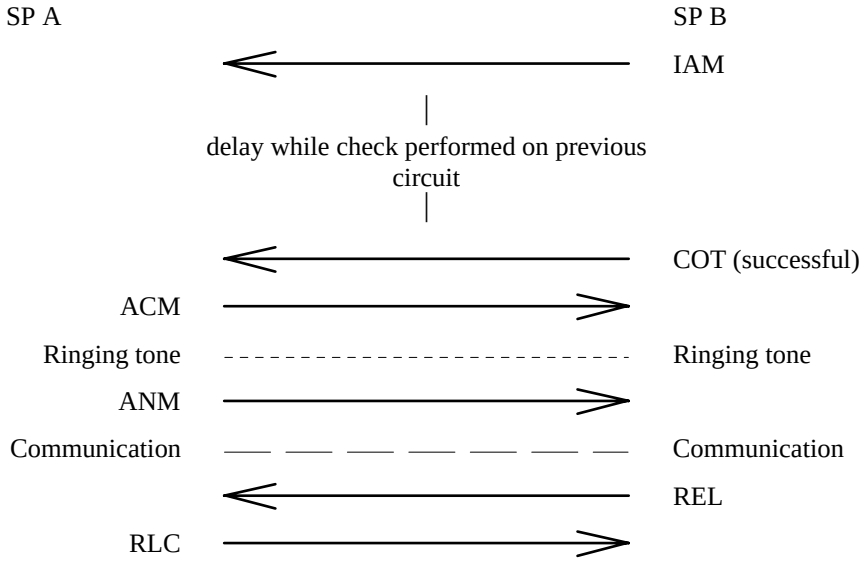


	TEST DESCRIPTION
1	Make a call from SP A to SP B with the continuity check indicator bits "DC" in the Nature of Connection indicators in the IAM set to "01". Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK 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	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.1.2				
TITLE:	Continuity check call				
SUBTITLE:	COT applied on a previous circuit				
PURPOSE:	To verify that if a continuity check is being performed on a previous circuit, a backward message is delayed until receipt of the COT message				
REFERENCES:	Q.767: D.2.1.8/Q.767		ISUP'92: 2.1.8/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that the signalling information in the IAM indicates that a continuity check has been performed on a previous circuit				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:



	TEST DESCRIPTION
1	Make a call from SP B to SP A with the continuity check indicator bits in the Nature of Connection indicators in the IAM set to "10". Record the message sequence using a signal monitor.
2	Arrange for signalling point B to send a COT message.
3	CHECK A: CAN RINGING TONE BE HEARD?...
4	The called party should answer the call.
5	CHECK B: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK C: IS THE CIRCUIT IDLE?...
8	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...

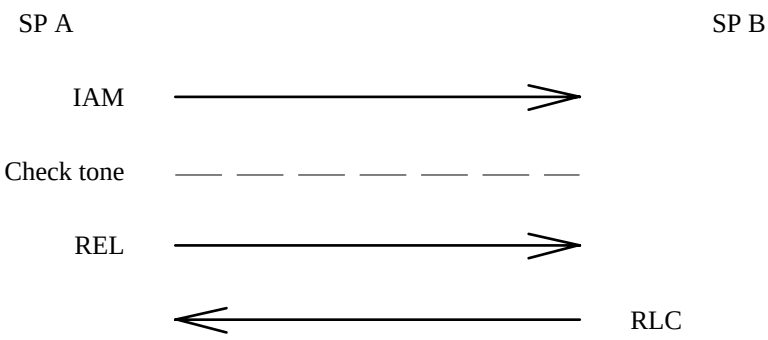
ISUP Basic Call Test Specification

TEST NUMBER:	6.1.3	
TITLE:	Continuity check call	
SUBTITLE:	Calling party clears during a COT	
PURPOSE:	To verify that the calling party can successfully clear the call during the continuity check phase	
REFERENCES:	Q.767: D.2.3/Q.767	ISUP'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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

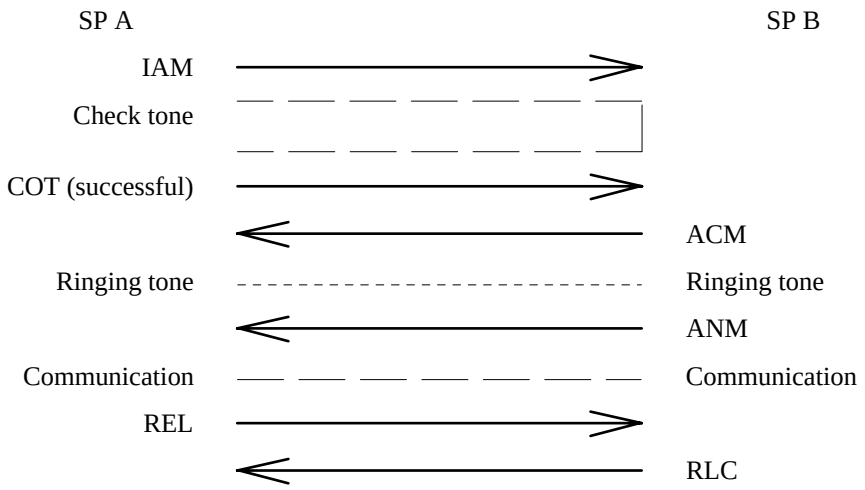


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	The calling party should clear the call during the continuity check phase.
3	CHECK A: IS THE CIRCUIT IDLE?...
4	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.1.4				
TITLE:	Continuity check call				
SUBTITLE:	Delay of through connect				
PURPOSE:	To verify that the switching through of the speech path is delayed until the residual check-tone has propagated through the return of the speech path				
REFERENCES:	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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

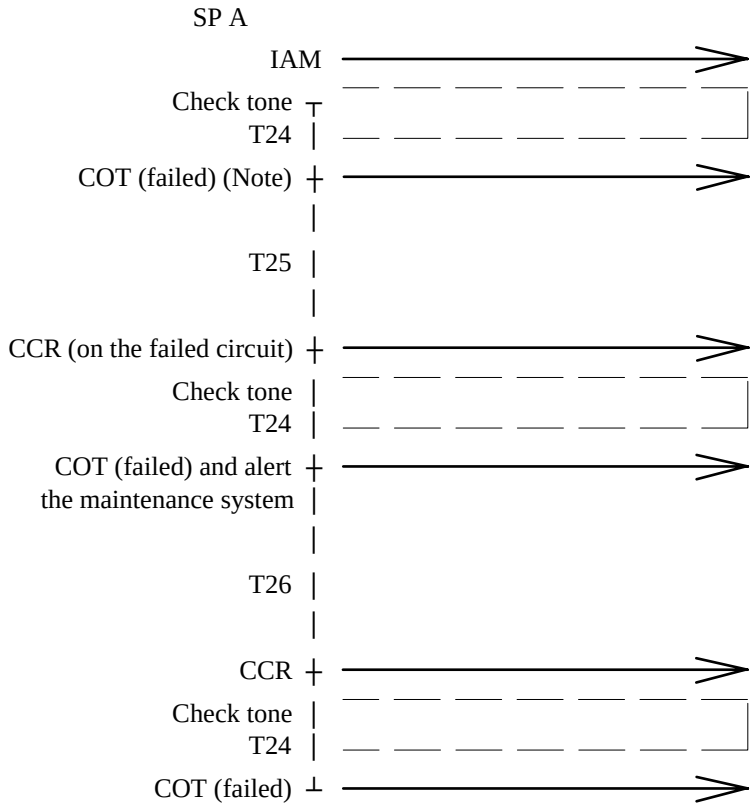


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE CONTINUITY CHECK TONE HEARD BY EITHER CALLED OR CALLING PARTY (IT SHOULD NOT BE HEARD)?...
3	CHECK B: CAN RINGING TONE BE HEARD?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
9	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.1.5				
TITLE:	Continuity check call				
SUBTITLE:	COT unsuccessful				
PURPOSE:	To verify that a repeat attempt of the continuity check is made on the failed circuit				
REFERENCES:	Q.767: D.2.1.8/Q.767		ISUP'92: 2.1.8/Q.764		
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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

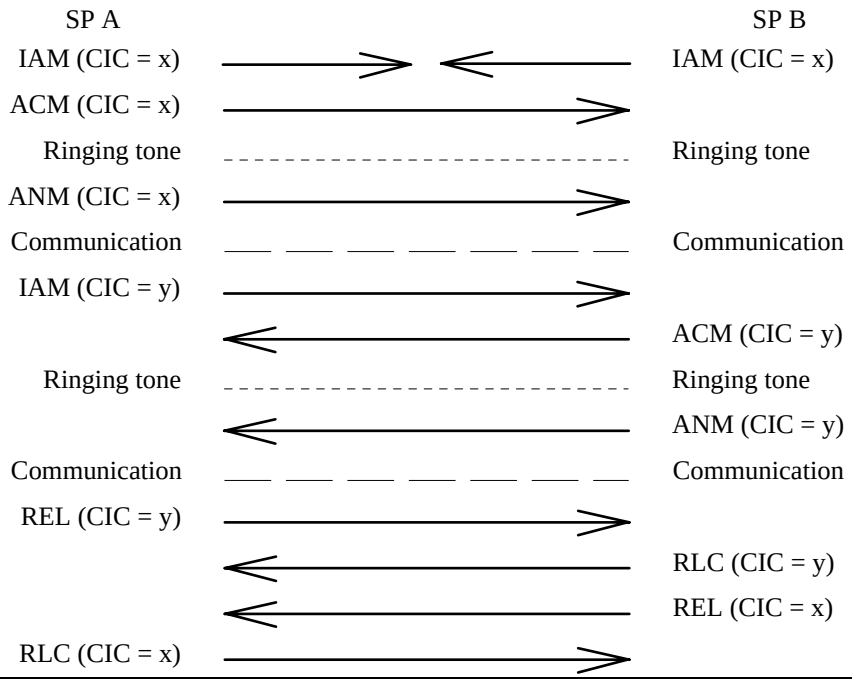


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE SECOND CONTINUITY CHECK INITIATED AFTER T25 EXPIRY?...
3	CHECK B: WAS THE MAINTENANCE SYSTEM ALERTED ON FAILURE OF THE SECOND CONTINUITY CHECK?...
4	CHECK C: WAS THE CHECK REPEATED AT INTERVALS OF T26?...
5	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The call should be reattempted.

ISUP Basic Call Test Specification

TEST NUMBER:	6.2.1				
TITLE:	Automatic repeat attempt				
SUBTITLE:	Dual seizure for non-controlling SP				
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. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

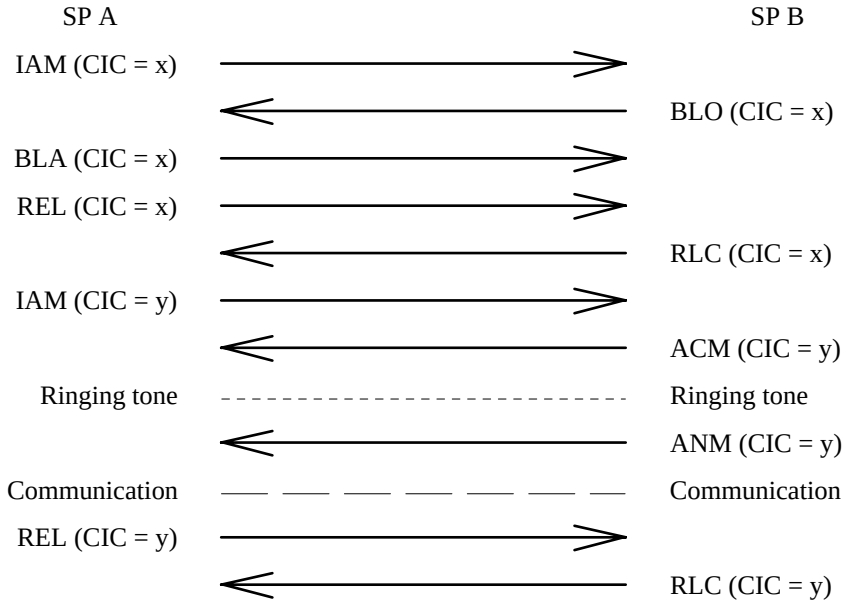


	TEST DESCRIPTION
1	Simultaneously transmit an IAM (containing the same value of CIC) from each end of the link for a both way circuit. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD ON THE CALL ORIGINATED FROM SP B?...
3	The called party at SP A should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: WAS A REPEAT ATTEMPT MADE BY SP A, WITH A DIFFERENT VALUE OF CIC IN THE IAM?...
6	CHECK D: CAN RINGING TONE BE HEARD ON THE CALL ORIGINATED FROM SP A?...
7	The called party at SP B should answer the call.
8	CHECK E: IS THE CONNECTION ESTABLISHED?...
9	Clear both calls down.
10	CHECK F: ARE THE CIRCUITS IDLE?...
11	CHECK G: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	6.2.2				
TITLE:	Automatic repeat attempt				
SUBTITLE:	Blocking of a circuit				
PURPOSE:	To verify that an automatic repeat attempt will be made on receipt of the blocking message after sending an initial address message and before any backward messages have been received				
REFERENCES:	Q.767: D.2.9.1 ii)/Q.767		ISUP'92: 2.8.1 ii)/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a blocking message is returned in response to the initial address message of the first call request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

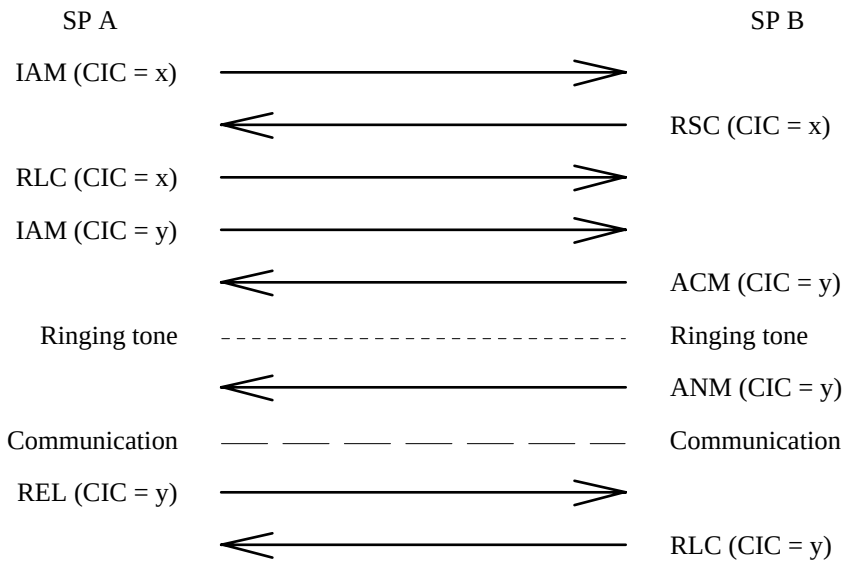


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The called party should clear the call.
6	CHECK C: IS THE CIRCUIT (CIC = Y) IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	6.2.3				
TITLE:	Automatic repeat attempt				
SUBTITLE:	Circuit reset				
PURPOSE:	To verify that an automatic repeat attempt will be made on receipt of circuit reset after sending of an initial address message and before a backward message has been received				
REFERENCES:	Q.767: D.2.9.1 iii)/Q.767		ISUP'92: 2.8.1 iii)/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that a circuit reset signal is sent in response to the initial address message of the first call request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

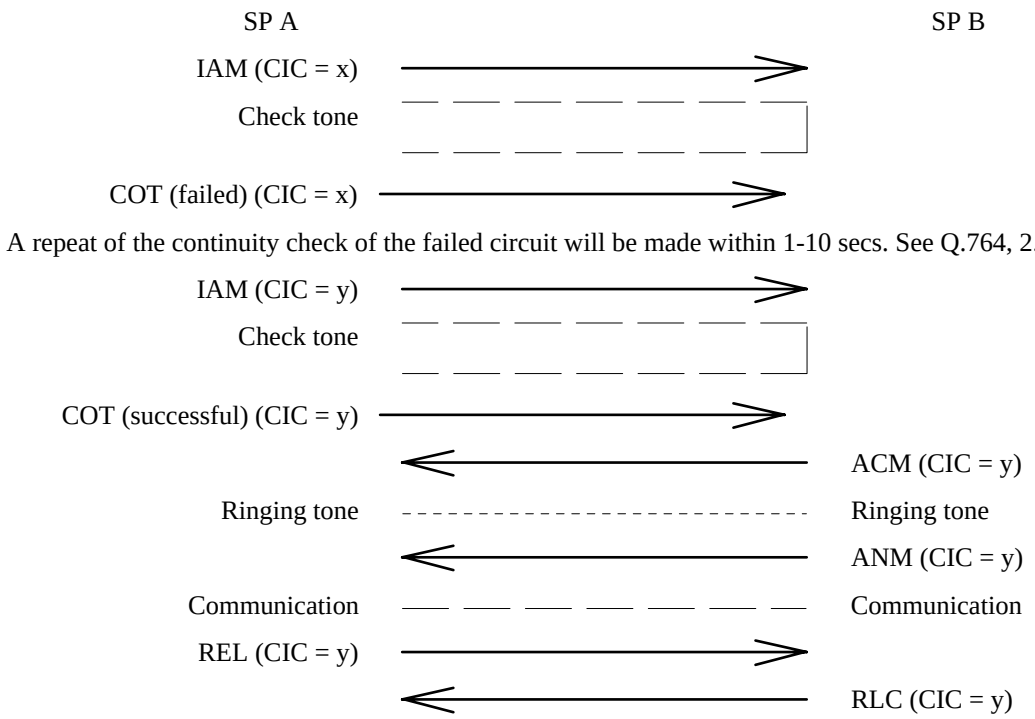


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: ARE THE CIRCUITS IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	6.2.4				
TITLE:	Automatic repeat attempt				
SUBTITLE:	Continuity check failure				
PURPOSE:	To verify that an automatic repeat attempt will be made on continuity check failure				
REFERENCES:	Q.767: D.2.9.1 iv)/Q.767		ISUP'92: 2.8.1 iv)/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that check tone is not returned within the specified limits to the first call request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

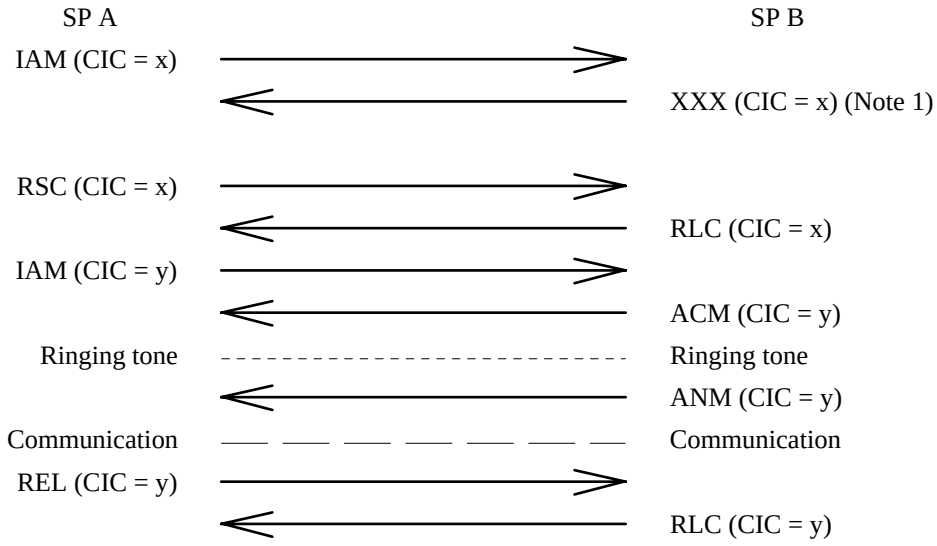


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	6.2.5				
TITLE:	Automatic repeat attempt				
SUBTITLE:	Receipt of unreasonable signalling information				
PURPOSE:	To verify that an automatic repeat attempt will be made on receipt of unreasonable signalling information after sending the initial address message and before one of the backward signals has been received				
REFERENCES:	Q.767: D.2.9.1 v), 2.10.5.1 d)/Q.767		ISUP'92: 2.8.1 v), 2.9.5.1 d)/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP B such that unreasonable signalling information (see Note below) is returned in response to the initial address message of the first call request				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

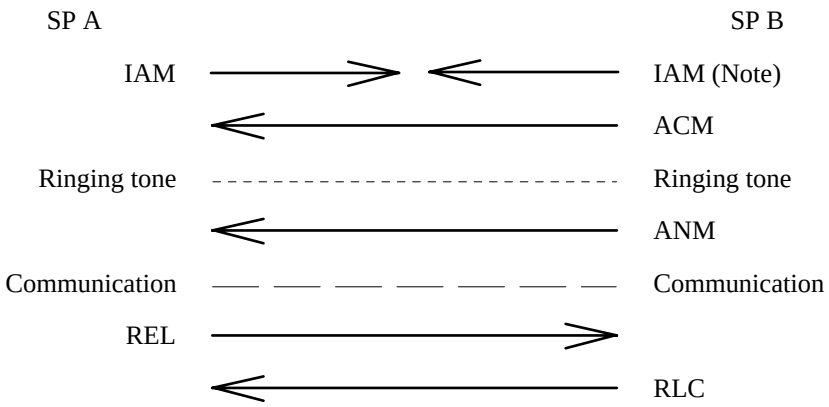


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: ARE THE CIRCUITS IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – This may be any message that, if received at this point, would be either ambiguous or inappropriate. For example, SUS or RES message.
	NOTE 2 – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	6.3.1				
TITLE:	Dual seizure				
SUBTITLE:	Dual seizure for controlling SP				
PURPOSE:	To verify that on detection of dual seizure, the call initiated by the controlling signalling point is completed and the non-controlling signalling point is backed off				
REFERENCES:	Q.767: D.2.10.1.4/Q.767		ISUP'92: 2.9.1.4/Q.764		
PRE-TEST CONDITIONS:	Arrange the SP data such that SP A is the controlling signalling point				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

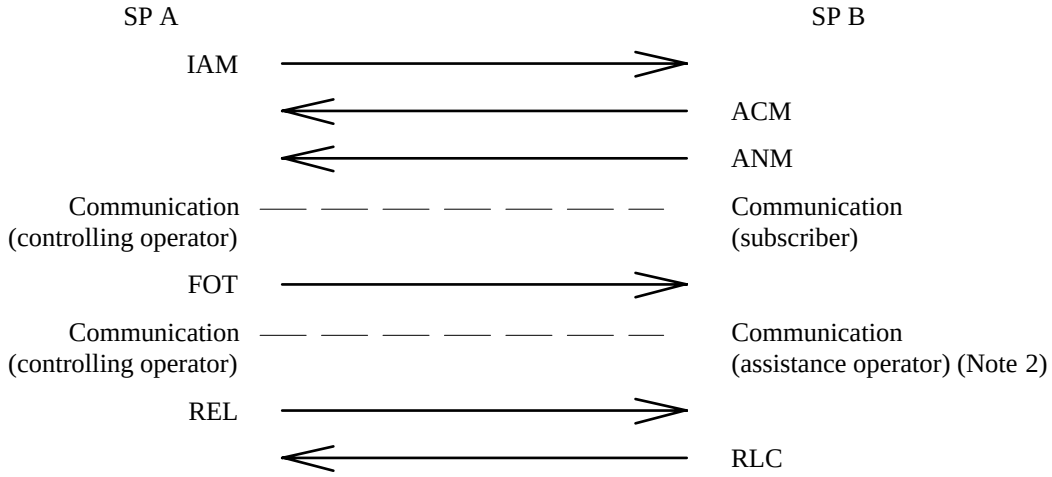


	TEST DESCRIPTION
1	Simultaneously transmit an IAM (containing the same value of CIC) from each end of the link for a both way circuit. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD ON THE CALL ORIGINATED FROM SP A?...
3	The called party at SP B should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party at SP A should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.
	NOTE – The call initiated by SP B should be re-attempted, see test number 6.2.1.

ISUP Basic Call Test Specification

TEST NUMBER:	6.4.1				
TITLE:	Semi-automatic operation				
SUBTITLE:	FOT sent following a call to a subscriber				
PURPOSE:	To verify that the FOT is correctly sent				
REFERENCES:	Q.767: D.2.1.12/Q.767		ISUP'92: 2.1.10/Q.764		
PRE-TEST CONDITIONS:	a) FOT message is generated at SP A. b) A controlling operator is at SP A. c) Arrange the data so that an assistance operator is at SP B.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

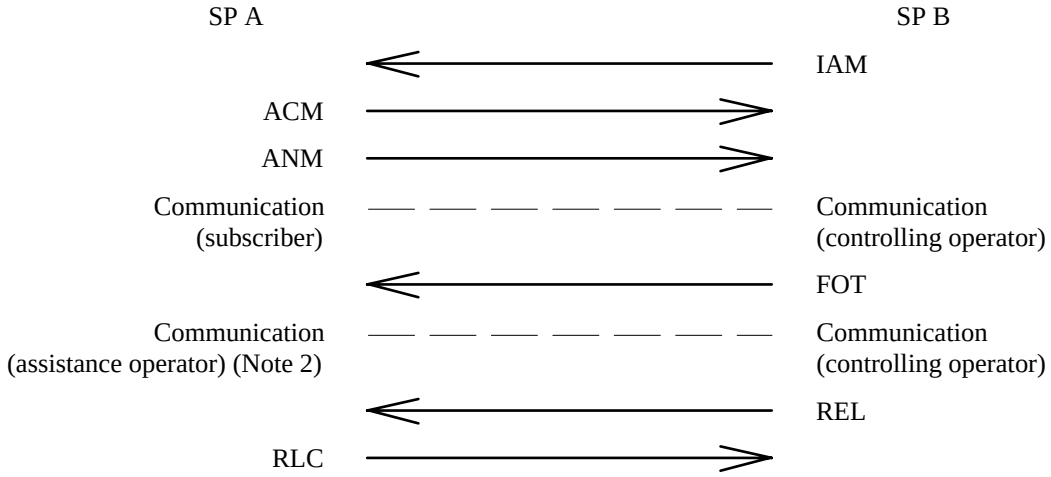


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	The called party should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED BETWEEN A CONTROLLING OPERATOR AND A SUBSCRIBER?...
4	CHECK B: IS FOT MESSAGE SENT BY SP A?...
5	CHECK C: IS THE CONNECTION ESTABLISHED BETWEEN CONTROLLING AND ASSISTANCE OPERATORS?... (Note 2)
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – FOT may be sent between ACM and REL.
	NOTE 2 – The support of the FOT message in the international interface does not impose that the related functions are implemented in each gateway (e. g. language assistance).

ISUP Basic Call Test Specification

TEST NUMBER:	6.4.2				
TITLE:	Semi-automatic operation				
SUBTITLE:	FOT received following a call to a subscriber				
PURPOSE:	To verify that the FOT is correctly received				
REFERENCES:	Q.767: D.2.1.12/Q.767		ISUP'92: 2.1.10/Q.764		
PRE-TEST CONDITIONS:	a) FOT message is generated at SP B. b) Arrange the data so that a controlling operator is at SP B. c) An assistance operator is at SP A.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

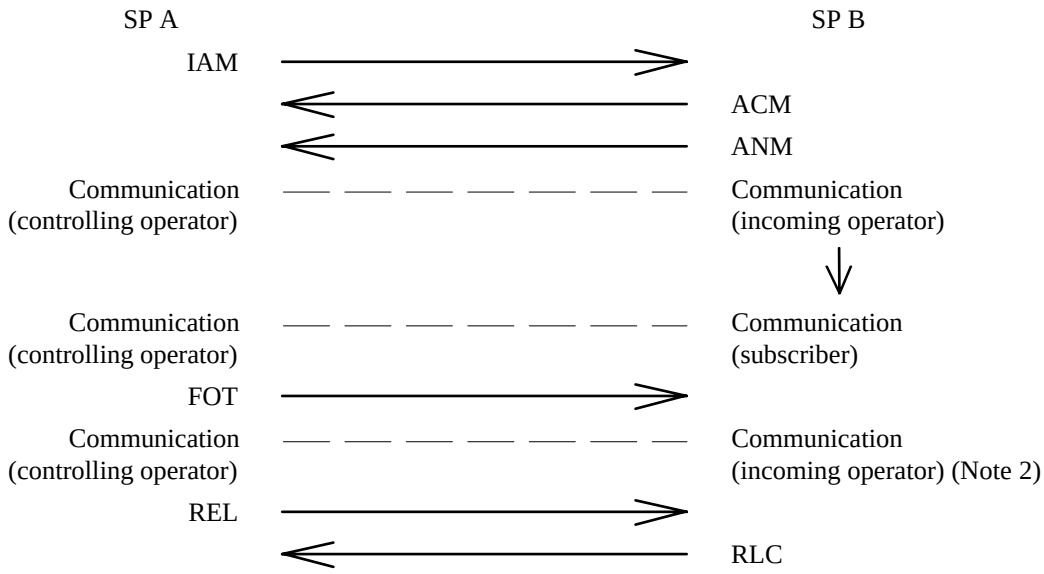


	TEST DESCRIPTION
1	Make a call from controlling operator at SP B to SP A. Record the message sequence using a signal monitor.
2	The called party should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED BETWEEN A CONTROLLING OPERATOR AND A SUBSCRIBER?...
4	CHECK B: IS THE FOT MESSAGE RECEIVED CORRECTLY BY SP A?...
5	CHECK C: IS THE CONNECTION ESTABLISHED BETWEEN CONTROLLING AND ASSISTANCE OPERATOR?... (Note 2)
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – FOT may be received between ACM and REL.
	NOTE 2 – The support of the FOT message in the international interface does not impose that the related functions are implemented in each gateway (e. g. language assistance).

ISUP Basic Call Test Specification

TEST NUMBER:	6.4.3				
TITLE:	Semi-automatic operation				
SUBTITLE:	FOT sent following a call via codes 11 and 12				
PURPOSE:	To verify that a FOT is correctly sent				
REFERENCES:	Q.767: D.2.1.12/Q.767		ISUP'92: 2.1.10/Q.764		
PRE-TEST CONDITIONS:	a) FOT message is generated at SP A. b) A controlling operator is at SP A. c) Arrange the data so that an incoming operator is at SP B.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

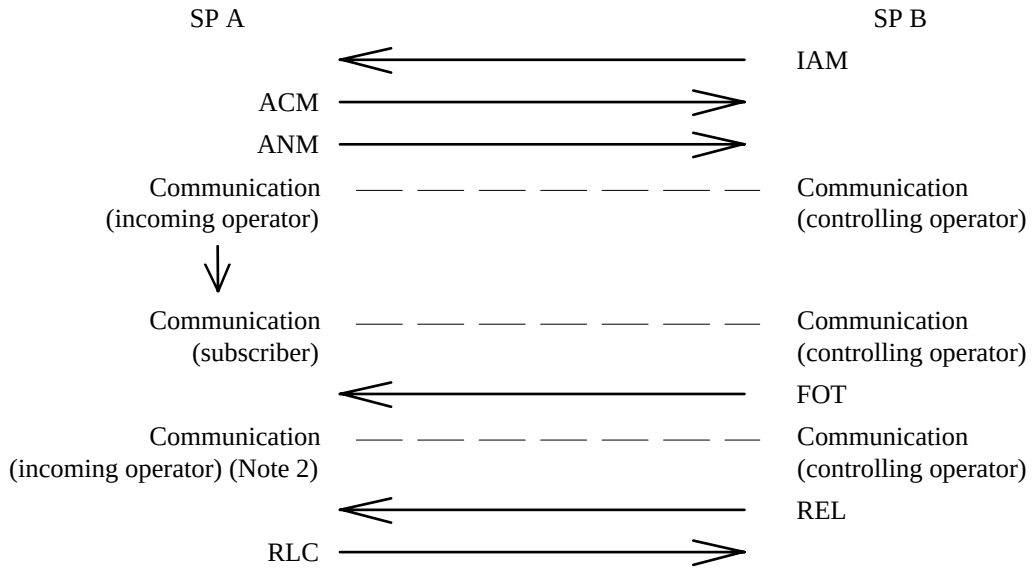


	TEST DESCRIPTION
1	Make a call from controlling operator at SP A to an incoming operator at SP B via codes 11 and 12. Record the message sequence and parameters using a signal monitor.
2	The incoming operator should answer the call and make a call to a called user. The called user should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED BETWEEN A CONTROLLING OPERATOR AND A SUBSCRIBER?...
4	CHECK B: IS FOT MESSAGE SENT BY A SP A?...
5	CHECK C: IS THE CONNECTION RE-ESTABLISHED BETWEEN CONTROLLING AND INCOMING OPERATORS?... (Note 2)
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – FOT may be sent between ACM and REL.
	NOTE 2 – The support of the FOT message in the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).

ISUP Basic Call Test Specification

TEST NUMBER:	6.4.4				
TITLE:	Semi-automatic operation				
SUBTITLE:	FOT received following a call via codes 11 and 12				
PURPOSE:	To verify that a FOT is correctly received				
REFERENCES:	Q.767: D.2.1.12/Q.767		ISUP'92: 2.1.10/Q.764		
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 OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

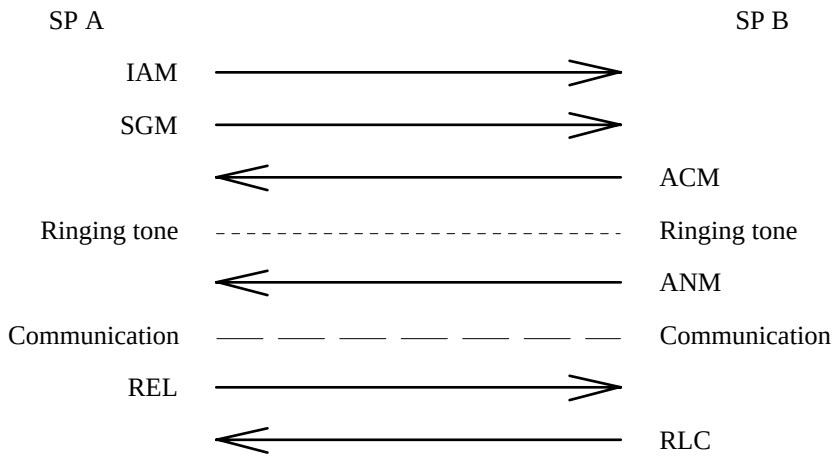


	TEST DESCRIPTION
1	Make a call from controlling operator at SP B to an incoming operator at SP A via codes 11 and 12. Record the message sequence using a signal monitor.
2	The incoming operator should answer the call and make a call to a called user. The called user should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED BETWEEN A CONTROLLING OPERATOR AND A SUBSCRIBER?...
4	CHECK B: IS THE FOT MESSAGE RECEIVED CORRECTLY BY SP A?...
5	CHECK C: IS THE CONNECTION RE-ESTABLISHED BETWEEN CONTROLLING AND INCOMING OPERATORS?... (Note 2)
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – FOT may be received between ACM and REL.
	NOTE 2 – The support of the FOT message in the international interface does not impose that the related functions are implemented in each gateway (e.g. language assistance).

ISUP Basic Call Test Specification

TEST NUMBER:	6.5.1				
TITLE:	Simple segmentation				
SUBTITLE:	Sending of SGM				
PURPOSE:	To verify that a call can be successfully completed if segmentation is applied				
REFERENCES:	Q.767:		ISUP'92: 2.1.12/Q.764		
PRE-TEST CONDITIONS:	a) Arrange that the OFCI in the IAM is set to "additional information will be sent". b) The SGM may include UUI, GenNb, GenNot and ATP.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

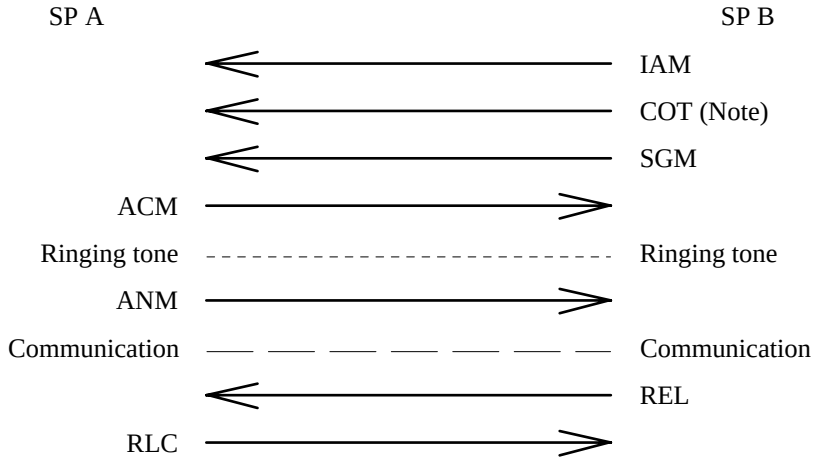


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	CHECK B: IS THE SGM MESSAGE SENT?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	6.5.2				
TITLE:	Simple segmentation				
SUBTITLE:	Receipt of SGM				
PURPOSE:	To verify that a call can be successfully completed if segmentation is applied				
REFERENCES:	Q.767:		ISUP'92: 2.1.12/Q.764		
PRE-TEST CONDITIONS:	a) Arrange that the OFCI in the IAM is set to "additional information will be sent". b) The SGM may include UUI, GenNb, GenNot and ATP.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

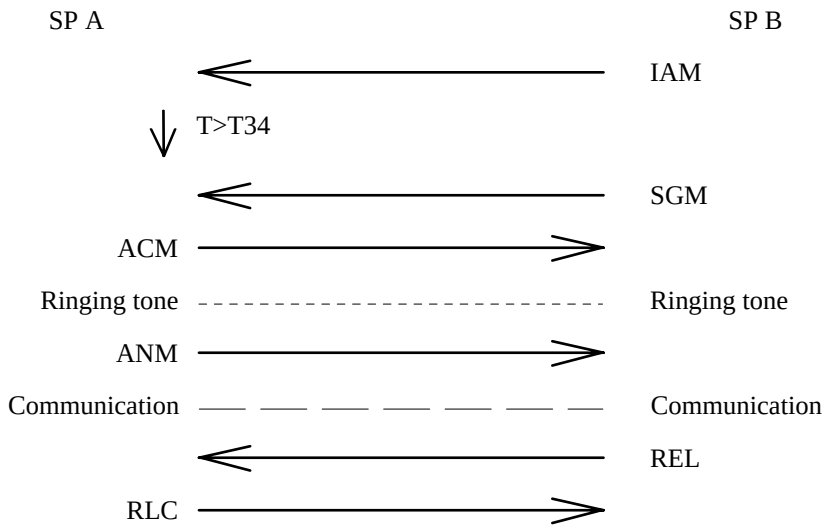


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	CHECK B: IS THE SGM MESSAGE PASSED ON?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
9	If the policing of information is included in the ISC :
10	CHECK F: IS THE CALL CONTINUED AFTER RECEIVING THE SGM?...
11	CHECK G: IS THE RESEGMENTATION PERFORMED?...
	NOTE – The COT message is an optional message.

ISUP Basic Call Test Specification

TEST NUMBER:	6.5.3				
TITLE:	Simple segmentation				
SUBTITLE:	Receipt of a SGM after timer T34 expired				
PURPOSE:	To verify that a call can be successfully completed and the SGM will be discarded				
REFERENCES:	Q.767:		ISUP'92: 2.1.12/Q.764		
PRE-TEST CONDITIONS:	a) Arrange that the OFCI in the IAM is set to "additional information will be sent". b) The SGM should include UUI.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

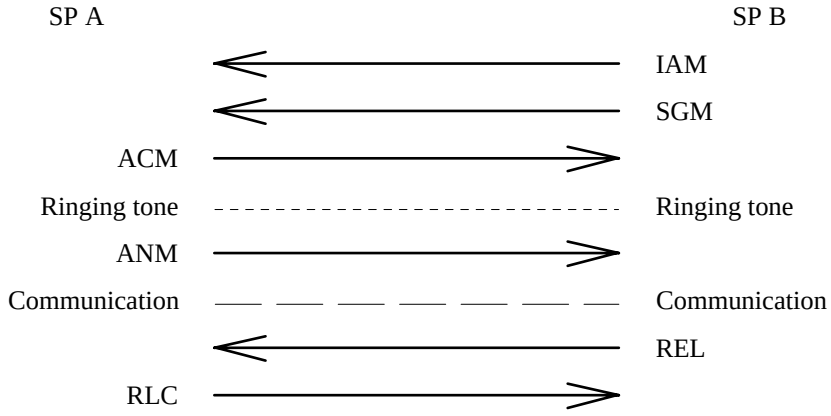


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	CHECK E: IS THE CALL CONTINUED AFTER TIMER EXPIRY?...
9	CHECK F: IS IAM WITHHELD AND THE SGM MESSAGE DISCARDED?...

ISUP Basic Call Test Specification

TEST NUMBER:	6.5.4				
TITLE:	Simple segmentation				
SUBTITLE:	Receipt of a SGM in forward direction				
PURPOSE:	To verify that SP A is able to discard a SGM message without disrupting normal call handling				
REFERENCES:	Q.767: 4.1.1.2/Q.767		ISUP'92: 2.1.12/Q.764		
PRE-TEST CONDITIONS:	SP A: Q.767 SP B: ISUP'92 supporting the SGM procedure.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	(Note 1)		(Note 2)		X

EXPECTED MESSAGE SEQUENCE:

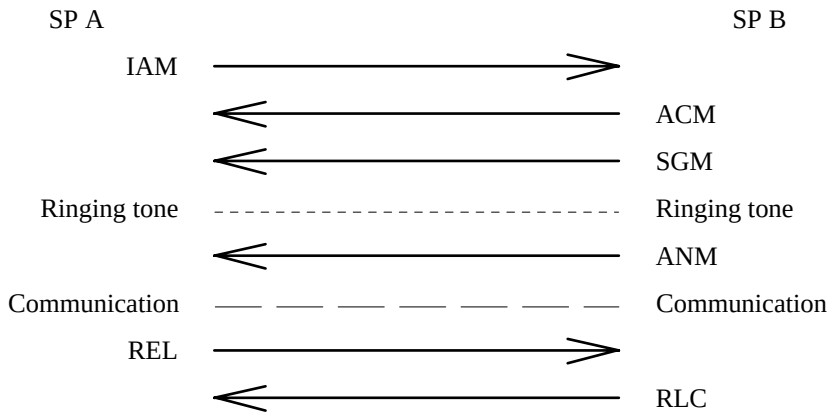


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE BIT C IN THE IAM IN THE OFCI IGNORED?...
6	CHECK D: IS THE SGM DISCARDED BY SP A?...
7	The calling party should clear the call.
8	CHECK E: IS THE CIRCUIT IDLE?...
9	CHECK F: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The tests 1.6.1.1 and 1.6.3.1 have to be performed with the appropriate parameter.
	NOTE 2 – The test 6.5.1 has to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	6.5.5				
TITLE:	Simple segmentation				
SUBTITLE:	Receipt of a SGM in backward direction				
PURPOSE:	To verify that SP A is able to discard a SGM without disrupting normal call handling				
REFERENCES:	Q.767: 4.1.1.2/Q.767		ISUP'92: 2.1.12/Q.764		
PRE-TEST CONDITIONS:	SP A: Q.767 SP B: ISUP'92 supporting the SGM procedure.				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	(Note 1)		(Note 2)		X

EXPECTED MESSAGE SEQUENCE:

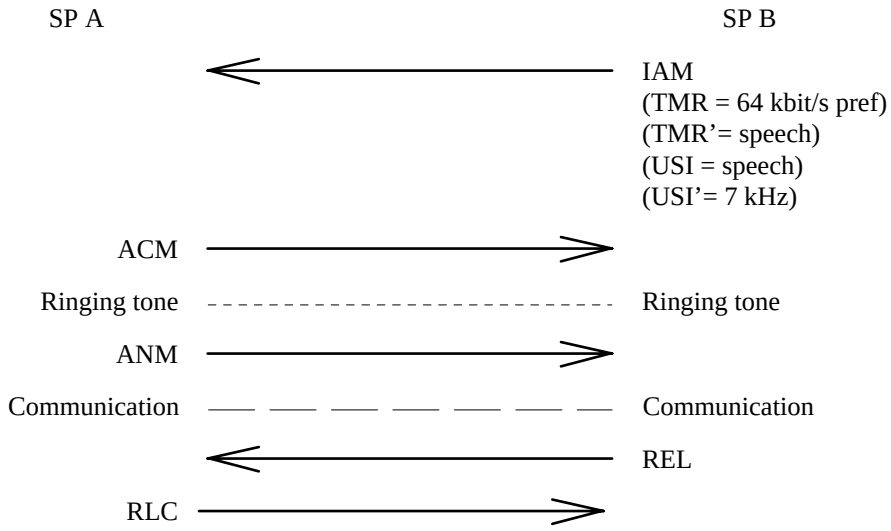


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	CHECK C: IS THE BIT C IN THE ACM IN THE OBCI IGNORED?...
6	CHECK D: IS THE SGM DISCARDED BY SP A?...
7	The calling party should clear the call.
8	CHECK E: IS THE CIRCUIT IDLE?...
9	CHECK F: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The tests 1.6.1.2 and 1.6.3.2 have to be performed with the appropriate parameter.
	NOTE 2 – The test 6.5.1 has to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	6.6.1				
TITLE:	Fallback				
SUBTITLE:	Fallback does not occur				
PURPOSE:	To verify that a call can be successfully completed				
REFERENCES:	Q.767:		ISUP'92: 2.5.4/Q.764		
PRE-TEST CONDITIONS:	Arrange data such that Fallback does not occur behind SP A				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

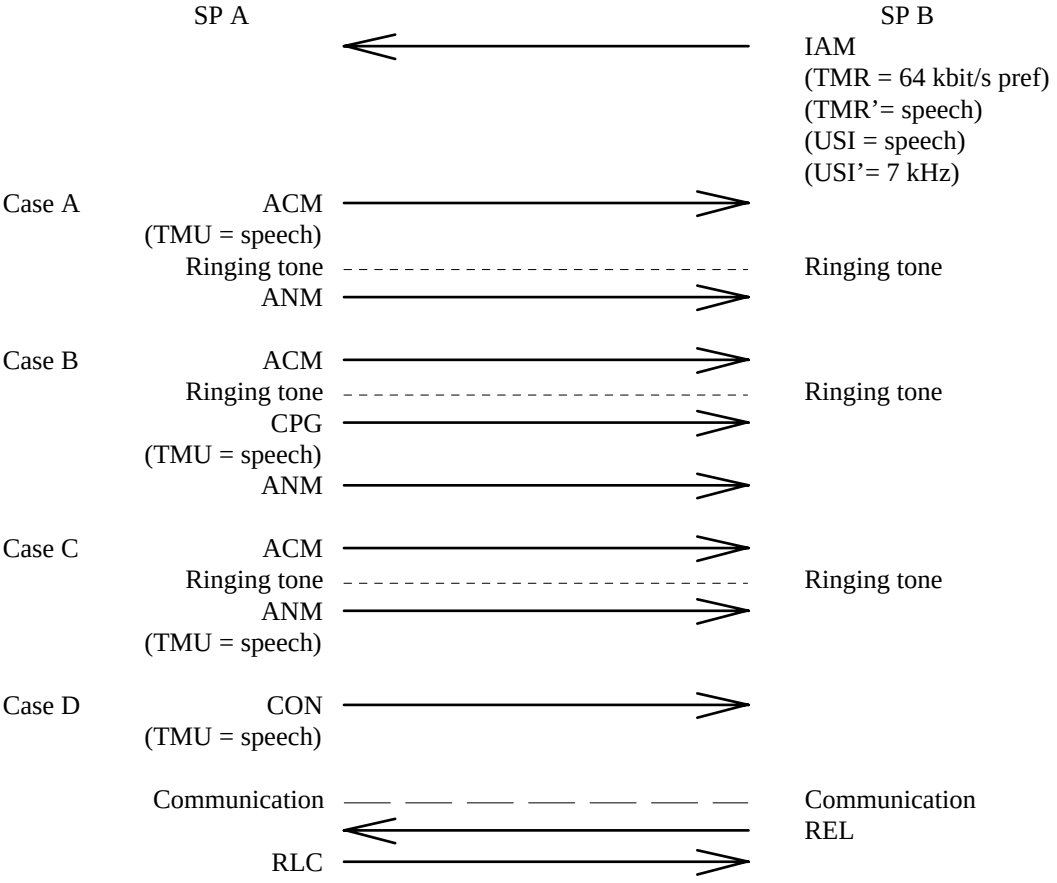


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.6.2				
TITLE:	Fallback				
SUBTITLE:	Fallback occurs behind SP A				
PURPOSE:	To verify that a call can be successfully completed using Fallback that was indicated behind SP A				
REFERENCES:	Q.767:		ISUP'92: 2.5/Q.764		
PRE-TEST CONDITIONS:	Arrange data such that Fallback occurs behind SP A				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

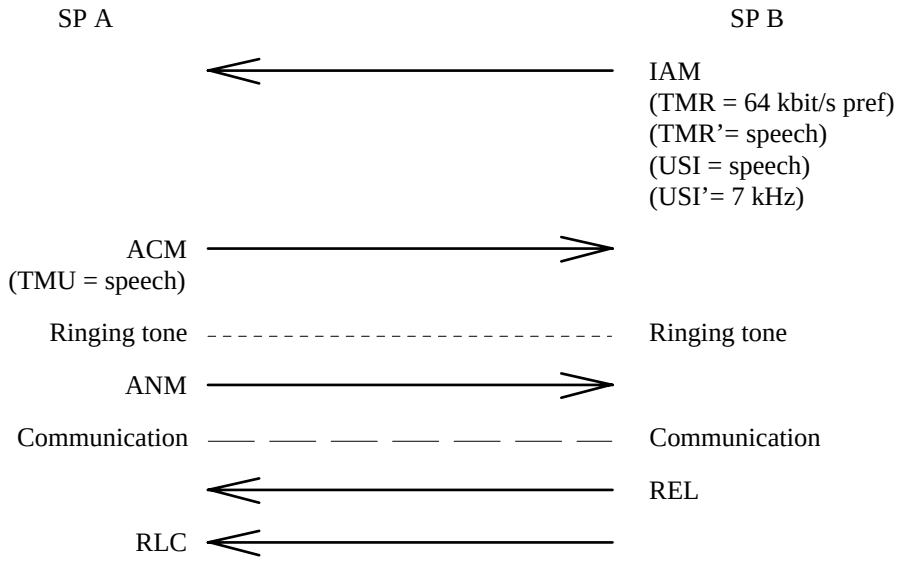


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED WITH FALLBACK CONNECTION TYPE?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.6.3				
TITLE:	Fallback				
SUBTITLE:	Fallback occurs in SP A				
PURPOSE:	To verify that SP A is able to perform Fallback				
REFERENCES:	Q.767:		ISUP'92: 2.5/Q.764		
PRE-TEST CONDITIONS:	Arrange the data in SP A such that Fallback occurs				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

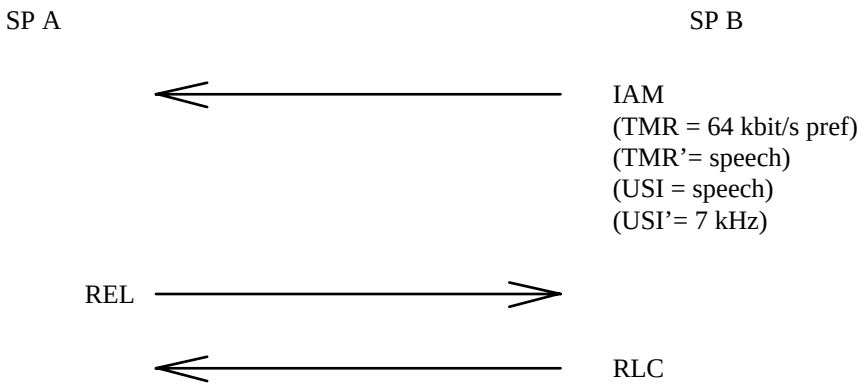


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: CAN RINGING TONE BE HEARD?...
3	The called party should answer the call.
4	CHECK B: IS THE CONNECTION ESTABLISHED WITH THE FALLBACK CONNECTION TYPE?...
5	The calling party should clear the call.
6	CHECK C: IS THE CIRCUIT IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
8	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	6.6.4				
TITLE:	Fallback				
SUBTITLE:	Abnormal procedure, Fallback connection types sent to an exchange not supporting the fallback procedure				
PURPOSE:	To verify that SPA is able to release the call				
REFERENCES:	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 VAT	ISUP'92 CPT	Comb. CPT
	(Note 1)		(Note 2)		X

EXPECTED MESSAGE SEQUENCE:

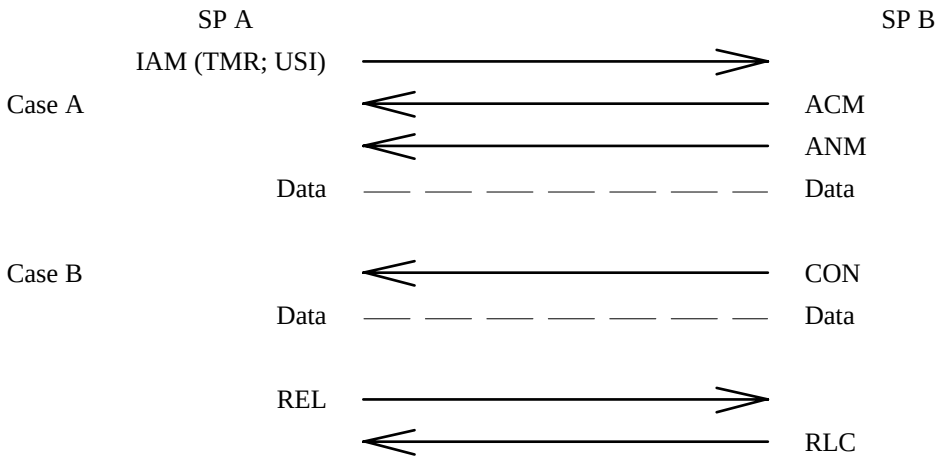


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The test 1.6.3.1 (case B) has to be performed with the appropriate parameter.
	NOTE 2 – The test 6.6.1 has to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	7.1.1				
TITLE:	64 kbit/s unrestricted				
SUBTITLE:	Successful call setup				
PURPOSE:	To verify that a 64 kbit/s call can be successfully completed using appropriate transmission medium requirement and user service information parameters				
REFERENCES:	Q.767: D.2.1/Q.767		ISUP'92: 2.1/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

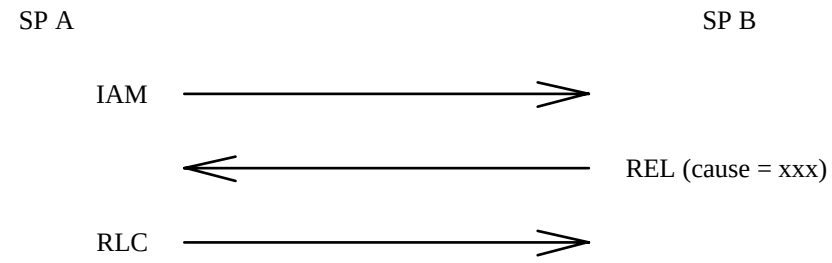


	TEST DESCRIPTION
1	Make a 64 kbit/s call from SP A to SP B.
2	CHECK A: IS THE TMR SET TO "64 kbit/s UNRESTRICTED"?...
3	CHECK B: DOES THE USI (IF INCLUDED) HAVE APPROPRIATE INFORMATION?... FOR EXAMPLE, USI HAS TWO OCTETS FOR 64 kbit/s AND AT LEAST FOUR OCTETS FOR ANY SUBRATE.
4	CHECK C: IS THE "ECHO CONTROL DEVICE INDICATOR" IN NATURE OF CONNECTION INDICATORS PARAMETER SET TO "NOT INCLUDED"?...
5	CHECK D: IS THE ECHO CONTROL DEVICE DISABLED OR IS A NON-ECHO CONTROLLED CIRCUIT SELECTED?...
6	The called party should answer the call.
7	CHECK E: IS IT POSSIBLE TO PASS DATA BETWEEN SP A AND SP B?...
8	The calling party should clear the call.
9	CHECK F: IS THE CIRCUIT IDLE?... FOR CIRCUITS EQUIPPED WITH ECHO CONTROL, IS THE ECHO CONTROL DEVICE RE-ENABLED?...
10	CHECK G: WAS THE MESSAGE SEQUENCE AS ABOVE?...
11	Repeat this test for any subrate calls.
12	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	7.1.2				
TITLE:	64 kbit/s unrestricted				
SUBTITLE:	Unsuccessful call setup				
PURPOSE:	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				
REFERENCES:	Q.767: D.2.2/Q.767		ISUP'92: 2.2/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

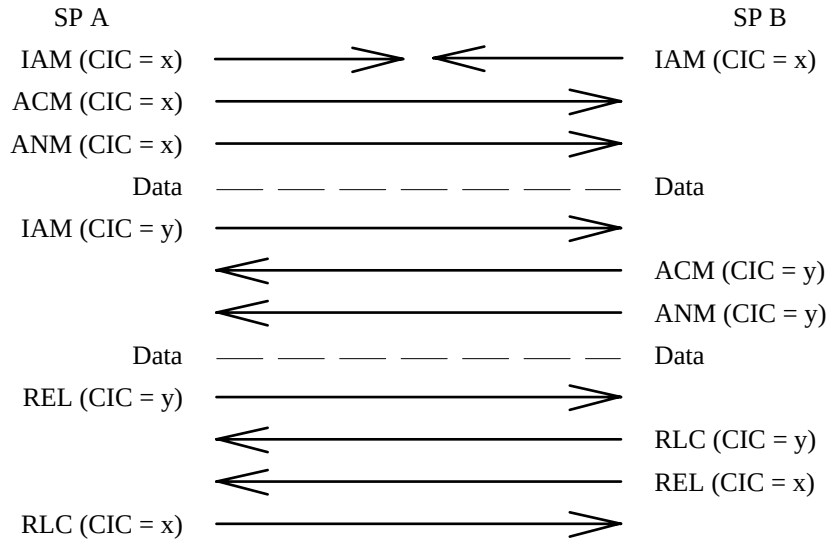


	TEST DESCRIPTION
1	Attempt to make a 64 kbit/s call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE APPROPRIATE CAUSE RETURNED TO THE CALLING PARTY?...
3	CHECK B: IS THE CIRCUIT IDLE?... FOR CIRCUITS EQUIPPED WITH ECHO CONTROL, IS THE ECHO CONTROL DEVICE RE-ENABLED?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
5	Repeat steps 1 to 4 with "xxx" set to various causes which are based on bilateral agreements. The suggested causes are: unallocated number, no circuit available, bearer capability not authorized, bearer capability not presently available, and bearer capability not implemented.

ISUP Basic Call Test Specification

TEST NUMBER:	7.1.3				
TITLE:	64 kbit/s unrestricted				
SUBTITLE:	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. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

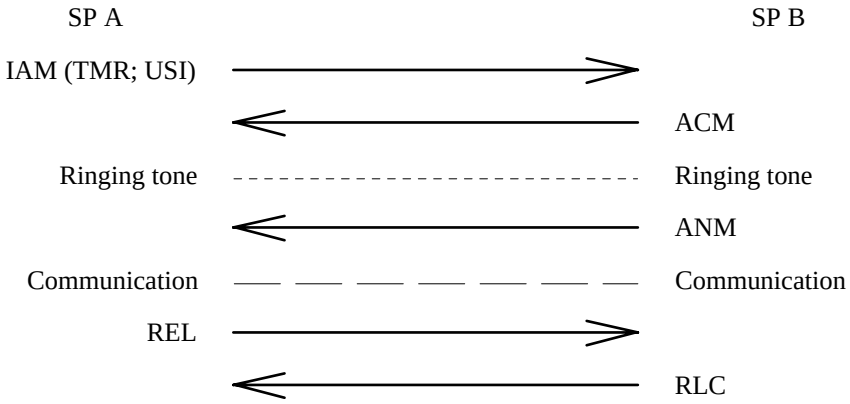


	TEST DESCRIPTION
1	Simultaneously transmit an IAM (containing the same value of CIC) from each end of the link for a both way circuit. Both IAMs have appropriate indicators set for TMR and USI. Record the message sequence using a signal monitor.
2	CHECK A: IS THE ECHO CONTROL DEVICE DISABLED FOR CIC = 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 F: ARE THE CIRCUITS IDLE?...
11	CHECK G: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – The message sequence may not be as shown above.

ISUP Basic Call Test Specification

TEST NUMBER:	7.2.1				
TITLE:	3.1 kHz audio				
SUBTITLE:	Successful call setup				
PURPOSE:	To verify that a 3.1 kHz audio call can be successfully completed using appropriate transmission medium requirement and user service information parameters				
REFERENCES:	Q.767: D.2.1/Q.767	ISUP'92: 2.1/Q.764			
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

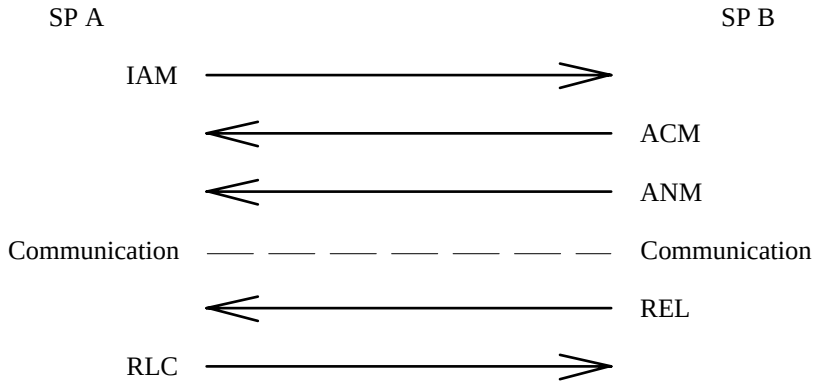


	TEST DESCRIPTION
1	Make a 3.1 kHz audio call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE TMR SET TO "3.1 KHZ AUDIO"?...
3	CHECK B: DOES THE USI IF INCLUDED HAVE APPROPRIATE INFORMATION?... FOR EXAMPLE; USI HAS TWO OR THREE OCTETS FOR 3.1 KHZ AUDIO.
4	The called party should answer the call.
5	CHECK C: IS DATA/SPEECH POSSIBLE?...
6	The calling party should clear the call.
7	CHECK D: IS THE CIRCUIT IDLE?...
8	CHECK E: WAS THE MESSAGE AS ABOVE?...
9	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.1				
TITLE:	Multirate connection types				
SUBTITLE:	Successful multirate outgoing call setup				
PURPOSE:	To verify that SP A is able to set up an outgoing call with a multirate bearer service				
REFERENCES:	Q.767:		ISUP'92: 1.2/Q.763; 2.1/Q.764		
PRE-TEST CONDITIONS:	Assure that there are enough circuits available for the call				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

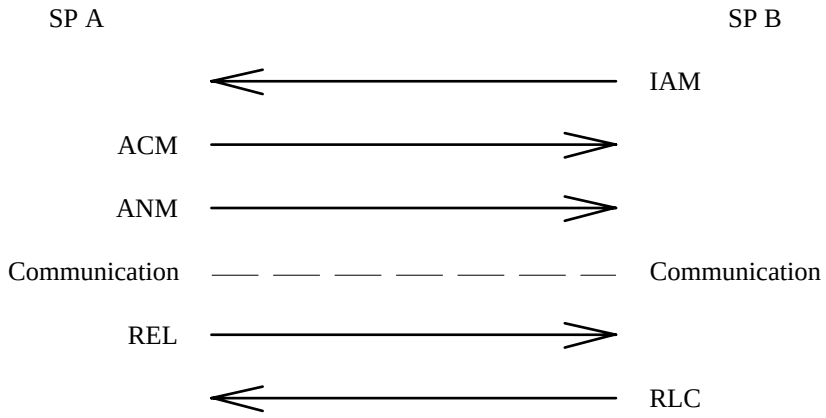


	TEST DESCRIPTION
1	Make a 2 × 64 kbit/s multirate call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE TMR SET TO "2 × 64 kbit/s unrestricted"?...
3	CHECK B: DOES THE USI (IF INCLUDED) CONTAIN THE APPROPRIATE INFORMATION?...
4	The called party should answer the call.
5	CHECK C: IS THE CONNECTION ESTABLISHED?...
6	The called party should clear the call.
7	CHECK D: ARE THE CIRCUITS IDLE?...
8	CHECK E: WAS THE MESSAGE SEQUENCE AS ABOVE?...
9	Repeat the test for the following multirate connection types: 384 kbit/s, 1536 kbit/s and 1920 kbit/s.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.2				
TITLE:	Multirate connection types				
SUBTITLE:	Successful multirate incoming call setup				
PURPOSE:	To verify that SP A is able to handle an incoming call with a multirate bearer service				
REFERENCES:	Q.767:		ISUP'92: 1.2/Q.763; 2.1/Q.764		
PRE-TEST CONDITIONS:	Assure that there are enough circuits available for the call				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

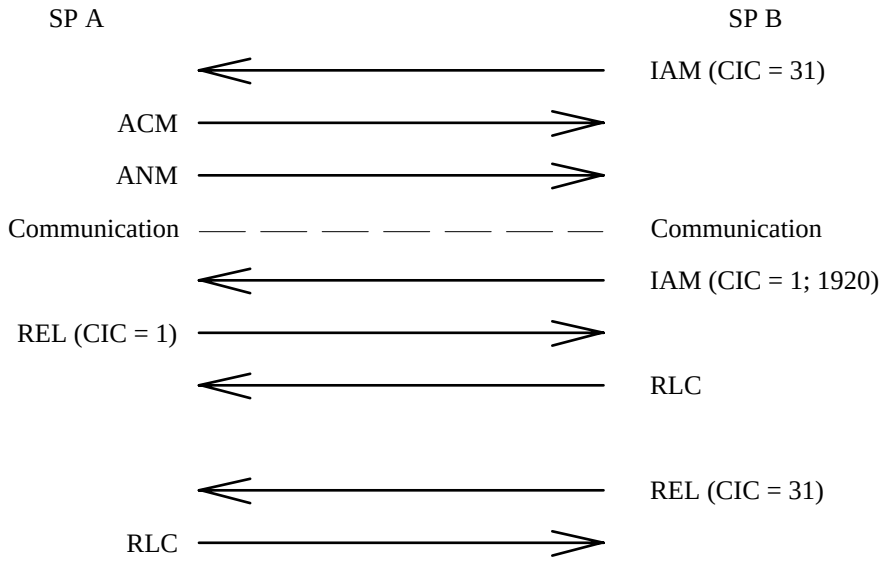


	TEST DESCRIPTION
1	Make a 2 × 64 kbit/s multirate call from SP B to SP A. Record the message sequence using a signal monitor.
2	The called party should answer the call.
3	CHECK A: IS THE CONNECTION ESTABLISHED?...
4	The called party should clear the call.
5	CHECK B: ARE THE CIRCUITS IDLE?...
6	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
7	Repeat the test for the following multirate connection types: 384 kbit/s, 1536 kbit/s and 1920 kbit/s.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.3				
TITLE:	Multirate connection types				
SUBTITLE:	Unsuccessful multirate call setup – one circuit already busy				
PURPOSE:	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				
REFERENCES:	Q.767:		ISUP'92: 1.2/Q.763; 2.1/Q.764		
PRE-TEST CONDITIONS:	Assure that there is a sufficient number of circuits available for the multirate 1920 kbit/s call				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

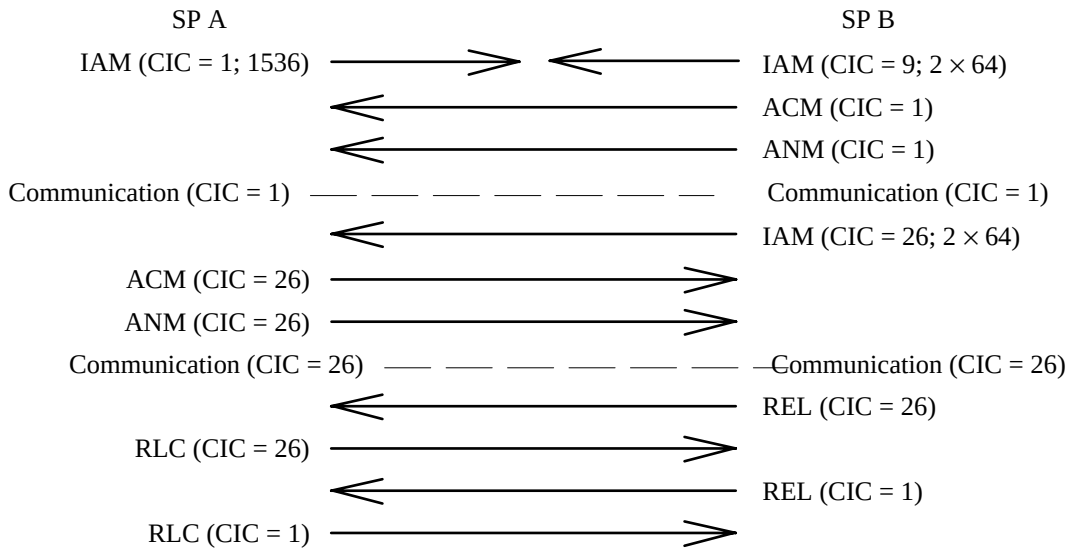


	TEST DESCRIPTION
1	Make a speech call from SP B to SP A using CIC = 31. Record the message sequence using a signal monitor.
2	The called party should answer the call.
3	Make a 1920 kbit/s multirate call from SP B to SP A using CIC = 1.
4	CHECK A: IS THE MULTIRATE CALL RELEASED?...
5	The calling party should clear the speech call.
6	CHECK B: ARE THE CIRCUITS IDLE?...
7	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE – This test may be adapted for any bitrate specified for multirate connection types.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.4				
TITLE:	Multirate connection types				
SUBTITLE:	Dual seizure of different connection types: Controlling exchange				
PURPOSE:	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				
REFERENCES:	Q.767:		ISUP'92: 1.2/Q.763; 2.9.1.4/Q.764		
PRE-TEST CONDITIONS:	Assure that there is a sufficient number of circuits available for both multirate calls				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:

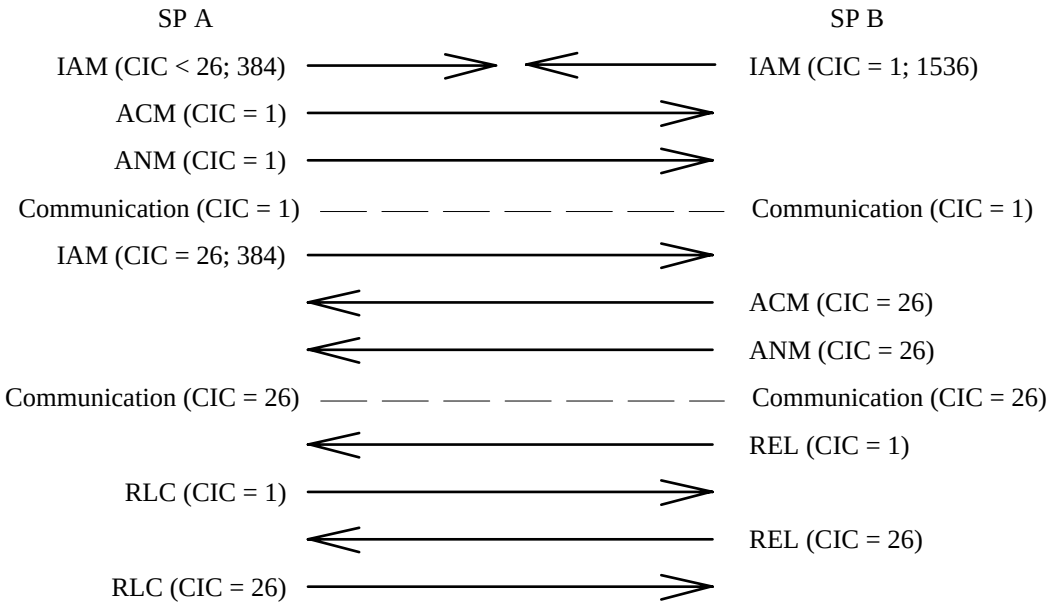


	TEST DESCRIPTION
1	Make a 1536 kbit/s multirate call from SP A to SP B. The CIC will be 1 (the only possibility). Make a 2 × 64 kbit/s multirate call from SP B to SP A using CIC = 9. Record the message sequence using a signal monitor.
2	CHECK A: IS THE 1536 kbit/s MULTIRATE CALL (IT USES MORE CIRCUITS) PUT THROUGH?...
3	The 2 × 64 kbit/s multirate call is reattempted on the unused CIC = 26.
4	CHECK B: ARE BOTH CONNECTIONS ESTABLISHED?...
5	Release both calls.
6	CHECK C: ARE THE CIRCUITS IDLE?...
7	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The message sequence may not be as shown above.
	NOTE 2 – This test may be adapted for any bitrate specified for multirate connection types.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.5				
TITLE:	Multirate connection types				
SUBTITLE:	Dual seizure of different connection types: Non-controlling exchange				
PURPOSE:	To verify that SP A is able to detect dual seizure for calls of different multirate connection types and it reattempts the call involving the smaller number of circuits				
REFERENCES:	Q.767:		ISUP'92: 1.2/Q.763; 2.9.1.4 /Q.764		
PRE-TEST CONDITIONS:	Assure that there is a sufficient number of circuits available for both multirate calls				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X	X	

EXPECTED MESSAGE SEQUENCE:



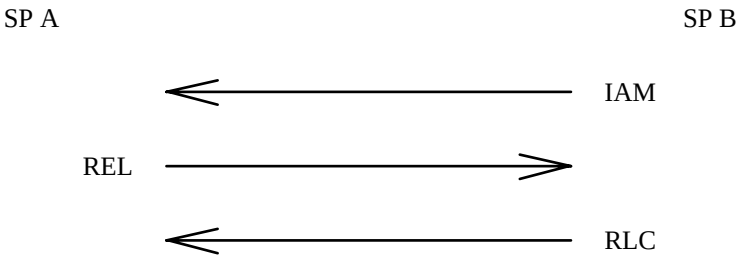
	TEST DESCRIPTION
1	Make a 384 kbit/s multirate call from SP A to SP B. The CIC shall be less than 26 because otherwise dual seizure will not occur. Make a 1536 kbit/s multirate call from SP B to SP A using CIC = 1. Record the message sequence using a signal monitor.
2	CHECK A: IS THE 384 kbit/s MULTIRATE CALL REATTEMPTED ON CIC = 26?...
3	CHECK B: ARE BOTH CONNECTIONS ESTABLISHED?...
4	Release both calls.
5	CHECK C: ARE THE CIRCUITS IDLE?...
6	CHECK D: WAS THE MESSAGE SEQUENCE AS ABOVE?...
	NOTE 1 – The message sequence may not be as shown above.
	NOTE 2 – This test may be adapted for any bitrate specified for multirate connection types.

ISUP Basic Call Test Specification

TEST NUMBER:	7.3.6	
TITLE:	Multirate connection types	
SUBTITLE:	Abnormal procedure, Multirate connection types call sent to an exchange not supporting the procedure	
PURPOSE:	To verify that SPA is able to release the call	
REFERENCES:	Q.767: 4.1.1.2/Q.767	ISUP'92: 1.2/Q.763; 2.1/Q.764
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'92 CPT	Comb. CPT
	(Note 1)		(Note 2)	X	X

EXPECTED MESSAGE SEQUENCE:

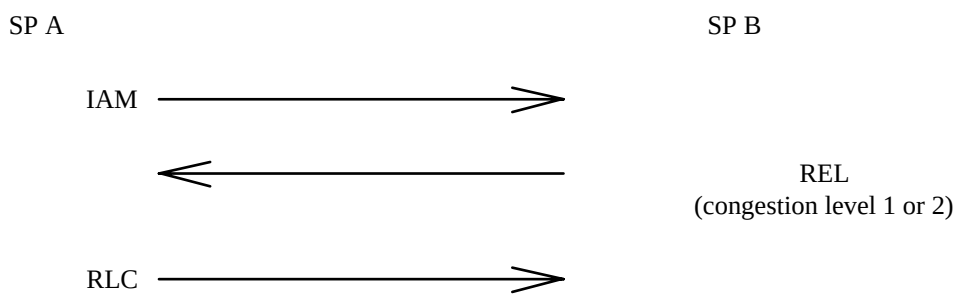


	TEST DESCRIPTION
1	Make a 2 × 64 kbit/s multirate call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS THE CIRCUIT IDLE?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...
4	Repeat the test for the following multirate connection types: 384 kbit/s, 1536 kbit/s and 1920 kbit/s.
	NOTE 1 – The test 1.6.3.1 (case B) has to be performed with the appropriate parameter.
	NOTE 2 – SP B: The test 7.3.1 has to be performed. SP A: The test 1.7.3.1 (case B) has to be performed.

ISUP Basic Call Test Specification

TEST NUMBER:	8.1.1				
TITLE:	Automatic congestion control				
SUBTITLE:	Receipt of a release message containing an automatic congestion level parameter				
PURPOSE:	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)				
REFERENCES:	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'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

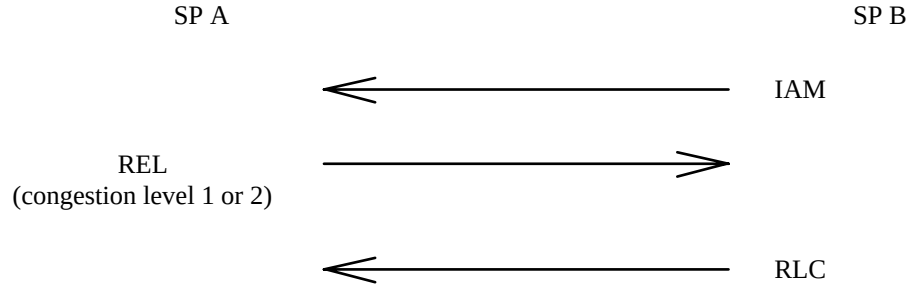


	TEST DESCRIPTION
1	Make an appropriate number of calls from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE TRAFFIC FROM SP A TO SP B REDUCED?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	8.1.2				
TITLE:	Automatic congestion control				
SUBTITLE:	Sending of a release message containing an automatic congestion level parameter				
PURPOSE:	To verify that SP A is able to send a release message containing an automatic congestion level parameter				
REFERENCES:	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'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:

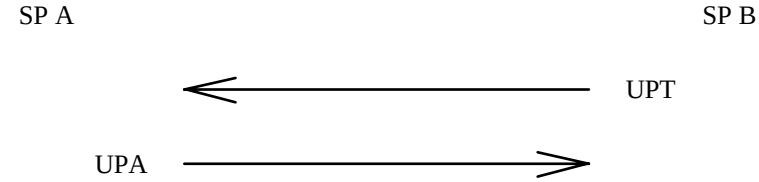


	TEST DESCRIPTION
1	Make a call from SP B to SP A. Record the message sequence using a signal monitor.
2	CHECK A: IS AN AUTOMATIC CONGESTION LEVEL PARAMETER SENT IN THE REL?...
3	CHECK B: IS THE CIRCUIT IDLE?...
4	CHECK C: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	8.2.1				
TITLE:	ISUP availability control				
SUBTITLE:	Receipt of an UPT				
PURPOSE:	To verify that on receipt of a user part test message SP A will respond by sending a user part available message				
REFERENCES:	Q.767:		ISUP'92: 2.13/Q.764		
PRE-TEST CONDITIONS:					
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:



	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: WAS THE MESSAGE SEQUENCE AS ABOVE?...

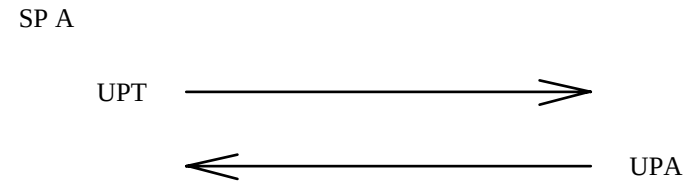
ISUP Basic Call Test Specification

TEST NUMBER:	8.2.2	
TITLE:	ISUP availability control	
SUBTITLE:	Sending of an UPT	
PURPOSE:	To verify that SP A is able to send a user part test message	
REFERENCES:	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

TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

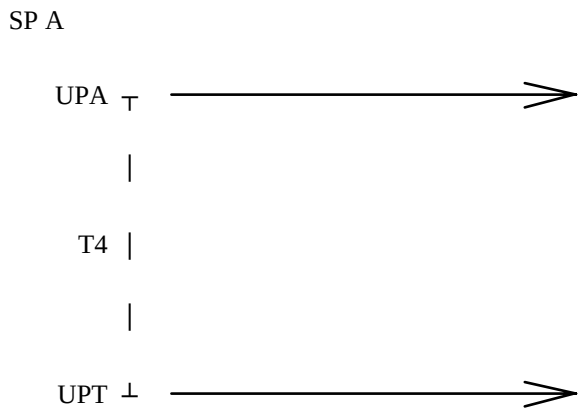


	TEST DESCRIPTION
1	Arrange for SP A to send a user part test message. Record the message sequence using a signal monitor.
2	CHECK A: WAS THE MESSAGE SEQUENCE AS ABOVE?...
3	CHECK B: IS THE ISDN USER PART OF SP B MARKED AVAILABLE IN SP A?...

ISUP Basic Call Test Specification

TEST NUMBER:	8.2.3				
TITLE:	ISUP availability control				
SUBTITLE:	T4: failure to receive a response to a UPT				
PURPOSE:	To verify that SP A is able to restart the availability test procedure after expiry of timer T4				
REFERENCES:	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 VAT	ISUP'92 CPT	Comb. CPT
			X		

EXPECTED MESSAGE SEQUENCE:

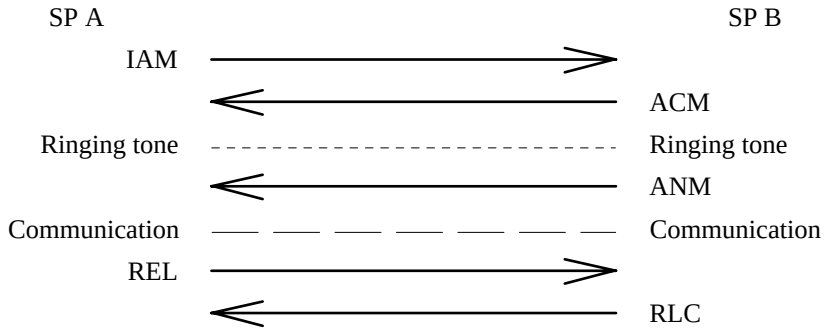


	TEST DESCRIPTION
1	Arrange for SP A to send a user part test message. Record the message sequence using a signal monitor.
2	CHECK A: WAS A USER PART TEST MESSAGE SENT AFTER T4 EXPIRED?...
3	CHECK B: WAS THE MESSAGE SEQUENCE AS ABOVE?...

ISUP Basic Call Test Specification

TEST NUMBER:	9.1.1				
TITLE:	Echo control procedure according to Q.767				
SUBTITLE:	Q.767 echo control procedure for call set up (initiated in SP A)				
PURPOSE:	To verify that a call can be successfully established with the inclusion of echo control devices				
REFERENCES:	Q.767: D.2.8/Q.767	ISUP'92: 2.7.1/Q.764			
PRE-TEST CONDITIONS:	The SP data is arranged such that the call is routed over a route requiring echo control devices or already has an echo control device included in the connection. For CPT arrange data such that incoming half echo control devices are available in SP B				
TYPE OF TEST:	Q.767 VAT	Q.767 CPT	ISUP'92 VAT	ISUP'92 CPT	Comb. CPT
	X	X	X	X	X

EXPECTED MESSAGE SEQUENCE:

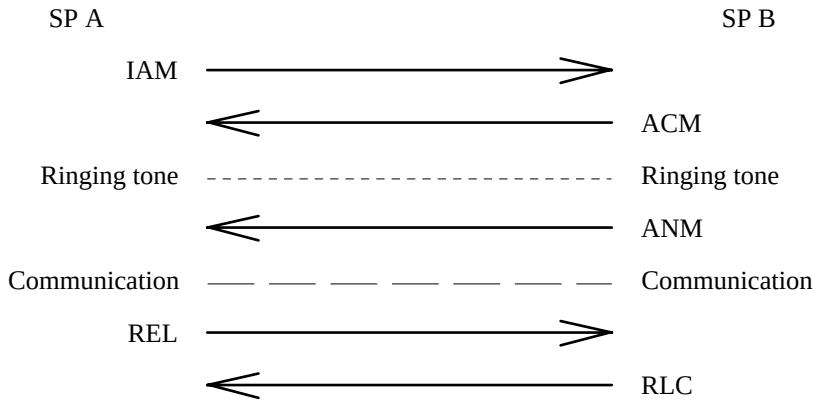


	TEST DESCRIPTION
1	Make a call from SP A to SP B. Record the message sequence using a signal monitor.
2	CHECK A: IS THE ECHO CONTROL DEVICE INDICATOR BIT "E" (OUTGOING HALF ECHO CONTROL DEVICE INCLUDED) IN NATURE OF CONNECTION INDICATORS IN THE IAM SET TO "1"?...
3	CHECK B: IS THE ECHO CONTROL DEVICE INDICATOR BIT "N" (INCOMING HALF ECHO CONTROL DEVICE INCLUDED) IN THE BACKWARD CALL INDICATORS IN THE ACM SET TO "1"?...
4	CHECK C: CAN RINGING TONE BE HEARD?...
5	The called party should answer the call.
6	CHECK D: IS THE CONNECTION ESTABLISHED?...
7	CHECK E: ARE THE ECHO DEVICES OPERATING CORRECTLY?...
8	The calling party should clear the call.
9	CHECK F: IS THE CIRCUIT IDLE?...
10	CHECK G: WAS THE MESSAGE SEQUENCE AS ABOVE?...
11	For validation testing repeat this test in the reverse direction.

ISUP Basic Call Test Specification

TEST NUMBER:	9.1.2				
TITLE:	Echo control procedure according to Q.767				
SUBTITLE:	Q.767 echo control procedure for call setup (initiated in SP B)				
PURPOSE:	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-TEST CONDITIONS:	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'92 VAT	ISUP'92 CPT	Comb. CPT
	X		X		

EXPECTED MESSAGE SEQUENCE:



	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?...

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