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SERIES T: CONFORMANCE TESTING PROCEDURES FOR THE TELETEX RECOMMENDATIONS

CONFORMANCE TESTING PROCEDURES FOR THE TELETEX RECOMMENDATIONS

Reedition of CCITT Recommendation T.64 published in the Blue Book, Fascicle VII.4 (1988)

NOTES

1 CCITT Recommendation T.64 was published in Fascicle VII.4 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 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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Recommendation T.64

CONFORMANCE TESTING PROCEDURES FOR THE TELETEX RECOMMENDATIONS[1]

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[1] This Recommendation is applicable to the version of Teletex Recommendations in the CCITT Red Book, Geneva, 1984. It is intended that a similar Recommendation on conformance testing procedures applicable to the Teletex Recommendations in the present (1988) Blue Book will be forthcoming during the Study Period 1988-1992.

The CCITT,

considering

that Recommendation F.200 defines the Teletex service;

that Recommendation T.60 defines the terminal characteristics for Teletex;

that Recommendation T.61 defines the character repertoire and coding for Teletex;

that Recommendation T.62 defines the Teletex control procedure;

that Recommendation T.70 defines the network independent transport procedure;

that Recommendation T.90 defines the Teletex requirements for interworking with telex;

that compatible implementation of these standards is necessary for successful development and acceptance of the service,

unanimously declares the following

This Recommendation contains test procedures to facilitate Administrations' verification of the protocol and service conformance of Teletex systems in order to expedite the international compatibility of Teletex.

1 General

1.1 *Scope*

1.1.1 This Recommendation defines test procedures for the 1984 version of Teletex Recommendations.

1.1.2 The test procedures contained herein are based on requirements for Teletex systems in three main areas:

a) Teletex transport layer procedures as specified in Recommendation T.70 (see Annex B).

b) Teletex control procedures specified in Recommendation T.62 (see Annex C).

c) Teletex service aspects as specified in Recommendation F.200 and associated Recommendations T.60, T.61 and T.90 (see Annex D).

1.1.3 The test procedures are intended to assist verification and cannot fully guarantee the compliance of Teletex systems to the relevant Recommendations.

1.1.4 The test procedures do not supersede the relevant Teletex Recommendations which continue to be the definitive specifications for all aspects of the Teletex service and systems.

1.1.5 The test procedures cover those aspects of Teletex which have international end-to-end significance.

1.2 *Fundamental principles*

1.2.1 The test procedures allow the conformance of a Teletex system to be assessed by comparing the "observed" behaviour of the system against an agreed common reference which specifies the expected behaviour of the system.

1.2.2 The test procedures provide an ability to test a Teletex system located remotely from the test equipment so that systems and test equipments need not be portable.

1.2.3 The test procedures enable a Teletex system to be tested without placing any requirements on the system except conformance to the relevant Teletex Recommendations.

1.2.4 The test procedures are independent from any particular test equipment.

1.2.5 The test procedures do not attempt to optimize testing methods or specify any particular sequence of tests unless expressly stated.

1.3 *Definitions*

See Annex A.

1.4 *Testing methodology*

Testing of a Teletex system shall occur from the bottom layer upwards. Before layer (N) can be tested, layer (N - 1) must have been assessed so as not to interfere with the testing of layer (N). This methodology ensures that an error in the lower layer does not corrupt protocol elements received at the higher layer.

1.5 *Test procedures*

1.5.1 The test procedures are applicable to all Teletex systems except where they are marked as being “conditional”. Conditional tests are only applicable to Teletex systems which claim certain non-basic capabilities.

1.5.2 The test procedures consist of two types: protocol test procedures and application service test procedures.

1.5.2.1 Protocol test procedures test the conformance of a Teletex system to the Recommendations T.62 and T.70.

1.5.2.2 Application service test procedures test a system’s conformance to those requirements specified in Recommendation F.200 and associated Recommendations T.60, T.61 and T.90.

1.5.3 The tests are divided into a number of sets, those which are carried out with the Teletex system calling and those which are carried out with the Teletex system called. The tests are further sub-divided covering the Teletex system under normal (error free) conditions and the Teletex system under exception (error) conditions.

2 **Protocol test procedures**

Protocol test procedures are defined by a set of protocol test schedules and protocol data unit (PDU) lists.

2.1 *Protocol test schedules*

2.1.1 The test schedules are described in a tabular form. Test conditions and input sequences together with the expected result are specified.

The tests explore a Teletex system’s behaviour as it passes through the state event transitions defined in the relevant Recommendation.

2.1.2 Normal protocol tests are designed to be carried out sequentially, i.e. a successful conclusion to test N will leave the Teletex system in the correct state for test N + 1 to be carried out.

2.1.3 Exception protocol tests are designed to be carried out individually, i.e. the Teletex system is driven into the correct state for a particular test by procedures which are defined for that test.

2.2 *Tests on transient states*

2.2.1 Where a state is transient (i.e. the system may send a PDU immediately following the occurrence of an internal service primitive) it may not be possible to carry out a particular test. It can be determined from the reaction of the system whether a state has been accessed. If access is possible then tests should be performed on the required state-event pairs; otherwise no further tests need be attempted on that state.

2.3 *Description of the test tables*

The test tables consist of five columns which are described below.

2.3.1 *Test number*

The *Test number* has the following format: WXY/Z

where:

W	is either a “G” to indicate that the test is carried with the Teletex system calling or a “D” to indicate that the test is carried out with the Teletex system called. In certain tests the “G” or “D” is preceded by a test identifier, e.g. CG for conditional tests.
X	is either an “N” to indicate that the test is carried out under normal conditions or an “E” to indicate that the test is carried out under exception conditions.
Y	specifies the state from which the test is made.
Z	is the test number within the particular test group.

2.3.2 *Test type*

The *Test type* provides a brief description of the test.

2.3.3 *Tester action*

Tester action specifies the sequence of protocol elements which shall be sent by the tester during a particular test.

2.3.4 *Tester detects*

Tester detects specifies the sequence of protocol elements which shall be received by the tester during a particular test in order for the test to be satisfactorily completed.

2.3.5 *State diagram route in system/PDUs sent by the tester/comments*

2.3.5.1 *State diagram route in system* describes the sequence of state transitions explored during the test.

2.3.5.2 The *PDUs sent by the tester* specify those PDUs sent by the tester during the test. For some tests a number of PDUs are specified, one of which shall be chosen to carry out the test. Other tests have to be repeated for each PDU. These tests are indicated by “(REP)” following the PDU list.

The PDU numbers refer to the PDUs specified in the PDU lists. PDUs are referred to as TPDUs in the T.70 test schedules in Annex B and SPUDs in the T.62 test schedules in Annex C.

2.4 *Protocol data unit (PDU) lists*

2.4.1 Separate PDU lists are defined for the T.70 test schedules and the T.62 test schedules.

2.4.2 The PDU lists specify the PDUs used within the test tables.

2.4.3 There are two types of list: one for valid PDUs and one for invalid PDUs.

3 **Application service test procedures**

3.1 *Application service tests*

3.1.1 The application service tests establish a number of scenarios which test the conformance of a Teletex system to the Recommendations which specify service and related matters.

3.2 *Description of the application service test schedules*

3.2.1 Each test consists of three parts, the title of the test, the actions required to establish the test and the checks that have to be carried out to assess the Teletex system.

3.2.2 Where appropriate the Recommendation and section number which define the particular service requirement being tested are referenced.

3.2.3 Where a particular test requires specific values, these have been chosen to ensure a reasonable level of compatibility between Teletex systems.

3.2.4 The tests use the following numbering format: WXN.

Where:

W	indicates whether the test is mandatory (M) or conditional (C).
X	is either a “G” to indicate that the test is carried out with the Teletex system calling or a “D” to indicate that the test is carried out with the Teletex system called.
N	specifies the test number within the particular test groups.

4 Test limitations

The tests will establish to an acceptable degree of reliability that a Teletex system conforms to the relevant Recommendations. It is not possible to test for “complete” conformance due to:

a) the immense number of state event combinations and possible valid and invalid PDU types which would require an unacceptably large amount of computational resources and time;

b) the possibility that previous actions may affect the results of a particular test;

c) “transient” states that, although defined in the Recommendations, may not externally be accessible.

ANNEX A

(to Recommendation T.64)

Definitions and abbreviations

A.1 *Abbreviations*

The following is a list of abbreviations used in the tables and test schedules of Annexes B, C and D. See § A.2 for symbols other than abbreviations which are used.

A.2 *Other symbols*

I	Indicates an invalid PDU
V	Indicates a valid PDU
X	Represents one or more octets in the correct form, the value is unspecified.
(14)	Number of octets.
*	Indicates where the incorrect or unexpected value occurs.
–	Indicates that the field is empty or not used.
<	Less than.
>	Greater than.
< >	Not equal to.
$\overline{o}$	A bar above an octet indicates the octet is in error.

Test schedules

Tester action/tester detects columns

[ ] Indicates a valid PDU exchange which may be initiated by the SUT in addition to the PDUs exchanged during the course of a test.

PDUs sent by the tester column

(REP) Indicates that the test must be repeated for each PDU specified.

Abbreviation	Meaning	Reference
CC	Clearing cause	T.64
CDC	Command document continue	T.62, T.64
CDCL	Command document capability list	T.62, T.64
CDD	Command document discard	T.62, T.64
CDE	Command document end	T.62, T.64
CDPB	Command document page boundary	T.62, T.64
CDR	Command document resynchronize	T.62, T.64
CDS	Command document start	T.62, T.64
CDUI	Command document user information	T.62, T.64
CHAR	Character	T.64
CI	Command identifier	T.62, T.64
CIL	Call identification line	T.200, T.64
CLI	Command length indicator	T.64
CM	Conditional mandatory parameter	T.64
CRN	Checkpoint reference number	T.64
CSA	Command session abort	T.62, T.64
CSCC	Command session change control	T.62, T.64
CSE	Command session end	T.62, T.64
CSS	Command session start	T.62, T.64
CSUI	Command session under information	T.62, T.64
DISC	DISCONNECT	T.64
DPE	Document protocol element	T.64
DR	Destination reference	T.64
DRN	Document reference number	T.64
EAD	Extended addressing (called = D)	T.64
EAG	Extended addressing (calling = G)	T.64
EM	End mark	T.64, T.70
GI	Group identifier	T.64
ID	Identification	T.64
ITA2	International Telegraph Alphabet No. 2	T.64
LI	Length indicator	T.62, T.64
M	Mandatory parameter	T.64
MUT	Multi-terminal configuration	T.64
N-	Network	T.64
NBTC	Non basic terminal capabilities	T.64
PDU	Protocol data unit	T.64
PG	Parameter group	T.64
PGI	Parameter group identifier	T.62, T.64
PGLI	Parameter group length indicator	T.64
PI	Parameter identifier	T.62, T.64
PLI	Parameter length indicator	T.64
PV	Parameter value	T.62, T.64
R-	Reception	T.64

Abbreviation	Meaning	Reference
R-TCR	Receive TCR event	T.64, T.70
R-TDT	Receive TDT event	T.64, T.70
RDCLP	Response document capability list positive	T.62, T.64
RDDP	Response document discard positive	T.62, T.64
RDEP	Response document end positive	T.62, T.64
RDGR	Response document general reject	T.62, T.64
RDPBN	Response document page boundary negative	T.62, T.64
RDPBP	Response document page boundary positive	T.62, T.64
RDRP	Response document resynchronize positive	T.62, T.64
RI	Response identifier	T.62, T.64
RLI	Response length indicator	T.64
RSAP	Response session abort positive	T.62, T.64
RSCCP	Response session change control positive	T.62, T.64
RSEP	Response session end positive	T.62, T.64
RSSN	Response session start negative	T.62, T.64
RSSP	Response session start positive	T.62, T.64
RSUI	Response session user information	T.62, T.64
S-	Session	T.64, X.225
S-	Sending	T.64
S-TCA	Send TCA action	T.64, T.70
SD	Source reference	T.64
SG	Source reference	T.64
SID	Session identification	T.64
SPDU	Session protocol data unit	T.64
SR	Source reference	T.64
SUT	System under test	T.64
T-	Transport	T.64
TBR	Transport block reject block	T.64, T.70
TCA	Transport connection accept block	T.64, T.70
TCC	Transport connection clear block	T.64, T.70
TCR	Transport connection request block	T.64, T.70
TDT	Transport data block	T.64, T.70
TID	Terminal identification	T.64
TPDU	Transport protocol data unit	T.64
TSDU	Transport service data unit	T.64
TUT	Terminal under test	T.64

ANNEX B

(to Recommendation T.64)

B.1 *T.70 Transport Protocol Data Unit (TPDU) list*

Test level 4, TCR

Tester sending TCR		Length indicator (LI) Block type Destination ref. (DD) Source ref. (SG) Extension field
Type/No.	Short description	X E 0 0 X X 0 Parameters C0, C1, C2 X 0 0 0 X X 0 in any order
Protocol elements – Valid for transmission and reception		
V1	Without parameter	0 E 0 0 1 3 0 6 0 0 0 2 4 0
V2	TDT Blocksize 128	0 E 0 0 1 3 0 C 0 0 9 0 0 0 2 4 0 0 1 7
V3	TDT Blocksize 2048	0 E 0 0 1 3 0 C 0 0 9 0 0 0 2 4 0 0 1 B
V4	With 1 EAD	0 E 0 0 1 3 0 C 0 # 9 0 0 0 2 4 0 2 1
V5	With parameters block size, EAG, EAD	1 E 0 0 1 3 0 C 0 0 C 0 # # # # C 0 # # # 4 0 0 0 2 4 0 0 1 8 1 4 2 3
V6	Parameter in any order	1 E 0 0 1 3 0 C 0 # # # # C 0 0 C 0 # # # 4 0 0 0 2 4 0 1 4 0 1 8 2 3
V7	With EAD > 3 digits	0 E 0 0 1 3 0 C 0 # # # # # D 0 0 0 2 4 0 2 5
V8	Parameter with LI = 0	0 E 0 0 1 3 0 C 0 8 0 0 0 2 4 0 0 0
Protocol elements – Valid for reception only		
V9	With 1 EAG	0 E 0 0 1 3 0 C 0 # # # B 0 0 0 2 4 0 1 3
V10	Class byte < >0	0 E 0 0 1 3 1 6 0 0 0 2 4 1
V11	TDT block size not known	0 E 0 0 1 3 0 C 0 C̄ 9 0 0 0 2 4 0 0 1 1
V12	Parameter not known	0 E 0 0 1 3 0 Ā 0 0 1 A 0 0 0 2 4 0 5 2
V13	Second half of block type identifier < > 0 and class byte < > 0 and default class parameter (checks interworking with CCITT transport protocols)	0 Ē 0 0 1 3 2̄ C 0 0 9 F 0 0 2 4 1 7 1 0

Note 1 – The character # represents an IA5 digit with any parity.

Note 2 – Terminals conforming to the 1984-Version may reject TCR V13.

Test level 4, Invalid TCR

Tester sending TCR		Length indicator (LI) Block type Destination ref. (DD) Source ref. (SG) Extension field
Type/No.	Short description	X E $\overline{0\ 0}$ $\overline{X\ X}$ 0 Parameters C0, C1, C2 X 0 0 0 X X 0 in any order
I1	IL < > Length	$\overline{0}$ E 0 0 0 0 0 7 0 0 0 0 0 0
I2	LI < 6 and LI = Length	$\overline{0}$ E 0 0 1 3 5 0 0 0 2 4
I3	LI > 127 LI = Length	$\overline{8}$ E 0 0 1 3 0 C 7 (Note 2) 0 0 0 0 2 4 0 1 8
I4	PLI of TDT Block size < > 1	0 E 0 0 1 3 0 C $\overline{0}$ $\overline{0}$ $\overline{0}$ A 0 0 0 2 4 0 0 2 8 9
I5	LI < > sum of PLI + (2*n* + 6). *n* = number of parameters	$\overline{1}$ E 0 0 1 3 0 C 0 0 C 0 # # # 1 0 0 0 2 4 0 0 1 8 1 3

Note 1 – The character # represents an IA5 digit with any parity.

Note 2 – This PDU must be padded with 120 octets.

Note 3 – I4 is only applicable to SUTs which use the block size negotiation mechanism.

Test level 4, TCA

Tester sending TCA		Length indicator (LI) Block type Destination ref. (DR+SG) Source ref. (SD) Extension field
Type/No.	Short Description	X D $\overline{X\ X}$ $\overline{X\ X}$ 0 Parameters C0, C1, C2 X 0 X X X X 0 in any order
Protocol elements – Valid for transmission and reception		
V1	Without parameter	0 D X X 1 3 0 6 0 X X 2 4 0
V2	TDT blocksize 128	0 D X X 1 3 0 C 0 0 9 0 X X 2 4 0 0 1 7
V3	EAD identical to that received in TCR	X D X X 1 3 0 C X # . . . . . . X 0 X X 2 4 0 2 X
V4	EAD not identical to that received in TCR	X D X X 1 3 0 C X # # # . . . X 0 X X 2 4 0 2 X
V5	EAD identical to that received in TCR. Blocksize = 128. The order of the parameters is undefined.	X D X X 1 3 0 C X # # # . . . . . . C 0 0 X 0 X X 2 4 0 2 X 0 1 7
V6	Parameter with LI = 0	0 D X X 1 3 0 C 0 8 0 X X 2 4 0 0 0

Note 1 – The character # represents an IA5 digit with any parity.

Note 2 – Terminals conforming to the 1984-Version may reject TCA V6.

Test level 4, Invalid TCA

Tester sending TCA		Length indicator (LI) Block type Destination ref. (DR+SG) Source ref. (SD) Extension field
Type/No.	Short Description	X D X X X X 0 Parameters C0, C1, C2 X 0 X X X X 0 in any order
I1	LI < > Length	$\overline{0}$ D X X 1 3 0 7 0 X X 2 4 0
I2	LI < 6 and LI = Length	$\overline{0}$ D X X 1 3 5 0 X X 2 4
I3	LI > 127 LI = Length	$\overline{8}$ D X X 1 3 0 C 7 (Note 2) 0 0 X X 2 4 0 1 8
I4	Destination ref. < > Source ref. of TCR	0 D $\overline{X}$ $\overline{X}$ 1 3 0 6 0 X X 2 4 0
I5	BYTE 7 < > 0	0 D X X 1 3 $\overline{A}$ 6 0 X X 2 4 0
I6	PLI of TDT block size < > 1	$\overline{0}$ D X X 1 3 0 C $\overline{0}$ 0 0 A 0 X X 2 4 0 0 2 7 7
I7	TDT blocksize > blocksize requested in TCR	0 D X X 1 3 0 C 0 $\overline{X}$ 9 0 X X 2 4 0 0 1 $\overline{X}$
I8	LI < > sum of PLI + $(2n + 6)$ n = number of parameters	$\overline{1}$ D X X 1 3 0 C 0 0 C 0 # # # 1 0 X X 2 4 0 0 1 7 1 3

Note 1 – The character # represents an IA5 digit with any parity.

Note 2 – This PDU must be padded with 120 octets.

Test level 4, TCC

Tester Sending TCC		Length indicator (LI) Block type Destination ref. (DR+SG) Source ref. (SD) Clearing cause Additional clearing information
Type/No.	Short Description	X 8 X X X X 0 E X 0 X X X X X 0
Protocol elements – Valid for transmission and reception		
V1	Without parameter CC = 0	0 8 X X 1 3 0 6 0 X X 2 4 0
V2	Without parameter CC = 1	0 8 X X 1 3 0 6 0 X X 2 4 1
V3	Without parameter CC = 2	0 8 X X 1 3 0 6 0 X X 2 4 2
V4	Without parameter CC = 3	0 8 X X 1 3 0 6 0 X X 2 4 3
V5	Without parameter Reason unknown	0 8 X X 1 3 A 6 0 X X 2 4 A

Test level 4, Invalid TCC

Tester Sending TCC		Length indicator (LI) Block type Destination ref. (DR+SG) Source ref. (SD) Clearing cause (CC) Additional clearing information X 8 X X X X 0 E X 0 X X X X X 0
Type/No.	Short Description	
I1	LI < > Length	0̄ 8 X X 1 3 0 7 0 X X 2 4 0
I2	LI < 6 and LI = Length	0̄ 8 X X 1 3 5 0 X X 2 4
I3	LI > 127	8̄ 8 X X 1 3 0 E 7 (Note) 0 0 X X 2 4 0 0 8
I4	DR < > SR of TCR	0 8 X̄ X̄ 1 3 0 6 0 X X 2 4 0

Note – This PDU must be padded with 120 octets.

Test level 4, TBR

Tester Sending TBR		Length indicator (LI) Block type Destination ref. (DR) Reject cause Reject block PI PLI X 7 X X 0 C X.... X 0 X X X 1 X
Type/No.	Short Description	
Protocol elements – Valid for transmission and reception		
V1	Normal	X 7 X X 0 C X X . . . X 0 X X 0 1 X X

Test level 4, Invalid TBR

Tester Sending TBR		Length indicator (LI) Block type Destination ref. (DR) Reject cause Reject block PI PLI X 7 X X 0 C X.... X 0 X X X 1 X
Type/No.	Short Description	
I1	LI < > Length	0̄ 7 X X 0 C 0 0 F 9 0 X X 1 1 2 2 0

Test level 4, TDT

Tester Sending TDT		Length indicator (LI) Block type TSDU – Endmark
Type/No.	Short Description	0 F X Data 2 0 0
Protocol elements – Valid for transmission and reception		
V1	TDT Size < = 128 EM = 1	0 F 8 TSDU or rest of TSDU 2 0 0
V2	TDT Size > 0 and < 128 EM = 0	0 F 0 Part of TSDU 2 0 0
V3	Empty Data Field EM = 1 after having sent a TDT with EM = 0	0 F 8 2 0 0

Test level 4, invalid TDT

Tester Sending TDT		Length indicator (LI) Block type TSDU – Endmark
Type/No.	Short Description	0 F X Data 2 0 0
I1	LI <> 2	$\bar{0}$ F 8 3 0 0
I2	Empty data field EM = 0	0 F $\bar{0}$ 2 0 0
I3	Negotiated TDT size = 128 TDT size > 128	0 F 8 TSDU 128 Bytes 2 0 0

Test level 4, undefined PDU

Tester Sending Undefined PDU		Length indicator (LI) Block type
Type/No.	Short Description	X 0 X X X X X X 0 X X X X X
UD1	Octet 2 Incorrecto	0 0 8 TSDU 2 0 0

B.2 *T.70 test schedule*

Basic test lists

Testing normal conditions
System calling/Tester called

Before this sequence is executed, the system will establish the network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the T.70 test c) Comments
GN1	Send TCR		R-TCR	a) 0.2 - 1.1
GN2	Receive TCA	S-TCA		a) 1.1 - 2.1 b) TCA (V1-V6) (REP) except TCA V4 c) Systems complying with the 1984-Version may reject TCA V6
GN3	Send TDT		R-TDT (CSS)	a) 2.1 - 2.1
GN4	Receive TDT	S-TDT (RSSP)		a) 2.1 (no reassembly) - 2.1 b) TDT V1 c) See Note 1
GN5	SEND-TDT (with segmentation)		R-TDT (CSUI/CDS) R-TDT (CSUI/CDUI) #N	a) 2.1 (segmentation) - 2.1 c) #N is the number of TDT.
		S-TDT (RSUI/RDEP) with request session function	R-TDT (CSUI/CDE)	b) TDT V1
GN6 (Note 2)	Receive TDT (with reassembly)	S-TDT (RSCCP)	R-TDT (CSCC)	a) 2.1 (with reassembly) - 2.1
		S-TDT (CSUI/CDS)		
		S-TDT # N EM = 0		b) TDT (V1-V3) c) #N is the number of TDT
		S-TDT EM = 1 (CSUI/CDUI)		
		S-TDT (CSUI/CDE)	R-TDT (RSUI/RDEP)	
		S-TDT (CSCC)	R-TDT (RSCCP)	
		S-TDT (RSEP)	R-TDT (CSE)	

Note 1 – On receiving RSSP, the system may undertake "terminal capability negotiation" and/or "Session change control". In this case, the tester has to answer correctly.

Note 2 – Test GN6 is only possible if the system is capable of acknowledging change request function at the session level, or if the system can be instructed to poll (send CSCC).

Basic test lists

Testing exception conditions from state 0.3
System calling/Tester called

Before each test, a network connection is set up by the system and the tester will:

- R-TCR,
- S-TCR,
- R-TBR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
GE03/0	Receive any TPDU	S-TPDU		a) 0.3 - 0.3 b) Any TPDU c) System discards TPDU and then timeout
	Timeout	Do nothing	Release of the network connection	a) 0.3 - 0.1

Basic test lists

Testing exception conditions from state 1
System calling/Tester called

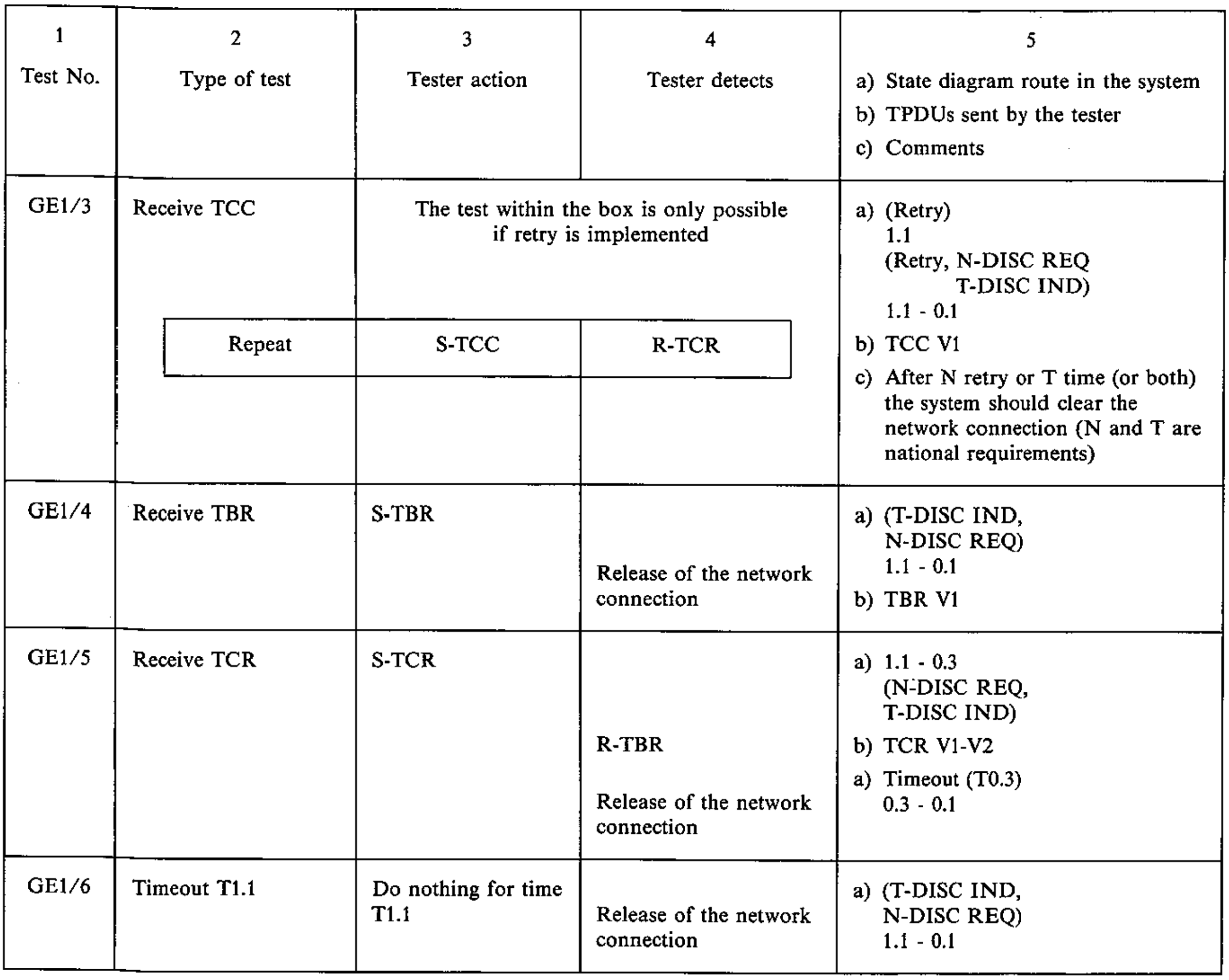
Before each test, a network connection is set up by the system and the tester will R-TCR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
GE1/0	Recovery from network DISC	N-DISC REQ	Release of the network connection	a) (T-DISC IND) a) 1.1 - 0.1 c) Correct response to further tests will indicate that implementation can return from state 1.1 to state 0.1
GE1/1	Recovery from network reset	Force an N-RESET IND in the SUT	Release of the network connection	a) (T-DISC IND, N-DISC REQ) a) 1.1 - 0.1 c) Correct response to further tests will indicate that implementation can return from state 1.1 to state 0.1
GE1/2	Receive invalid TPDU	S-TPDU invalid	Release of the network connection	a) (T-DISC IND, N-DISC REQ) 1.1 - 0.1 b) TCA I1-I8 TCC I1-I4 Undefined PDU UD1

Basic test lists

Testing exception conditions from state 1 (cont)
System calling/Tester called

Before each test, a network connection is set up by the system and the tester will T-TCR.



1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
GE1/3	Receive TCC	The test within the box is only possible if retry is implemented		a) (Retry) 1.1 (Retry, N-DISC REQ T-DISC IND) 1.1 - 0.1 b) TCC V1 c) After N retry or T time (or both) the system should clear the network connection (N and T are national requirements)
	Repeat	S-TCC	R-TCR	
GE1/4	Receive TBR	S-TBR	Release of the network connection	a) (T-DISC IND, N-DISC REQ) 1.1 - 0.1 b) TBR V1
GE1/5	Receive TCR	S-TCR	R-TBR	a) 1.1 - 0.3 (N-DISC REQ, T-DISC IND) b) TCR V1-V2
			Release of the network connection	a) Timeout (T0.3) 0.3 - 0.1
GE1/6	Timeout T1.1	Do nothing for time T1.1	Release of the network connection	a) (T-DISC IND, N-DISC REQ) 1.1 - 0.1

Basic test lists

Testing exception conditions from state 2
System calling/testing called

Before each test, a network connection is set up by the system and the tester will:

- R-TCR,
- S-TCA,
- R-TDT.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
GE2/0	Recovery from network DISC	N-DISC REQ	Release of the network connection.	a) (T-DISC IND) 2.1 - 0.1 c) Correct response to further tests will indicate that the implementation can return from state 2.1 to state 0.1
GE2/1	Recovery from network reset	Force an N-RESET IND in the SUT	[R-TDT (CSA)] Release of the network connection.	a) (T-DISC IND, N-DISC REQ) 2.1 - 0.1 c) Correct response to further test will indicate that the implementation can return from state 2.1 to state 0.1
GE2/2	Receive invalid TPDU	S-TPDU invalid N-DISC REQ	R-TBR [R-TDT (CSA)] Release of the network connection	a) 2.1 - 0.3 (N-DISC REQ, T-DIS IND) 0.3 - 0.1 b) TDT I1-I3 Undefined PDU UD1
GE2/3	Receive TBR	S-TBR	[R-TDT (CSA)] Release of the network connection	a) (T-DISC IND, N-DISC REQ) 2.1 - 0.1 b) TBR V1

Basic test lists

Normal conditions
System called/tester calling

Before this test, the tester will establish the network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
DN0	Receive TCR	S-TCR		a) 0.1 - 1.1 b) TCR V1-V13 (REP) c) Systems conforming to the 1984-Version may reject TCR V13
DN1	Send TCA		R-TCA	a) 1.1 - 2.1
DN2	Receive TDT	S-TDT (CSS) S-TDT (CDS)	R-TDT (RSSP)	a) 2.1 b) TDT V1-V3 (REP) c) RSSP with segmentation is possible.
DN3	Receive TDT (with reassembly)	S-TDT #N (CSUI/CDUI) S-TDT(CSUI/CDE)	R-TDT (RSUI/RDEP)	a) 2.1 (with reassembly) - 2.1 b) TDT V1-V2 c) #N, the number of TDT, is dependent on size of document. At least one TDT without TSDU End Mark should contain between 1 and 127 octets
DN4 (Note)	Send TDT after session change control	S-TDT (CSCC) S-TDT (RSUI/RDEP) S-TDT (RSCCP) S-TDT (CSE) N-DISC REQ	R-TDT (RSCCP) R-TDT (CSUI/CDS) R-TDT #N EM = 0 R-TDT EM = 1 (CSUI/CDUI) R-TDT (CSUI/CDE) R-TDT (CSCC) R-TDT (RSEP) Release of the network connection	a) 2.1 (with segmentation) - 2.1 b) TDT V1-V3 c) #N is dependent on size of document

Note – Test DN4 is only possible if the system under test is capable of requesting change request functions at the session level.

Basic test lists

Testing exception conditions from state 0.2
System called/Tester calling

Before each test, the tester will set up a network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
DE02/0	Recovery from network DISC	N-DISC REQ	Release of the network connection.	a) 0.2 - 0.1 c) Correct response to further tests will indicate that the implementation can return from state 0.2 to state 0.1
DE02/1	Receive invalid TPDU	S-TPDU invalid	Release of the network connection	b) Any invalid TPDU a) 0.2 - 0.1
DE02/2	Receive unacceptable TCR	S-TCR		a) 0.2 - 0.1 b) TCR V1-V12 c) The system is put into a condition so that it responds with TCC. On some systems it may not be possible to cause the system to generate a TCC.
			R-TCC	a) 0.2 - 0.2
DNE02/3	Timeout T0.2	Do nothing	Release of the network connection	

Basic test lists

Testing exception conditions from state 0.3
System called/tester calling

If T-EXCEPT IND has been implemented, it may not be possible to force the terminal under test (TUT) into state 0.3.

Before each test, the tester will:

- set up a Network connection
- S-TCR,
- R-TCA,
- S-invalid TPDU,
- R-TBR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
DE03/0	Receive any TPDU	S-TPDU	Release of the network connection	a) (N-DISC REQ, T-DISC IND) 0.3 - 0.1 b) Any TPDU c) System should discard TPDU and then timeout
DE03/1	Timeout T.03	Do nothing	Release of the network connection.	a) 0.3 - 0.1

Basic test lists

Testing exception conditions from state 1 (transient)
System called/tester calling

Before each test, the tester will:

- set up a network connection,
- S-TCR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
DE1/0	Receive invalid TPDU	S-TPDU		b) Any invalid TPDU
			[R-TCA] R-TBR	a) 1 - 0.3
		N-DISC REQ	Release of the network connection.	a) 0.3 - 0.1

Basic test lists

Testing exception conditions from state 2

System called/tester calling

Before each test, the tester will:

- set up a network condition,
- S-TCR,
- R-TCA.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
DE2/0	Recovery from network DISC	N-DISC REQ	Release of the network connection	a) 2.1 - 0.1 c) Correct response to further tests will ensure that the implementation can return from state 2.1 to state 0.1
DE2/1	Recovery from network reset	Force an N-RESET IND in the SUT	Release of the network connection	a) (T-DISC IND, N-DISC REQ) 2.1 - 0.1 c) Correct response to further tests will ensure that the implementation can return from state 2.1 to state 0.1
DE2/2	Receive invalid TPDU	S-TPDU invalid N-DIS REQ	R-TBR Release of the network connection	a) 2.1 - 0.3 (N-DIS IND, T-DISC IND) 0.3 - 0.1 b) Any invalid TPDU.
DE2/3	Receive TBR	S-TBR	N-DISC IND	b) TBR V1 a) (T-DISC IND, N-DISC REQ) a) 2.1 - 0.1

B.2.1 *Extended addressing tests (EAD) for T.70: Test for systems and multi-terminal configurations which support transport extended addressing*

System calling/testing called

Before each test, the system will establish network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
AG/0	Ability to correctly encode extended addresses	S-TCA (EAD = TCR EAD)	R-TCR (EAD) System enters data phase	a) 0.2 - 1.1 a) 1.1 - 2.1 b) TCA V5
AG/1	Ability to accept TCAs containing different EAD from that requested in TCR (redirection acceptable)	S-TCA (EAD < > TCR EAD)	R-TCR (EAD) System enters data phase	a) 0.2 - 1.1 c) This test is only possible if the system allows the operator to indicate that redirection is acceptable a) 1.1 - 2.1 b) TCA V1, V4 (REP)
AG/2	Ability to reject TCAs containing different EAD from that requested in TCR (redirection unacceptable)	S-TCA (EAD < > TCR EAD)	R-TCR (EAD) Release of the network connection	a) 0.2 - 1.1 b) TCA V1, V4 c) This test is only possible if the system allows the operator to indicate that redirection is unacceptable a) 1.1 - 2.1 c) Before the test the system shall be set up to reject redirection

Extended addressing (EAD) tests

Multi-terminal configurations only
Multi-terminal configuration (MUT) called/tester calling

Before each test, the system will establish network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
MDA/0	Ability to accept TCR	S-TCR		a) 0.2 - 1.1 b) See Table B-1/T.64 c) See Table B-1/T.64
			R-TCA	a) 1.1 - 2.1

TABLE B-1/T.64

Valid responses for the test MDA/0

TPDUs used in basic T.70 list	Comments	Valid responses
TCR V9	1 EAG	TCA V1 or TCA V2 or TCA V4 or TCA V6
TCR V4 TCR V5 TCR V7	Available EAG Available EAG Only possible if an available EAG > 3 digits exists	TCA V3 or TCA V5

Extended addressing (EAD) tests

Multi-terminal configurations only
multi-terminal configuration (MUT) called/Tester calling

Before each test, the system will establish network connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route in the system b) TPDUs sent by the tester c) Comments
MDA/1	Ability to redirect a TCR or Respond with TCC	S-TCR	R-TCA	a) 0.2 - 1.1 b) See Table B-2/T.64 c) See Table B-2/T.64

TABLE B-2/T.64

Valid responses for the test MDA/1

TPDUs used in basic T.70 list	Comments	Valid responses
TCR V4 TCR V7	Non-existing EAD	TCA V4 or TCC V1 or TCC V4 or TCC V5
TCR V4	Existing EAD but busy or out of order	TCA V4 or TCC V1 or TCC V2 or TCC V3 or TCC V5

ANNEX C

(to Recommendation T.64)

C.1 *T.62 Session protocol data unit (SPDU) list*

<CSS> Session protocol element

Command session start →		Session reference				Non basic session cap.			Service ID	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use para.	Nonstandard capab.
			Term. ID	Date and time	Add. ref.		Misc. cap.	Window					Control char.	Page format	Misc. T cap.			
Tester sends ↓ (Testcase)	C I LI 0 X D X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) A 8 M M M	P I LI PV 0 0 (14) B E M M M	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 2 X X	P I LI PV 1 0 X 4 2 X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV E X X 8 X X
V 1 With all def. parameters	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	0 0 (2) C 2	0 X 2 X	0 X X D X X	0 0 X E 1 X	0 X X 8 X X	1 X X 2 X X	1 X X 4 X X	4 X 1 X	4 X X 9 X X	4 0 0 A 1 1	4 X X B X X	C X X 1 X X	E X X X	E X X 8 X X
V 2 With P 12, GP 41, p. ex	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	0 X X 8 X X	1 X X 2 X X	1 X X 4 X X	4 X 1 X	–	4 0 0 A 1 1	4 X X B X X	–	E X X X	–
V 3 With P OC and PG 02	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	0 0 (2) C 2	0 X 2 X	0 X X D X X	0 0 X E 1 X	0 X X 8 X X	–	–	–	–	–	–	–	–	–
V 4 LI Defined on 3 octets	0F XX DF XX	0F XX 1F XX	0F 01 (24) AF 08	0F 00 (14) BF 0E	–	–	–	–	0 X X 8 X X	–	–	–	–	–	–	–	(255) EF 00 2F XX	–
V 5 Undefined P and PLI = 0	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	–	0 X 2 X	–	* 0 0 0 F 1 1	0 0 0 8 1 1	–	–	4 0 1 4	* 4 0 9 0	–	* 4 0 B 0	* C 0 1 0	–	–
V 6 Without options	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
V 7 Separator "–" in PV OB	0 X D X	0 X 1 X	0 1 (24) A 8	**** 0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
V 8 Wrong PV in service-ID	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	* 0 0 0 8 1 1	–	–	–	–	–	–	–	–	–

<CSS> Session protocol element

Command session start →		Session reference				Non basic session cap.			Service ID	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use para.	Nonstandard capab.
			Term. ID	Date and time	Add. ref.		Misc. cap.	Window					Control char.	Page format	Misc. T cap.			
Tester sends ↓ (Testcase)	C I LI 0 X D X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) A 8 M M M	P I LI PV 0 0 (14) B E M M M	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 2 X X	P I LI PV 1 X X 4 X X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV E X X 8 X X
I 1 CLI Error	* 0 E D E	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	C X X 1 X X	–	E X X 8 X X
I 2 PG LI Error	0 X D X	* 0 E 1 E	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
I 3 P LI Error	0 X D X	0 X 1 X	0 1 (24) A 8	0 0 (14) B E	*** ** 0 0 C 3	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
I 4 Mand. P not present (SID)	0 X D X	0 X 1 X	0 1 (24) A 8	* 0 0 (14) B E	–	–	–	–	0 0 0 9 1 1	–	–	–	–	–	–	–	–	–
I 5 Mand. P not present (D&T)	0 X D X	0 X 1 X	0 1 (24) A 8	*** *** 0 0 – B 0	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
I 6 Mand. P not present (TID)	0 X D X	0 X 1 X	******** –	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–
I 7 Mand. PGI not present	0 X D X	* 0 X Z X	0 1 (24) A 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–

<RSSP> Session protocol element

Response session start positive →		Session reference				Non basic session cap.			Service ID	Session service funct.	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use		Non-standard capab.
			Term. ID	Date and time	Add. ref.		Misc. cap.	Window						Control char.	Page format	Misc. T cap.				
Tester sends ↓ (Testcase)	R I LI 0 X E X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 0 X X	P I LI PV 1 X X 2 X X	P I LI PV 1 0 X 4 2 X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV F X X X X X	P I LI PV E X X 8 X X
V 1 With all def. parameters	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X	0 X X D X X	0 0 X E 1 X	0 X X 8 X X	1 X X 0 X X	1 X X 2 X X	1 X X 4 X X	4 X 1 X	4 X X 9 X X	4 0 0 A 1 1	4 X X B X X	C X X 1 X X	E X X X	F X X X X X	E X X 8 X X
V 2 With all P of CSS	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X (Note 1)	0 X X D X X (Note 1)	0 0 X E 1 X (Note 1)	0 X X 8 X X	1 X X 0 X X	1 X X 2 X X (Note 1)	1 X X 4 X X	4 X 1 X (Note 1)	4 X X 9 X X (Note 1)	4 0 0 A 1 1 (Note 1)	4 X X B X X (Note 1)	–	E X X X (Note 1)	F X X X X X (Note 1)	–
V 3 With more PV than in CSS	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X (Note 1)	0 X X D X X (Note 1)	* 0 0 F E 1 F (Note 1)	0 0 0 8 1 1	** 1 0 00 0 2 10	1 X X 2 X X (Note 1)	1 X X 4 X X	4 X 1 X (Note 1)	4 X X 9 X X (Note 1)	4 0 0 A 1 1 (Note 1)	4 X X B X X (Note 1)	–	E X X X (Note 1)	F X X X X X (Note 1)	–
V 4 With undef. parameter	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	* 0 X 4 X	* 0 0 (9) F 9 X	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
V 5 With PV = 0	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X	* 0 0 0 0 1 0	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
V 6 With PV error	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	* 1 0 0 0 1 5	–	–	–	–	–	–	–	–	–	–

Note 1 – Present if sent in CSS only.

Note 2 – Identical to parameters in CSS.

<RSSP> Session protocol element

Response session start positive →		Session reference				Non basic session cap.			Service ID	Session service funct.	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use		Non-standard capab.
			Term. ID	Date and time	Add. ref.		Misc. cap.	Window						Control char.	Page format	Misc. T cap.				
Tester sends ↓ (Testcase)	R I LI 0 X E X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 0 X X	P I LI PV 1 X X 2 X X	P I LI PV 1 0 X 4 2 X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	I G IL E X X X	I P IL VP F X X X X X	I P IL VP E X X 8 X X
V 7 LI present in 3 octets	0F XX EF XX	0F XX 1F XX	0F 01 (24) 9F 08	0F 00 (14) BF 0E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
V 8 Without options	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
V 9 With PV of TID coded "+++"	0 X E X	0 X 1 X	**** 0 1(+++) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
V 10 With LI = 0	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	–	* 0 0	–	–	0 0 0 8 1 1	* 1 0 0 0	–	–	4 0 1 4	* 4 0 9 0	* 4 0 A 0	–	–	–	–	–

Note 1 – Present if sent in CSS only.

Note 2 – Identical to parameters in CSS.

<RSSP> Session protocol element

Response session start positive →		Session reference				Non basic session cap.			Service ID	Session control funct.	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use		Non-standard capab.
			Term. ID	Date and time	Add. ref.		Misc. cap.	Window						Control char.	Page Format	Misc. T. cap.				
Tester sends ↓ (Testcase)	R I LI 0 X E X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 U (2) C 2 CM CM CM	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 0 X X	P I LI PV 1 X X 2 X X	P I LI PV 1 0 X 4 2 X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV F X X X X X	P I LI PV E X X 8 X X
I 1 RLI Error	* 0 E E E	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 2 PGI LI error	0 X E X	* 0 E 1 E	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 3 PI LI error	0 X E X	0 X 1 X	* 0 1 (24) 9 9	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 4 Date & time not eq. to CSS	0 X E X	0 X 1 X	0 1 (24) 9 8	**** 0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 5 Mand. P length error	0 X E X	0 X 1 X	0 1 (24) 9 8	****** 0 0 (--) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 6 Mand. PG missed	0 X E X	**** –	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–

CM Conditional mandatory parameter

Note 1 – Present if sent in CSS only.

Note 2 – Identical to parameters in CSS.

<RSSP> **Session protocol element**

Response session start positive →		Session reference				Non basic session capac.			Service ID	Session control function	Inactive timer	Session service funct.	Non basic term. capabilities				Session user data	Priv. use		Non-standard capab.
			Term. ID	Date and time	Add. references		Misc. cap.	Window						Control char.	Page Format	Misc. term.				
Tester sends ↓ (Testcase)	R I LI 0 X E X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 U (2) C 2 CM CM CM	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 X X 0 X X	P I LI PV 1 X X 2 X X	P I LI PV 1 0 X 4 2 X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV F X X X X X	P I LI PV E X X 8 X X
I 7 P. oc. not eq. to CSS	0 X E X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	** 0 0 EE C 2 EE (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–
I 8 Mand. P TID not present	0 X E X	0 X 1 X	******** –	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–	–

CM Conditional mandatory parameter

Note 1 — Present if sent in CSS only.

Note 2 — Identical to parameters in CSS.

<RSSN> Session protocol element

Response session start negative →		Session reference				Non basic s. cap.			Service ID	Session service funct.	Reason	Non basic term. capabilities				Session user data	Private use		Non-standard capab.
			Term. ID	Data and time	Add. Ref.		Misc. cap.	Window					Control char.	Page format	Misc T. cap.				
Tester sends ↓ (Testcase)	R I LI 0 X C X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 0 X 4 2 X	P I LI PV 3 X X 2 X X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV F X X X X X	P I LI VP E X X 8 X X
V 1 With all def. parameters	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X	0 X X D X X	0 0 X E 1 X	0 X X 8 X X	1 0 X 4 2 X	3 0 0 2 1 0	4 X 1 X	4 X X 9 X X	4 0 0 A 1 1	4 X X B X X	C X X 1 X X	E X X X	F X X X X X	E X X 8 X X
V 2 With all P of CSS	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X (Note 1)	0 X X D X X (Note 1)	0 0 X E 1 X (Note 1)	0 X X 8 X X	1 0 X 4 2 X (Note 1)	7ITA2 34D(69) 262	4 X 1 X (Note 1)	4 X X 9 X X (Note 1)	4 0 0 A 1 1 (Note 1)	4 X X B X X (Note 1)	–	E X X X (Note 1)	F X X X X X (Note 1)	E X X 8 X X (Note 1)
V 3 With more PV than in CSS	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X (Note 1)	0 X X D X X (Note 1)	0 0 F E 1 F (Note 1)	0 0 0 8 1 1	1 0 X 4 2 X (Note 1)	3 0 0 2 1 1	4 X 1 X (Note 1)	4 X X 9 X X (Note 1)	4 0 0 A 1 1 (Note 1)	4 X X B X X (Note 1)	–	E X X X (Note 1)	F X X X X X (Note 1)	E X X 8 X X (Note 1)
V 4 With undef. parameter	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	* 0 X 4 X	* 0 0 (9) F 9 X	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–
V 5 With PV = 0	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	0 X 2 X	* 0 0 0 0 1 0	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–

Invalid cases inappropriate

Note 1 – Present if sent in CSS only.

Note 2 – Identical to parameters in CSS.

<RSSN> Session protocol element

Response session start negative →		Session reference				Non basic s. cap.			Service ID	Session service funct.	Reason	Non basic term. capabilities				Session user data	Private use		Non-standard capab.
			Term. ID	Date and time	Add. Ref.		Misc. cap.	Window					Control char.	Page format	Misc T. cap.				
Tester sends ↓ (Testcase)	R I LI 0 X C X	G I LI 0 X 1 X M M	P I LI PV 0 1 (24) 9 8 M M M	P I LI PV 0 0 (14) B E M M M (Note 2)	P I LI PV 0 0 (2) C 2	G I LI 0 X 2 X	P I LI PV 0 X X D X X	P I LI PV 0 0 X E 1 X	P I LI PV 0 X X 8 X X M M M	P I LI PV 1 0 X 4 2 X	P I LI PV 3 X X 2 X X	G I LI 4 X 1 X	P I LI PV 4 X X 9 X X	P I LI PV 4 0 0 A 1 1	P I LI PV 4 X X B X X	G I LI PV C X X 1 X X	G I LI E X X X	P I LI PV F X X X X X	P I LI VP E X X 8 X X
V 6 With PV error	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	** 1 0 FF 4 2 FF	–	–	–	–	–	–	–	–	–
V 7 LI present in 3 octets	0F XX CF XX	0F XX 1F XX	0F 01 (24) 9F 08	0F 00 (14) BF 0E	0 0 (2) C 2 (Note 1)	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–
V 8 Without options	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	–	–	–	–	0 0 0 8 1 1	–	–	–	–	–	–	–	–	–	–
V 9 Without parameters	0 0 C 0	–	–	–	–	–	–	–	– – –	–	–	–	–	–	– –	–			
V 10 Service ID PV not 01	0 X C X	0 X 1 X	0 1 (24) 9 8	0 0 (14) B E	0 0 (2) C 2 (Note 1)	–	–	–	* 0 0 0 8 1 2	–	–	–	–	–	–	–	–	–	–

Invalid cases inappropriate

Note 1 – Present if sent in CSS only.

Note 2 – Identical to parameters in CSS.

Session protocol element

<CSE>

Command session end →			Session termination P		
Tester sends ↓ (Testcase)	C I 0 9	LI X X	PI 1 1	LI X X OPTIONAL	PV X X
V 1 Without parameter	0 9	0 0	–		
V 2 With P 11 retain xport	0 9	0 3	1 1	0 1	0 0
V 3 With P 11 but release xport	0 9	0 3	1 1	0 1	0 1
V 4 With PLI = 0	0 9	0 2	1 1	***** 0 0	(–)
I 1 CLI error	0 9	* 0 5	–		
I 2 PLI error	0 9	0 3	1 1	* 0 2	0 0

<RSEP>

Response session end positive →		
Tester sends ↓ (Testcase)	R I 0 A	LI 0 0
V 1 Standard	0 A	0 0
V 2 3 octet LI	0 A	*** F00 F00
I 1 RLI error	0 A	* 0 5

Session protocol element

<CSA>

Command session abort →			Session termination P		
Tester sends ↓ (Testcase)	C I 1 9	LI X X	PI 1 1 M	LI X X M	PV X X M
V 1 With P 11	1 9	0 3	1 1	0 1	0 0
V 2 Other PV	1 9	0 3	1 1	0 1	0 5
V 3 With 3 octet LI	1 9	0 5	1 1	F00 F01	0 1

<RSAP>

Response session abort positive →		
Tester sends ↓ (Testcase)	R I 1 A	LI 0 0
V 1 Normal	1 A	0 0
V 2 With 3 octet LI	1 A	*** F00 F00

Session protocol element

<CSCC>

Command session change control →		
Tester sends ↓ (Testcase)	C I 1 5	LI 0 0
V 1 Standard	1 5	0 0
V 2 3 octet LI	1 5	F00 F00
I 1 LI error	1 5	* 0 1

<RSCCP>

Response session change control positive →		
Tester sends ↓ (Testcase)	R I 1 6	LI 0 0
V 1 Standard	1 6	0 0
V 2 3 octet LI	1 6	F00 F00
I 1 LI error	1 6	* 1 1

Session protocol element

<CSUI>

Command session user information →		Document protocol element (DPE)
Tester sends ↓ (Testcase)	C I LI 0 0 1 0	X X XXXX X X XXXX M M M
V 1 With DPE	0 0 1 0	DPE depends on L.6 state
V 2 LI 3 octet	0 F00 1 F00	DPE depends on L.6
I 1 LI not eq. 0	* 0 0 1 3	DPE depends on L.6 state

<RSUI>

Response session user information →		Request session function	Document protocol element (DPE)
Tester sends ↓ (Testcase)	R I LI 0 X 2 X	PI LI PV 1 X X 0 X X	X X XXXX X X XXXX M M M
V1 With parameter and user info.	0 0 2 3	1 0 0 0 1 1	DPE depends on L.6 state
V 2 Without parameter	0 0 2 0	–	DPE depends on L.6 state
V 3 LI 3 octet	0 0 2 9	1 F00 0 0 F01 1	DPE depends on L6 state
V 4 With undef. PV	0 0 2 3	1 0 0 0 1 5	DPE depends on L.6 state
I 1 RLI error	* 0 0 2 4	1 0 0 0 1 2	DPE depends on L.6 state
I 2 PLI error	0 0 2 3	1 0 0 0 2 1	DPE depends on L.6 state

<CDS> Document protocol element

Command document start →			Service interw. ID			Document reference number			Document type ID			Non-basic terminal capabilities																				Session user data			Private use param.			
														Graph. char.			Control char.			Page format			Misc. T. cap.			Charact. box height			Charact. box width									
Tester sends ↓ (Testcase)	C I 2 D	LI X X	P I 2 8	LI X X	PV X X	P I 2 9 M	LI X X M	PV X X M	P I 3 0	LI 0 1	PV X X	G I 4 1	LI X X	P I 4 8	LI X X	PV X X	P I 4 9	LI X X	PV X X	P I 4 A	LI X X	PV X X	P I 4 B	LI X X	PV X X	P I 4 D	LI X X	PV X X	P I 4 E	LI X X	PV X X	G I C 1	LI X X	PV X X	G I E X	LI X X	P I F X	LI X X
V 1 Opt. parameter only used if negotiated	2 D	X X	–			2 9	0 1	3 1	3 0	0 1	0 1	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	4 D	X X	X X	4 E	X X	X X	C 1	X X	X X	E X	X X	F X	X X
V 2 Without opt. parameter	2 D	X X	–			2 9	0 2	33 01	–			–		–			–			–			–			–			–			–			–			
V 3 With document ID PV 02 –	2 D	X X	–			2 9	0 4	3333 0004	3 0	0 1	* 0 2	–		–			–			–			–			–			–			–			–			
V 4 With document ID PV 03 –	2 D	X X	–			2 9	0 5	33333 00005	3 0	0 1	* 0 3	–		–			–			–			–			–			–			–			–			
V 5 Normal document for interwork	2 D	X X	2 8	0 1	0 1	2 9	0 4	3333 1006	–			–		–			–			–			–			–			–			–			–			
V 6 Control document for interwork –	2 D	X X	2 8	0 1	0 1	2 9	0 4	3333 1007	3 0	0 1	0 2	–		–			–			–			–			–			–			–			–			
V 7 LI 3 octet	2 D	X X	–			2 9	*** F00 F01	3 2	–			–		–			–			–			–			–			–			–			–			
V 8 PLI = 0	2 D	X X	–			2 9	0 1	3 3	–			4 1	0 2	4 8	0 0	***** (–)	–			–			–			–			–			–			–			
V 9 Operator document –	2 D	X X	–			2 9	0 1	3 4	3 0	0 1	* 0 1	–		–			–			–			–			–			–			–			–			

<CDS> Document protocol element

Command document start →			Service interw. ID			Document reference number			Document type ID			Non-basic terminal capabilities																				Session user data			Private use param.			
														Graph. char.			Control char.			Page format			Misc. T. cap.			Charact. box height			Charact. box width									
Tester sends ↓ (Testcase)	C I 2 D	LI X X	P I 2 8	LI X X	PV X X	P I 2 9 M	LI X X M	PV X X M	P I 3 0	LI 0 1	PV X X	G I 4 1	LI X X	P I 4 8	LI X X	PV X X	P I 4 9	LI X X	PV X X	P I 4 A	LI X X	PV X X	P I 4 B	LI X X	PV X X	P I 4 D	LI X X	PV X X	P I 4 E	LI X X	PV X X	G I C 1	LI X X	PV X X	G I E X	LI X X	P I F X	LI X X
I 1 CLI error	2 D	* E E	2 8	0 1	0 1	2 9	0 3	333 210	3 0	0 1	0 2	–		–			–			–			–			–			–			–			–			
I 2 PLI error	2 D	0 B	2 8	* 0 3	0 1	2 9	0 3	333 211	3 0	0 1	0 0	–		–			–			–			–			–			–			–			–			
I 3 Error in document reference number PV length	2 D	X X	2 8	0 1	0 1	2 9	* 0 0	(–)	–			–		–			–			–			–			–			–			–			–			
I 4 Missing mand. parameter	2 D	0 3	–			********** –			3 0	0 1	0 1	–		–			–			–			–			–			–			–			–			

<CDC> Document protocol element

Command document continue →		Document linking							Service inter-working ID	Document reference number	Document type ID	Non-basic terminal capabilities							Session user data	Private use parameter
			Called term ID	Calling term ID	Date & Time	Add. session reference number	Document reference number	Checkpoint reference number					Graph characters	Control characters	Page format	Misc. T. cap.	Character box height	Character box width		
Tester sends ↓ (Testcase)	C I LI 1 X D X	G I LI 2 X 1 X	P I LI PV 0 1 (24) 9 8	P I LI PV 0 1 (24) A 8	P I LI PV 0 0 (14) B E	P I LI PV 0 0 (2) C 2	P I LI PV 2 X X 9 X X M M M	P I LI PV 2 X X A X X M M M	P I LI PV 2 X X 8 X X	P I LI PV 2 X X 9 X X M M M	P I LI PV 3 0 X 0 1 X	G I LI 4 X 1 X	P I LI PV 4 X X 8 X X	P I LI PV 4 X X 9 X X	P I LI PV 4 X X A X X	P I LI PV 4 X X B X X	P I LI PV 4 X X D X X	P I LI PV 4 X X E X X	G I LI PV C X X 1 X X	G I LI E X X X
V 1 With all in previous document presented parameters	1 X D X	2 X 1 X	0 1 (24) 9 8	0 1 (24) A 8	0 0 (14) B E	0 0 (2) C 2	2 X X 9 X X	2 X X A X X	2 0 0 8 1 1	2 0 3 9 1 2	3 0 0 0 1 2	4 X 1 X	4 X X 8 X X	–	4 X X A X X	4 X X B X X	4 X X D X X	4 X X E X X	C X X 1 X X	E X X X
V 2 Only mand. parameters (Note 1)	1 X D X	2 X 1 X	–	–	–	–	2 0 333 9 3 801	2 0 333 A 3 101	–	2 0 333 9 3 009	–	–	–	–	–	–	–	–	–	–
I 1 Missing link CM parameter	1 X D X	2 X 1 X	0 1 (24) 9 8	0 1 (24) A 8	******** –	0 0 (2) C 2	2 0 333 9 3 200	2 0 333 A 3 001	–	2 0 333 9 3 020	–	–	–	–	–	–	–	–	–	–
I 2 Missing mand. parameter	1 X D X	2 X 1 X	–	–	–	–	2 0 333 9 3 201	******** –	–	2 0 333 9 3 021	–	–	–	–	–	–	–	–	–	–
I 3 Mand. P 2A LI = 0	1 X D X	2 X 1 X	0 1 (24) 9 8	0 1 (24) A 8	0 0 (14) B E	0 0 (2) C 2	2 0 333 9 3 200	* 2 0 – A 0	–	2 0 333 9 3 020	–	–	–	–	–	–	–	–	–	–
I 4 LI error	* 1 E D E	2 X 1 X	0 1 (24) 9 8	0 1 (24) A 8	0 0 (14) B E	0 0 (2) C 2	2 0 333 9 3 202	2 0 333 A 3 001	–	2 0 333 9 3 022	–	–	–	–	–	–	–	–	–	–
I 5 PLI Error	1 X D X	2 X 1 X	0 1 (24) 9 8	0 1 (24) A 8	0 0 (14) B E	* 0 0 (2) C 1	2 0 333 9 3 202	2 0 333 A 3 001	–	2 0 333 9 3 022	–	–	–	–	–	–	–	–	–	–

Note 1 – This case is valid only if this CDC occurs in the same session at the initial CDS.

Document protocol element

<CDE>

Command document end →		Checkpoint reference number
Tester sends ↓ (Testcase)	CI LI 2 0 9 X	PI LI PV 2 0 0 A X X M M M
V 1 CRN = 1, after CDS or last CRN+1	2 0 9 X	2 0 333 A X XXX
V 2 LI three octets	2 0 9 X	2 F00 333 A F03 XXX
I 1 CLI error	* 2 E 9 E	2 0 333 A X XXX
I 2 PLI error	2 X 9 X	* 2 E 333 A E XXX
I 3 Incorrect CRN	2 X 9 X	* * * 2 X 333 A X EEE
I 4 Missing mand. parameter	2 0 9 0	********** –
I 5 Mand. PLI = 0	2 0 9 2	******** 2 0 (–) A 0
I 6 Non T.61 coded CRN	2 0 9 X	* * * 2 0 000 A 3 123

<RDEP>

Response document end positive →		Checkpoint reference number
Tester sends ↓ (Testcase)	RI LI 2 X A X	PI LI PV 2 X 3 A X X M M M
V 1 CRN length and PV equal to CDE	2 X A X	2 X 3333 A X XXXX
V 2 CRN PV equal to CDE, length not equal	2 X A X	* * * * * * 2 X 3333 A X XXXX
V 3 LI three octets	2 X A X	2 F00 333 A F03 XXX
I 1 CLI error	* 2 E A E	2 0 333 A X XXX
I 2 PLI error	2 X A X	* 2 E 333 A E XXX
I 3 Sequencing of CRN incorrect	2 X A X	* * * 2 X 333 A X EEE
I 4 Missed mand. parameter	2 0 A 0	********** –
I 5 Mand. PLI = 0	2 0 A 2	******** 2 0 (–) A 0
I 6 Non T.61 coded CRN	2 0 A X	* * * 2 0 000 A 3 123

Document protocol element

<CDR>

Command document resynchronise →		Reason
Tester sends ↓ (Testcase)	CI LI 1 0 9 X	PI LI PV 3 0 0 2 1 X
V 1 With param.	1 0 9 3	3 0 0 2 1 0
V 2 Without parameter	1 0 9 0	–

<CDD>

Command document discard →		Reason
Tester sends ↓ (Testcase)	CI LI 3 X 9 X	PI LI PV 3 0 0 2 1 X
V 1 With param.	3 0 9 3	3 0 0 2 1 3
V 2 Without parameter	3 0 9 0	–

Document protocol element

<RDRP>

Response document resynchronise positive →	
Tester sends ↓ (Testcase)	RI LI 1 0 A 0
V 1 Normal	1 0 A 0
V 2 LI three octets	1 F00 A F00

<RDDP>

Response document discard positive →	
Tester sends ↓ (Testcase)	RI LI 3 0 A 0
V 1 Normal	3 0 A 0
V 2 LI three octets	3 F00 A F00

Document protocol element

<CDPB>

Command document page boundary →		Checkpoint reference number
Tester sends ↓ (Testcase)	CI LI 3 0 1 X	PI LI PV 2 0 0 A X X M M M
V 1 CRN = 1 after CDS or last CRN+1	3 0 1 X	2 0 333 A X XXX
V 2 LI three octets	3 F00 1 F05	2 0 333 A 3 XXX
I 1 CLI error	* 3 E 1 E	2 0 333 A X XXX
I 2 PLI error	3 X 1 X	* 2 E 333 A E XXX
I 3 Sequencing of CNR incorrect	3 X 1 X	* * * 2 X 333 A X EEE
I 4 Missed mand. parameter	3 0 1 0	********** –
I 5 Mand. PLI = 0	3 0 1 2	******** 2 0 (–) A 0

<RDPBP>

Response document page boundary positive →		Checkpoint reference number	Receive ability jeopard.
Tester sends ↓ (Testcase)	RI LI 3 X 2 X	PI LI PV 2 X 3 A X X M M M	PI LI PV 2 X X E X X M M M
V 1 CRN length and PV equal to CDPB	3 X 2 X	2 X 3333 A X XXXX	2 0 0 E 1 0
V 2 CRN PV equal CDPB, length not equal	3 X 2 X	* * * * * * 2 X 3333 A X 0 XXX	2 0 0 E 1 0
V 3 LI three octets	3 X 2 X	*** 2 F00 333 A F03 XXX	2 0 0 E 1 0
V 4 Parameter 2 E set to 1	3 X 2 X	2 X 333 A X XXX	2 0 0 E 1 1
I 1 PLI error	* 3 E 2 E	2 0 333 A X XXX	2 0 0 E 1 1
I 2 PLI error	3 X 2 X	* 2 E 333 A E XXX	2 0 0 E 1 0
I 3 Incorrect CRN	3 X 2 X	* * * 2 X 333 A X EEE	2 0 0 E 1 0
I 4 Missed mand. parameter	3 X 2 X	2 X 333 A X XXX	********* –
I 5 Mand. PLI = 0	3 0 2 7	2 0 333 A 3 XXX	***** 2 0 (–) E 0

<RDPBN>

Response document page boundary negative →		Reason
Tester sends ↓ (Testcase)	RI LI 3 0 0 X	PI LI PV 3 0 0 2 1 X
V 1 With param.	3 0 0 3	3 0 0 2 1 0
V 2 LI three octets	3 0 0 5	*** 3 F00 0 2 F01 X

<CDCL> Document protocol element

Command document capability list →			Inactive timer			Storage capacity negotiation			Non-basic terminal capabilities																				Session user data			Private use param.				Non-standard capab.		
											Graph. char.			Control char.			Page format			Misc. t. cap.			Charact. box height			Charact. box width												
Tester sends ↓ (Testcase)	C I 3 D	LI X X	P I 1 2	LI X X	PV X X	P I 2 D	LI 0 2	PV XX XX	G I 4 1	LI X X	P I 4 8	LI X X	PV X X	P I 4 9	LI X X	PV X X	P I 4 A	LI X X	PV X X	P I 4 B	LI X X	PV X X	P I 4 D	LI X X	PV X X	P I 4 E	LI X X	PV X X	G I C 1	LI X X	PV X X	G I E X	LI X X	P I F X	LI X X	P I E 8	LI X X	PV X X
V 1 With all def. parameters	3 D	X X	1 2	0 1	0 0	2 D	0 2	00 2A	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	4 D	X X	X X	4 E	X X	X X	C 1	X X	X X	E X	X X	F X	X X	E 8	X X	X X
V 2 With unexpected parameters	3 D	X X	* 1 1	0 1	0 0	2 D	0 2	01 23	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 3 LI defined on three octets	*** 3F DF	XX XX	1F 2F	*** 00 01	0 2	2 D	0 2	01 23	4 1	X X	4F 8F	*** XX XX	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 4 With several parameters	3 D	X X	1 2	0 2	00 12	–			4 1	X X	4 8	X X	X X	–			–			–			–			–			–			–				–		
V 5 Without parameters	3 D	0 0	–			–			–		–			–			–			–			–			–			–			–				–		
I 1 With CLI error	3 D	* E E	1 2	0 1	0 0	2 D	0 2	00 2A	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
I 2 With PGLI error	3 D	X X	1 2	0 1	0 1	2 D	0 2	0F 4F	4 1	* E E	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
I 3 With PLI error	3 D	X X	1 2	0 1	0 0	2 D	** 00 02	0F 2A	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		

<RDCLP> Document protocol element

Response document capability list positive →			Inactive timer			Accept. of CDCL param.			Storage capacity negotiation			Non-basic terminal capabilities																				Session user data			Private use param.				Non-standard capab.		
														Graph. char.			Control char.			Page format			Misc. t. cap.			Charact. box height			Charact. box width												
Tester sends ↓ (Testcase)	R I 3 E	LI X X	P I 1 2	LI X X	PV X X	P I 2 C	LI X X	PV X X	P I 2 D	LI 0 2	PV XX XX	G I 4 1	LI X X	P I 4 8	LI X X	PV X X	P I 4 9	LI X X	PV X X	P I 4 A	LI X X	PV X X	P I 4 B	LI X X	PV X X	P I 4 D	LI X X	PV X X	P I 4 E	LI X X	PV X X	G I C 1	LI X X	PV X X	G I E X	LI X X	P I F X	LI X X	P I E 8	LI X X	PV X X
V 1 With all def. parameters	3 X	E X	1 2	0 1	0 0	–			2 D	0 2	00 10	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	4 D	X X	X X	4 E	X X	X X	C 1	X X	X X	E X	X X	F X	X X	E 8	X X	X X
V 2 With unexpected parameter	3 E	X X	* 1 1	0 1	0 0	–			2 D	0 2	01 23	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 3 With not def. PV	3 E	X X	1 2	0 1	0 1	–			2 D	0 2	0F 4F	4 1	X X	4 8	X X	X X	4 9	0 1	* F F	4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 4 LI defined on three octets	*** 3F EF	XX XX	*** 1F 2F	00 01	0 2	–			2 D	0 2	0F 8F	4 1	X X	4F 8F	*** XX XX	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 5 With several parameters	3 E	X X	1 2	0 2	00 12	2 C	0 1	0 0	–			4 1	X X	4 8	X X	X X	–			–			–			–			–			–			–				–		
V 6 With P 2C, PV 01	3 E	X X	1 2	0 1	F E	2 C	0 1	0 1	–			–		–			–			–			–			–			–			–			–				–		
V 7 With P 2C, PV 01 and P	3 E	X X	–			2 C	0 1	0 1	2 D	0 2	01 43	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
V 8 Without parameters	3 E	0 0	–			–			–			–		–			–			–			–			–			–			–			–				–		

<RDCLP> Document protocol element

Response document capability list positive →			Inactive timer			Accept. of CDCL param.			Storage capacity negotiation			Non-basic terminal capabilities																				Session user data			Private use param.				Non-standard capab.		
														Graph. char.			Control char.			Page format			Misc. t. cap.			Charact. box height			Charact. box width												
	PI	LI	PI	LI	PV	PI	LI	PV	PI	LI	PV	GI	LI	PI	LI	PV	PI	LI	PV	PI	LI	PV	PI	LI	PV	PI	LI	PV	PI	LI	PV	GI	LI	PV	GI	LI	PI	LI	PI	LI	PV
Tester sends ↓ (Testcase)	3 E	X X	1 2	X X	X X	2 C	X X	X X	2 D	0 2	XX XX	4 1	X X	4 8	X X	X X	4 9	X X	X X	4 A	X X	X X	4 B	X X	X X	4 D	X X	X X	4 E	X X	X X	C 1	X X	X X	E X	X X	F X	X X	E 8	X X	X X
I 1 With RLI error	3 E	* E E	1 2	0 1	0 0	2 C	0 1	0 1	2 D	0 2	00 2A	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	4 D	X X	X X	4 E	X X	X X	C 1	X X	X X	E X	X X	F X	X X	E 8	X X	X X
I 2 With PGLI error	3 E	X X	1 2	0 1	0 1	–			2 D	0 2	0F 4F	4 1	* E E	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		
I 3 With PLI error	3 E	X X	1 2	0 1	0 0	–			2 0	* 00 04	0F 2A	4 1	X X	4 8	X X	X X	–			4 A	X X	X X	4 B	X X	X X	–			–			–			–				–		

Document protocol element

<CDUI>

Command document user information →		Correct user info.
Tester sends ↓ (Testcase)	CI LI 0 0 1 0	XXXXXXXX XXXXXXXX
V 1 Normal	0 0 1 0	XXXXXXXX XXXXXXXX
V 2 LI three octets	*** 0 F00 1 F00	XXXXXXXX XXXXXXXX
I 1 CLI not equal 00	* 0 E 1 E	XXXXXXXX XXXXXXXX
I 2 Without user inform.	0 0 1 0	******** –

<RDGR>

Response document general reject →		Reflect parameter values
Tester sends ↓ (Testcase)	RI LI 0 X 0 X	PI LI PV 3 X X 1 X X M M M
V 1 With parameter	0 X 0 X	3 0 X 1 1 X
V 2 With parameter	0 X 0 X	3 X (X) 1 X

C.2 *T.62 Test Schedule*

Session test schedule

Testing normal conditions
Terminal calling/Tester called

Before this sequence is executed, the terminal will establish the transport connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
Session tests				
GN1	Send CSS		R-CSS	a) 0.3 - 8.1
GN2	Receive RSSP	S-RSSP		a) 8.1 - 9 (DS 1.1) b) RSSP V1 - V10 (REP)
Document tests				
Tests GN3 and GN4 can only be carried out if the SUT has the capability to transmit a CSUI/CDCL. They may require the SUT to be set up to transmit a non-basic document.				
GN3	Send CSUI/CDCL		R-CSUI/CDCL	a) DS 1.1 - DS 6.1
GN4	Receive RSUI/RDCLP	S-RSUI/RDCLP		a) DS 6.1 - DS 1.1 b) RDCLP V1 - V8 (REP)
Tests GN5 - GN14 require the SUT to be set up to transmit a 5 page document.				
GN5	Send CSUI/CDS		R-CSUI/CDS	a) DS 1.1 - DS 2.1
GN6	Send CSUI/CDUI		R-CSUI/CDUI #N	a) DS 2.1 - DS 3.1, DS 3.1 - DS 3.1 c) #N is number of CDUI
GN7	Send CSUI/CDPB (1)		R-CSUI/CDPB (1)	a) DS 3.1 - DS 2.1
GN8	Receive RSUI/RDPBP Clear checkpoint (transient)	S-RSUI/RDPBP (1)		a) DS 2.1 - DS 2.1 b) RSUI V1 RDPBP V1

Testing normal conditions
Terminal calling/Tester called (cont.)

Before this sequence is executed, the terminal will establish the transport connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GN9	To ensure SUT stops transmission when 3 checkpoints are outstanding		R-CSUI/CDUI #N R-CSUI/CDPB (2) R-CSUI/CDUI #N R-CSUI/CDPB (3) R-CSUI/CDUI #N R-CSUI/CDPB (4) SUT stops transmission	
GN10	Clear checkpoint at window edge	S-RSUI/RDPBP (2)	R-CSUI/CDUI #N	a) DS 4.1 - DS 2.1 b) RSUI V2 RDPBP V2
GN11	Send CSUI/CDE		R-CSUI/CDE (5)	a) DS 3.1 - DS 5.1
GN12	Receive RSUI/RDPBP	S-RSUI/RDPBP (3)		a) DS 5.1 - DS 5.1 b) RDPBP V3
GN13	Receive RSUI/RDPBP	R-RSUI/RDPBP (4)		a) DS 5.1 - DS 5.1 b) RDPBP V4
GN14	Receive RSUI/RDEP	S-RSUI/RDEP (5)		a) DS 5.1 - DS 1.1 b) RSUI V1 RDEP V1 - V3
Test GN15 can only be carried out if the SUT has the capability to transmit CSUI/CDC. It may require that a previous document transmission be interrupted.				
GN15	Send CSUI/CDC		R-CSUI/CDC	a) DS 1.1 - DS 2.1

Testing normal conditions
Terminal calling/Tester called (cont.)

Before this sequence is executed, the terminal will establish the transport connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
Session tests				
Test GN16 can only be carried out if the SUT has the capability to offer CSCC.				
GN16	Send CSCC		R-CSCC	a) 9 DS - 10.1
GN17	Receive RSCCP	S-RSCCP		a) 10.1 - 11 DR b) RSCCP V1 or V2
GN18	Tester transmits a complete document			
GN19	Receive CSCC	S-CSCC		a) 11 DR - 12.1 b) CSCC V1 or V2
GN20	Send RSCCP		R-RSCCP	a) 12.1 - 9 DS
GN21	Send CSE		R-CSE	a) 9 DS - 13.1
GN22	Receive RSEP	S-RSEP		a) 13.1 - 0.1 or 0.2 b) RSEP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 7 (transient state)

Before each test, the tester will be in the process of establishing a session or transmitting a document and at some stage S-CSA.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE7/0	Receive SPDU	S-SPDU		a) 7.1 - 7.1 b) Any SPDU
			R-RSAP	a) 7.1 - 0.1 or 0.2

Session test schedule

Exception tests
Terminal calling/Tester called

Tests from state 8.1

Before each test, the tester will R-CSS.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE8/0	Timeout T2	Do nothing		a) 8.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE8/1	Receive invalid SPDU	S-SPDU invalid		a) 8.1 - X b) Any session or document PDU other than RSSP, RSSN or CSA
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE8/2	Receive CSA	S-CSA		a) 8.1 - 7.1 b) CSA V1, V2 or V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE8/3	Receive RSSN	S-RSSN	T-DISC IND	a) 8.1 - 0.1 b) RSSN V1 - V10
GE8/4	Receive invalid RSSP	S-RSSP invalid		a) 8.1 - X b) RSSP I1 - I8
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2

Session test schedule

Exception tests
Terminal calling/Tester called

Tests from state 9 DS 1.1 (transient state)

Before each test, the tester will:

- R-CSS
- S-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE91/0	Receive any invalid SPDU	S-SPDU		a) 9.DS - X b) Any SPDU
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE91/1	Receive CSA	S-CSA		a) 9.DS - 7.1 b) CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 2.1 (transient state)

Before each test, the tester will:

- R-CSS
- S-RSSP
- R-CSUI/CDS

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE91/0	Receive any invalid SPDU	S-SPDU		a) 9.DS - X b) Any SPDU
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE91/1	Receive CSA	S-CSA		a) 9.DS - 7.1 b) CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 2.1 (transient state) *(cont.)*

Before each test, the tester will proceed as normal until it receives R-CSUI/CDPB(I) (S-R) < (W-I).

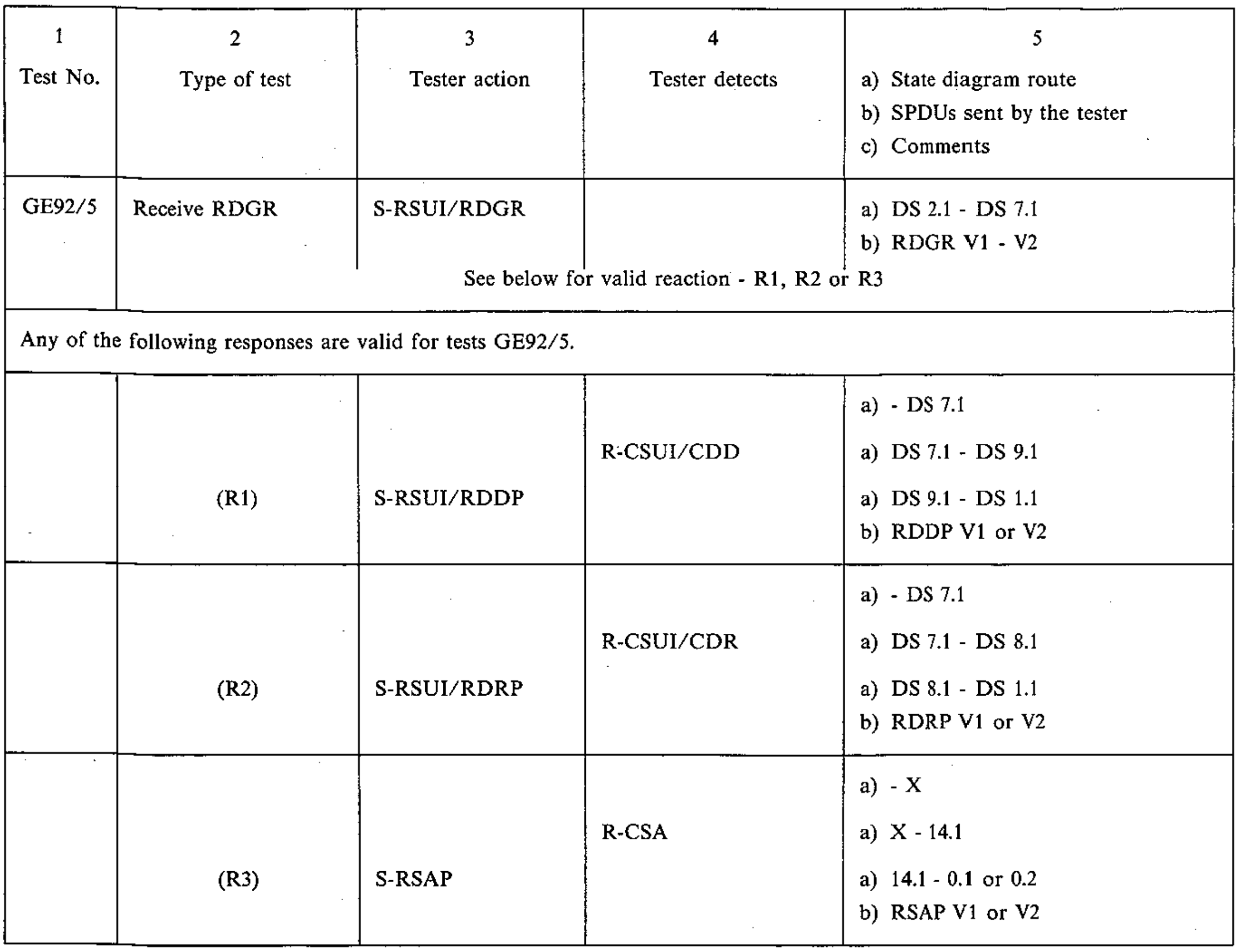
1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE92/2	Receive an invalid RSUI/-	RSUI/- invalid		a) DS 2.1 - b) Any SPDU other than RDPBP or RDPBN
	See below for valid reaction - R1, R2 or R3			
GE92/3	Receive RDPBN	S-RSUI/RDPBN		a) DS 2.1 - b) RDPBN V1 or V2
	See below for valid reaction - R1, R2 or R3			
GE92/4	Receive RDPBP with wrong checkpoint number	S-RSUI/RDPBP		a) DS 2.1 - b) RDPBP I3 with checkpoint number incorrect
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE92/2 GE92/3 GE92/4.				
	(R1)	S-RSUI/RDDP	R-CSUI/CDD	a) - DS 7.1 a) DS 7.1 - DS 9.1 a) DS 9.1 - DS 1.1 b) RDDP V1 or V2
	(R2)	S-RSUI/RDRP	R-CSUI/CDR	a) - DS 7.1 a) DS 7.1 - DS 8.1 a) DS 8.1 - DS 1.1 b) RDRP V1 or V2
	(R3)	S-RSAP	R-CSA	a) - X a) X - 14.1 a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 2.1 (transient state) *(cont.)*

Before each test, the tester will:

- R-CSS
- S-RSSP
- R-CSUI/CDS



1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE92/5	Receive RDGR	S-RSUI/RDGR		a) DS 2.1 - DS 7.1 b) RDGR V1 - V2
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE92/5.				
				a) - DS 7.1
			R-CSUI/CDD	a) DS 7.1 - DS 9.1
	(R1)	S-RSUI/RDDP		a) DS 9.1 - DS 1.1 b) RDDP V1 or V2
				a) - DS 7.1
			R-CSUI/CDR	a) DS 7.1 - DS 8.1
	(R2)	S-RSUI/RDRP		a) DS 8.1 - DS 1.1 b) RDRP V1 or V2
				a) - X
			R-CSA	a) X - 14.1
	(R3)	S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 1.1

Before each test, the tester will respond normally with a multipage document until it receives the acknowledgement for the second page.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE9C/0	Receive RDPBN	S-RSUI/RDPBN		a) DS 2.1 or DS 3.1 - b) RDPBN V1 or V2
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE9C/0.				
	(R1)	S-RSUI/RDDP	R-CSUI/CDD	a) - DS 7.1 a) DS 7.1 - DS 9.1 DS 9.1 - DS 1.1 b) RDDP V1 or V2
	(R2)	S-RSUI/RDRP	R-CSUI/CDR R-CSUI/CDC ((optional)	a) - DS 7.1 a) DS 7.1 - DS 8.1 a) DS 8.1 - DS 1.1 b) RDRP V1 or V2 a) DS 1.1 - DS 2.1
	(R3)	S-RSAP	R-CSA	a) - X a) X - 14.1 a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Note – Testing document continuation: it is not mandatory for all terminals to support document continuation.

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 1.1 *(cont.)*

Before each test, the tester will respond normally with a multipage document until it receives the acknowledgement for the second page.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE9C/1	Receive CSA	S-CSA		a) DS 9 - DS 2.1 (or DS 3.1 - 7.1) b) CSA V1
			R-RSAP (Transport connection retained) The second part of this test can only be carried out, if the SUT does not release the network connection	a) 7.1 - 0.2
			R-CSS	a) 0.2 - 8.1
		S-RSSP		a) 8.1 - 9.DS b) RSSP V1 - V10
			R-CSUI/CDC	a) DS 1.1 - DS 2.1
GE9C/2	Receive invalid PDU at 0.2	S-CSA		a) DS 2.1 - DS 7.1 (or DS 3.1 - 7.1) b) CSA V1
			R-RSAP (Transport connection retained)	a) 7.1 - 0.2
		S-invalid PDU		a) - 0.2 - 0.1 b) Any SPDU
			T-DISC IND	

Note — Testing document continuation: it is not mandatory for all terminals to support document continuation.

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 3.1 (transient state)

Before each test, the tester will:

- R-CSS
- S-RSSP
- R-CSUI/CDS
- R-CSUI/CDUI ##N
  (R-CSUI/CDPB
  R-CSUI/CDUI ##N) where N is number of CDUIs necessary to equal one page.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE93/0	Receive invalid SPDU	S-SPDU invalid S-RSAP	R-CSA	a) DS 3.1 - X a) X - 14.1 a) 14.1 - 0.1 or 0.2
GE93/1	Receive CSA	S-CSA	R-RSAP	a) DS 3.1 - 7.1 b) CSA V1 - V3 a) 7.1 - 0.1 or 0.2
GE93/2	Receive an invalid RSUI/RDPBP	S-RSUI/RDPBP invalid		a) DS 3.1 - 7.1 b) RDPBP I1 - I5
	See below for valid reaction - R1, R2 or R3			
GE93/3	Receive RDPBN	S-RSUI/RDPBN		a) DS 3.1 - b) Any valid RDPBN V1 or V2
	See below for valid reaction - R1, R2 or R3			
	(R1)	S-RSUI/RDDP	R-CSUI/CDD	a) - DS 7.1 a) DS 7.1 - DS 9.1 b) RDDP V1 or V2 a) DS 9.1 - DS 1.1
	(R2)	S-RSUI/RDRP	R-CSUI/CDR	a) - DS 7.1 a) DS 7.1 - DS 8.1 b) RDRP V1 or V2 a) DS 8.1 - DS 1.1
	(R3)	S-RSAP	R-CSA	a) - X a) X - 14.1 a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2 c) Any of these responses are valid for tests GE93/2 GE93/3

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 3.1 (transient state) *(cont.)*

Before each test, the tester will respond correctly until it receives:

- R-CSUI/CDS
- R-CSUI/CDUI

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE93/4	Receive RDGR	S-RSUI/RDGR		a) DS 3.1 - 7.1 b) RDGR V1 - V2
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE93/4.				
				a) - DS 7.1
			R-CSUI/CDD	a) DS 7.1 - DS 9.1 b) RDDP V1 or V2
	(R1)	S-RSUI/RDDP		a) DS 9.1 - DS 1.1
				a) - DS 7.1
			R-CSUI/CDR	a) DS 7.1 - DS 8.1 b) RDRP V1 or V2
	(R2)	S-RSUI/RDRP		a) DS 8.1 - DS 1.1
				a) - X
			R-CSA	a) X - 14.1
	(R3)	S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 4.1

Before each test, the tester will perform normal tests:

- GN0-GN7 (RSUI/CDPB)
- window edge reached

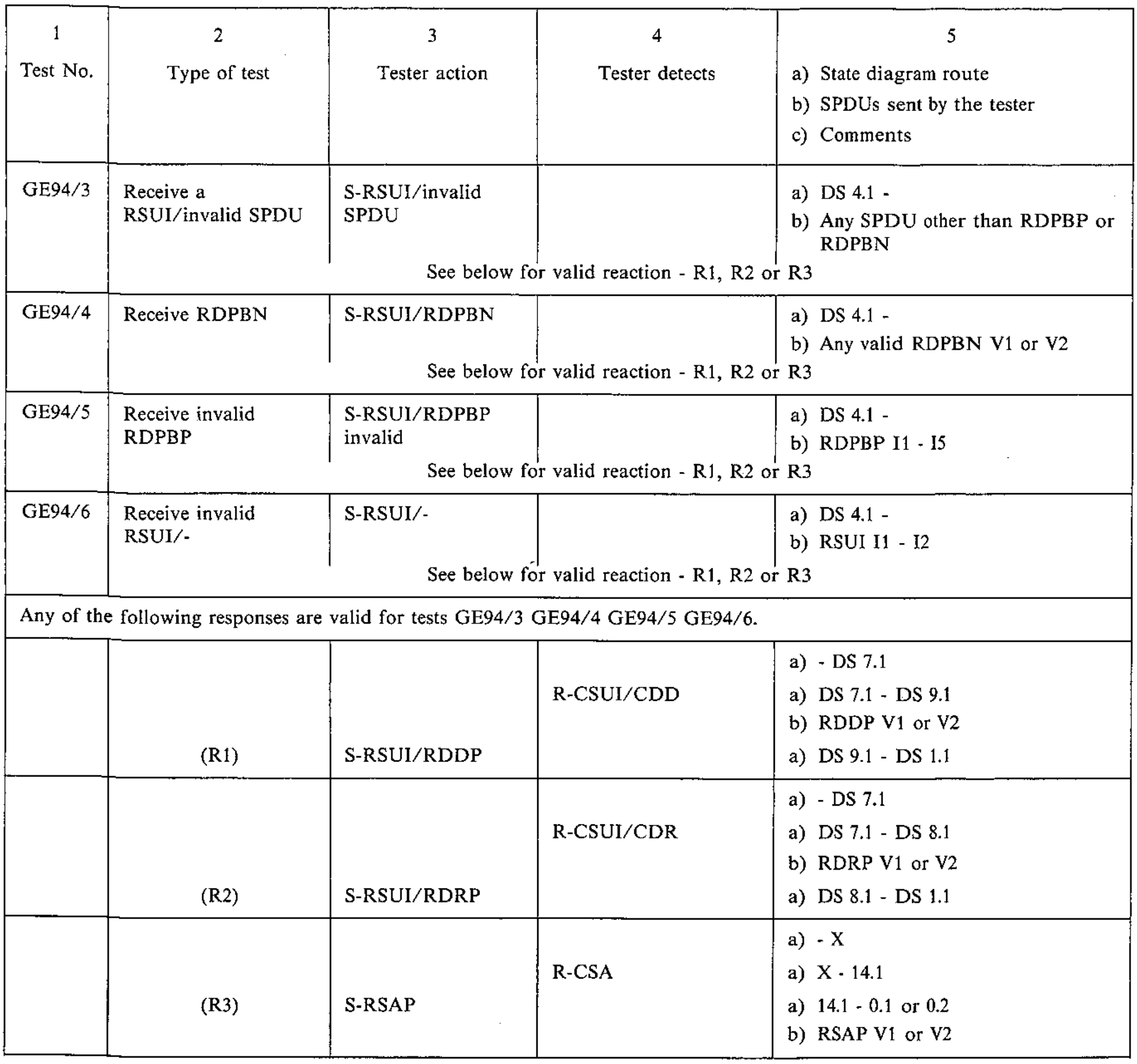
1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE94/0	Timeout T2	Do nothing		a) DS 4.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE94/1	Receive CSA	S-CSA		a) DS 4.1 - 7.1 b) CSA V1, V2 or V3
			R-RSAP	a) DS 7.1 - 0.1 or 0.2
GE94/2	Receive an invalid SPDU except CSA or RSUI/-	S-SPDU invalid		a) DS 4.1 - X b) Any SPDU other than CSA, RSUI/-
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 4.1 *(cont.)*

Before each test, the tester will perform normal tests:

- GN0-GN7 (RSUI/CDPB)
- window edge reached



1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE94/3	Receive a RSUI/invalid SPDU	S-RSUI/invalid SPDU		a) DS 4.1 - b) Any SPDU other than RDPBP or RDPBN
	See below for valid reaction - R1, R2 or R3			
GE94/4	Receive RDPBN	S-RSUI/RDPBN		a) DS 4.1 - b) Any valid RDPBN V1 or V2
	See below for valid reaction - R1, R2 or R3			
GE94/5	Receive invalid RDPBP	S-RSUI/RDPBP invalid		a) DS 4.1 - b) RDPBP I1 - I5
	See below for valid reaction - R1, R2 or R3			
GE94/6	Receive invalid RSUI/-	S-RSUI/-		a) DS 4.1 - b) RSUI I1 - I2
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE94/3 GE94/4 GE94/5 GE94/6.				
	(R1)	S-RSUI/RDDP	R-CSUI/CDD	a) - DS 7.1 a) DS 7.1 - DS 9.1 b) RDDP V1 or V2 a) DS 9.1 - DS 1.1
	(R2)	S-RSUI/RDRP	R-CSUI/CDR	a) - DS 7.1 a) DS 7.1 - DS 8.1 b) RDRP V1 or V2 a) DS 8.1 - DS 1.1
	(R3)	S-RSAP	R-CSA	a) - X a) X - 14.1 a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 5.1

Before each test, the tester will perform tests GN0-GN6 (one page document) (i.e. normal call up to CDPB). The tester will then R-CDE (one checkpoint outstanding).

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE95/0	Timeout T2	Do nothing		a) DS 5.1 - X b) RSAP V1 or V2
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2
GE95/1	Receive CSA	S-CSA		a) DS 5.1 - 7.1 b) CSA V1, V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE95/2	Receive SPDU invalid	S-SPDU invalid		a) DS 5.1 - X b) Any invalid SPDU
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 5.1 *(cont.)*

Before each test, the tester will perform tests GN0-GN7 (two page document). It will then R-CSUI/CDE(I) (one checkpoint outstanding).

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE95/3	Receive an invalid RDEP	S-RSUI/RDEP		a) DS 5.1 - b) RDEP I1 - I6
	See below for valid reaction - R1, R2 or R3			
GE95/4	Receive RSUI/-	S-RSUI/-		a) DS 5.1 - b) Any SPDU other than RDEP, RDPBP or RDPBN
	See below for valid reaction - R1, R2 or R3			
GE95/5	Receive an RSUI/RDPBN	S-RSUI/RDPBN		a) DS 5.1 - b) RDPBN V1 or V2
	See below for valid reaction - R1, R2 or R3			
GE95/6	Receive RDPBP	S-RSUI/RDPBP		b) RDPBP I1-I5, V1-V4
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE95/3 GE95/4 GE95/5 GE95/6.				
	(R1)	S-RSUI/RDDP	R-CSUI/CDD	a) - DS 7.1 a) DS 7.1 - DS 9.1 b) RDDP V1 or V2 a) DS 9.1 - DS 1.1
	(R2)	S-RSUI/RDRP	R-CSUI/CDR	a) - DS 7.1 a) DS 7.1 - DS 8.1 b) RDRP V1 or V2 a) DS 8.1 - DS 1.1
	(R3)	S-RSAP	R-CSA	a) - X a) X - 14.1 a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 5.1 *(cont.)*

Before each test, the tester will perform tests GN0-GN7 (two page document). It will then R-CSUI/CDE(I) (one checkpoint outstanding).

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE95/7	Receive invalid RDPBP	S-RSUI/RDPBP		a) DS 5.1 - b) RDPBP I1 - I5
	See below for valid reaction - R1, R2 or R3			
GE95/8	Receive unexpected RDEP	S-RSUI/RDEP (K) (K< >R)		a) DS 5.1 - b) RDEP V1 - V3
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE95/7 GE95/8.				
				a) - DS 7.1
			R-CSUI/CDD	a) DS 7.1 - DS 9.1
	(R1)	S-RSUI/RDDP		a) DS 9.1 - DS 1.1 b) RDDP V1 or V2
				a) - DS 7.1
			R-CSUI/CDR	a) DS 7.1 - DS 8.1
	(R2)	S-RSUI/RDRP		a) DS 8.1 - DS 1.1 b) RDRP V1 or V2
				a) - X
			R-CSA	a) X - 14.1
	(R3)	S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 6.1
(only possible if terminal supports non-basic options requiring the use of CDCL)

Before each test, the tester will respond normally until it receives a CDCL requesting non-basic capabilities.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE96/0	Timeout T2	Do nothing		a) DS 6.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2
GE96/1	Receive CSA	S-CSA		a) DS 6.1 - 7.1 b) CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE96/2	Receive invalid SPDU	S-SPDU		a) DS 6.1 - X b) Any valid SPDU except CSA or RSUI/-
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 6.1 *(cont.)*
(only possible if terminal supports non-basic options requiring the use of CDCL)

Before each test, the tester will respond normally until it receives a CDCL requesting non-basic capabilities.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE96/3	Receive RSUI/-	S-RSUI/-		a) DS 6.1 - b) Any valid RSUI/- except RSUI/RDCLP
	See below for valid reaction - R1, R2			
GE96/4	Receive invalid RDCLP	S-RSUI/RDCLP invalid		a) DS 6.1 - b) RDCLP I1 - I3
	See below for valid reaction - R1, R2			
Any of the following responses are valid for tests GE96/3 GE96/4.				
	(R1)			a) - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2
	(R2)			a) DS 7.1
			R-CSUI/CDR	a) DS 7.1 - DS 8.1
		S-RSUI/RDRP		a) DS 8.1 - DS 1.1 b) RDRP V1 - V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 7.1 (transient state)

Before each test, the tester will respond correctly until it receives R-CSUI/CDS, tester transmits S-CSUI/RDGR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE97/0	Receive an invalid SPDU	S-SPDU invalid		a) DS 7.1 - X b) Any session PDU other than CSA or RSUI/-
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE97/1	Receive CSA	S-CSA		a) DS 7.1 - 7.1 b) Any valid CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE97/2	Receive an invalid RSUI/-	RSUI/- invalid		a) DS 7.1 b) Any invalid document PDU
	See below for valid reaction - R1, R2 or R3			
Any of the following responses are valid for tests GE97/2.				
				a) DS 7.1
			R-CSUI/CDD	a) DS 7.1 - DS 9.1
	(R1)	S-RSUI/RDDP		a) DS 9.1 - DS 1.1 b) RDDP V1 or V2
				a) DS 7.1
			R-CSUI/CDR	a) DS 7.1 - DS 8.1
	(R2)	S-RSUI/RDRP		a) DS 8.1 - DS 1.1 b) RDRP V1 or V2
				a) - X
			R-CSA	a) X - 14.1
	(R3)	S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 8.1
(these tests are only possible if the CDR recovery method is supported by the terminal)

Before each test, the tester will:

- respond in a manner which causes the terminal to initiate CDR recovery
- R-CDUI/CDR

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE98/0	Timeout T2	Do nothing		a) DS 8.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2
GE98/1	Receive CSA	S-CSA		a) DS 8.1 - 7.1 b) CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE98/2	Receive any invalid SPDU	Invalid S/-SPDU		a) DS 8.1 - X b) Any invalid SPDU except CSA or RSUI/-
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 or V2
GE98/3	Receive any valid RSUI/- except RDRP	S-RSUI/-		a) DS 8.1 - DS 8.1 b) Any valid RSUI/- except RDRP
			Nothing	c) SUT should ignore SPDU
		S-RSUI/RDRP	Terminal continues normally	a) DS 8.1 - DS 1.1 b) RDRP V1 or V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 9 DS 9

Before each test, the tester will respond correctly until it receives R-RSUI/CDPB(1). It will then transmit S-RSUI/RDPBN. If the terminal then transmits R-CSUI/CDD the following tests can be undertaken.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE99/0	Timeout T2	Do nothing		a) DS 9 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) - 0.1 or 0.2 b) RSAP V1 or V2
GE99/1	Receive CSA	S-CSA		a) DS 9.1 - 7.1 b) CSA V1 - V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE99/2	Receive SPDU	Invalid S-SPDU		a) DS 9.1 - X b) Any SPDU other than CSA, RSUI/-
			R-CSA	a) X - 14.1
GE99/3	Receive RSUI/-	S-RSUI/-		a) DS 9.1 - DS 9.1 b) Any SPDU other than RDDP
		Do nothing	Terminal timeout	c) See GE99/0
GE99/4	Receive RDDP	S-RSUI/RDDP	Normal continuation	a) DS 9.1 - DS 1.1 b) Any valid RDDP V1, V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 10.1
(only possible if terminal supports change control)

Before each test, the tester will:

- R-CSS
- S-RSSP with request to transmit (possible reception of a document depends on terminal capabilities)
- R-CSCC

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE10/0	Timeout T2	Do nothing		a) DS 10.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1, V2
GE10/1	Receive invalid SPDU	Invalid S-SPDU		a) 10.1 - X b) Any SPDU except RSCCP or CSA
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1, V2
GE10/2	Receive CSA	S-CSA		a) 10.1 - 7.1 b) CSA V1, V2 or V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE10/3	Receive invalid RSCCP	Invalid S-SPDU		a) 10.1 - X b) RSCCP I1
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 11 (transient state)
(only possible if terminal supports change control)

Before each test, the tester will:

- R-CSS
- S-RSSP with request to transmit (possible reception of a document depends on terminal capabilities)
- R-CSCC
- S-RSCCP
- Send DOCUMENT

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE11/0	Receive unexpected SPDU			
		S-CSE		a) 11.DR - X b) CSE V1 - V4
			R-CSA	a) X - 14.1

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 11 (transient state) *(cont.)*
(Only possible if terminal supports change control)

Before each test, the tester will:

- R-CSS
- S-RSSP with request to transmit (possible reception of a document depends on terminal capabilities)
- R-CSCC
- S-RSCCP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE11/1	Receive invalid CSCC	Invalid S-CSCC		a) 11.DR - X b) CSCC I1
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 12 (transient state)
(only possible if terminal supports change control)

Before each test, the tester will:

- R-CSS
- S-RSSP with request to transmit (possible reception of a document depends on terminal capabilities)
- R-CSCC
- S-RSCCP
- S-CSCC

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE12/0	Receive CSA	S-CSA		a) 12.1 - 7.1 b) CSA V1, V3
			R-RSAP	a) 7.1 - 0.1 or 0.2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 13

Before each test, the tester will respond normally until it receives a CSE.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE13/0	Timeout T2	Do nothing		a) 13.1 - X
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2
GE13/1	Receive CSA	S-CSA		a) 13.1 - 7.1 b) CSA V1, V3
			R-RSAP	a) 7.1 - 0.1 or 0.2
GE13/2	Receive unexpected SPDU	S-SPDU		a) 13.1 - X b) Any SPDU other than CSA, RSEP
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2
GE13/3	Receive invalid RSEP	Invalid S-RSEP		a) 13.1 - X b) RSEP I1
			R-CSA	a) X - 14.1
		S-RSAP		a) 14.1 - 0.1 or 0.2 b) RSAP V1 - V2

Session test schedule

Exception tests
Terminal calling/Tester called
Tests from state 14

Before each test, the tester will:

- Respond normally to document transfer, and then
- S-SPDU (invalid)
- R-CSA

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
GE14/0	Timeout T3	Do nothing		
			T-DISC IND	a) 14.1 - 0.1 or 0.2
GE14/1	Receive any SPDU except RSAP	S-SPDU		a) 14.1 - 14.1 b) Any SPDU except RSAP
			T-DISC IND	a) 14.1 - 0.1 or 0.2

Session test schedule

Testing normal conditions
Terminal called/Tester calling
Session establishment

Before the sequence is carried out, the tester shall establish the transport connection.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DN1	Receive CSS	S-CSS		a) 0.2 - 1.1 b) CSS V1 - V8 (REP) c) RSSN is acceptable for V8
DN2	Send RSSP (or RSSN)		R-RSSP	a) 1.1 - 2 c) Test is passed if RSSP is in the right format and consistent with its capabilities
DN3	Receive CSCC	S-CSCC		a) 2 - 3.1 b) CSCC V1 - V2 (REP)
			R-RSCCP	a) 3.1 - 4
			R-CSCC	a) 4 - 5.1
		S-RSCCP		a) 5.1 - 2 b) RSCCP V1 - V2 (REP) c) Terminal has no document to send

Session test schedule

Testing normal conditions
Terminal called/Tester calling
Session establishment *(cont.)*

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DN4	Receive CSE	S-CSE		a) 2 - b) CSE V2
			R-RSEP	a) 6 - 0.2
DN5 may require a new transport connection to be established if the SUT release the existing transport connection.				
DN5	Receive CSE after sending RSSP	S-CSS		a) 0.2 - 1.1 b) CSS V1 - V8
			R-RSSP	a) 1.1 - 2
		S-CSE		a) 2 - 6 b) CSE V1 - V4 (REP)
			R-RSEP	a) 6 - 0.2
Before carrying out the following test, the tester must establish a session connection.				
DN6	Receive CDCL	S-CSUI/CDCL		a) DR 1.1 - b) CDCL V1 - V5 (REP) c) Must respond consistent with its capabilities
			R-RSUI/RDCLP	a) DR 6.1 - DR 1.1

Session test schedule

Testing normal conditions
Terminal called/Tester calling
Document transfer

Before carrying out these tests, the tester will establish a session.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DN7	Receive CDS	S-CSUI/CDS		a) DR 1.1 - DR 2.1 b) CDS V1 - V9 (REP)
DN8	Receive CSUI/CDUI	S-CSUI/CDUI		a) DR 2.1 - DR 3.1 b) CDUI V1 - V2 (REP) CSUI V1 - V2 (REP)
DN9	Receive CSUI/CDPB (1)	S-CSUI/CDPB (1)		a) DR 3.1 - DR 2.1 b) CDPB V1 - V2 (REP)
			R-RSUI/RDPBP (1)	a) DR 2.1 - DR 2.1
DN10	Receive CDE	S-CSUI/CDUI		a) DR 2.1 - DR 3.1 b) CDUI V1 - V2
		CSUI/CDE (2)		a) DR 3.1 - DR 5.1 b) CDE V1 - V2 (REP)
			R-RSUI/RDEP (2)	a) DR 5.1 - DR 1.1
DN11 requires a previous document transmission to be interrupted (for V1 in a new session).				
DN11	Receive CDC	S-CSUI/CDC		a) DR 1.1 - DR 2.1 b) CDC V1 - V2 (REP)
DN12	Correct reaction when window limit reached	Send multi-page document until window limit reached		b) CDPB V1 - V2
			R-RSUI/RDPBP (1)	a) DR 4.1 - DR 2.1 c) This test can only be carried out if the tester is able to reach the window limit before the terminal responds with a RDPBP. RDPBP must be returned before 60 s inactivity timer expires

Session test schedule

Testing normal conditions
Terminal called/Tester calling
Document transfer *(cont.)*

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DN13	Receive 1 page document	Send single page document	R-RSUI/RDEP (1)	a) DR 5.1 - DR 1.1
DN14	Receive CDE when outstanding acknowledgements exist	Send multipage document so that page acknowledgements are outstanding		b) CDE V1 - V2
			R-RSUI/RDPBP #N (acknowledge in sequence)	a) DR 5.1 - DR 5.1 a) DR 5.1 - DR 1.1
		S-CDE	R-RSUI/RDEP (K)	c) N is the number of RDPBP's necessary to clear outstanding acknowledgements
DN15	Handling of document and checkpoint reference numbers	Send following documents in different sessions DOC 1) DRN = 1 5 pages CRN = 1, 02, 003, 0004, 00005 DOC 2) DRN = 22 4 pages CRN = 1, 02, 003, 0004 DOC 3) DRN = 333 3 pages CRN = 1, 02, 003 DOC 4) DRN = 4444 2 pages CRN = 1, 02	Terminal must correctly receive all documents	

DRN: Document reference number.

CRN: Checkpoint reference number.

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 0

Before each test, the tester will:

- S-TCR
- R-TCA

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE0/0	Timeout T1	Do nothing	T-DISC IND	a) 0.2 - 0.1
DE0/1	Receive unexpected SPDU	S-SPDU unexpected	T-DISC IND	a) 0.2 - 0.1 b) Any SPDU except CSS
DE0/2	Receive invalid CSS	S-CSS invalid	T-DISC IND	a) 0.2 - 0.1 b) CDS I1 - I7
DE0/3	Receives CSS which requires a RSSN response	S-CSS		a) 1.2 - 0.2
			R-RSSN	b) CDS V1 - V8 c) The tests can only be carried out if the terminal responds with a RSSN to one of the valid CSS

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 1 (transient state)

Before each test, the tester will S-CSS.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE1/0	Receive unexpected SPDU	S-SPDU		a) 1.1 - b) Any SPDU except CSA
			R-CSA	a) 14.1
DE1/1	Receive CSA	S-CSA		a) 1.1 - b) CSA V1 - V2
			R-RSAP	a) 7 - 0

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 1

Before each test, the tester will:

- S-CSS
- R-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE21/0	Timeout T1	Do nothing	R-CSA	a) DR 1.1 a) - 14.1
DE21/1	Receive CSA	S-CSA	R-RSAP	a) DR 1.1 b) CSA V1 - V3 a) - 7.1 a) - 0.2
DE21/2	Receive unexpected SPDU	S-SPDU	R-CSA	a) DR 1.1 b) Any SPDU except CSA, CSCC, CSE I1, I2 or CSUI/- a) - 14.1
DE21/3	Receive invalid CSE	S-CSE invalid	R-CSA	a) DR 1.1 b) CSE I1, I2 a) - 14.1
DE21/4	Receive unexpected CSUI/-	S-CSUI/-	R-CSA or R-RSUI/RDGR	a) DR 1.1 - b) Any CSUI/- except CDS, CDC, CDR, or CDCL a) - 14.1 or a) - DR 7.1
DE21/5	Receive CSUI/CDR	S-CSUI/CDR	R-CSUI/RDRP	b) CDR (V1 or V2) a) DR 8.1 - DR 1.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 1.1

Before each test, the tester will:

- S-CSS
- R-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE21/6	Receive invalid CDS	S-CSUI (CDS) invalid		a) DR 1.1 b) CDS I1 - I4
			R-CSA	a) - 14.1
			or	or
			R-RSUI/RDGR	a) - DR 7.1
DE21/7	Receive invalid CDCL	S-CSUI (CDCL) invalid		a) DR 1.1 b) CDCL I1 - I3
			R-CSA	a) - 14.1
			or	or
			R-RSUI/RDGR	a) - DR 7.1
DE21/8	Receive invalid CSUI	S-CSUI invalid		a) DR 1.1 b) CSUI I1
			R-CSA	a) - 14.1
			or	or
			R-RSUI/RDGR	a) - DR 7.1
DE21/9	Receive invalid CDC	S-CSUI/CDC invalid		a) DR 1.1 b) CDC I1 - I5
			R-CSA	a) - 14.1
			or	or
			R-RSUI/RDGR	a) - DR 7.1
DE21/10	Receive invalid CSCC	S-CSCC invalid		a) DR 1.1 b) CSCC I1
			R-CSA	a) - 14.1

Session test schedule

Exception tests

Terminal called/Tester calling

Tests from state 2 DR 2

Before each test, the tester will initiate call to S-CSUI/CDS.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE22/0	Timeout T1	Do nothing	R-CSA	a) DR 2.1 - a) - 14.1
DE22/1	Receive invalid SPDU	S-SPDU	R-CSA	a) DR 2.1 - b) Any SPDU except CSUI/- or CSA a) - 14.1
DE22/2	Receive CSA	S-CSA	R-RSAP	a) DR 2.1 - b) CSA V1 - V2 a) - 7.1 - 0
DE22/3	Receive CSUI/- unexpected	S-CSUI/-		a) DR 2.1 - b) Any document command or response except CDD, CDR, CDUI, CDPB, CDE
	See below for valid reaction - R1, R2			
DE22/4	Receive invalid page boundary PDU	S-CSUI/CDPB (1)		a) DR 2.1 -
	See below for valid reaction - R1, R2 or R3			
DE22/5	Receive CSUI/CDR	S-CSUI/CDR	R-RSUI/RDRP	a) DR 2.1 - b) CDR V1 or V2 a) - DR 1.1
DE22/6	Receive CSUI/CDD	S-CSUI/CDD	R-RSUI/RDDP	a) DR 2.1 - b) CDD V1 or V2 a) - DR 9.1 a) - DR 1
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 2 *(cont.)*

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
Before each test, the tester will: – initiate call until 1 page has been sent, – S-CSUI/CDPB (1), – R-RDPBP (1).				
DE22/7	Timeout T1	Do nothing	within 60 seconds R-CSA	a) DR 2.1 - a) - 14.1
DE22/8	Receive CSA	S-CSA	R-RSAP	a) DR 2.1 - b) CSA V1 - V3 a) - 0.2
DE22/9	Receive unexpected SPDU	S-SPDU	R-CSA	a) DR 2.1 - b) Any SPDU except CSA or CSUI/- a) - 14.1
DE22/10	Receive unexpected CSUI/-	S-CSUI		a) DR 2.1 - b) Any invalid document PDU except CDD, CDR, CDUI or CDPB
	See below for valid reaction - R1, R2			
DE22/11	Receive unexpected CDPB	S-CSUI/CDPB (2)		a) DR 2.1 - b) CDPB V1 - V2
	See below for valid reaction - R1, R2 or R3			
	(R1)		R-CSA	a) - 14.1
	(R2)		R-RSUI/RDGR	a) - DR 7.1
	(R3)		R-RSUI/RDPBN	a) - DR 7.1
DE22/12	Receive CDR	S-CSUI/CDR	R-RSUI/RDRP	a) - DR 8.1 b) CDR V1 - V2 a) - DR 1.1
DE22/13	Receive CDD	S-CSUI/CDD	R-RSUI/RDDP	a) - DR 9.1 b) CDD V1 - V2 a) - DR 1.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 3

Before each test, the tester will:

- S-CSS, R-SSP
- S-CSUI/CDS, S-CSUI/CDUI
- S-CSUI/CDPB (1), S-CSUI/CDUI
- R-RDPBP (1)

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE23/0	Timeout T1	Do nothing	R-CSA (after 60 seconds)	a) DR 3.1 - a) - 14.1
DE23/1	Receive invalid CDPB	S-CSUI/CDPB		a) DR 3.1 - b) CDPB I1 - I5
	See below for valid reaction - R1, R2 or R3			
DE23/2	Receive SPDU invalid in this state	S-SPDU	R-CSA	a) DR 3.1 - b) Any SPDU except CSA or CSUI/- a) - 14.1
DE23/3	Receive CSA	S-CSA	R-RSAP	a) DR 3.1 - b) CSA V1 - V3 a) - 7.1 a) - 0
DE23/4	Receive CSUI/- invalid in this state	S-CSUI/-		a) DR 3.1 - b) Any invalid CSUI/ except CDE, CDD, CDR, CDUI or CDPB
	See below for valid reaction - R1, R2 or R3			
DE23/5	Receive CSUI/- invalid CDUI	S-CSUI/CDUI invalid		a) DR 3.1 - b) CDUI I1 - I2
	See below for valid reaction - R1, R2 or R3			
DE23/6	Receive CSUI/CDR	S-CSUI/CDR	R-RSUI/RDRP	a) DR 3.1 - b) CDR V1 - V2 a) - DR 8.1 a) - DR 1.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 3 *(cont.)*

Before each test, the tester will:

- S-CSS, R-SSP
- S-CSUI/CDS, S-CSUI/CDUI
- S-CSUI/CDPB (1), S-CSUI/CDUI
- R-RDPBP (1)

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE23/7	Receive CSUI/CDD	S-CSUI/CDD	R-RSUI/RDDP	a) DR 3.1 - b) CDD V1 - V2 a) - DR 9.1 - DR 1.1
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1
Before each test, the tester will initiate call and attempt to reach the window limit at the point when the last CDPB is about to be sent.				
DE23/8	Receive invalid CDPB	S-CSUI/CDPB invalid		a) DR 3.1 - b) CDPB I1 - I5
	See below for valid reaction - R1, R2 or R3			
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1

Session test schedule

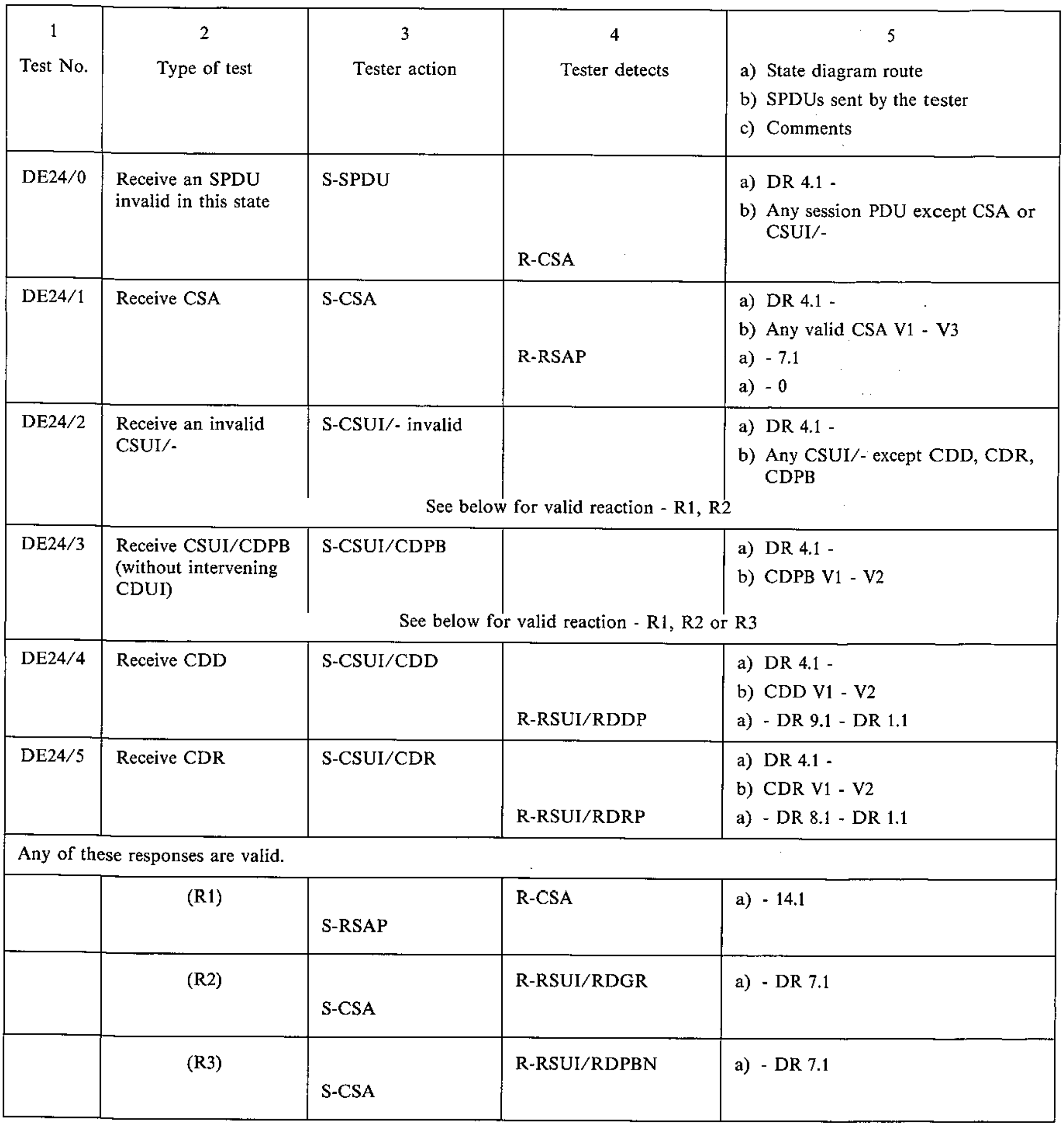
Exception tests
Terminal called/Tester calling
Tests from state 2 DR 3 *(cont.)*

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
Before each test, the tester will: – S-CSS – RSSP – S-CSUI/CDS – S-CSUI/CDUI				
DE23/9	Receive invalid CDE	S-CSUI/CDE		b) CDE I1 - I6
		See below for valid reaction - R1, R2 or R3		
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1
DE23/10	Timeout T1	Do nothing	Rec-CAS (after 60 seconds)	a) DR 3.1 - 14.1
DE23/11	Resetting timer T1	Do nothing for 45 seconds S-CSUI/CDUI Do nothing	R-CSA (after 60 seconds)	a) DR 3.1 - 14.1 b) Any

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 4 (transient state)

Before each test, the tester will initiate call and cause the terminal to reach the window limit.



1	2	3	4	5
Test No.	Type of test	Tester action	Tester detects	a) State diagram route b) SPDUs sent by the tester c) Comments
DE24/0	Receive an SPDU invalid in this state	S-SPDU	R-CSA	a) DR 4.1 - b) Any session PDU except CSA or CSUI/-
DE24/1	Receive CSA	S-CSA	R-RSAP	a) DR 4.1 - b) Any valid CSA V1 - V3 a) - 7.1 a) - 0
DE24/2	Receive an invalid CSUI/-	S-CSUI/- invalid		a) DR 4.1 - b) Any CSUI/- except CDD, CDR, CDPB
	See below for valid reaction - R1, R2			
DE24/3	Receive CSUI/CDPB (without intervening CDUI)	S-CSUI/CDPB		a) DR 4.1 - b) CDPB V1 - V2
	See below for valid reaction - R1, R2 or R3			
DE24/4	Receive CDD	S-CSUI/CDD	R-RSUI/RDDP	a) DR 4.1 - b) CDD V1 - V2 a) - DR 9.1 - DR 1.1
DE24/5	Receive CDR	S-CSUI/CDR	R-RSUI/RDRP	a) DR 4.1 - b) CDR V1 - V2 a) - DR 8.1 - DR 1.1
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 5 (transient state)

Before each test, the tester will initiate call, send single page document and S-CDE.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE25/0	Receive invalid SPDU	S-SPDU		b) Any SPDU except CSA, CSUI/-
			R-CSA	a) - 14.1
DE25/1	Receive CSA	S-CSA		a) - 7.1 b) CSA V1 - V3
			R-RSAP	a) - 0
DE25/2	Receive CSUI/-	S-CSUI/- invalid		b) Any CSUI/- except CDD, CDR
	See below for correct reaction - R1, R2 or R3			
DE25/3	Timeout T1	Do nothing	R-RSUI/RDEP (1)	
			R-CSA	a) - 14.1
DE25/4	Receive CDD	S-CSUI/CDD		a) - DR 9.1 b) CDD V1 - V2
			R=RSUI/RDDP	a) - DR 1.1
DE25/5	Receive CDR	S-CSUI/CDR		a) - DR 8.1 b) CDR V1, V2
			R-RSUI/RDRP	a) - DR 1.1
Any of these responses are valid.				
	(R1)	S-RSAP	R-CSA	a) - 14.1
	(R2)	S-CSA	R-RSUI/RDGR	a) - DR 7.1
	(R3)	S-CSA	R-RSUI/RDPBN	a) - DR 7.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 6 (transient state)

Before each test, the tester will initiate call and S-CSUI/CDCL.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE26/0	Timeout T1	Do nothing	R-RSUI/RDCLP R-CSA	a) - 14.1
DE26/1	Receive an invalid SPDU	S-SPDU invalid		a) 2 - b) Any SPDU except CSA, CSUI/-
			R-CSA	a) - 14.1
		S-RSAP		a) 0
DE26/2	Receive CSA	S-CSA		a) - 7.1 b) CSA V1 - V3
			R-RSAP	a) 0
DE26/3	Receive a CSUI/- invalid in this state	S-CSUI/-		a) DR 2.1 b) Any SPDU
	See below for valid reaction - R1 or R2			
	(R1)		R-CSA	a) - 14.1
	(R2)		R-RSUI/RDGR	a) - DR 7.1
DE26/4	Receive CSUI/CDR	S-CSUI/CDR		b) CSD V1 - V2
			R-RSUI/RDRP	a) - 8.1 - DR 1.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from error states 2 DR 7.1

Note – The terminal may not support the RDGR or RDPBN mechanisms and respond with CSA

Before each test, the tester will send a document with the CRN sequence incorrect and receive RDGR or RDPBN.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE27/0	Timeout T1	Do nothing		a) DR 7.1
			R-CSA	a) 14.1
		S-RSAP		a) 0.1 or 0.2 b) RSAP V1 or V2
DE27/1	Receive CDD	S-CSUI/CDD		a) DR 9.1 b) CDD V1, V2
			R-RSUI/RDDP	a) - DR 1.1
DE27/2	Receive CDR	S-CSUI/CDR		a) DR 8.1 b) CDR V1, V2
			R-RSUI/RDRP	a) DR 1.1
DE27/3	Receive unexpected SPDU	S-SPDU		a) DR 7.1 b) Any SPDU except CSA, CSUI/-, RSAP V1 or V2
			R-CSA	a) 14.1
		S-RSAP		a) 0.1 or 0.2
DE27/4	Receive unexpected CSUI/-	S-CSUI/- Ddo nothing for 45 seconds		a) DR 7.1 b) Any CSUI/- except CDR or CDD
		S-CSUI/CDD		a) DR 9.1 b) CDD V1 or V2
			R-RSUI/RDDP	a) DR 1.1
DE27/5	Receive CSA	S-CSA		a) DR 7.1 b) CSA V1 - V3
			R-RSAP	a) 0.1 or 0.2

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 8.1

Before each test, the tester will send a document and interrupt it by S-CSUI/CDR.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE28/0	Receive unexpected SPDU	S-SPDU		a) - 7.1 b) Any SPDU except CSA c) transient
			R-CSA	a) 14.1
		S-RSAP		a) 0.1 - 0.2
DE28/1	Receive CSA	S-CSA		a) - 7.1 b) CSA V1 - V3 c) transient
			R-RSAP	a) 0.1 or 0.2
DE28/2	Timeout T1		R-RSUI/RDRP	
		Do nothing		a) 14.1
			R-CSA (after 60 seconds)	

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 2 DR 9.1

Before each test, the tester will send a document and interrupt it by S-CSUI/CDD.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE29/0	Receive unexpected SPDU	S-SPDU		a) DR 9.1 b) Any SPDU except CSA c) transient
			R-CSA	a) 14.1
		S-RSAP		a) 0.1 or 0.2
DE29/1	Receive CSA	S-CSA		a) DR 9.1 b) CSA V1 - V3 c) transient
			R-RSAP	a) 0.1 or 0.2
DE29/2	Timeout T1		R-RSUI/RDDP	
		Do nothing		a) - 14.1
			R-CSA (after 60 seconds)	

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 3 (transient state)

Before each test, the tester will:

- S-CSS
- R-RSSP
- S-CSCC

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE3/0	Receive SPDU invalid in this state	S-SPDU		a) 3 - b) Any SPDU except CSA
			R-CSA	a) - 14.1
DE3/1	Receive CSA	S-CSA		a) 3 - b) Any valid CSA V1 - V3
			R-RSAP	a) - 7.1 a) - 0

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 5

Before each test, the tester will:

- S-CSS
- R-RSSP
- S-CSCC
- R-RSCCP
- R-CSCC

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE5/0	Timeout T2	Do nothing		a) 5 -
			R-CSA	a) - 14.1
DE5/1	Receive CSA	S-CSA		a) 5 - b) CSA V1 - V3
			R-RSAP	a) - 7.1 a) - 0
DE5/2	Receive SPDU invalid in this state	S-SPDU		a) 5 - b) Any SPDU except CSA or RSCCP
			R-CSA	a) - 14.1

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 6 (transient state)

Before each test, the tester will initiate call to S-CSE.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE6/0	Receive SPDU invalid in this state	S-SPDU		a) 6 - b) Any SPDU except CSA
			R-CSA	a) - 14.1
DE6/1	Receive CSA	S-CSA		a) 6 - b) CSA V1 - V3
			R-RSAP	a) - 7.1 a) - 0

Session test schedule

Terminal called/Tester calling
Tests from state 7 (Transient)

Before each test, the tester will initiate call to S-CSA.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE6/0	Receive SPDU invalid in this state	S-SPDU		a) 6 - b) Any SPDU except CSA
			R-CSA	a) - 14.1
DE6/1	Receive CSA	S-CSA		a) 6 - b) CSA V1 - V3
			R-RSAP	a) - 7.1 a) - 0

Session test schedule

Exception tests
Terminal called/Tester calling
Tests from state 14

Before each test, the tester will initiate call, create session error, R-CSA.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
DE14/0	Timeout T3	Do nothing		a) 14 -
			T-DISC IND	a) - 0
DE14/1	Receive invalid SPDU	S-SPDU		a) 14 - b) Any SPDU except RSAP
			T-DISC IND	a) - 0

C.3 *Non-Basic Terminal Capabilities (NBTCs) T.62 Negotiation test schedule*

This section of Annex C defines the test for negotiation for non-basic terminal capabilities (NBTC).

The format given here corresponds to the basic Teletex tabular test schedules and differs only in that no specific references to coding examples are made. This is because the coding used is based on the capabilities supported by the terminal and the valid T.62 protocol element description.

Session test schedule

NBTC negotiation tests
Terminal called/tester calling
Test from state 1.1.

Before each test, the tester will S-CSS.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CDN1/0	Correct indication of NBTC in RSSP	S-CSS		a) 1.1 b) CSS V1, V6 (REP) c) The NBTC indicated in RSSP must be consistent with those supported by SUT
			R-RSSP	a) DR 1.1

Session test schedule

NBTC negotiation tests
Terminal called/tester calling
Test from DR 1.1.

Before each test, the tester will:

- S-CSS
- R-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CDN21/1	Response to CDCL without NBTC	S-CSUI/CDCL		a) DR 6.1 b) CDCL V5
			R-RSUI/RDCLP	a) Any NBTC, when indicated in RDCLP, must be supported by the SUT

Session test schedule

NBTC negotiation tests
Terminal called/tester calling
Test from DR 1.1. *(cont.)*

Before each test, the tester will:

- S-CSS
- R-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CDN21/2	Successful negotiation of NBTC in CDCL/RDCLP	S-CSUI/CDCL		a) DR 6.1 b) CDCL with NBTC of Table 3/T.62 supported by the SUT
			R-RSUI/RDCLP with acceptance of CDCL parameters or list of all NBTC of the SUT or list of NBTC requested in CDCL	a) DR 1.1
		S-CDS		a) DR 2.1 b) CDS with NBTC requested for the document
CDN21/3	Successful negotiation of NBTC (excluding those of Table 3/T.62) in CDCL/RDCLP	S-CSUI/CDCL		a) DR 6.1 b) CDCL with NBTC supported by the SUT excluding those of Table 3/T.62
			R-RSUI/RDCLP with acceptance of CDCL parameters or list of all NBTC of the SUT or list of the requested NBTC in CDCL	a) DR 1.1
		S-CDS		a) DR 2.1 b) CDS with those NBTC requested for the document

Session test schedule

NBTC negotiation tests
Terminal called/tester calling
Test from DR 1.1. *(cont.)*

Before each test, the tester will:

- S-CSS
- R-RSSP

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CDN21/4	Negotiation of all NBTC supported by SUT and others	S-CDCL		a) DR 6.1 b) CDCL with all NBTC supported by SUT
			R-RDCLP with list of all NBTC supported by the SUT	a) DR 1.1

Session test schedule

NBTC negotiation tests
Terminal calling/tester called
Test of NBTC from state 0.3

Before each test, prepare a document in the SUT.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CGN0/0	Correct indication of NBTC in CSS		R-CSS with indication of NBTC from Table 3/T.62 supported by SUT as receiving capabilities	a) 0.3 - 8.1 c) Create a basic document in the SUT requiring no NBTC
		S-RSSP		b) RSSP V1 - V10
CGN0/1	Unsuccessful negotiation of NBTC in CSS/RSSP		R-CSS	a) 0.3 - 8.1 c) Create a document in the SUT requiring only standardized option NBTC (i.e. as in Table 3/T.62)
		S-RSSP		a) 8.1 - 9 DS 1.1 b) RSSP (with a subset of the requested NBTC or no NBTC)
			R-CSE	

Session test schedule

NBTC negotiation tests
Terminal calling/tester called
Test of NBTC from state 0.3 *(cont.)*

Before each test, prepare a document in the SUT requiring only NBTC from Table 3/T.62.

1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CGN0/2	Successful negotiation of NBTC in CSS/RSSP		R-CSS	a) 0.3 - 8.1
		S-RSSP		a) 8.1 - 9 DS 1.1
			[R-CDCL]	b) RSSP with all the required NBTC or RSSP with all NBTC of Table 3/T.62
		[S-RDCLP]		
			R-CDS	c) SUT shall preceded with the sending of the document (preceeded or not by a CDCL/RDCLP)

Session test schedule

NBTC negotiation tests
Terminal calling/tester called
Test of NBTC from state 0.3 *(cont.)*

Before each test, prepare a document in the SUT requiring

- (1) NBTC from Table 3/T.62
- (2) NBTC outside Table 3/T.62

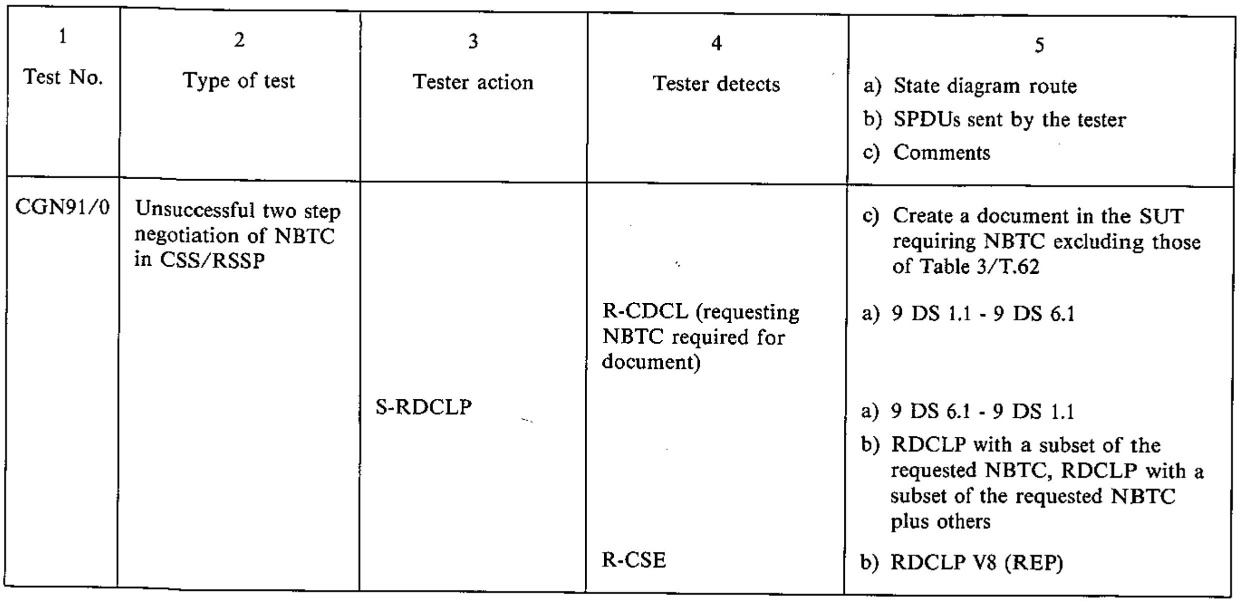
1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CGN0/3	Successful two step negotiation		R-CSS	a) 0.3 - 8.1
		S-RSSP		a) 8.1 - 9 DS 1.1 b) RSSP indicating NBTC (1)
			R-CDCL requesting NBTC (2)	a) DS 1.1 - DS 6.1
		S-RDCLP		a) DS 6.1 - DS 1.1 b) RDCLP with NBTC (2) b) RDCLP with NBTC (1) and (2) RDCLP V6 (REP)
			R-CDS with NBTC (1) and NBTC (2)	

Session test schedule

NBTC negotiation tests
Terminal calling/tester called
Test from state 9 DS 1.1.

Before each test, the tester will:

- R-CSS
- S-RSSP



1 Test No.	2 Type of test	3 Tester action	4 Tester detects	5 a) State diagram route b) SPDUs sent by the tester c) Comments
CGN91/0	Unsuccessful two step negotiation of NBTC in CSS/RSSP			c) Create a document in the SUT requiring NBTC excluding those of Table 3/T.62
			R-CDCL (requesting NBTC required for document)	a) 9 DS 1.1 - 9 DS 6.1
		S-RDCLP		a) 9 DS 6.1 - 9 DS 1.1 b) RDCLP with a subset of the requested NBTC, RDCLP with a subset of the requested NBTC plus others
			R-CSE	b) RDCLP V8 (REP)

ANNEX D

(to Recommendation T.64)

Teletex Application Service test schedules

D.1 *Introduction*

This test schedule is based on the application service requirements. The objective is to cover those mandatory parts of F.200, F.201, T.60, T.61, T.62 and T.90 which refer to aspects of the Teletex application service.

Tests covering protocol conformance to T.70 and T.62 are contained in the transport layer and session/document layer test schedules.

This test schedule identifies test areas which are subject to national requirements.

It should be noted that many Administrations will define additional service requirements that are not covered by these tests.

D.2 *Overview*

The abbreviation SUT (System Under Test) is used when referring to the Teletex terminal or system being tested.

Each test consists of three parts: the title of the test, the actions required to establish the tests and the checks that have to be carried out to assess the SUT.

For each test, the Recommendation and section number which defines the particular service requirement is given.

All Recommendation section numbering references refer to the 1984 Red Book version.

The tests are divided into two main types:

- normal condition tests that assess a terminal's ability to behave correctly under normal conditions;
- exception condition tests that assess a terminal's ability to continue to function correctly under exception or error conditions.

D.2.1 *Normal condition tests*

These tests are divided into 2 main categories:

- mandatory tests which are carried out on all SUTS;
- conditional tests which are only carried out if the SUT has certain capabilities.

These categories are sub-divided into: tests carried out with the SUT establishing the call, and tests carried out when the SUT is called.

Mandatory tests are numbered MG1, MG2, . . . when the SUT is the sender, and MD1, MD2, . . . when the SUT is the receiver.

Conditional tests are numbered CG1, CG2, . . . when the SUT is the sender, CD1, CD2, . . . when the SUT is the receiver.

D.2.2 *Exception condition tests*

These tests are divided into two categories:

- tests carried out with the SUT establishing the call. These are numbered EG1, EG2, . . .
- tests carried out when the SUT is called. These tests are numbered ED1, ED2, . . .

D.3 Teletex application service tests under normal conditions

D.3.1 *Mandatory tests*

The following tests shall be carried out on all SUTs that have a transmission capability.

D.3.1.1 *SUT calling, tester called*

Test MG1 – Correct handling of Terminal Identification (TID), Parts 1 to 4

SUT establishes a call.

Check:

- that the TID in CSS is consistent with the value assigned to the SUT,
- that the TID in CSS is in compliance with Recommendation F.200 format (Rec. F.200, § 7.5) and Recommendation T.61 encoding (Rec. T.61, § 4),

Test MG2 – Correct handling of date and time

SUT establishes a call.

Check:

- consistency of the date and time with that accessible in local mode (Rec. F.200, § 5.3.2.7),
- compliance to Recommendation F.200 format (Rec. F.200, § 5.3.2.7),
- compliance to Recommendation T.61 encoding (Rec. T.61, § 4).

Test MG3 – Capability to transmit normal documents in one session

SUT formats and transmits at least one document.

Check:

- that the document is completely transmitted,
- that the document type identifier parameter is absent from CDS.

Test MG4 – Ability to provide information to the operator in case of document transmission failure

This test is for further study as it is not a requirement specified in the 1984 Red Book version of Recommendation F.200.

Test MG5 – Capability to generate and transmit control and *normal documents in the telex mode*

SUT generates a Telex submission Control Document**Error! Bookmark not defined.**.

SUT generates a Normal Document suitable for transmission to Telex.

SUT sends Control Document followed by Normal Document(s) to tester.

Check:

- that the Control Document is submitted before the Normal Document(s) during the same session,
- that the content of the Normal Document is restricted to the ITA2 character repertoire and the line length restricted to 69 characters,
- that the service interworking identifier is present in the Normal Document(s),
- that the Control Document identifier is present in the CDS of the Control Document,
- that the document reference number is correctly incremented in the CDS of the Control Document and the Normal Document(s).

Test MG6 – Correct handling of basic page formats and character encoding

SUT transmits a two-page document containing the CCITT Test (Rec. T.63) (see Notes 1 and 2).

Check:

- that the document transmitted is of two pages in total, the first being horizontally oriented and the second vertically oriented (see Notes 1 and 2),
- that the encoding of the graphic and control characters is correct,
- that CR/FF or FF/CR is present in the first CDUI of each page and that subsequent CDUIs within the same page do not contain FF.

Note 1 – If the terminal is unable to generate both horizontal and vertical pages, the test shall be carried out by using only one page format.

Note 2 – Depending on national requirements, the actual characters which can be created and transmitted may constitute a subset of the Teletex basic character repertoire. Any characters that are not generated shall be replaced by the coding of a valid T.61 character (e.g. question mark).

Note 3 – The document to be sent must be created on the terminal by use of normal operator input devices (e.g. keyboard).

D.3.1.2 *SUT called, tester calling*

Test MD1 – Correct handling of Terminal Identification (TID),
Parts 1 to 4

Tester establishes a call up to receiving RSSP.

Check:

- that the TID in RSSP is consistent with the value assigned to the SUT,
- that the TID in RSSP complies to Recommendation F.200 format (Rec. F.200, § 7.5) and complies to Recommendation T.61 encoding (Rec. T.61, § 4).

Test MD2 – Correct handling of call identification line

(A) Tester transmits documents of several pages (at least two documents of two pages in the same session).

SUT presents the documents with the CILs (see Note 1).

Check:

- position of CIL within printable area (see Note 2),
- compliance to Recommendation F.200 format (Rec. 200, § 5.3.2),
- consistency of the CIL with TID, date and time, document reference number and page number transmitted by the tester.

(B) The same Test MD2 (A), but using a different length reference number.

(C) The same Test MD2 (A), but using a different type of valid TID.

Note 1 – The choice of whether and where this presentation is made is a local decision except in certain recovery situations (see Test MD5).

Note 2 – The CIL may be partially overlapped by user text if the first/last communicable text line is superscripted/subscripted.

Test MD3 – Capability to receive normal document(s) in one session

(A) Tester transmits two documents of three pages, each page containing 1600 octets (including graphic and control characters).

Check:

- that it is possible to present the documents on the SUT,
- that the contents, layouts, and formats of the presented documents are identical to the documents sent by the tester.

(B) Tester transmits 3 documents each of one page, the first document consisting only of CR/FF, the second document consisting of CR/FF plus one graphic character, the third document consisting of CR/FF plus at least 4000 characters.

Check:

- that it is possible to present the documents on the SUT,
- that the contents, layouts, and formats of the presented documents are identical to the documents sent by the tester.

(C) Tester transmits one document containing one 200-character page. The page should be transmitted using 1 character per CDUI.

Check:

- that it is possible to present the document on the SUT,
- that the content, layout, and format of the presented document is identical to the document sent by the tester.

Test MD4 – Capability to receive control documents (Rec. T.62, Annex F and Rec. T.90)

(A) Tester transmits a Telex Non-Delivery Notification Control Document and sends it to the SUT.

Check:

- that the document is not rejected and is handled correctly by the SUT (Rec. T.90, § 4.4).

(B) Tester transmits to the SUT a Control Document which cannot be automatically processed by the SUT.

Check:

- that on user request the document is correctly presented.

Test MD5 – Ability to handle continuation documents (Rec. F.200, § 5.3.2.3)

Tester begins transmission of a multi-page document.

SUT receives and acknowledges at least one page.

Tester causes transmission to be interrupted.

Tester continues the interrupted document.

Check:

- that the CIL has been presented at the point of interruption and the point of continuation,
- that the system provides a means for the operator to linkback to the original interrupted document, e.g. same document reference number in both CILs.

(A) Interruption and continuation occur within the same call and same session.

(B) Interruption and continuation occur within the same call and different sessions.

(C) Interruption and continuation occur within different calls.

(D) Interruption due to a local SUT failure, e.g. power failure.

(E) Interruption due to a network failure, e.g. physical network disconnection.

(F) Tester begins transmission of a multi-page document.

SUT receives and acknowledges at least one page.

Tester causes transmission to be interrupted.

Tester transmits a complete document.

Tester continues the interrupted document.

Check:

- that the system receives both documents,
- that the CIL has been presented at the point of interruption and the point of continuation,
- that the system provides a means for the operator to linkback to the original interrupted document, e.g. same document reference number in both CILs.

Test MD6 – Ability to handle document discarding (Rec. T.62, § 3.4.8, Note 2)

(A) Tester transmits at least one page of a document, receives acknowledgement and then sends CDD.

Check:

- that the document is discarded and not available to the operator or that the operator is informed that the portion of document received is totally invalid.

(B) Tester transmits at least one page of multi-page document.

Tester causes transmission to be interrupted.

Tester continues interrupted document.

Tester sends CDD after at least one further page has been acknowledged.

Check:

- that, either the entire document has been discarded (including pages received prior to and after the document interruption) or that the operator is informed that the portion of document received is totally invalid.

(C) Tester transmits at least one page of multi-page document.

Tester causes transmission to be interrupted.

Tester closes session.

Tester continues interrupted document in a new session.

Tester sends CDD after at least one further page has been acknowledged.

Check:

- that, either the entire document has been discarded (including pages received prior to and after the document interruption) or that the operator is informed that the portion of document received is totally invalid.

Test MD7 – Ability to handle interrupted documents

(A) SUT receives and acknowledges at least one page.

Tester causes transmission to be interrupted.

Tester does not continue interrupted document.

Check:

- that the interrupted document is accessible to the user,
- that the CIL has been presented at the point of interruption.

(B) The same as Test MD7 (A), but with the interruption due to local SUT failure, e.g. power failure.

(C) The same as Test MD7 (A), but with the interruption due to network failure, e.g. physical disconnection.

Test MD8 – Ability to provide status reporting and operator indicators (Rec. F.200, § 7.4)

(A) Tester transmits a complete document to the SUT.

Check:

- that ‘message received into store’ indication is given to the operator [Rec. T.60, § 7.2 a)].

(B) Disable SUT’s memory (see Note).

Tester attempts to transmit a document to the SUT.

Check:

- that ‘terminal unable or soon unable to receive’ indication is given to the operator [Rec. T.60, § 7.2 b)].

(C) Disable printer (where used as receive store) (see Note).

Tester attempts to transmit a document to the SUT.

Check:

- that ‘operator assistance required’ indication is given to the operator [Rec. T.60, § 7.2 c)].

Note – On certain systems it may not be possible to carry out this test.

Test MD9 – Reaction to memory overflow conditions (Rec. 200, § 7.3.2.2)

(A) Fully load the SUT’s memory (see Note).

Tester attempts to transmit a document to the SUT.

Check:

- that the system provides an indication in the control procedures that its receiving capabilities are jeopardized, e.g. responds to CCS with an RSSN with reason ‘receiving capabilities unable to enter into a session’.

(B) Leave space in the memory to receive two pages (see Note).

Attempt to transmit a five-page document to the SUT.

Check:

- that the system responds to CDPBs with RDPBPs until memory fills, when the response should change to RDPBN,
- that it is possible to present pages which were positively acknowledged and that they are identical to those sent by the tester.

Note – On certain systems it may not be possible to manipulate the memory.

Test MD10 – Correct handling of basic page format and character encoding (Rec. F.200, § 7.3.2.2)

(A) Tester transmits the CCITT test text of Recommendation T.63 and the pages defined in Annex E to Recommendation T.64.

The SUT presents document(s).

Check:

- that the complete basic repertoire has been received and that all graphic characters have been presented (displayed and/or printed) as legibly as possible and that the functions invoked by the control characters are correctly represented (e.g. underline, PLU, PLD),
- that the documents received are as sent and presented as legibly as possible.

(B) The same as Test MD10 (A), but with the presentation control functions SGR, SHS, SVS, PFS, parameter default values absent (see Rec. T.61, § 4.2.3.1).

Test MD11 – Independence of local and communication functions [Rec. F.200, § 1.2.2.1 f)]

Place the SUT in local mode.

Tester sends a document to the SUT.

Check:

- – that the document is received correctly and that local mode of operation is not disturbed by reception of incoming document.

D.3.2 *Conditional tests*

The following tests shall be carried out on SUTs which support the appropriate capabilities.

D.3.2.1 *SUT calling/tester called*

Test CG1 – Ability to handle continuation documents (Rec. F.200, § 5.3.2.3)

(A) The SUT starts to send a multi-page document.

Tester interrupts document transmission after the SUT has received acknowledgement of at least one page.

SUT continues document transmission within the same call and the same session.

Check:

- – that the DRN in the CIL is the same as that in the original CDS,
- – that the system continues transmission of the interrupted document without repeating pages for which acknowledgements have been received,
- – that CRN of resumption is incremented by one in the next page boundary (CDE or CDPB).

(B) SUT starts to send a multi-page document.

Tester interrupts document transmission after the SUT has received acknowledgement of at least one page.

SUT continues document transmission in a different session.

Check:

- – that the DRN in the CIL is the same as that in the original CDS,
- – that the system continues transmission of the interrupted document without repeating pages for which acknowledgements have been received,
- – that CRN of resumption is incremented by one in the next page boundary (CDE or CDPB),
- – that the TIDs of the called and calling systems transmitted in CDC are correct,
- – that the date and time is the same as that in the original CSS.

(C) SUT starts to send a multi-page document.

Tester interrupts document transmission after the SUT has received acknowledgement of at least one page.

SUT transmits a complete document.

SUT continues interrupted document in a new session.

Check:

- – that both documents are transmitted correctly,
- – that the DRN in the CIL is the same as that in the original CDS,
- – that the system continues transmission of the interrupted document without repeating pages for which acknowledgements have been received,
- – that CRN of resumption is incremented by one in the next page boundary (CDE or CDPB),
- – that the TIDs of the called and calling systems transmitted in CDC are correct,
- – that date and time is the same as that in the original CSS.

Note – SUTs which claim the ability to handle continuation documents may not have the capability to support this facility in all of the conditions specified above.

Test CG2 – Ability to handle the change control function

(A) SUT offers control to tester.

Operator sets up SUT to offer control to the tester.

SUT establishes the call and transmits document(s) to the tester.

SUT gives control to the tester.

Tester transmits document(s) to the SUT.

SUT releases the call.

Check:

– that the SUT has transmitted and received the documents correctly.

(B) SUT gives control to tester on request.

Operator sets up SUT to give control to the tester on tester request.

SUT establishes a call and transmits document(s) to the tester.

Tester requests control.

SUT gives control to the tester.

Tester transmits document(s) to the SUT.

Check:

– that the SUT has transmitted and received the document(s) correctly.

Note 1 – Change of control may occur before or after the document(s) has been transmitted.

Note 2 – Systems which can handle change control may not have the capability in both the conditions specified above.

Test CG3 – Correct handling of non-basic terminal capabilities (NBTCs)

(A) Successful negotiation (for one document) (see Note 2).

SUT creates a document containing at least one NBTC.

SUT establishes a call to the tester.

SUT requests the NBTC(s) contained in the document.

Tester accepts the NBTC(s).

Check:

– that SUT correctly initiates the negotiation (see Notes 1 and 2),
– that SUT transmits the document,
– that the NBTC(s) are correctly encoded in the transmitted document.

(B) Successful negotiation (one basic document and one document containing NBTCs in the same session).

SUT creates two documents: the first a basic document, the second containing NBTC(s) supported by the SUT.

SUT establishes a call to the tester.

SUT requests all of the NBTC(s) contained in the second document. (This negotiation may occur after transmission of the first document.)

Tester accepts the NBTC(s).

SUT transmits documents.

Check:

– that SUT correctly initiates the negotiation (see Notes 1 and 2),
– that SUT transmits the basic document followed by the non-basic document.

(C) Unsuccessful negotiation (one document).

SUT creates a document containing at least one NBTC.

SUT establishes a call to the tester.

SUT requests all of the NBTC(s) contained in the document.

Tester responds as if it were a system not supporting NBTC(s).

Check:

– that SUT does not transmit the document.

(D) Negotiation of two documents in the same session - one successful, one unsuccessful.

SUT creates two documents each requiring different NBTCs.

SUT establishes a call to the tester.

SUT requests the NBTC(s) of both documents.

Tester accepts the NBTC(s) of only one document.

Check:

– that SUT transmits the document for which the NBTC(s) have been accepted.

– that SUT does not transmit the document for which the NBTC(s) have not been accepted.

Note 1 – NBTC(s) related to the document may be indicated in RSSP and will therefore not need to be negotiated using CDCL, RDCLP.

Note 2 – Tests (A) (B) (C) shall be repeated to cover all the NBTCs supported by the SUT, if they cannot be all present at the same time in a single document.

Test CG4 – Correct handling of memory negotiation

(A) Correct number of kilo-octets requested

SUT creates two documents:

– one document of one page containing 1600 octets,

– one document of seven pages containing 512 octets each.

SUT transmits those two in two different sessions.

Check:

– that SUT requested 2 kilos octets of receiving memory in the first session, and 4 kilo octets in the second session.

(B) Interworking with basic systems

SUT creates a three-page document and tries to transmit it to the tester.

Tester simulates a system which is not supporting the memory negotiation facility (e.g. answering with an empty RDCLP to the CDCL).

Check:

– that SUT transmits the document.

D.3.2.2 *SUT called, tester calling*

The following test shall be carried out on SUTs which support the appropriate capabilities.

Test CD1 – Ability to transmit a document after change control has occurred

Operator sets-up SUT to transmit a document after change control.

Tester establishes a call and transmits document(s) to SUT.

SUT requests and receives control.

SUT transmits document(s) to the tester.

Check:

– that the SUT has transmitted and received the document(s) correctly.

Test CD2 – Capability to receive monitor documents in one session (Rec. T.62, Annex F).

SUT receives one monitor document

Check:

– that, if accepted, the document is not presented to the operator.

Test CD3 – Capability to receive operator documents in one session (Rec. T.62, Annex F)

SUT receives and presents on user request one Operator Document.

Check:

– that if accepted the document is received and presented correctly.

Test CD4 – Correct handling of non-basic terminal capabilities (NBTCs)

(A) Successful negotiation (for one document) (see Note 2).

Tester creates a document containing NBTCs supported by the SUT.

Tester initiates capability negotiation (CDCL) prior to the transmission (see Note 1).

Tester transmits the document to the SUT.

Check:

– that SUT has responded positively to the capability negotiation (CDCL) initiated by the tester,

– that SUT receives and presents the document correctly.

(B) Successful negotiation for two documents (in two steps) in the same session (see Note 2).

Tester creates two documents, each requiring different NBTCs supported by the SUT.

Tester initiates negotiation (CDCL) for the first document (Note 1).

Tester transmits first document to the SUT.

Tester initiates negotiation (CDCL) for the second document (see Note 1).

Tester transmits second document to the SUT.

Check:

– that SUT has responded positively to both negotiations (CDCL) initiated by the tester,

– that SUT receives and presents correctly both documents.

(C) Successful negotiations (in one step) for two documents in the same session (Note 2).

Tester creates two documents, each requiring different NBTCs supported by the SUT.

Tester initiates negotiation (CDCL) for both documents (see Note 1).

Tester transmits both documents to the SUT.

Check:

– that SUT has accepted all capabilities requested by the tester during the negotiation (CDCL),

– that SUT receives and presents correctly both documents.

(D) Unsuccessful negotiation (the requested NBTCs not supported) (see Note 3).

Tester creates a document requiring NBTCs not supported by the SUT.

Tester initiates negotiation (CDCL) for the NBTCs related to the document.

Check:

– that SUT does not accept the capabilities requested by the tester during the negotiation.

(E) Negotiation of two documents in the same session one successful, one unsuccessful (see Note 3).

Tester creates two documents: the first one containing NBTCs supported by the SUT, and the second one containing NBTCs not supported by the SUT.

Tester initiates negotiation (CDCL) for both documents.

Check:

– that SUT accepts only the capabilities required for the first document, and does not accept the capabilities required for the second one.

Note 1 – NBTC(s) related to the document may be indicated in RSSP, and will not necessarily need to be negotiated using CDCL/RDCLP.

Note 2 – This test shall be repeated to cover all the NBTCs supported by the SUT, if they cannot all be presented at the same time in a single document.

Note 3 – This test can be performed only if the SUT does not support all the possible NBTCs.

Test CD5 – Ability for systems which support memory negotiation to interwork with basic systems

(A) Interworking with basic systems.

Tester sends a basic document to the SUT, without memory negotiation.

Check:

- that SUT receives and presents correctly the document.

D.4 *Teletex application service tests under exception conditions*

These tests ensure tha the SUT does not fail under exception conditions that affect the application service. The expected reaction of the SUT is not specified except that it must continue to be available for service (i.e. no system error).

D.4.1 *SUT calling/tester called*

Test EG1 – Receiving incorrect TID in RSSP

SUT calls the tester to establish the connection.

The tester answers positively to the opening of the session (CSS/RSSP), but an invalid TID in RSSP (i.e. not in accordance with the F.200 format).

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

Test EG2 – Receiving an unknown reason code in document transmission rejection

(A) SUT calls the tester.

Tester refuses the session connection by sending a RSSN with an unknown reason code (i.e. presently not yet defined in the CCITT Recommendation).

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

(B) SUT transmits at least one page of a document.

Tester causes transmission to be interrupted by sending an RDPBN with an unknown reason code.

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

D.4.2 *SUT called/Tester calling*

Test ED1 – Receiving incorrect TID in CSS

Tester sends a CSS with an invalid TID (i.e. not in accordance with F.200 format).

Try to present CIL on SUT, if the CSS has not been rejected in real time.

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

Test ED2 – Receiving incorrect date and time in CSS

Tester sends a CSS with an invalid date and time (i.e. not in accordance with the F.200 format). If this CSS is accepted by SUT, the tester transmits a one page document to the SUT.

Try to present CIL on SUT.

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

Test ED3 – Receiving too long DRN/CRN

Tester transmits a document to the SUT, with a document reference number (DRN) of 4 octets, and checkpoint reference numbers (CRN) of 4 octets (by adding leading zeros to the regular values).

Try to present the received document including CIL (if not rejected in real time) on the SUT.

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

Test ED4 – Receiving a document containing incorrect presentation information

(A) One page exceeding the number of lines allowed.

Tester transmits a one page document to SUT, which exceeds the number of lines specified in Table 1/T.60.

If accepted, the SUT must be able to present the document or an error must be indicated to the operator.

Attempt to interchange a document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

(B) Pages containing lines which exceed the maximum number of characters allowed per line.

Tester transmits a document to SUT, which contains lines requesting more characters (print positions) than allowed in Table 1/T.60.

If accepted the SUT must be able to present the document or an error must be indicated to the operator.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

(C) Incorrect use of form feed (FF).

Tester transmits a one page document using more than one CDUI, each containing FF.

If accepted, try to present this document on SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

(D) Incorrect use of PLU/PLD.

Tester transmits a one page document with incorrect use of PLU/PLD in single lines, e.g.:

Page 1:

1st line: <char> <PLD> <char> <PLU> <char> <PLU> <char> <CR> <LF>

Page 2:

1st line: <char> <CR> <LF>

2nd line: <char> <PLU> <char> <PLU> <char> <PLU> <5 char> <PLD> <char> <PLD> <char> <PLD> <char> <CR> <LF>

3rd line: <character>

If accepted, try to present the document on SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

(E) An undefined bit-combination of the primary set of graphic characters, the supplementary set of graphic characters, and the set of control functions.

Tester transmits undefined bit combinations in one or more pages, e.g.:

Graphic characters

05/12, 05/14
06/00
07/11, 07/13, 07/14, 07/15
10/00, 10/09, 10/10, 10/12, 10/13, 10/14, 10/15
11/09, 11/10
12/0
13/00-13/15
14/05
15/15

Control functions

00/00-00/07, 00/09, 00/11
01/00-01/08, 01/12, 01/14, 01/15
08/00-08/10, 08/13, 08/14
09/00-09/10, 09/12-09/15

If accepted, try to present the document on SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

Test ED5 – Receiving invalid linking information on document continuation

SUT receives and acknowledges at least one page. Tester causes transmission to be interrupted. Tester continues interrupted document with a DCD containing invalid linking information. (e.g. wrong TID, incorrect DRN, etc.).

If accepted, try to present both parts of the document on SUT with the CIL.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

Test ED6 – Receiving an undefined reason code during document interruption

Tester begins to transmit a multi-page document.

After the SUT has acknowledged at least one page, the tester causes transmission to be interrupted by sending a CDR with an undefined reason code.

Try to present the partially received document on SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

– that the SUT is still fully operational (e.g. transmission and local functions).

Test ED7 – Receiving a document with NBTCs, which have not been negotiated and are not supported by SUT

(A) Tester creates a document requiring an NBTC, not supported by the SUT.

Tries to transmit the document to the SUT, without any negotiation.

If accepted, try to present the document on the SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

(B) Tester creates two documents; one requiring an NBTC, not supported by the SUT, one requiring no NBTC.

Tester negotiates the use of the NBTC.

Tester transmits both documents.

If accepted, try to present the document on the SUT.

Attempt to interchange another document between the SUT and the tester with the tester acting correctly.

Check:

- that the SUT is still fully operational (e.g. transmission and local functions).

ANNEX E

(to Recommendation T.64)

Test text coding

E.1 This annex contains the test and associated encoding of characters to be used in test MD10 in addition to the test text.

Page contents	SUT presentation
PFS=1, SVS=3, SHS=0, SGR=4 CR, FF	Horizontal page format, starts with 12 lines per inch 10 characters per inch underlining beginning at home position
Line 1 <2/3> <2/4> <characters>	Distance to CIL 4.23 mm
Line 2 <characters>	Distance to line 1 2.12 mm
Line 3 <characters>	Distance to line 2 2.12 mm
Line 4 <SVS=2> <characters>	Distance to line 3 2.12 mm (SVS take effect for the next line(s))
Line 5 <characters>	Distance to line 4 8.47 mm
Line 6 <PLU>*<PLD>*<PLD>* <PLU> ---- within 100 stars The sum of PLU and the sum of PLD are equal	Distance to line 5 8.47 mm underlining must be on the same level
Line 7 <PLD><SGR=4>* <PLU> <SGR=4> *<PLU><SGR=4>* <PLD> <SGR=4> *---- within 100 stars	Distance to line 6 8.47 mm underlining moved up and down
Line 8 <characters> <SVS=1>	Distance to line 7 8.47 mm
Line 9 <characters>	Distance to line 8 6.35 mm
Line 10 <5BS> <characters>	Distance to line 9 6.35 mm
Line 11 <5BS> <characters>	Distance to line 10 6.35 mm
Line 12 <char> <SVS=0> <char>	Distance to line 11 6.35 mm
Line 13 <char>	Distance to line 12 4.23 mm
Line 14 <characters> <SVS=1>	Distance to line 13 4.23 mm
Line 15 <characters> <SVS=2>	Distance to line 14 6.35 mm
Line 16 <characters>	Distance to line 15 8.47 mm
Line 17 <characters>	Distance to line 16 8.47 mm
Line 18 <characters> <SVS=3>	Distance to line 17 8.47 mm
Line 19 <characters>	Distance to line 18 2.12 mm
Line 20 <characters>	Distance 2.12 mm per line

E.2 Correct handling and acceptance of pages with maximum numbers of lines per page.

Page contents	SUT presentation
PFS 1, SVS 0, 38 lines text	38 + 1 lines
PFS 1, SVS 1, 25 lines text	25 + 1 lines
PFS 1, SVS 2, 19 lines text	19 + 1 lines
PFS 0, SVS 0, 55 lines text	55 + 1 lines
PFS 0, SVS 1, 36 lines text	36 + 1 lines
PFS 0, SVS 2, 27 lines text	27 + 1 lines

E.3 Correct handling and acceptance of maximum numbers of characters per line in the printable area.

Page contents	SUT presentation
PFS 1, SVS 0, SHS 0, 100 characters	100 characters per line
PFS 1, SVS 0, SHS 0, 5BS, 105 characters	105 characters per line
PFS 1, SVS 0, SHS 0, 100 characters	100 characters
No parameters, 72 characters	72 characters
No parameters, 5BS, 77 characters	77 characters
No parameters, 72 characters	72 characters

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