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Information technology — Telecommunications and information exchange between systems — X.25 DTE conformance testing —

Part 2:
Data link layer conformance test suite

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Test de conformité X.25 DTE —

Partie 2: Suite d'essais de conformité pour la couche liaison de données

Contents

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development on International Standards through technical committees established by the respective organization to deal with particular fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical ISO/IEC JTC1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 8882-2 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

This second edition cancels and replaces the first edition (ISO/IEC 8882-2:1992), which has been technically revised.

ISO/IEC 8882 consists of the following parts, under the general title *Information technology -- Telecommunications and information exchange between systems -- X.25 DTE conformance testing*:

— *Part 1 : General principles*

— *Part 2 : Data link layer conformance test suite*

— *Part 3 : Packet layer conformance test suite*

Annex A of this part of IOS/IEC 8882 is for information only.

Introduction

This part of ISO/IEC 8882 presents the X.25-DTE Conformance Test Suite for Data Link Layer, described in Tree and Tabular Combined Notation (TTCN).

Part 1 of ISO/IEC 8882 explains the objectives and usage of this part of ISO/IEC 8882.

Clause 1 of this part of ISO/IEC 8882 is the scope which provides an objective basis for the applicability of the tests within this part of ISO/IEC 8882. Clauses 2 and 3 give the references, definitions and abbreviations used in this part of ISO/IEC 8882. Clause 4 contains information relating to procedures performed in conformance testing. The test suite structure is defined in terms of test groups and subgroups in Table 1. This clause also gives an overview of the test suite. Clause 5 contains the abstract test suite for the X.25-DTE LAPB Data Link Layer protocol. Finally, Annex A provides a conformance testing summary matrix.

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Information technology — Telecommunications and information exchange between systems — X.25 DTE conformance testing —

Part 2:
Data link layer conformance test suite

1 Scope

This part of ISO/IEC 8882 defines an abstract test suite for testing the conformance of the Data Link Layer of an IUT with respect to ISO/IEC 7776 or the CCITT Recommendation X.25 (1980, 1984).

Conformance of a Data Terminal Equipment (DTE) to the above ISO International Standard or CCITT Recommendations is tested using a dedicated circuit between the tester and the DTE. It is noted that CCITT Recommendations X.25 (1980) and X.25 (1984) are written from the perspective of a DCE and therefore do not always explicitly specify the DTE's operation. In such cases it is assumed that recommended operation of a DTE is included by implication because of the need to communicate with X.25 DCEs. This part of ISO/IEC 8882 excludes the testing of the LAP procedures given in the CCITT Recommendations.

NOTE Test cases for extended mode operation (Modulo 128), multilink procedure and DTE-DTE operation as per ISO/IEC 7776 are for further study.

The tests in this part of ISO/IEC 8882 are designed for three possible interworking situations, shown in Figure 1. This part specifies tests for all three cases shown in Figure 1, but recognizes that not every test may apply to a particular DTE. A test selection procedure has to be performed to determine the applicability of a test to a particular DTE. Such selection will be based on the PICS and the PIXIT.

```
      Local Station                        Remote Station

  +-----------------------+          +-----------------------+
  |                       |          |                       |
  |         DTE           |<-------->|  DCE (X.25 LAPB 84)    |
  | (based on ISO/IEC 7776)|          |  DTE (ISO/IEC 7776)   |
  |                       |          |                       |
  +-----------------------+          +-----------------------+

  +-----------------------+          +-----------------------+
  |                       |          |                       |
  |         DTE           |<-------->|        DCE            |
  | (based on X.25 LAPB 84)|          |   (X.25 LAPB 84)      |
  |                       |          |                       |
  +-----------------------+          +-----------------------+

  +-----------------------+          +-----------------------+
  |                       |          |                       |
  |         DTE           |<-------->|        DCE            |
  | (based on X.25 LAPB 80)|          |   (X.25 LAPB 80)      |
  |                       |          |                       |
  +-----------------------+          +-----------------------+
```
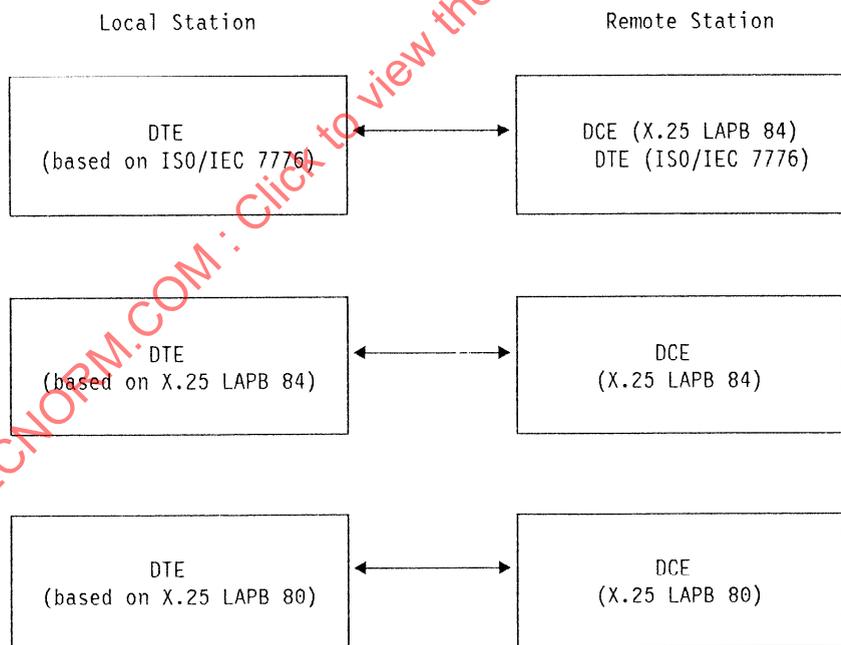
Figure 1 - Testing X.25-DTE/DCE and X.25-DTE/DTE Interworking

In the rest of this part of ISO/IEC 8882, the term "X.25 standards" means all three of CCITT Recommendation X.25 (1980), CCITT Recommendation X.25 (1984), and International Standard ISO/IEC 7776, unless stated otherwise.

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2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 8882 At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 8882 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 7498-1: 1994, *Information technology -- Open Systems Interconnection -- Basic Reference Model: The Basic Model (See also CCITT Recommendation X.200).*

ISO/IEC 7776: 1995, *Information technology -- Telecommunications and information exchange between systems -- High-level data link control procedures -- Description of the X.25 LAPB-compatible DTE data link procedures.*

ISO/IEC 8824: 1990, *Information technology -- Open Systems Interconnection -- Specification of Abstract Syntax Notation One (ASN.1) (See also CCITT Recommendation X.680).*

ISO/IEC 8882-1:1993, *Information technology -- Telecommunications and information exchange between systems -- X.25-DTE conformance testing -- Part 1, General principles.*

ISO/IEC 9646-1: 1991, *Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 1: General concepts. (See also CCITT Recommendation X.290).*

ISO/IEC 9646-2: 1994, *Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 2: Abstract Test Suite specification. (See also CCITT Recommendation X.291).*

ISO/IEC 9646-3: 1992, *Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 3: The Tree and Tabular Combined Notation (TTCN).*

ISO/IEC 9646-4: 1994, *Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 4: Test realization. (See also CCITT Recommendation X.293).*

ISO/IEC 9646-5: 1994, *Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 5: Requirements on test laboratories and clients for the conformance assessment process. (See also CCITT Recommendation X.294).*

CCITT Recommendation X.25 (1980), *Interface Between Data Terminating Equipment (DTE) and Data Circuit- Terminating Equipment (DCE) for Terminals Operating in the Packet Mode on the Public Data Networks.*

CCITT Recommendation X.25 (1984), *Interface Between Data Terminating Equipment (DTE) and Data Circuit-Terminating Equipment (DCE) for terminals operating in the Packet Mode on the Public Data Networks by Dedicated Circuit.*

3 Definitions and abbreviations

For the purposes of this part of ISO/IEC 8882, the definitions given in 3.4 and in the following International Standards apply:

a) ISO/IEC 7498-1;

b) ISO/IEC 9646;

c) ISO/IEC 8882-1.

3.1 Reference model definitions

The following terms defined in ISO/IEC 7498-1 are used:

a) (N)-protocol data unit (N-PDU). In the context of this part of ISO/IEC 8882 (N) is layer 2 and so N-PDU is abbreviated to PDU. A PDU in the Data Link Layer is also referred to as a "frame".

b) Data Link Layer

3.2 Conformance testing terms

The following terms are used from the Conformance Testing Methodology and Framework International Standard (ISO/IEC 9646):

a) Conformance Testing

b) Conformance Test Suite

c) Implementation Under Test (IUT)

d) Protocol Implementation Conformance Statement (PICS)

e) Protocol Implementation Extra Information for Testing (PIXIT)

f) Static Conformance Requirements (SCR)

g) Behavior Testing

h) Test Purpose

i) Tree and Tabular Combined Notation (TTCN)

j) Preamble

k) Test Body

l) Test Step

m) Test Event

n) Abstract Service Primitive (ASP)

o) Test Group

p) Abstract Test Suite (ATS)

q) Executable Test Suite (ETS)

r) Test Verdicts

s) Lower Tester

t) Upper Tester

u) Test Methods

v) Remote Single (layer) Test Method (RS method)

w) Valid Test Event

x) Invalid Test Event

y) Inopportune Test Event

z) Point of Control and Observation (PCO)

3.3 X.25-DTE conformance testing terms

This part of ISO/IEC 8882 makes use of the following terms defined in ISO/IEC 8882-1:

a) Improper PDU

b) Proper PDU

c) Test Case

d) Test Subgroup

e) Tester

3.4 Additional definitions

This test suite uses test subgroups for proper, improper and inopportune frames to test the IUT behavior. These terms are defined below.

3.4.1 improper frame : A frame that satisfies one or more of the following conditions:

a) it is not properly bounded by two flags;

b) it contains fewer than 32 bits between flags;

c) it contains a Frame Check Sequence (FCS) error;

d) it contains an invalid address field encoding;

e) it contains a command or response control field encoding that is undefined or not implemented in X.25-DTE LAPB Data Link Layer protocol as specified in ISO/IEC 7776;

f) it is an I frame exceeding the maximum established frame length;

g) it is an unnumbered or supervisory frame with an information field which is not permitted;

h) it is a frame with an invalid N(R).

3.4.2 inopportune frame : A syntactically valid frame arriving at a time (DTE's state) when it should be considered irrelevant by the DTE. Syntactically valid frames are those that are allowed by the X.25 standards for a DTE using the LAPB procedure and are not covered by 3.4.1.

3.4.3 proper frame : A valid frame arriving at the correct DTE's state or phase and not covered by 3.4.1 or 3.4.2.

3.5 Abbreviations

The abbreviation IUT is used in this part of ISO/IEC 8882 to refer to an X.25-DTE under test.

4 Test suite information

4.1 Test suite structure

The X.25-DTE Data Link Layer Conformance Test Suite structure is outlined in Table 1.

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Table 1. Data link layer test suite structure			
Data Link Layer Test Groups	Test State Abbreviation	Test Group Name	Current State of IUT
DL1	DP	Disconnect phase	DISC received and UA or DM transmitted (see clause 4.10)
DL2	LD	Link Disconnection phase	DISC transmitted from any phase (see clause 4.11)
DL3	LS	Link Set-up phase	SABM transmitted from DP (see clause 4.11)
DL4	IT	Information Transfer phase	SABM received and UA transmitted, or SABM transmitted and UA received, while in DP or IT phase
DL5	FR	Frame Reject condition	FRMR transmitted from IT phase (see clause 4.10)
DL6	BY	IUT Busy condition	RNR transmitted from IT phase (see clause 4.10 and 4.11)
DL7	SR	Sent Reject condition	REJ transmitted from IT phase
DL8	SP	System Parameters and Error Recovery	See note below

Note:

Test Group DL8 tests the setting of the system parameters:

    T1 - Retransmission timer;
    N2 - Maximum number of attempts by IUT to complete a transmission.

The setting of maximum established length and k (window size) are tested under test group DL4.

4.2 Data link layer test groups and subgroups

The first seven test groups shown in Table 1, called Data Link Layer Test Groups DL1 to DL7, are provided to test the interactive capability of the IUT in every phase. The test groups are further divided into three subgroups according to the definitions in clause 3.4. These are as follows:

- Subgroup 1 involves those test cases where the tester transmits a proper frame.

- Subgroup 2 involves those test cases where the tester transmits an improper frame.

- Subgroup 3 involves those test cases where the tester transmits an inopportune frame.

The eighth test group (DL8) is designed to test the operational correctness of the IUT system parameters listed in Table 1.

4.3 Method for conformance testing

The method for conformance testing shall be as defined in ISO/IEC 8882-1.

4.4 Test case notation

Clause 5 describes the abstract test suite using the Tree and Tabular Combined Notation (TTCN). This abstract test suite complies with ISO/IEC 9646-3 for TTCN.GR. The test realizer shall comply with the requirements of ISO/IEC 9646-4. In particular, these concern the realization of an Executable Test Suite (ETS) based on the Abstract Test Suite (ATS). Test laboratories running conformance test services for this abstract test suite shall comply with ISO/IEC 9646-5.

The tests described in this test suite may be performed in any order. Test cases are independent of one another. Most of the test cases consist of a preamble followed by a test body and ending with a verification sequence. The preamble consists of the initialization test steps described in clause "Preambles." The verification sequences consists of the final test step described in clause "Verification sequences." In some instances in the test steps, all the possible parameter alternatives for PDUs are not verified, as they do not directly relate to the test purpose.

The preambles shown in this part of ISO/IEC 8882 are examples of how, for different situations, the tester can get the IUT into the desired phase or state. These preambles are not meant to be either a mandatory or exhaustive set of acceptable initialization sequences for the IUT. Other possible preambles may be negotiated between the test laboratory and the client. Table 2 illustrates an abstract test case written in TTCN:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments

Table 2. Test Step Dynamic Behavior

Test Step Name	: TTCN_EXAMPLE
Group	: Example Test Case
Objective	: An example test step illustrating an abstract test case in TTCN.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ preamble_1 [IUT_TYPE = option_1]			1
2		+ preamble_n [IUT_TYPE = option_n]			2
3		+ test_body_part_1			
4		+ verification_1			
5		! PDU_X			5
6		? PDU_Y [IUT_TYPE = option_2]			6
7		(VARIABLE := 1)			7
8		+ verification_2			
9		+ test_body_part_n			
10		+ verification_n			

Detailed Comments:

1 The '+' symbol indicates the attachment of a TTCN tree.
2 Trees attached at the same level of indentation are alternatives.
5 Event line starting with '!' is a send event in TTCN.
6 Event line starting with '?' is a receive event in TTCN.
7 The operation ':=' is an assignment in TTCN.

4.5 Preamble

The Preamble of a test case consists of the steps required to bring the IUT to the appropriate initial state or phase. There may be various alternative sequences of test steps which can be performed in order to initialize the IUT. The preamble may depend on the test method as well as specific IUT behavior that can be controlled or observed using that method. Therefore, preambles may be different for different IUTs. In order to properly initialize a test case an appropriate preamble has to be used for testing a particular IUT. An inconclusive verdict in the preamble may be the result either of protocol violation or of the fact that the preamble is unsuitable for that particular IUT. Clause "Preambles" gives examples of preambles to be used as a test initialization sequence. Other valid preambles that may be used are a matter of agreement between the test laboratory and its client.

4.6 Verification sequence

The conclusion of a test case is conducted in the test sequence called a verification sequence. In most cases the verification sequence depends on the final state in which the IUT is expected to be as a result of a test stimulus. A single test case may have more than one possible verification sequence depending on the actual IUT behavior. Also, like the preamble, the verification sequence may depend on the testing method used or may depend on the IUT. Clause "Verification sequences" gives examples of verifica-

tion sequences to be used as a test conclusion sequence. Other valid verification sequences that may be used are a matter of agreement between the test laboratory and its clients.

4.7 IUT initiated actions

The general principles, with respect to IUT initiated actions required by this test suite, are in accordance with ISO/IEC 8882-1. The ability of the IUT to perform these actions, and its ability to initiate the tests containing the actions, are determined by the information provided in the PIXIT.

4.8 Acceptable unexpected IUT frames

The test cases in this test suite indicate the frames from the IUT required to satisfy the test purpose. In some cases, particularly in the Information Transfer phase, unexpected frames may be received from the IUT which do not affect the final test verdict.

Acceptable unexpected frames are accepted by the tester without affecting the final test verdict. In the case of RNR, the tester shall suspend the test until the busy condition is cleared (see Table 3, item 7b).

In a controlled environment, DISC and SABM commands and DM responses sent by the IUT are not considered to be acceptable unexpected frames during information transfer tests.

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4.9 Transient states

A transient state is an unstable state that may preclude satisfactory conduct of tests contained in clauses "Verification of the disconnected phase," "Verification of frame reject condition" and "Verification of IUT busy condition." To conduct tests in these clauses the IUT must be capable of:

• Being forced to establish a particular data link condition or phase as part of the test preamble, by using the LAPB procedures as defined in X.25 standards.

• Maintaining the established condition for a period of time sufficient for the tester to initiate and conduct the required test steps in an orderly and observable manner.

• Arriving at a prescribed, predictable condition or phase for the verification of the test, and maintaining that condition for a time sufficient to record the results from the verification sequence.

4.10 Unreachable states

An unreachable state is a state never entered by some IUTs. This may preclude satisfactory conduct of tests contained in clauses "Verification of the IUT link disconnection phase," "Verification of link setup phase" and "Verification of IUT busy condition."

4.11 Declarations

The purpose of TTCN declarations is to describe the set of test events and all other attributes to be used in the test suite. For further information on TTCN declarations see ISO/IEC 9646-3.

For the X.25 Data Link Layer test suite, the declarations are based on Protocol Data Units (PDUs) defined in OSI Basic Reference Model [ISO/IEC 7498-1] are called "frames" in the X.25 standards. The PDUs are declared with a set of PDU parameters that may be assigned values for the purpose of testing. The PDU constraints (specified in clause "ASN.1 PDU constraint declarations") are the list of values that the PDU parameters must take in a particular test event.

The improper PDUs are declared only for the purpose of use within ISO/IEC 8882. It is recognized that many variations are possible in an improper PDU, all of which may cause the same reaction from the IUT. It is not practical to exhaustively list all these variations. To preserve the flexibility of improper PDU encoding, ISO/IEC 8882 shows some typical examples.

The FCS octets are not shown in the data type declarations in this test suite.

4.12 Order of bit transmission

The order of bit transmission for the PDUs in the declarations above shall be as defined in the X.25 standards. The order of bit transmission for PDUs in the declarations for ABORT, HEX and FCS_ERROR is illustrated in the example shown in Figure 2.
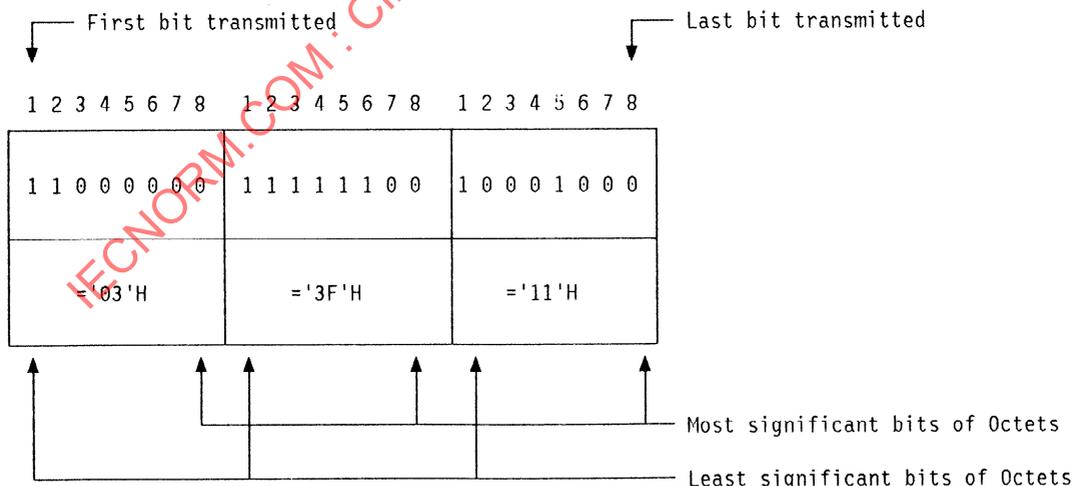
NOTE - This example does not show flags, FCS fields, and bits inserted for transparency.

Figure 2 - Example - Hex (String:='033F11'H)

4.13 PIXIT proforma

It is essential that the client provide the test laboratory with all the information (in addition to that given in the PICS) that will enable the appropriate test cases to be applied to the IUT. This information is provided in the Protocol Implementation eXtra Information for Testing (PIXIT). This PIXIT proforma is related to and dependent on the Protocol Implementa-

tion Conformance Statement (PICS) proforma which is being developed as an amendment to ISO/IEC 7776.

A mnemonic enclosed in parenthesis, e.g. (N2), indicates the test suite parameter that maps to this PIXIT question.

Item	General Information	Values
1	Classification of IUT, select one of ISO_7776, X25_1980, X25_1984, if conformance is claimed to ISO/IEC 7776, X.25 1980 or 1984 respectively. (IUT_TYPE)	Value:
2	The value of k used by IUT. (k)	Value:
3	The value of the maximum established length of the information field of the received I frames. (MEL)	Value:
4	The value of N2 for IUT. (N2)	Value:
5	The value of T1 parameter, in milli-seconds, used by the IUT. (T1_ONE)	Value:
Md	Which MODULO base is used for these tests? (Md)	Value:
Item	**Procedural Information**	**Values**
6	IUT will initiate transmission of I frames on entering information transfer tests.	☐Yes ☐No
6a	IUT acknowledges I frames immediately so that it can handle a full window of I frames within timer T1/2. (IUT_ACK)	☐Yes ☐No
7a	IUT can be made to enter the busy condition when required for testing. (IUT_SEND_RNR)	☐Yes ☐No
7a1	If yes to 7a, specify the time, in milli-seconds, the IUT will remain busy.	Value:
7b	Specify if IUT will send RNR after link set-up (e.g., this may correspond to a situation where RNR is used while higher level is being set up).	☐Yes ☐No
7b1	If yes to 7b, enter the MAXIMUM time, in milli-seconds, the IUT will be in busy condition. (Tb)	Value:
8	IUT can be made to initiate link disconnection when required for testing. (IUT_SEND_DISC)	☐Yes ☐No
8a	Is manual intervention required to initiate link disconnection when required for testing.	☐Yes ☐No
8a1	If yes to 8a, specify the time, in milli-seconds.	Value:
9	State the time in milli-seconds the tester must wait before determining that the IUT will not respond to a tester stimulus. This value will be tester parameter Td. Note: Td < T1. (Td)	Value:
10a	IUT can be made to set-up the link when required for testing. (IUT_SETUP_LINK)	☐Yes ☐No
10a1	If yes to 10a, specify PICS item under "Link set-up (reset) procedure" to be used.	PICS item:
10b	IUT can request the tester to set-up the link when required. (TEST_DM)	☐Yes ☐No
11	IUT can maintain the disconnected phase as a stable state for a period of time. (STABLE_DP)	☐Yes ☐No
11a	If yes to 11, specify the time, in milli-seconds, IUT will remain in disconnected phase. During this time period the IUT will not unilaterally send a SABM, DISC, or DM frame.	Value:
12	The IUT can maintain the frame reject condition as a stable state for a period of time. (STABLE_FRMR)	☐Yes ☐No
12a	If yes to 12, specify the time, in milli-seconds, IUT will remain in frame reject condition.	Value:
13a	Upon reaching the disconnected phase, will the IUT reply with DM response to all commands received, and not set up the data link until some operator action is taken. (DMRSP)	☐Yes ☐No

Table 3 (Page 1 of 2). Protocol Implementation eXtra Information for Testing (PIXIT)

Table 3 (Page 2 of 2). Protocol Implementation eXtra Information for Testing (PIXIT)		
13b	Upon reaching the disconnected phase, will the IUT not respond to any stimulus, and not set up the data link until some operator action is taken. (UNRSP)	☐Yes ☐No
14	Where operator action is required (for implicit send events), specify the maximum time, in seconds, required for the operator to complete the requested action. (TOPERATOR)	Value:
Item	**I Frame Information**	**Values**
15	Specify in sequence contents of the information field that the tester is allowed to send to the IUT in information transfer phase. (UDAT) Note: Note that in some tests up to k + 1 frames are sent from the tester.	Frame 1:
15a		Frame 2:
15b		Frame 3:
15c		Frame 4:
15d		Frame 5:
15e		Frame 6:
15f		Frame 7:
15g		Frame 8:
16	Specify the i-field for an I frame that is to contain a too long information field. (ULON)	Value:

4.14 Classification of IUT

In this test suite the global variable "IUT_TYPE" is defined. This variable can assume values for ISO/IEC 7776, or X.25-1980, or X.25-1984. A Boolean expression is used to test this variable before a test event can apply to one specific standard. If this is not done, then that event applies to all three X.25 standards.

5 TTCN abstract test suite

5.1 Test suite overview

Table 4. Test Suite Structure

Suite Name	: ISO/IEC 8882-2
Standards Ref	: ISO/IEC 7776 : 1986
PICS Ref	: ISO/IEC 7776/DAM1 : 1991
PIXIT Ref	: ISO/IEC 8882-2
Test Method(s)	: Remote Embedded Single Layer
Comments	:

Test Group Reference	Selection Ref	Test Group Objective	Page Nr
DL1/	DP_STABLE	Verification of the Disconnected Phase	
DL1/DL1_PROPER/		Proper frames	63
DL1/DL1_IMPROPER/		Improper frames	65
DL1/DL1_INOPPORTUNE/		Inopportune frames	70
DL2/	SEND_DISC	Verification of IUT Initiated Link Disconnection Phase	
DL2/DL2_PROPER/		Proper frames	77
DL2/DL2_IMPROPER/		Improper frames	80
DL2/DL2_INOPPORTUNE/	NOT_CCITT_80	Inopportune frames	85
DL3/	SEND_SABM	Verification of Link Set-up Phase	
DL3/DL3_PROPER/		Proper frames	90
DL3/DL3_IMPROPER/		Improper frames	92
DL3/DL3_INOPPORTUNE/	NOT_CCITT_80	Inopportune frames	97
DL4/		Verification of Information Transfer Phase	
DL4/DL4_PROPER/		Proper frames	102
DL4/DL4_IMPROPER/		Improper frames	110
DL4/DL4_INOPPORTUNE/		Inopportune frames	119
DL5/	FRMR_STABLE	Verification of Frame Reject Condition	
DL5/DL5_PROPER/		Proper frames	121
DL5/DL5_IMPROPER/		Improper frames	122
DL5/DL5_INOPPORTUNE/		Inopportune frames	128
DL6/	SEND_RNR	Verification of IUT Busy Condition	
DL6/DL6_PROPER/		Proper frames	134
DL6/DL6_IMPROPER/		Improper frames	138
DL6/DL6_INOPPORTUNE/		Inopportune frames	147
DL7/		Verification of Sent Reject Condition	
DL7/DL7_PROPER/		Proper frames	149
DL7/DL7_IMPROPER/		Improper frames	153
DL7/DL7_INOPPORTUNE/		Inopportune frames	162
DL8/		System Parameters and Error Recovery tests	163

5.2 Test case index

Table 5 (Page 1 of 17). Test Case Index				
Test Group Reference	**Test Case Id**	**Selection Ref**	**Description**	**Page Nr**
DL1/DL1_PROPER/	DL1_101		Verify that the IUT sends a DM/F = 1 in response to a DISC/P = 1 in the disconnected phase.	63
DL1/DL1_PROPER/	DL1_102		Verify that the IUT sends a DM/F = 0 in response to a DISC/P = 0 in the disconnected phase.	63
DL1/DL1_PROPER/	DL1_103		Verify that the IUT sends a UA/F = 1 or a DM/F = 1 in response to a SABM/P = 1 in the disconnected phase.	63
DL1/DL1_PROPER/	DL1_104		Verify that the IUT sends a UA/F = 0 or a DM/F = 0 in response to a SABM/P = 0 in the disconnected phase.	64
DL1/DL1_PROPER/	DL1_105		Verify that the IUT reacts properly in the disconnected phase on receiving a DM/F = 0.	64
DL1/DL1_IMPROPER/	DL1_201		Verify that, in the disconnected phase, the IUT upon receipt of a command frame with undefined or not implemented control field with P = 1, either discards the frame or sends a DM/F = 1 response frame.	65
DL1/DL1_IMPROPER/	DL1_202		Verify that the IUT discards a response frame with an undefined or not implemented control field with F = 1 in the disconnected phase.	65
DL1/DL1_IMPROPER/	DL1_203		Verify that the IUT discards a SABM/P = 1 with an address different from A,B,C or D in the disconnected phase.	65
DL1/DL1_IMPROPER/	DL1_204		Verify that the IUT discards a SABM/P = 1 with an FCS error in the disconnected phase.	66
DL1/DL1_IMPROPER/	DL1_205		Verify that the IUT discards a DM/F = 1 in the disconnected phase.	66
DL1/DL1_IMPROPER/	DL1_206		Verify that the IUT discards a DM/F = 0 with an information field in the disconnected phase.	66
DL1/DL1_IMPROPER/	DL1_207		Verify that, in the disconnected phase, the IUT upon receipt of a SABM/P = 1 with an information field, either discards the frame or sends a DM/F = 1 response frame.	67
DL1/DL1_IMPROPER/	DL1_208		Verify that, in the disconnected phase, the IUT upon receipt of a UA/F = 0 with an information field, while in the disconnected phase.	67
DL1/DL1_IMPROPER/	DL1_209		Verify that, in the disconnected phase, the IUT upon receipt of a RR/P = 1 with an information field, either discards the frame or sends a DM/F = 1 response frame.	67
DL1/DL1_IMPROPER/	DL1_210		Verify that, in the disconnected phase, the IUT upon receipt of a RNR/P = 1 with an information field, either discards the frame or sends a DM/F = 1 response frame.	68
DL1/DL1_IMPROPER/	DL1_211		Verify that, in the disconnected phase, the IUT upon receipt of a REJ/P = 1 with an informtion field, either discards the frame or sends a DM/F = 1 response frame.	68
DL1/DL1_IMPROPER/	DL1_212		Verify that the IUT discards an I/P = 0 frame containing an information field longer than the maximum established length in the disconnected phase.	68
DL1/DL1_IMPROPER/	DL1_213		Verify that the IUT discards a DISC/P = 0 with an information field in the disconnected phase.	69
DL1/DL1_IMPROPER/	DL1_214		Verify that the IUT discards a DISC/P = 1 with an information field in the disconnected phase.	69
DL1/DL1_IMPROPER/	DL1_215		Verify that the IUT discards a SABM/P = 1 with an information field in the disconnected phase.	69

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL1/DL1_INOPPORTUNE/	DL1_301		Verify that the IUT sends a DM/F = 1 in response to an I/P = 1 in the disconnected phase.	70
DL1/DL1_INOPPORTUNE/	DL1_302		Verify that the IUT sends a DM/F = 1 in response to an RR/P = 1 in the disconnected phase.	70
DL1/DL1_INOPPORTUNE/	DL1_303		Verify that the IUT sends a DM/F = 1 in response to an RNR/P = 1 in the disconnected phase.	70
DL1/DL1_INOPPORTUNE/	DL1_304		Verify that the IUT sends a DM/F = 1 in response to an REJ/P = 1 in the disconnected phase.	71
DL1/DL1_INOPPORTUNE/	DL1_305		Verify that the IUT discards a UA/F = 0 in the disconnected phase.	71
DL1/DL1_INOPPORTUNE/	DL1_306		Verify that the IUT discards a UA/F = 1 in the disconnected phase.	71
DL1/DL1_INOPPORTUNE/	DL1_307		Verify that the IUT discards an FRMR/F = 0 in the disconnected phase.	72
DL1/DL1_INOPPORTUNE/	DL1_308		Verify that the IUT discards an FRMR/F = 1 in the disconnected phase.	72
DL1/DL1_INOPPORTUNE/	DL1_309		Verify that the IUT discards an I/P = 0 in the disconnected phase.	72
DL1/DL1_INOPPORTUNE/	DL1_310		Verify that the IUT discards an RR/F = 0 in the disconnected phase.	73
DL1/DL1_INOPPORTUNE/	DL1_311		Verify that the IUT discards an RNR/F = 0 in the disconnected phase.	73
DL1/DL1_INOPPORTUNE/	DL1_312		Verify that the IUT discards an REJ/F = 0 in the disconnected phase.	73
DL1/DL1_INOPPORTUNE/	DL1_313		Verify that the IUT discards an RR/F = 1 in the disconnected phase.	74
DL1/DL1_INOPPORTUNE/	DL1_314		Verify that the IUT discards an RNR/F = 1 in the disconnected phase.	74
DL1/DL1_INOPPORTUNE/	DL1_315		Verify that the IUT discards an REJ/F = 1 in the disconnected phase.	74
DL1/DL1_INOPPORTUNE/	DL1_316		Verify that the IUT discards an RR/P = 0 in the disconnected phase.	75
DL1/DL1_INOPPORTUNE/	DL1_317		Verify that the IUT discards an RNR/P = 0 in the disconnected phase.	75
DL1/DL1_INOPPORTUNE/	DL1_318		Verify that the IUT discards an REJ/P = 0 in the disconnected phase.	75
DL1/DL1_INOPPORTUNE/	DL1_319		Verify that the IUT discards an I/P = 0 frame with no information field in the disconnected phase.	76
DL2/DL2_PROPER/	DL2_101	NOT_UNRESP	Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 received in the link disconnection phase . This situation corresponds to a DISC and DISC collision.	77
DL2/DL2_PROPER/	DL2_102	NOT_UNRESP	Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the link disconnection phase . This situation corresponds to a DISC and DISC collision.	78
DL2/DL2_PROPER/	DL2_103		Verify that the IUT sends a DM/F = 0 in response to a SABM /P = 0 received in the link disconnection phase . This situation corresponds to a DISC and SABM collision. The IUT is expected to enter the disconnected phase.	78
DL2/DL2_PROPER/	DL2_104		Verify that the IUT sends a DM/F = 1 in response to a SABM/P = 1 received in the link disconection phase . This situation corresponds to a DISC and SABM collision. The IUT is expected to enter the disconnected phase.	79
DL2/DL2_PROPER/	DL2_105	NOT_UNRESP	Verify proper IUT behavior in the link disconnection phase upon receiving a proper DM response.	79

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL2/DL2_PROPER/	DL2_106		Verify that in the link disconnection phase, upon receiving a DM/F = 0 response, when the last DISC command from the IUT was with P = 1, the IUT shall consider the DM response to represent a collision condition and shall remain in the link disconnection phase.	79
DL2/DL2_PROPER/	DL2_107	NOT_UNRESP	Verify proper IUT behaviour in the link disconnection phase upon receiving a proper UA response.	79
DL2/DL2_IMPROPER/	DL2_201		Verify that, in the link disconnection phase, the IUT discards a command frame with an undefined or not implemented control field with P = 1.	80
DL2/DL2_IMPROPER/	DL2_202		Verify that the IUT discards a response frame with an undefined or not implemented control field with F = 1 in the link disconnection phase.	80
DL2/DL2_IMPROPER/	DL2_203		Verify that the IUT discards a DISC/P = 0 with information field in the link disconnection phase.	80
DL2/DL2_IMPROPER/	DL2_204		Verify that the IUT discards a SABM/P = 1 with an information field in the link disconnection phase.	81
DL2/DL2_IMPROPER/	DL2_205		Verify that the IUT discards a UA with an appropriate F bit setting, but with an added information field in the link disconnection phase.	81
DL2/DL2_IMPROPER/	DL2_206		Verify that the IUT discards a DM with an appropriate F bit setting, but with an additional information field in the link disconnection phase.	82
DL2/DL2_IMPROPER/	DL2_207		Verify that the IUT discards an I/P = 1 frame containing an information field longer than the maximum established length in the link disconnection phase.	82
DL2/DL2_IMPROPER/	DL2_208		Verify that the IUT discards an RR/P = 1 with an information field in the link disconnection phase.	82
DL2/DL2_IMPROPER/	DL2_209		Verify that the IUT discards an RNR/P = 1 with an information field in the link disconnection phase.	83
DL2/DL2_IMPROPER/	DL2_210		Verify that the IUT discards an REJ/P = 1 with an information field in the link disconnection phase.	83
DL2/DL2_IMPROPER/	DL2_211	SEND_DISC	Verify that the IUT discards a DISC with an address different from A, B, C or D in the link disconnection phase.	83
DL2/DL2_IMPROPER/	DL2_212		Verify that the IUT discards a DISC/P = 0 with an FCS error, in the link disconnection phase.	84
DL2/DL2_IMPROPER/	DL2_213	CCITT_80	Verify that in the case of X.25 1980, if the IUT is in the link disconnection phase and if the last DISC command from the IUT was with P = 0, then a DM/F = 1 shall be discarded and the IUT will remain in the link disconnection phase.	84
DL2/DL2_IMPROPER/	DL2_214		Verify that in the link disconnection phase, upon receiving an improper UA response (invalid F bit), the IUT shall discrad the UA and remain in the link disconnection phase.	84
DL2/DL2_INOPPORTUNE/	DL2_301		Verify that the IUT discards an RR/P = 1 in the link disconnection phase.	85
DL2/DL2_INOPPORTUNE/	DL2_302		Verify that the IUT discards an RR/P = 0 in the link disconnection phase.	85
DL2/DL2_INOPPORTUNE/	DL2_303		Verify that the IUT discards an RNR/P = 1 in the link disconnection phase	85
DL2/DL2_INOPPORTUNE/	DL2_304		Verify that the IUT discards an RNR/P = 0 in the link disconnection phase.	85
DL2/DL2_INOPPORTUNE/	DL2_305		Verify that the IUT discards an REJ/P = 1 in the link disconnection phase.	86
DL2/DL2_INOPPORTUNE/	DL2_306		Verify that the IUT discards an REJ/P = 0 in the link disconnection phase.	86

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL2/DL2_INOPPORTUNE/	DL2_307		Verify that the IUT discards an FRMR/F = 0 in the link disconnection phase.	86
DL2/DL2_INOPPORTUNE/	DL2_308		Verify that the IUT discards an RR/F = 1 in the link disconnection phase.	86
DL2/DL2_INOPPORTUNE/	DL2_309		Verify that the IUT discards an RR/F = 0 in the link disconnection phase.	87
DL2/DL2_INOPPORTUNE/	DL2_310		Verify that the IUT discards an RNR/F = 1 in the link disconnection phase	87
DL2/DL2_INOPPORTUNE/	DL2_311		Verify that the IUT discards an RNR/F = 0 in the link disconnection phase.	87
DL2/DL2_INOPPORTUNE/	DL2_312		Verify that the IUT discards an REJ/F = 1 in the link disconnection phase.	87
DL2/DL2_INOPPORTUNE/	DL2_313		Verify that the IUT discards an REJ/F = 0 in the link disconnection phase.	88
DL2/DL2_INOPPORTUNE/	DL2_314		Verify that the IUT discards an an FRMR/F = 1 in the link disconnection phase.	88
DL2/DL2_INOPPORTUNE/	DL2_315		Verify that the IUT discards an I/P = 0 in the link disconnection phase.	88
DL2/DL2_INOPPORTUNE/	DL2_316		Verify that the IUT discards an I/P = 1 received in the link disconnection phase.	88
DL2/DL2_INOPPORTUNE/	DL2_317		Verify that the IUT discards an I/P = 0 frame with no information field in the link disconnection phase.	89
DL3/DL3_PROPER/	DL3_101		Verify that the IUT sends a UA/F = 0 in response to a SABM/P = 0 received in the link set-up phase.	90
DL3/DL3_PROPER/	DL3_102		Verify that the IUT sends a UA/F = 1 in response to a SABM/P = 1 received in the link set-up phase.	90
DL3/DL3_PROPER/	DL3_103		Verify that the IUT sends a DM/F = 0 in response to a DISC/P = 0 in the link set-up phase. This situation corresponds to a SABM and DISC collision.	91
DL3/DL3_PROPER/	DL3_104		Verify that the IUT sends a DM/F = 1 in response to a DISC/P = 1 in the link set-up phase. This situation corresponds to a SABM and DISC collision.	91
DL3/DL3_PROPER/	DL3_105		Verify that in the link set-up phase, upon receiving a proper UA response, the IUT shall enter the information transfer phase.	91
DL3/DL3_PROPER/	DL3_106		Verify that in the link set-up phase, the IUT shall ignore a DM/F = 0, in case of a SABM and DM collision where SABM from IUT has P = 1.	91
DL3/DL3_PROPER/	DL3_107	NOT_UNRESP	Verify that in the link set-up phase, if the last SABM command from the IUT was with P = 1, then upon receiving a DM/F = 1 response, the IUT either sends a DISC/P = 1 or a SABM/P = 1 or a DM/F = 0 or does not respond.	92
DL3/DL3_IMPROPER/	DL3_201		Verify that the IUT discards a command frame with an undefined or not implemented control field with P = 1 in the link set-up phase.	92
DL3/DL3_IMPROPER/	DL3_202		Verify that the IUT discards a response frame with an undefined or not implemented control field in the link set-up phase.	92
DL3/DL3_IMPROPER/	DL3_203		Verify that the IUT discards a UA with an appropriate F bit setting but with an additional information field in the link set-up phase.	93
DL3/DL3_IMPROPER/	DL3_204		Verify that the IUT discards a DISC/P = 0 with information field in the link set-up phase.	93
DL3/DL3_IMPROPER/	DL3_205		Verify that the IUT discards a SABM/P = 1 with information field in the link set-up phase.	93
DL3/DL3_IMPROPER/	DL3_206		Verify that the IUT discards a DM with an appropriate F bit but with an information field in the link set-up phase.	94

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL3/DL3_IMPROPER/	DL3_207		Verify that the IUT discards an I/P = 1 with an information field which is longer than the maximum established length in the link set-up phase.	94
DL3/DL3_IMPROPER/	DL3_208		Verify that the IUT discards an I/P = 0 with no information field while in the link set-up phase.	94
DL3/DL3_IMPROPER/	DL3_209		Verify that the IUT discards an RR/P = 1 with an information field in the link set-up phase.	95
DL3/DL3_IMPROPER/	DL3_210		Verify that the IUT discards an RNR/P = 1 with an inforamtion field in the link set-up phase.	95
DL3/DL3_IMPROPER/	DL3_211		Verify that the IUT discards an REJ/P = 1 with an information field in the link set-up phase.	95
DL3/DL3_IMPROPER/	DL3_212		Verify that the IUT discards a SABM/P = 1 with an address different from A, B, C or D while in the link set-up phase.	96
DL3/DL3_IMPROPER/	DL3_213		Verify that the IUT discards a SABM/P = 1 with an FCS error in the link set-up phase.	96
DL3/DL3_IMPROPER/	DL3_214	CCITT_80	Verify that in the link set-up phase, if an IUT is of X.25 1980 type, then it would discard a DM/F = 1 if the last SABM from the IUT was P = 0.	96
DL3/DL3_IMPROPER/	DL3_215		Verify that the IUT discards a UA with an invalid F bit in the link set-up phase.	97
DL3/DL3_INOPPORTUNE/	DL3_301		Verify that the IUT discards an RR/P = 1 received in the link set-up phase.	97
DL3/DL3_INOPPORTUNE/	DL3_302		Verify that the IUT discards an RR/P = 0 received in the link set-up phase.	97
DL3/DL3_INOPPORTUNE/	DL3_303		Verify that the IUT discards an RR/F = 1 received in the link set-up phase.	98
DL3/DL3_INOPPORTUNE/	DL3_304		Verify that the IUT discards an RR/F = 0 received in the link set-up phase.	98
DL3/DL3_INOPPORTUNE/	DL3_305		Verify that the IUT discards an FRMR/F = 0 received in the link set-up phase.	98
DL3/DL3_INOPPORTUNE/	DL3_306		Verify that the IUT discards an FRMR/F = 1 received in the link set-up phase.	98
DL3/DL3_INOPPORTUNE/	DL3_307		Verify that the IUT discards an I/P = 0 received in the link set-up phase.	99
DL3/DL3_INOPPORTUNE/	DL3_308		Verify that the IUT discards an I/P = 1 received in the link set-up phase.	99
DL3/DL3_INOPPORTUNE/	DL3_309		Verify that the IUT discards an RNR/P = 0 received in the link set-up phase.	99
DL3/DL3_INOPPORTUNE/	DL3_310		Verify that the IUT discards an RNR/F = 0 received in the link set-up phase.	99
DL3/DL3_INOPPORTUNE/	DL3_311		Verify that the IUT discards an RNR/P = 1 received in the link set-up phase.	100
DL3/DL3_INOPPORTUNE/	DL3_312		Verify that the IUT discards an REJ/P = 0 received in the link set-up phase.	100
DL3/DL3_INOPPORTUNE/	DL3_313		Verify that the IUT discards an REJ/F = 0 received in the link set-up phase.	100
DL3/DL3_INOPPORTUNE/	DL3_314		Verify that the IUT discards an REJ/P = 1 received in the link set-up phase.	100
DL3/DL3_INOPPORTUNE/	DL3_315		Verify that the IUT discards an RNR/F = 1 received in the link set-up phase.	101
DL3/DL3_INOPPORTUNE/	DL3_316		Verify that the IUT discards an REJ/F = 1 received in the link set-up phase.	101
DL4/DL4_PROPER/	DL4_101		Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the information transfer phase.	102

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL4/DL4_PROPER/	DL4_102		Verify that the IUT upon receiving a SABM/P = 1 in the information transfer phase either sends a UA/F = 1 or it sends a DM/F = 1.	102
DL4/DL4_PROPER/	DL4_103		Verify proper IUT behavior on receiving FRMR/F = 0 in the information transfer phase.	103
DL4/DL4_PROPER/	DL4_104		Verify that the IUT acknowledges a a valid I/P = 0 frame.	103
DL4/DL4_PROPER/	DL4_105		Verify that the IUT acknowledges a valid I/P = 1 frame.	104
DL4/DL4_PROPER/	DL4_106		Verify that the IUT responds to a proper RR/P = 1 command in the information transfer phase.	104
DL4/DL4_PROPER/	DL4_107		Verify that in the information transfer phase if the IUT receives an REJ/P = 1 command frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame. Prior to this transmission the IUT shall send an RR/F = 1 response to the received REJ/P = 1 command frame.	105
DL4/DL4_PROPER/	DL4_108		Verify that in the information transfer phase if the IUT receives an REJ/P = 0 command frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame.	105
DL4/DL4_PROPER/	DL4_109		Verify that in the information transfer phase if the IUT receives an REJ/F = 0 respond frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame.	105
DL4/DL4_PROPER/	DL4_110		Verify proper IUT behavior in the information transfer when the IUT receives a DM/F = 0 response.	106
DL4/DL4_PROPER/	DL4_111		Verify that when the IUT receives, during the information transfer phase, an I frame with a N(S) greater than the IUT V(R) value, simulating (for example) a situation of one or more I frame(s) not received due to transmission error, it responds with an REJ command or response frame with a N(R) value equal to the value of the IUT receive state variable, V(R).	106
DL4/DL4_PROPER/	DL4_112		Verify that if the IUT receives a valid I/P = 0 frame with zero length information field, while it is in the information transfer phase, it shall increment by one the value of its receive state variable and respond with an I or RR or RNR frame with a N(R) equal to the updated value of the IUT receive state variable.	107
DL4/DL4_PROPER/	DL4_113		Verify that if the IUT receives a two valid I frames with a single flag in between, while it is in the information transfer state, it increments by two the value of its receive state variable and responds with an RR or RNR frame with an N(R) equal to the updated value of the IUT receive state variable. The P bit is set to "1" on the second frame from the tester.	107
DL4/DL4_PROPER/	DL4_114	IUT_WINDOW	Verify that the IUT in the information transfer phase, can manage its send window correctly. For this test, the IUT send window is the range of values for the IUT send state variable V(S), starting at the current value and going up to (V(S) + k), where k is the IUT parameter for maximum number of outstanding I frames. For the purpose of this test, the IUT shall transmit I frames that have a N(S) value within the send window.	108
DL4/DL4_PROPER/	DL4_115		Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 received in the information transfer phase.	108

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL4/DL4_PROPER/	DL4_116		Verify that the IUT upon receiving a SABM/P = 0 in the information transfer phase either sends a UA/F = 0 or it may send a DM/F = 0 frame.	109
DL4/DL4_PROPER/	DL4_117		When the IUT is in the information transfer phase and recives a valid RR/P = 0, the IUT shall consider the N(R) contained in this frame as an acknowledgements of all I frames it has transmitted with an N(S) up to and including the received N(R) -1.	109
DL4/DL4_PROPER/	DL4_118		When the IUT is in the inforamtion transfer phase and receives a valid RR/F = 0, the IUT shall consider the N(R) contained in this frame as an acknowledgedment of all I frames it has transmitted with an N(S) up to and including the received N(R) -1.	110
DL4/DL4_PROPER/	DL4_119		Verify that the IUT does not transmit information frames while the tester is in the busy condition and that after the tester exits the busy condition by transmitting an RR/P = 0, the IUT sends an I frame.	110
DL4/DL4_IMPROPER/	DL4_201		Verify proper IUT behavior when the IUT receives,in the information transfer phase, a UA/F = 0 response.	110
DL4/DL4_IMPROPER/	DL4_202		Verify proper IUT behavior when the IUT receives, in the information transfer phase, a UA/F = 1 response	111
DL4/DL4_IMPROPER/	DL4_203		Verify proper IUT behavior when the IUT receives, in the information transfer phase, an unsolicited FRMR/F = 1 response.	111
DL4/DL4_IMPROPER/	DL4_204		Verify proper IUT behaviour when the IUT receives, in the information transfer phase, an unsolicited DM/F = 1 response.	111
DL4/DL4_IMPROPER/	DL4_205		Verify that if the IUT,in the information transfer phase, receives an I/P = 0 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.	112
DL4/DL4_IMPROPER/	DL4_206		Verify that in the information transfer phase transmits an FRMR/F = 0 with a properly encoded Y bit, on receiving an I/P = 0 frame with an information length which exceeds the maximum established length.	112
DL4/DL4_IMPROPER/	DL4_207		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to a command frame with undefined or not implemented control field with P = 1. Verify also that the C/R bit shall be set to "0" along with a properly encoded W bit.	113
DL4/DL4_IMPROPER/	DL4_208		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to a response frame with an undefined or not implemented control field with F = 0. Verify also that the C/R bit shall be set to "1" along with a properly encoded W bit.	113
DL4/DL4_IMPROPER/	DL4_209		Verify that in the information transfer phase,the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.	114
DL4/DL4_IMPROPER/	DL4_210		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. Verify also that the C/R bit is set to "0" and the W and X bits shall be set properly.	114

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL4/DL4_IMPROPER/	DL4_211		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an informtion field. Verify also that the C/R bit is set to "0" and the W and X bits be set properly.	115
DL4/DL4_IMPROPER/	DL4_212		Verify that in the information transfer phase,the IUT transmits an FRMR/F = 0 in response to a UA/F = 0 with an Information field. Verify also the C/R bit is set to "1" and the W and X bits shall be set properly.	115
DL4/DL4_IMPROPER/	DL4_213		Verify that in the information transfer phase ,the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.	116
DL4/DL4_IMPROPER/	DL4_214		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.	116
DL4/DL4_IMPROPER/	DL4_215		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to an REJ/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.	116
DL4/DL4_IMPROPER/	DL4_216		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.	117
DL4/DL4_IMPROPER/	DL4_217		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 frame in response to an RNR/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.	117
DL4/DL4_IMPROPER/	DL4_218		Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.	117
DL4/DL4_IMPROPER/	DL4_219		Verify that the IUT discards an I frame with an FCS error in the information transfer phase.	118
DL4/DL4_IMPROPER/	DL4_220		Verify that the IUT discards an I/P = 1 frame with an incorrect address in information transfer phase.	118
DL4/DL4_IMPROPER/	DL4_221		Verify that the IUT discards a frame which is too short in the information transfer phase.	118
DL4/DL4_IMPROPER/	DL4_222		Verify that the IUT discards an I/P = 1 frame which is aborted before the closing flag in the information transfer phase.	119
DL4/DL4_INOPPORTUNE/	DL4_301		Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited RR/F = 1 response.	119
DL4/DL4_INOPPORTUNE/	DL4_302		Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited RNR/F = 1 response.	119
DL4/DL4_INOPPORTUNE/	DL4_303		Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited REJ/F = 1 response.	120
DL5/DL5_PROPER/	DL5_101		Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 in the frame rejection condition.	121
DL5/DL5_PROPER/	DL5_102		Verify that the IUT, upon receiving a SABM/P = 1 in the frame rejection condition, either sends a UA/F = 1 or sends a DM/F = 1.	121

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL5/DL5_PROPER/	DL5_103		Verify proper IUT behaviour in the frame rejection condition when the IUT receives an FRMR/F = 0 response.	121
DL5/DL5_PROPER/	DL5_104		Verify proper IUT behavior in the frame rejection condition when the IUT receives a DM/F = 0 response.	121
DL5/DL5_PROPER/	DL5_105		Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 received in the frame rejection condition.	122
DL5/DL5_PROPER/	DL5_106		Verify that the IUT upon receiving a SABM/P = 0 in the frame rejection condition either sends a UA/F = 0 or it sends a DM/F = 0.	122
DL5/DL5_IMPROPER/	DL5_201		Verify that if the IUT, while in the frame rejection condition, receives an I/P = 1 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 1 and with the FRMR information field encoding resulting from DL5_STATE.	122
DL5/DL5_IMPROPER/	DL5_202		Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to a command frame with undefined or not implemented control field with P = 1. Verify also that the information field of the FRMR frame is encoded as in DL5_STATE.	123
DL5/DL5_IMPROPER/	DL5_203		Verify that in the frame rejection condition, the IUT shall discard a response frame with an undefined or not implemented control field with F = 0.	123
DL5/DL5_IMPROPER/	DL5_204		Verify that in the frame rejection condition, the IUT shall transmit an FRMR in response to a SABM/P = 1 with an information field. Verify also that the information field of the FRMR is encoded as in DL5_STATE.	123
DL5/DL5_IMPROPER/	DL5_205		Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to a DISC/P = 1 with an information field. Verify also that the information field of the FRMR frame is encoded as in DL5_STATE.	124
DL5/DL5_IMPROPER/	DL5_206		Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. Verify also that the Information field of the FRMR shall be encoded as in DL5_STATE.	124
DL5/DL5_IMPROPER/	DL5_207		Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an informtion field. Verify also that the information field of the FRMR frame shall be encoded as in DL5_STATE.	124
DL5/DL5_IMPROPER/	DL5_208		Verify that in the frame rejection condition, the IUT shall transmit an FRMR/P = 1 in response to an REJ/F = 1 with an information field. Verify also that the Information field of the FRMR shall be encoded as in DL5_STATE.	125
DL5/DL5_IMPROPER/	DL5_209		Verify that in the frame rejection condition, the IUT shall discard a UA/F = 0 with an information field.	125
DL5/DL5_IMPROPER/	DL5_210		Verify that in the frame rejection condition, the IUT shall discard a DM/F = 0 with an information field.	125
DL5/DL5_IMPROPER/	DL5_211		Verify that in the frame rejection condition, the IUT shall discard an RR/F = 0 with an informtion field.	126
DL5/DL5_IMPROPER/	DL5_212		Verify that in the frame rejection condition, the IUT shall discard an RNR/F = 0 with an information field.	126
DL5/DL5_IMPROPER/	DL5_213		Verify that in the frame rejection condition, the IUT shall discard an REJ/F = 0 with an information field.	126

Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL5/DL5_IMPROPER/	DL5_214		Verify that the IUT discards an unsolicited UA/F = 0 response in the frame rejection condition.	126
DL5/DL5_IMPROPER/	DL5_215		Verify that the IUT discards an unsolicited UA/F = 1 response in the frame rejection condition.	127
DL5/DL5_IMPROPER/	DL5_216		Verify that the IUT discards an unsolicited DM/F = 1 response in the frame rejection condition.	127
DL5/DL5_IMPROPER/	DL5_217		Verify that the IUT discards an SABM/P = 0 with an incorrect address in frame rejection condition.	127
DL5/DL5_IMPROPER/	DL5_218		Verify that the IUT discards a SABM/P = 0 with an FCS error, in frame rejection condition.	128
DL5/DL5_IMPROPER/	DL5_219		Verify that the IUT, in the frame rejection condition on receiving an I/P = 1 frame with an informtion field which exceeds the maximum established length, transmits an FRMR frame with F = 1 and with the FRMR information field encoding resulting from DL5_STATE.	128
DL5/DL5_INOPPORTUNE/	DL5_301		Verify that the IUT in the frame rejection condition either discards an I/P = 0 or transmits an FRMR/F = 0 with the information field encoding resulting from DL5_STATE.	128
DL5/DL5_INOPPORTUNE/	DL5_302		Verify that the IUT in the frame reject condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an I/P = 1.	129
DL5/DL5_INOPPORTUNE/	DL5_303		Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an RR/P = 1.	129
DL5/DL5_INOPPORTUNE/	DL5_304		Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR informtion field encoding resulting from DL5_STATE, in response to an RNR/P = 1.	129
DL5/DL5_INOPPORTUNE/	DL5_305		Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an REJ/P = 1.	130
DL5/DL5_INOPPORTUNE/	DL5_306		Verify that the IUT in the frame rejection condition either discards an RR/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.	130
DL5/DL5_INOPPORTUNE/	DL5_307		Verify that the IUT in the frame rejection condition either discards an RNR/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.	130
DL5/DL5_INOPPORTUNE/	DL5_308		Verify that the IUT in the frame rejection condition either discards an REJ/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.	131
DL5/DL5_INOPPORTUNE/	DL5_309		Verify that the IUT in the frame rejection condition discards an RR/F = 1.	131
DL5/DL5_INOPPORTUNE/	DL5_310		Verify that the IUT in the frame rejection condition discards an RNR/F = 1.	131
DL5/DL5_INOPPORTUNE/	DL5_311		Verify that the IUT in the frame rejection condition discards an REJ/F = 1.	131
DL5/DL5_INOPPORTUNE/	DL5_312		Verify that the IUT in the frame rejection condition discards an RR/F = 0.	132
DL5/DL5_INOPPORTUNE/	DL5_313		Verify that the IUT in the frame rejection condition discards an RNR/F = 0.	132
DL5/DL5_INOPPORTUNE/	DL5_314		Verify that the IUT in the frame rejection condition discards an REJ/F = 0.	132

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL5/DL5_INOPPORTUNE/	DL5_315		Verify that the IUT in the frame rejection condition on receiving an I/P = 0 frame with no information field, either discards the I/P = 0 or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.	132
DL5/DL5_INOPPORTUNE/	DL5_316		Verify that if the IUT in the frame rejection condition receives an I/P = 0 frame with an out of sequence N(S), either discards the I/P = 0 or transmits an FRMR/F = 0 with the FRMR information field encoding from DL5_STATE.	133
DL6/DL6_PROPER/	DL6_101		Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 in the IUT busy condition.	134
DL6/DL6_PROPER/	DL6_102		Verify that the IUT upon receiving a SABM/P = 1 in the IUT busy condition, either sends a UA/F = 1 or it sends a DM/F = 1.	134
DL6/DL6_PROPER/	DL6_103	NOT_ISO_7776	Verify that, when a CCITT X.25 1980 or 1984 IUT is in the IUT busy condition, and receives a valid I/P = 1 whose send sequence number equals the IUT receive state variable V(R), the IUT will accept and process the contents of the N(R) field and return an RNR/F = 1 response. The received frame may or may not be acknowledged by the IUT.	134
DL6/DL6_PROPER/	DL6_104		Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/P = 0 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in this frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. The IUT shall process this N(R) value and either return an RNR/F = 0, or return nothing .	135
DL6/DL6_PROPER/	DL6_105		Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/P = 1 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in this frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. The IUT shall return an RNR/F = 1 response.	135
DL6/DL6_PROPER/	DL6_106		Verify that while in the IUT busy condition, if the IUT receives an RNR/P = 0 command, then the IUT shall set its send state variable V(S) to N(R) of the received RNR control field and shall not transmit subsequent I frames, until the busy condition is cleared from the tester. The IUT may either send no response to this command frame, or may send an RNR/F = 0 to confirm that IUT is still in the busy condition.	135
DL6/DL6_PROPER/	DL6_107		Verify that while in the IUT busy condition, if the IUT receives an RNR/P = 1 command, then the IUT shall set its send state variable V(S) to N(R) of the received RNR frame control field and shall not transmit (or retransmit) the corresponding I frames until an RR or REJ frame is received from the tester. The IUT shall respond with an RNR/F = 1 to confirm that the IUT is still in the busy condition.	136
DL6/DL6_PROPER/	DL6_108		Verify that when the IUT receives, during the IUT busy condition, a DM/F = 0 response, it shall initiate link resetting procedure or return a DM/F = 0 response to ask the tester to initiate link set-up procedure .	136
DL6/DL6_PROPER/	DL6_109		Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 in the IUT busy condition.	136
DL6/DL6_PROPER/	DL6_110		Verify that the IUT upon receiving a SABM/P = 0 in the IUT busy condition either sends a UA/F = 0 or it sends a DM/F = 0.	137

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL6/DL6_PROPER/	DL6_111		Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/F = 0 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in the frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. Since at this point the IUT is still busy, it shall discard the RR frame after processing the N(R) field as described above.	137
DL6/DL6_PROPER/	DL6_112		Verify that in the IUT busy condition, if the IUT receives an RNR/F = 0 response, then the IUT shall set its send state variable V(S) to N(R) of the received RNR control field and shall not transmit subsequent I frames, until the busy condition is cleared from the tester.	137
DL6/DL6_IMPROPER/	DL6_201		Verify proper IUT behavior when the IUT receives during the IUT busy condition, a UA/F = 0 response.	138
DL6/DL6_IMPROPER/	DL6_202		Verify proper IUT behavior when the IUT receives during the IUT busy condition, a UA/F = 1 response.	138
DL6/DL6_IMPROPER/	DL6_203		Verify proper IUT behavior when the IUT receives during the IUT busy condition, an FRMR/F = 0 response.	138
DL6/DL6_IMPROPER/	DL6_204		Verify proper IUT behavior when the IUT receives during the IUT busy condition, an FRMR/F = 1 response.	139
DL6/DL6_IMPROPER/	DL6_205		Verify proper IUT behavior when the IUT receives during the IUT busy condition, an unsolicited DM/F = 1 response.	139
DL6/DL6_IMPROPER/	DL6_206		Verify that if the IUT, while in the IUT busy condition, receives an I/P = 0 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.	139
DL6/DL6_IMPROPER/	DL6_207		Verify that the IUT, while in the IUT busy condition, transmits an FRMR with proper Y bit setting, on receiving an I/P = 0 frame with an information field which exceeds the maximum established length.	140
DL6/DL6_IMPROPER/	DL6_208		Verify that in the IUT busy condition, the IUT shall transmit an FRMR frame in response to a command frame with an undefined or not implemented control field with P = 1. The C/R bit shall be set to "0" and the W bit shall be set properly.	140
DL6/DL6_IMPROPER/	DL6_209		Verify that in the IUT busy condition, the IUT shall transmit an FRMR frame in response to a response frame with an undefined or not implemented control field with F = 0. The C/R bit shall be set to "1" and the W bit shall be set properly.	141
DL6/DL6_IMPROPER/	DL6_210		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 frame with an informtion field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	141
DL6/DL6_IMPROPER/	DL6_211		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	142
DL6/DL6_IMPROPER/	DL6_212		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bit shall be set properly .	142
DL6/DL6_IMPROPER/	DL6_213		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a UA/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .	143

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL6/DL6_IMPROPER/	DL6_214		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .	143
DL6/DL6_IMPROPER/	DL6_215		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .	144
DL6/DL6_IMPROPER/	DL6_216		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an REJ/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .	144
DL6/DL6_IMPROPER/	DL6_217		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	144
DL6/DL6_IMPROPER/	DL6_218		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	145
DL6/DL6_IMPROPER/	DL6_219		Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	145
DL6/DL6_IMPROPER/	DL6_220		When the IUT is in the IUT busy condition, and receives a valid I/P = 0 frame whose send sequence number is equal to the IUT receive state variable V(R) the IUT shall discard the information field of this frame, but process its N(R) receive sequence number and take one of the following actions: a) If the IUT is still in a busy state then, it may transmit an RNR/F = 0, or b) the IUT may transmit nothing .	145
DL6/DL6_IMPROPER/	DL6_221	NOT_CCITT	When an ISO 7776 IUT is in the IUT busy condition, and receives a valid I/P = 1 whose send sequence number equals the IUT receive state variable V(R), the IUT will accept and process the contents of the N(R) field and shall return an RNR/F = 1 response.	146
DL6/DL6_IMPROPER/	DL6_222		Verify that when the IUT receives, during the IUT busy condition, an I/P = 0 frame with a N(S) greater than the IUT V(R) value, simulating (for example) a situation of one or more I frame(s) not received due to transmission error, the IUT shall respond with an RNR/F = 0 response frame with a N(R) value equal to the value of the IUT receive state variable, V(R) or discard the I/P = 0.	146
DL6/DL6_IMPROPER/	DL6_223		Verify that the IUT discards an RR/P = 1 with an incorrect address in the IUT busy condition.	146
DL6/DL6_IMPROPER/	DL6_224		Verify that the IUT discards an RR/P = 1 with an FCS error in the IUT busy condition.	147
DL6/DL6_IMPROPER/	DL6_225		Verify that if the IUT receives a valid I/P = 0 frame with zero length information field in the IUT busy condition, it shall either send RNR or discard the received frame.	147
DL6/DL6_INOPPORTUNE/	DL6_301		Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited RR/F = 1 response.	147
DL6/DL6_INOPPORTUNE/	DL6_302		Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited RNR/F = 1 response.	148
DL6/DL6_INOPPORTUNE/	DL6_303		Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited REJ/F = 1 response.	148

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL7/DL7_PROPER/	DL7_101		Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the sent reject condition.	149
DL7/DL7_PROPER/	DL7_102		Verify that the IUT upon receiving a SABM/P = 1 in the sent reject condition, either sends a UA/F = 1 or it sends a DM/F = 1.	149
DL7/DL7_PROPER/	DL7_103		Verify that, when the IUT is in the sent reject condition, and receives a valid I/P = 0 frame whose send sequence number is equal to the IUT receive state variable V(R), the IUT shall accept the information field of this frame,and process its N(R) receive sequence number and take one of the following actions : a) If the IUT is now in a busy state, it may transmit an RNR/F = 0, or b) the IUT may transmit an RR/F = 0 or an I frame, and clear the sent reject condition.	149
DL7/DL7_PROPER/	DL7_104		Verify that, when the IUT is in the sent reject condition, and receives a valid I/P = 1 frame whose send sequence number is equal to the receive state variable V(R), the IUT shall accept the information field of this frame, and process its N(R) receive sequence number and the information field of this frame, and process its N(R) receive sequence number and take one of the following actions: a) If the IUT is now in a busy state, it may transmit an RNR/F = 1, or b) the IUT may transmit an RR/F = 1 and clear the sent reject condition.	150
DL7/DL7_PROPER/	DL7_105		Verify that in the sent reject condition, if the IUT receives an REJ/P = 0 command, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).	150
DL7/DL7_PROPER/	DL7_106		Verify that in the sent reject condition, if the IUT receives an REJ/P = 1 command, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).	151
DL7/DL7_PROPER/	DL7_107		Verify that when the IUT receives, during the sent reject condition, a DM/F = 0 response, it shall either initiate link resetting procedure or return a DM/F = 0 response to ask the tester IUT to initiate link set-up procedure.	151
DL7/DL7_PROPER/	DL7_108		Verify that if the IUT receives a valid I/P = 0 frame with zero length information field in the sent reject condition, it shall increment by one the value of its receive state variable and respond with an I or RR or RNR with a N(R) equal to the updated value of the IUT receive state variable.	152
DL7/DL7_PROPER/	DL7_109		Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 in the sent reject condition.	152
DL7/DL7_PROPER/	DL7_110		Verify that the IUT upon receiving a SABM/P = 0 while in the sent reject condition either sends a UA/F = 0 or a DM/F = 0.	152
DL7/DL7_PROPER/	DL7_111		Verify that in the sent reject condition, if the IUT receives an REJ/F = 0 response, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).	153
DL7/DL7_IMPROPER/	DL7_201		Verify proper IUT behavior when the IUT receives, during the sent reject condition, a UA/F = 0 response.	153
DL7/DL7_IMPROPER/	DL7_202		Verify proper IUT behavior when the IUT receives, during the sent reject condition, a UA/F = 1 response.	153

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Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL7/DL7_IMPROPER/	DL7_203		Verify that when the IUT receives, during the sent reject condition, an FRMR/F = 0 response, it may either initiate link resetting procedure or return a DM/F = 0 response to ask the tester to initiate link set-up procedure.	154
DL7/DL7_IMPROPER/	DL7_204		Verify proper IUT behavior when the IUT receives, during the sent reject condition, an FRMR/F = 1 response.	154
DL7/DL7_IMPROPER/	DL7_205		Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited DM/F = 1 response.	154
DL7/DL7_IMPROPER/	DL7_206		Verify that if the IUT, while in the sent reject condition, receives an I frame with a invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.	155
DL7/DL7_IMPROPER/	DL7_207		Verify that the IUT in the sent reject condition, transmits an FRMR/F = 0 with proper Y bit setting, on receiving an I frame with an information field which exceeds the maximum established length.	155
DL7/DL7_IMPROPER/	DL7_208		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 response to a command frame with undefined or not implemented control field with P = 1. The C/R bit shall be set to "0" and the W bit shall be set properly.	156
DL7/DL7_IMPROPER/	DL7_209		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a response frame with undefined or not implemented control field with F = 0. The C/R bit shall be set to "1" and the W bit shall be set properly.	156
DL7/DL7_IMPROPER/	DL7_210		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 with information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	157
DL7/DL7_IMPROPER/	DL7_211		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly.	157
DL7/DL7_IMPROPER/	DL7_212		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits sahll be set properly.	158
DL7/DL7_IMPROPER/	DL7_213		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a UA/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	158
DL7/DL7_IMPROPER/	DL7_214		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	159
DL7/DL7_IMPROPER/	DL7_215		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	159
DL7/DL7_IMPROPER/	DL7_216		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 frame in response to an REJ/F = 0 frame with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.	159
DL7/DL7_IMPROPER/	DL7_217		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly.	160

Table 5 (Page 16 of 17). Test Case Index				
Test Group Reference	Test Case Id	Selection Ref	Description	Page Nr
DL7/DL7_IMPROPER/	DL7_218		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	160
DL7/DL7_IMPROPER/	DL7_219		Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .	160
DL7/DL7_IMPROPER/	DL7_220		Verify that the IUT discards a frame with an incorrect address in sent reject condition.	161
DL7/DL7_IMPROPER/	DL7_221		Verify that the IUT discards a frame with an FCS error in the sent reject condition.	161
DL7/DL7_IMPROPER/	DL7_222		Verify that during the sent reject condition, the IUT discards an I frame with a N(S) greater than the IUT V(R) value.	161
DL7/DL7_INOPPORTUNE/	DL7_301		Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited RR/F = 1 response.	162
DL7/DL7_INOPPORTUNE/	DL7_302		Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited RNR/F = 1 response.	162
DL7/DL7_INOPPORTUNE/	DL7_303		Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited REJ/F = 1 response.	162
DL8/	DL8_1_101	SEND_DM	Verify that an IUT, after transmitting DM/F = 0 as a link set-up request, would retransmit a DM/F = 0, if no response is received for a time duration of T1.	163
DL8/	DL8_1_102	SEND_DM	Verify that an IUT, after transmitting DM/F = 0 as a link set-up request, would make N2-1 attempts by retransmitting a DM/F = 0 frame and starting timer T1.	163
DL8/	DL8_2_101	SEND_SABM	Verify that an IUT in the link set-up phase, after transmitting a SABM, would retransmit the same SABM, if no response is received for a time duration of T1.	164
DL8/	DL8_2_102	SEND_SABM	Verify that an IUT in link set-up phase, after transmitting a SABM, would make N2-1 attempts by retransmtting a SABM and starting timer T1.	164
DL8/	DL8_3_101	SEND_DISC	Verify that starting from the information transfer phase, if an IUT initiates a DISC, then it would retransmit the DISC frame if no response is received for a time duration of T1.	164
DL8/	DL8_3_102	SEND_DISC	Verify that an IUT in link disconnection phase, after transmitting a DISC, would make N2-1 attempts by retransmitting a DISC and starting timer T1.	165
DL8/	DL8_4_101		Verify that starting from the information transfer phase, if an IUT initiates one I frame, it would start timer T1. Verify also that if no response is received for a time duration of T1, then the IUT shall send a supervisory frame with the P bit set to "1". CCITT X.25 1980 and X.25 1984 implementations, may also retransmit the unacknowledged I frame.	165
DL8/	DL8_4_102		Verify that starting from the information transfer phase, if an IUT initiates two I frames, it starts timer T1. Verify also that if no response is received for a time duration of T1_ONE, then the IUT sends a supervisory frame with the P bit set to "1". CCITT X.25 1980 and X.25 1984 Implementations, may also retransmit the first unacknowledged I frame.	166
DL8/	DL8_4_103		Verify that the IUT correctly uses the N2 system parameter for the information transfer phase.	166

Table 5 (Page 17 of 17). Test Case Index				
Test Group Reference	**Test Case Id**	**Selection Ref**	**Description**	**Page Nr**
DL8/	DL8_5_101	SEND_REJ	Verify that an IUT supporting retransmission of REJ/P = 1 in sent reject condition,transmits an REJ/P = 1 command, if no response is received for a time duration of T1.	166
DL8/	DL8_5_102	SEND_REJ	Verify that an IUT supporting timer recovery for reject frames in the sent reject condition, makes N2-1 attempts to complete the transmission.	167
DL8/	DL8_6_101	SEND_FRMR	Verify that an IUT, after transmitting a FRMR and entering the frame rejection condition, retransmits the same FRMR if no response is received for a time duraion of T1_ONE.	167
DL8/	DL8_6_102	SEND_FRMR	Verify that an IUT, after transmitting FRMR and entering the frame rejection condition, makes N2-1 attempts by retransmtting the same FRMR and starting timer T1. Verify also that after N2 attempts, the IUT either initiates link resetting procedure or requests the tester to initiate link set-up procedure .	167

5.3 Test step index

Table 6 (Page 1 of 2). Test Step Index			
Test Step Group Reference	Test Step Id	Description	Page Nr
PREAMBLE/	DL1_STATE	An initialization sequence such as this is executed before each test case in test group DL1,its purpose is to have the IUT in the disconnected phase at the beginning of a test case.	168
PREAMBLE/	DL2_STATE	An initialization sequence such as the one shown below is executed before each test in test group DL2 . The purpose is to disconnect the link and then expect a IUT initiated DISC frame. The IUT may have any suitable means to transmit the DISC,in order to complete this preamble.	169
PREAMBLE/	DL2_DM_IUT	This sub-tree is used in DL2_STATE for IUTs that require operator action after entering the disconnected phase.	170
PREAMBLE/	HANDLE_IUT_DISC	This sub-tree will handle those situations where some IUTs transmit a DISC before a link set-up.	170
PREAMBLE/	RECV_DISC	This sub-tree handles situations where a DISC is received from IUT upon request from the tester.	171
PREAMBLE/	DL3_STATE	An initialization sequence such as the one below is executed before each test in test group DL3. The purpose is to cause the IUT to send a SABM frame.	172
PREAMBLE/	DL3_DM_IUT	This sub-tree is used in DL3_STATE for IUTs that require operator action after entering the disconnected phase.	173
PREAMBLE/	REQ_INIT	Sub-tree to request link set-up from the IUT.	174
PREAMBLE/	RESP_TO_DISC	Sub-tree will handle those situations where some IUTs transmit a DISC before a link set-up.	174
PREAMBLE/	TESTER_RESETS_LINK	Sub-tree to have the tester reset the link.	174
PREAMBLE/	DL4_STATE	A sequence such as the one below is executed before each test case in test group DL4. The purpose is to get the IUT into the information transfer phase.	175
PREAMBLE/	DL4_DM_IUT	This sub-tree is used in DL4_STATE for IUTs that require operator action after entering the disconnected phase.	176
PREAMBLE/	TESTER_SENDS_SABM	Sub-tree to send a SABM/P = 1 and expect a UA/F = 1.	176
PREAMBLE/	DL5_STATE	A sequence such as the one below is excuted before each test case in test group DL5. The purpose is to get the IUT into the frame reject condition.	177
PREAMBLE/	DL6_STATE	A sequence such as the one below is executed before each test case in test group DL6. The purpose is to get the IUT into the busy condition. This preamble requires an IUT initiated action.	177
PREAMBLE/	DL6_STATE_1	A sequence such as the one below is executed before each test case in test group DL6. The purpose is to get the IUT into the busy condition. This preamble requires an IUT initiated action.	178
PREAMBLE/	DL7_STATE	A sequence such as the one below is executed before each test case in test group DL7. The purpose is to get the IUT into the sent reject condition.	179
POSTAMBLE/	DL1_CHK	To verify that the IUT is in the disconnected phase. This postamble applies only if the IUT has a stable disconnected phase.	180
POSTAMBLE/	DL2_CHK	To verify that IUT is in the link disconnection phase.	180
POSTAMBLE/	DL3_CHK	To verify that IUT is in the link set-up phase.	180
POSTAMBLE/	DL4_CHK1	To verify that IUT is in the normal information transfer phase by sending an RNR frame.	181
POSTAMBLE/	DL4_CHK2	To verify that IUT is in the normal information transfer phase by sending an I-frame.	181
POSTAMBLE/	DL5_CHK	To verify that IUT is in the frame reject condition.	181
POSTAMBLE/	DL6_CHK	To verify that IUT is in the busy condition.	182

Table 6 (Page 2 of 2). Test Step Index			
Test Step Group Refer-ence	Test Step Id	Description	Page Nr
POSTAMBLE/	DL7_CHK	To verify that IUT is in the sent reject condition.	182
COMMON_SUBTREE/	ACCEPTABLE_UNEXPECTED_DL4	In the information transfer phase an IUT may send valid I,RR,REJ or RNR frames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict.	183
COMMON_SUBTREE/	ACCEPTABLE_UNEXPECTED_DL6	In the IUT busy condition the IUT may send valid I or RNR grames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict.	183
COMMON_SUBTREE/	ACCEPTABLE_UNEXPECTED_DL7	In the sent reject condition the IUT may send valid I,RR,or REJ frames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict.	184
COMMON_SUBTREE/	ACCEPTABLE_UNEXPECTED_DL8	In the sent reject timer recovery condition the IUT may send valid I or RR frames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict	184
COMMON_SUBTREE/	INIT_LINK	This sub-tree is used where an IUT may set up,reset or dis-connect the data link.	185
COMMON_SUBTREE/	IUT_RETRANSMITS_I_FRAME	This sub-tree is to observe that the IUT retransmits an unac-knowledged I frame.	185
COMMON_SUBTREE/	IUT_SENDS_I_FRAMES	This sub-tree is to observe that the IUT sends a number of I-frames.	185
COMMON_SUBTREE/	I_FRAME_EXCH	This is the sub-tree of test step IUT_SENDS_I_FRAME for sending an I-frame.	186
COMMON_SUBTREE/	NORMAL_INFORMATION_TRANSFER	In the information transfer phase an IUT may send valid I,RR,and RNR frames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict.	186
COMMON_SUBTREE/	NORMAL_INFORMATION_TRANSFER_2	In the information transfer phase an IUT may send valid I,RR,and RNR frames. The purpose of this sub-tree is to allow such behavior without affecting the final test verdict.	187
COMMON_SUBTREE/	OTHER_RESPONSE	This sub-tree is used where an IUT may set up,reset or dis-connect the link spontaneously,leading to an inconclusive verdict.	187
COMMON_SUBTREE/	RECEIVE_SOME_SUP_FRAME	This sub-tree is to receive from the IUT some supervisory response frame.	188
COMMON_SUBTREE/	RECV_CHK	To wait for time TBSY when IUT is busy in DL4 state.	188
COMMON_SUBTREE/	RECV_I_FRAME	This is a sub-tree of test step IUT_RETRANSMITS_I_FRAME for receiving an unacknowleged I frame.	188
COMMON_SUBTREE/	TESTER_BUSY	This is a local tree used in DL4_119 to verify that the IUT does not transmit an I frame while the Tester is in the Busy Condition.	189
LOCAL_SUBTREE/	ACK_ONE_FRAME	Tester sends an acknowledgement to one I frame and verifies the retransmission of the next I frame.	190
LOCAL_SUBTREE/	DISC_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends a DISC.	190
LOCAL_SUBTREE/	DM_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends a DM.	190
LOCAL_SUBTREE/	FRMR_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends a FRMR.	191
LOCAL_SUBTREE/	I_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends an I frame.	191
LOCAL_SUBTREE/	REJ_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends a REJ.	191
LOCAL_SUBTREE/	SABM_TMO_RECOVERY	Sub-tree to verify timer recover after the IUT sends a SABM.	192

5.4 ASN.1 type definitions

Table 7. ASN.1 Type Definition

| Type Name | : Frame_Address |
| Comments | : |

Type Definition

INTEGER {
                                    a (3) ,
                                    b (1)
 } (0..255)

Table 8. ASN.1 Type Definition

| Type Name | : I_Control |
| Comments | : |

Type Definition

CHOICE {
   mod8   I_Control_Mod8 ,
   mod128   I_Control_Mod128
 }

Table 9. ASN.1 Type Definition

| Type Name | : I_Field |
| Comments | : |

Type Definition

CHOICE {
   unformatted   OCTET STRING (SIZE (1..4100)) ,
   packet   PDU
 }

Table 10. ASN.1 Type Definition

| Type Name | : S_Control |
| Comments | : |

Type Definition

CHOICE {
   mod8   S_Control_Mod8 ,
   mod128   S_Control_Mod128
 }

Table 11. ASN.1 Type Definition

| Type Name | : Poll_Final |
| Comments | : |

Type Definition

ENUMERATED {
                                    on (1) ,
                                    off (0)
 }

Table 12. ASN.1 Type Definition	
Type Name Comments	: FRMR_I_Field :
Type Definition	

CHOICE {
  mod8
  mod128
}
	FRMR_I_mod8 ,
	FRMR_I_mod128

Table 13. ASN.1 Type Definition	
Type Name Comments	: I_Control_Mod8 :
Type Definition	

SEQUENCE {
  nr
  p
  ns
  control_1
}
	INTEGER (0..7) ,
	Poll_Final ,
	INTEGER (0..7) ,
	BIT STRING (SIZE (1))

Table 14. ASN.1 Type Definition	
Type Name Comments	: I_Control_Mod128 :
Type Definition	

SEQUENCE {
  ns
  control_1
  nr
  p
}
	INTEGER (0..127) ,
	BIT STRING (SIZE (1)) ,
	INTEGER (0..127) ,
	Poll_Final

Table 15. ASN.1 Type Definition	
Type Name Comments	: S_Control_Mod8 :
Type Definition	

SEQUENCE {
  nr
  p_f
  control_41
}
	INTEGER (0..7) ,
	Poll_Final ,
	BIT STRING (SIZE (4))

Table 16. ASN.1 Type Definition	
Type Name Comments	: S_Control_Mod128 :
Type Definition	

SEQUENCE {
  control
  nr
  p_f
}
	OCTET STRING (SIZE (1)) ,
	INTEGER (0..127) ,
	Poll_Final

Table 17. ASN.1 Type Definition	
Type Name	: FRMR_I_mod8
Comments	:

Type Definition

```
SEQUENCE {
   control                          OCTET STRING (SIZE (1)) ,
   vr                               INTEGER (0..7) ,
   c_r                              Poll_Final ,
   vs                               INTEGER (0..7) ,
   bit_1                            BIT STRING (SIZE (1)) ,
   bit_85                           BIT STRING (SIZE (4)) ,
   zyxw                             BIT STRING (SIZE (4))
}
```

Table 18. ASN.1 Type Definition	
Type Name	: FRMR_I_mod128
Comments	:

Type Definition

```
SEQUENCE {
   control                          OCTET STRING (SIZE (2)) ,
   vr                               INTEGER (0..127) ,
   c_r                              Poll_Final ,
   vs                               INTEGER (0..127) ,
   bit_1                            BIT STRING (SIZE (1)) ,
   bit_85                           BIT STRING (SIZE (4)) ,
   zyxw                             BIT STRING (SIZE (4))
}
```

5.5 Test suite parameter declarations

Table 19. Test Suite Parameter Declarations

Parameter Name	Type	PICS/PIXIT Ref	Comments
DMRSP	BOOLEAN	PIXIT 13a	Does the IUT reply with DM response to all commands received upon reaching the disconnected phase?
FR2	BOOLEAN	PICS FR2	Does the IUT start timer T1 after entering the Frame Rejection Condition?
IUT_ACK	BOOLEAN	PIXIT 6a	Does IUT acknowledge I frames immediately?
IUT_SEND_DISC	BOOLEAN	PIXIT 8	Can the IUT initiate link disconnection when required for testing?
IUT_SEND_RNR	BOOLEAN	PIXIT 7a	Can the IUT be made to enter the busy condition when required for testing?
IUT_SETUP_LINK	BOOLEAN	PIXIT 10a	Can the IUT be made to set-up the link when required for testing?
IUT_TYPE	IA5String	PIXIT 1	Classification of the IUT
k	INTEGER	PIXIT 2	The maximum number of outstanding I frames
K1	BOOLEAN	PICS LS1	Does the IUT support initialization of link setup?
K2	BOOLEAN	PICS LS6	Does the IUT send DM to request link setup?
K3	BOOLEAN	PICS T1e	Does the IUT support timer T1 recovery for REJ?
K4	BOOLEAN	PICS T1d	Does the IUT support timer T1 recovery for FRMR?
LCRa	BOOLEAN	PICS LCRa	IUT resolves collision of unnumbered commands after receiving a UA
LCRb	BOOLEAN	PICS LCRb	IUT resolves collision of unnumbered commands after sending a UA
LCRc	BOOLEAN	PICS LCRc	IUT resolves collision of unnumbered commands after timing out waiting for a UA
Md	INTEGER	PIXIT Md	Value of modulus
MEL	INTEGER	PIXIT 3	Maximum established length of an I frame (N1)
N2	INTEGER	PIXIT 4	Transmission counter of the IUT
STABLE_DP	BOOLEAN	PIXIT 11	Can the IUT maintain the disconnected phase as a stable state for a period of time?
STABLE_FRMR	BOOLEAN	PIXIT 12	Can the IUT maintain the frame reject condition for a period of time?
T1_ONE	INTEGER	PIXIT 5	Timer T1 value of the IUT
Tb	INTEGER	PIXIT 7b1	The maximum time the IUT will be in the busy condition after link set-up
Td	INTEGER	PIXIT 9	Timer to determine if the IUT will not respond to a tester stimulus
TEST_DM	BOOLEAN	PIXIT 10b	Can the IUT request the tester to set-up the link?
TOPERATOR	INTEGER	PIXIT 14	Time required for the operator to complete the requested action
UDAT	HEXSTRING	PIXIT 15	I Frame information field
ULON	HEXSTRING	PIXIT 16	Contents of the information field that exceeds the MEL
UNRSP	BOOLEAN	PIXIT 13b	Does the IUT respond to any stimulus upon reaching the disconnected phase?

5.6 Test case selection expression definitions

Table 20. Test Case Selection Expression Definitions

Expression Name	Selection Expression	Comments
CCITT_80	IUT_TYPE = "X25_1980"	CCITT X.25 (1980) IUTs
DP_STABLE	STABLE_DP AND NOT UNRSP	Stable Disconnected Phase
FRMR_STABLE	STABLE_FRMR	Stable Frame Rejection Condition
IUT_WINDOW	IUT_ACK	Select if IUT acknowledges I frames immediately
NOT_CCITT	NOT ((IUT_TYPE = "X25_1980") OR (IUT_TYPE = "X25_1984"))	ISO 7776 IUTs
NOT_CCITT_80	NOT (IUT_TYPE = "X25_1980")	ISO 7776 or CCITT X.25 (1984) IUTs
NOT_ISO_7776	NOT (IUT_TYPE = "ISO_7776")	CCITT X.25 IUTs
NOT_UNRESP	NOT UNRSP	IUTs which require operator intervention to setup the link
SEND_DISC	IUT_SEND_DISC	IUTs which can send a DISC upon request
SEND_DM	K2 AND TEST_DM	IUTs which can send a DM upon request
SEND_FRMR	K4 AND STABLE_FRMR	IUTs which send a FRMR after timer T1 expires
SEND_REJ	K3 AND NOT_CCITT	IUTs which send a REJ after timer T1 expires
SEND_RNR	IUT_SEND_RNR	IUT which can send a RNR upon request
SEND_SABM	K1 AND IUT_SETUP_LINK	IUTs which send a SABM

5.7 Test case variable declarations

Table 21. Test Case Variable Declarations

Variable Name	Type	Value	Comments
ACK_VR	INTEGER	0	Used in I_FRAME_EXCH to keep count of V_R
FLAG	BOOLEAN		Used to indicate whether acknowledgement is to be sent
IR	INTEGER		Used to keep track of frames received by the IUT
IS	INTEGER		Used to keep track of frames sent by the IUT
P_F_BIT	Poll_Final		Used to keep track of P/F bit received
STEP	INTEGER	0	Counter for repeat statements
TOT_STEP	INTEGER	0	Used to keep track of window rotation
V_R	INTEGER	0	Receive state variable V(R)
V_S	INTEGER	0	Send state variable V(S)
Z_W	BITSTRING		Used to keep the previous value of ZYXW bits

5.8 PCO declarations

Table 22. PCO Declarations			
PCO Name	PCO Type	Role	Comments
L	PCO	LT	Service access point at lower tester for data link layer testing

5.9 Timer declarations

Table 23. Timer Declarations			
Timer Name	Duration	Unit	Comments
HALF_T1	T1_ONE	ms	HALF_T1 is a test parameter equal to half the duration of timer T1
SHORT_TIMER	1	ms	Used in the preambles
T1	T1_ONE	ms	T1_ONE is a test parameter equal to duration of timer T1
TBSY	Tb	ms	The time the IUT will remain in the busy immediately after entering the information transfer phase
TMO1	Td	ms	Tester timeout waiting for an IUT response
TOPR	TOPERATOR	sec	The time required for the operator action on the implicit send events
TWO_T1	T1_ONE	ms	TWO_T1 is a test parameter equal to twice the duration of timer T1

5.10 ASN.1 PDU type definitions

Table 24. ASN.1 PDU Type Definition
PDU Name   : I_Frame PCO Type   : PCO Comments   :
Type Definition

SEQUENCE {
  address   Frame_Address ,
  control   I_Control ,
  user_data   I_Field
}

Table 25. ASN.1 PDU Type Definition
PDU Name   : RR PCO Type   : PCO Comments   :
Type Definition

SEQUENCE {
  address   Frame_Address ,
  control   S_Control
}

Table 26. ASN.1 PDU Type Definition
PDU Name   : RNR PCO Type   : PCO Comments   :
Type Definition

SEQUENCE {
  address   Frame_Address ,
  control   S_Control
}

Table 27. ASN.1 PDU Type Definition
PDU Name   : REJ PCO Type   : PCO Comments   :
Type Definition

SEQUENCE {
  address   Frame_Address ,
  control   S_Control
}

Table 28. ASN.1 PDU Type Definition
PDU Name   : SABM PCO Type   : PCO Comments   :
Type Definition

SEQUENCE {
  address   Frame_Address ,
  control_86   BIT STRING (SIZE (3)) ,
  p_f   Poll_Final ,
  control_41   BIT STRING (SIZE (4))
}

Table 29. ASN.1 PDU Type Definition	
PDU Name	: DISC
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control_86	BIT STRING (SIZE (3)) ,
p_f	Poll_Final ,
control_41	BIT STRING (SIZE (4))
}	

Table 30. ASN.1 PDU Type Definition	
PDU Name	: DM
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control_86	BIT STRING (SIZE (3)) ,
p_f	Poll_Final ,
control_41	BIT STRING (SIZE (4))
}	

Table 31. ASN.1 PDU Type Definition	
PDU Name	: UA
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control_86	BIT STRING (SIZE (3)) ,
p_f	Poll_Final ,
control_41	BIT STRING (SIZE (4))
}	

Table 32. ASN.1 PDU Type Definition	
PDU Name	: FRMR
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control_86	BIT STRING (SIZE (3)) ,
p_f	Poll_Final ,
control_41	BIT STRING (SIZE (4)) ,
i_field	FRMR_I_Field
}	

Table 33. ASN.1 PDU Type Definition	
PDU Name	: Unformatted_Frame_Type
PCO Type	: PCO
Comments	:
Type Definition	
OCTET STRING (SIZE (1..4103))	

Table 34. ASN.1 PDU Type Definition	
PDU Name	: RR_L
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control	S_Control ,
info	OCTET STRING (SIZE (1..32))
}	

Table 35. ASN.1 PDU Type Definition	
PDU Name	: RNR_L
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control	S_Control ,
Info	OCTET STRING (SIZE (1..32))
}	

Table 36. ASN.1 PDU Type Definition	
PDU Name	: REJ_L
PCO Type	: PCO
Comments	:
Type Definition	
SEQUENCE {	
address	Frame_Address ,
control	S_Control ,
info	OCTET STRING (SIZE (1..32))
}	

5.11 ASN.1 PDU constraint declarations

Table 37. ASN.1 PDU Constraint Declaration	
Constraint Name	: ABORT_1
PDU Type	: Unformatted_Frame_Type
Derivation Path	:
Comments	:
Constraint Value	
*	

Table 38. ASN.1 PDU Constraint Declaration	
Constraint Name	: DISC_10
PDU Type	: DISC
Derivation Path	:
Comments	:
Constraint Value	
{ address control_86 p_f control_41 }	b, '010'B, off, '0011'B

Table 39. ASN.1 PDU Constraint Declaration	
Constraint Name	: DISC_11
PDU Type	: DISC
Derivation Path	:
Comments	:
Constraint Value	
{ address control_86 p_f control_41 }	b, '010'B, on, '0011'B

Table 40. ASN.1 PDU Constraint Declaration	
Constraint Name	: DISC_12
PDU Type	: DISC
Derivation Path	:
Comments	:
Constraint Value	
{ address control_86 p_f control_41 }	b, '010'B, ?, '0011'B

Table 41. ASN.1 PDU Constraint Declaration

Constraint Name	: DISC_30
PDU Type	: DISC
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '010'B,
  p_f   off,
  control_41   '0011'B
}

Table 42. ASN.1 PDU Constraint Declaration

Constraint Name	: DISC_31
PDU Type	: DISC
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '010'B,
  p_f   on,
  control_41   '0011'B
}

Table 43. ASN.1 PDU Constraint Declaration

Constraint Name	: DISC_40
PDU Type	: DISC
Derivation Path	:
Comments	: Invalid address

Constraint Value

{
  address   4,
  control_86   '010'B,
  p_f   off,
  control_41   '0011'B
}

Table 44. ASN.1 PDU Constraint Declaration

Constraint Name	: DM_1 (PF: Poll_Final)
PDU Type	: DM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '000'B,
  p_f   PF,
  control_41   '1111'B
}

Table 45. ASN.1 PDU Constraint Declaration

Constraint Name	: DM_10
PDU Type	: DM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '000'B,
  p_f   off,
  control_41   '1111'B
}

Table 46. ASN.1 PDU Constraint Declaration

Constraint Name	: DM_11
PDU Type	: DM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86 '000'B,
  p_f on,
  control_41 '1111'B
}

Table 47. ASN.1 PDU Constraint Declaration

Constraint Name	: DM_30
PDU Type	: DM
Derivation Path	:
Comments	:

Constraint Value

{
  address a,
  control_86 '000'B,
  p_f off,
  control_41 '1111'B
}

Table 48. ASN.1 PDU Constraint Declaration

Constraint Name	: DM_31
PDU Type	: DM
Derivation Path	:
Comments	:

Constraint Value

{
  address a,
  control_86 '000'B,
  p_f on,
  control_41 '1111'B
}

Table 49. ASN.1 PDU Constraint Declaration

Constraint Name	: FCS_ERROR_1
PDU Type	: Unformatted_Frame_Type
Derivation Path	:
Comments	:

Constraint Value
⋆

Table 50. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_10
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '100'B,
  p_f   off,
  control_41   '0111'B
  i_field
   mod8   {
    control   'FF'H,
    vr   0,
    c_r   on,
    vs   0,
    bit_1   '0'B,
    bit_85   '0000'B,
    zyxw   '0001'B
                       }
}

Table 51. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_11
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '100'B,
  p_f   on,
  control_41   '0111'B
  i_field
   mod8   {
    control   'FF'H,
    vr   0,
    c_r   off,
    vs   0,
    bit_1   '0'B,
    bit_85   '0000'B,
    zyxw   '0001'B
                       }
}

Table 52. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_30
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '100'B,
  p_f   off,
  control_41   '0111'B
  i_field
    mod8   {
      control   ?,
      vr   ?,
      c_r   ?,
      vs   ?,
      bit_1   '0'B,
      bit_85   '0000'B,
      zyxw   ?
                          }
}

Table 53. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_31
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '100'B,
  p_f   on,
  control_41   '0111'B
  i_field
    mod8   {
      control   ?,
      vr   ?,
      c_r   ?,
      vs   ?,
      bit_1   '0'B,
      bit_85   '0000'B,
      zyxw   ?
                          }
}

Table 54. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_32
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '100'B,
  p_f   ?,
  control_41   '0111'B
  i_field
    mod8   {
     control   ?,
     vr   ?,
     c_r   ?,
     vs   ?,
     bit_1   '0'B,
     bit_85   '0000'B,
     zyxw   ?
     }
}

Table 55. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_33 (VS, VR: INTEGER;Z: BITSTRING)
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '100'B,
  p_f   off,
  control_41   '0111'B
  i_field
    mod8   {
     control   ?,
     vr   VR,
     c_r   off,
     vs   VS,
     bit_1   '0'B,
     bit_85   '0000'B,
     zyxw   Z
     }
}

Table 56. ASN.1 PDU Constraint Declaration

Constraint Name	: FRMR_34 (VS, VR: INTEGER;Z: BITSTRING)
PDU Type	: FRMR
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                a,
  control_86             '100'B,
  p_f                    on,
  control_41             '0111'B
  i_field
    mod8                   {
      control                ?,
      vr                     VR,
      c_r                    off,
      vs                     VS,
      bit_1                  '0'B,
      bit_85                 '0000'B,
      zyxw                   Z
                           }
}
```

Table 57. ASN.1 PDU Constraint Declaration

Constraint Name	: HEX_1
PDU Type	: Unformatted_Frame_Type
Derivation Path	:
Comments	:

Constraint Value
*

Table 58. ASN.1 PDU Constraint Declaration

Constraint Name	: I_10
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                b,
  control
    mod8                   {
      nr                     ?,
      p                      off,
      ns                     ?,
      control_1              '0'B,
                           },
  user_data              *
}
```

Table 59. ASN.1 PDU Constraint Declaration

Constraint Name	: I_11
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         b,
  control
    mod8                              {
      nr                                ?,
      p                                 on,
      ns                                ?,
      control_1                         '0'B,
                                      },
  user_data                         *
}
```

Table 60. ASN.1 PDU Constraint Declaration

Constraint Name	: I_12
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         b,
  control
    mod8                              {
      nr                                ?,
      p                                 ?,
      ns                                ?,
      control_1                         '0'B,
                                      },
  user_data                         *
}
```

Table 61. ASN.1 PDU Constraint Declaration

Constraint Name	: I_30
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         a,
  control
    mod8                              {
      nr                                ?,
      p                                 off,
      ns                                ?,
      control_1                         '0'B,
                                      },
  user_data                         UDAT
}
```

Table 62. ASN.1 PDU Constraint Declaration

Constraint Name	: I_31
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         a,
  control
    mod8                             {
      nr                               ?,
      p                                on,
      ns                               ?,
      control_1                        '0'B,
                                     },
  user_data                        UDAT
}
```

Table 63. ASN.1 PDU Constraint Declaration

Constraint Name	: I_32
PDU Type	: I_Frame
Derivation Path	:
Comments	: No info. field

Constraint Value

```
{
  address                         a,
  control
    mod8                             {
      nr                               ?,
      p                                off,
      ns                               ?,
      control_1                        '0'B,
                                     },
  user_data                        UDAT
}
```

Table 64. ASN.1 PDU Constraint Declaration

Constraint Name	: I_33
PDU Type	: I_Frame
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         a,
  control
    mod8                             {
      nr                               ?,
      p                                ?,
      ns                               ?,
      control_1                        '0'B,
                                     },
  user_data                        *
}
```

Table 65. ASN.1 PDU Constraint Declaration

Constraint Name	: I_4 (PP: Poll_Final)
PDU Type	: I_Frame
Derivation Path	:
Comments	: Invalid address

Constraint Value

{
  address   4,
  control
    mod8   {
     nr   ?,
     p   PP,
     ns   ?,
     control_1   '0'B,
                                  },
  user_data   '00'H
}

Table 66. ASN.1 PDU Constraint Declaration

Constraint Name	: LONG_30
PDU Type	: I_Frame
Derivation Path	:
Comments	: Information field length = MEL + 8 bits

Constraint Value

{
  address   a,
  control
    mod8   {
     nr   ?,
     p   off,
     ns   ?,
     control_1   '0'B,
                                },
  user_data   ULON
}

Table 67. ASN.1 PDU Constraint Declaration

Constraint Name	: LONG_31
PDU Type	: I_Frame
Derivation Path	:
Comments	: Information field length = MEL + 8 bits

Constraint Value

{
  address   a,
  control
    mod8   {
     nr   ?,
     p   on,
     ns   ?,
     control_1   '0'B,
                                },
  user_data   ULON
}

Table 68. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_10
PDU Type	: REJ
Derivation Path	:
Comments	: Command

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   off,
      control_41   '1001'B
                                                  }
}

Table 69. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_11
PDU Type	: REJ
Derivation Path	:
Comments	: Command

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '1001'B
                                                  }
}

Table 70. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_12
PDU Type	: REJ
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   off,
      control_41   '1001'B
                                                  }
}

Table 71. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_13
PDU Type	: REJ
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   b,
  control
    mod8   {
     nr   ?,
     p_f   on,
     control_41   '1001'B
          }
}

Table 72. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_30
PDU Type	: REJ
Derivation Path	:
Comments	: Command

Constraint Value

{
  address a,
  control
    mod8 {
     nr ?,
     p_f off,
     control_41 '1001'B
    }
}

Table 73. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_31
PDU Type	: REJ
Derivation Path	:
Comments	: Command

Constraint Value

{
  address a,
  control
    mod8 {
     nr ?,
     p_f on,
     control_41 '1001'B
    }
}

Table 74. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_32
PDU Type	: REJ
Derivation Path	:
Comments	: Response

Constraint Value

```
{
  address                        a,
  control
    mod8                           {
      nr                             ?,
      p_f                            off,
      control_41                     '1001'B
                                   }
}
```

Table 75. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_33
PDU Type	: REJ
Derivation Path	:
Comments	: Response

Constraint Value

```
{
  address                        a,
  control
    mod8                           {
      nr                             ?,
      p_f                            on,
      control_41                     '1001'B
                                   }
}
```

Table 76. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_L_10
PDU Type	: REJ_L
Derivation Path	:
Comments	: INFO field may be set to other values

Constraint Value

```
{
  address                        b,
  control
    mod8                           {
      nr                             ?,
      p_f                            off,
      control_41                     '1001'B
                                   }
  info                           '00'H
}
```

Table 77. ASN.1 PDU Constraint Declaration

Constraint Name	: REJ_L_31
PDU Type	: REJ_L
Derivation Path	:
Comments	: INFO field may be set to other values

Constraint Value

{
  address   a,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '1001'B
                                             }
  info   '00'H
}

Table 78. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_10
PDU Type	: RNR
Derivation Path	:
Comments	: Command

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   off,
      control_41   '0101'B
                                             }
}

Table 79. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_11
PDU Type	: RNR
Derivation Path	:
Comments	: Command

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '0101'B
                                             }
}

Table 80. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_12
PDU Type	: RNR
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   off,
      control_41   '0101'B
                  }
}

Table 81. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_13
PDU Type	: RNR
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '0101'B
                  }
}

Table 82. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_14
PDU Type	: RNR
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   ?,
      control_41   '0101'B
                  }
}

Table 83. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_30
PDU Type	: RNR
Derivation Path	:
Comments	: Command

Constraint Value

{
　address　　　　　　　　　　　a,
　control
　　mod8　　　　　　　　　　　{
　　　nr　　　　　　　　　　　　?,
　　　p_f　　　　　　　　　　　off,
　　　control_41　　　　　　　'0101'B
　　　　　　　　　　　　　　　}
}

Table 84. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_31
PDU Type	: RNR
Derivation Path	:
Comments	: Command

Constraint Value

{
　address　　　　　　　　　　　a,
　control
　　mod8　　　　　　　　　　　{
　　　nr　　　　　　　　　　　　?,
　　　p_f　　　　　　　　　　　on,
　　　control_41　　　　　　　'0101'B
　　　　　　　　　　　　　　　}
}

Table 85. ASN.1 PDU Constraint Declaration

Constraint Name	: RNR_32
PDU Type	: RNR
Derivation Path	:
Comments	: Response

Constraint Value

{
　address　　　　　　　　　　　a,
　control
　　mod8　　　　　　　　　　　{
　　　nr　　　　　　　　　　　　?,
　　　p_f　　　　　　　　　　　off,
　　　control_41　　　　　　　'0101'B
　　　　　　　　　　　　　　　}
}

Table 86. ASN.1 PDU Constraint Declaration	
Constraint Name	: RNR_33
PDU Type	: RNR
Derivation Path	:
Comments	: Response

Constraint Value
{
address   a,
control
mod8   {
nr   ?,
p_f   on,
control_41   '0101'B
}
}

Table 87. ASN.1 PDU Constraint Declaration	
Constraint Name	: RNR_L_10
PDU Type	: RNR_L
Derivation Path	:
Comments	: INFO field may be set to other values

Constraint Value
{
address   b,
control
mod8   {
nr   ?,
p_f   off,
control_41   '0101'B
}
info   '00'H
}

Table 88. ASN.1 PDU Constraint Declaration	
Constraint Name	: RNR_L_31
PDU Type	: RNR_L
Derivation Path	:
Comments	: INFO may be set to other values.

Constraint Value
{
address   a,
control
mod8   {
nr   ?,
p_f   on,
control_41   '0101'B
}
info   '00'H
}

Table 89. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_1 (PF: Poll_Final)
PDU Type	: RR
Derivation Path	:
Comments	: Response

Constraint Value

```
{
  address                          b,
  control
    mod8                           {
      nr                             ?,
      p_f                            PF,
      control_41                     '0001'B
                                   }
}
```

Table 90. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_10
PDU Type	: RR
Derivation Path	:
Comments	: Command

Constraint Value

```
{
  address                          b,
  control
    mod8                           {
      nr                             ?,
      p_f                            off,
      control_41                     '0001'B
                                   }
}
```

Table 91. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_11
PDU Type	: RR
Derivation Path	:
Comments	: Command

Constraint Value

```
{
  address                          b,
  control
    mod8                           {
      nr                             ?,
      p_f                            on,
      control_41                     '0001'B
                                   }
}
```

Table 92. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_12
PDU Type	: RR
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   b,
  control
    mod8   {
     nr   ?,
     p_f   off,
     control_41   '0001'B
                              }
}

Table 93. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_13
PDU Type	: RR
Derivation Path	:
Comments	: Response

Constraint Value

{
  address b,
  control
    mod8 {
     nr ?,
     p_f on,
     control_41 '0001'B
        }
}

Table 94. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_14
PDU Type	: RR
Derivation Path	:
Comments	:

Constraint Value

{
  address b,
  control
    mod8 {
     nr ?,
     p_f ?,
     control_41 '0001'B
        }
}

Table 95. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_30
PDU Type	: RR
Derivation Path	:
Comments	: Command

Constraint Value

```
{
  address                 a,
  control
    mod8                  {
      nr                  ?,
      p_f                 off,
      control_41          '0001'B
                          }
}
```

Table 96. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_31
PDU Type	: RR
Derivation Path	:
Comments	: Command

Constraint Value

```
{
  address                 a,
  control
    mod8                  {
      nr                  ?,
      p_f                 on,
      control_41          '0001'B
                          }
}
```

Table 97. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_32
PDU Type	: RR
Derivation Path	:
Comments	: Response

Constraint Value

```
{
  address                 a,
  control
    mod8                  {
      nr                  ?,
      p_f                 off,
      control_41          '0001'B
                          }
}
```

Table 98. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_33
PDU Type	: RR
Derivation Path	:
Comments	: Response

Constraint Value

{
  address   a,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '0001'B
                                }
}

Table 99. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_41
PDU Type	: RR
Derivation Path	:
Comments	: Invalid address

Constraint Value

{
  address   4,
  control
    mod8   {
      nr   ?,
      p_f   on,
      control_41   '0001'B
                                }
}

Table 100. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_L_10
PDU Type	: RR_L
Derivation Path	:
Comments	: INFO may be set to other values

Constraint Value

{
  address   b,
  control
    mod8   {
      nr   ?,
      p_f   off,
      control_41   '0001'B
                              }
  info   '00'H
}

Table 101. ASN.1 PDU Constraint Declaration

Constraint Name	: RR_L_31
PDU Type	: RR_L
Derivation Path	:
Comments	: INFO may be set to other values

Constraint Value

{
  address   a,
  control
    mod8   {
     nr   ?,
     p_f   on,
     control_41   '0001'B
                       }
  info   '00'H
}

Table 102. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_10
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '001'B,
  p_f   off,
  control_41   '1111'B
}

Table 103. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_11
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '001'B,
  p_f   on,
  control_41   '1111'B
}

Table 104. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_12
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   b,
  control_86   '001'B,
  p_f   ?,
  control_41   '1111'B
}

Table 105. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_30
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '001'B,
  p_f   off,
  control_41   '1111'B
}

Table 106. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_31
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   a,
  control_86   '001'B,
  p_f   on,
  control_41   '1111'B
}

Table 107. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_40
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   4,
  control_86   '001'B,
  p_f   off,
  control_41   '1111'B
}

Table 108. ASN.1 PDU Constraint Declaration

Constraint Name	: SABM_41
PDU Type	: SABM
Derivation Path	:
Comments	:

Constraint Value

{
  address   4,
  controi_86   '001'B,
  p_f   on,
  control_41   '1111'B
}

Table 109. ASN.1 PDU Constraint Declaration

Constraint Name	: UA_1 (PF : Poll_Final)
PDU Type	: UA
Derivation Path	:
Comments	:

Constraint Value

```
{
  address              b,
  control_86           '011'B,
  p_f                  PF,
  control_41           '0011'B
}
```

Table 110. ASN.1 PDU Constraint Declaration

Constraint Name	: UA_10
PDU Type	: UA
Derivation Path	:
Comments	:

Constraint Value

```
{
  address              b,
  control_86           '011'B,
  p_f                  off,
  control_41           '0011'B
}
```

Table 111. ASN.1 PDU Constraint Declaration

Constraint Name	: UA_11
PDU Type	: UA
Derivation Path	:
Comments	:

Constraint Value

```
{
  address              b,
  control_86           '011'B,
  p_f                  on,
  control_41           '0011'B
}
```

Table 112. ASN.1 PDU Constraint Declaration

Constraint Name	: UA_30
PDU Type	: UA
Derivation Path	:
Comments	:

Constraint Value

```
{
  address              a,
  control_86           '011'B,
  p_f                  off,
  control_41           '0011'B
}
```

Table 113. ASN.1 PDU Constraint Declaration

Constraint Name	: UA_31
PDU Type	: UA
Derivation Path	:
Comments	:

Constraint Value

```
{
  address                         a,
  control_86                      '011'B,
  p_f                             on,
  control_41                      '0011'B
}
```

5.12 Verification of the disconnected phase

If the PIXIT claims that the disconnected phase is unreachable then the tests in this group are not selected.

Table 114. Test Case Dynamic Behavior

Test Case Name : DL1_101
Group : DL1/DL1_PROPER/
Purpose : Verify that the IUT sends a DM/F = 1 in response to a DISC/P = 1 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! DISC START TMO1	DISC_31		
3	L1	? DM	DM_31	(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	8

Detailed Comments:

8   No response

Table 115. Test Case Dynamic Behavior

Test Case Name : DL1_102
Group : DL1/DL1_PROPER/
Purpose : Verify that the IUT sends a DM/F = 0 in response to a DISC/P = 0 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! DISC START TMO1	DISC_30		
3		? DM	DM_30	(PASS)	
4		+ DL1_CHK			
5		+ OTHER_RESPONSE			
6		? TIMEOUT TMO1		FAIL	6

Detailed Comments:

6   No response

Table 116. Test Case Dynamic Behavior

Test Case Name : DL1_103
Group : DL1/DL1_PROPER/
Purpose : Verify that the IUT sends a UA/F = 1 or a DM/F = 1 in response to a SABM/P = 1 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! SABM START TMO1	SABM_31		
3	L1	? UA	UA_31	(PASS)	
4		+ DL4_CHK1			
5		? DM	DM_31	(PASS)	
6		+ DL1_CHK			
7		? DM	DM_30		
8		GOTO L1			
9		+ OTHER_RESPONSE			
10		? TIMEOUT TMO1		FAIL	10

Detailed Comments:

10   No response

Table 117. Test Case Dynamic Behavior

Test Case Name	: DL1_104				
Group	: DL1/DL1_PROPER/				
Purpose	: Verify that the IUT sends a UA/F = 0 or a DM/F = 0 in response to a SABM/P = 0 in the disconnected phase.				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! SABM START TMO1	SABM_30		
3		? UA	UA_30	(PASS)	
4		+ DL4_CHK1			
5		? DM	DM_30	(PASS)	
6		+ DL1_CHK			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	8

Detailed Comments:

8   No response

Table 118. Test Case Dynamic Behavior

Test Case Name	: DL1_105				
Group	: DL1/DL1_PROPER/				
Purpose	: Verify that the IUT reacts properly in the disconnected phase on receiving a DM/F = 0.				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! DM START TMO1	DM_10		
3	L1	? SABM	SABM_11	(PASS)	
4		+ DL3_CHK			
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	(PASS)	
6		+ DL3_CHK			
7		? DISC	DISC_11	(PASS)	
8		+ DL2_CHK			
9		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	(PASS)	
10		+ DL2_CHK			
11		? DM	DM_30		
12		GOTO L1			
13		+ OTHER_RESPONSE			
14		? TIMEOUT TMO1		(PASS)	14
15		+ DL1_CHK			

Detailed Comments:

14   Discarded

Table 119. Test Case Dynamic Behavior

Test Case Name : DL1_201
Group : DL1/DL1_IMPROPER/
Purpose : Verify that,in the disconnected phase, the IUT upon receipt of a command frame with undefined or not implemented control field with P = 1, either discards the frame or sends a DM/F = 1 response frame.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H)	HEX_1		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	3
4		+ DL1_CHK			
5		? DM	DM_31	PASS	5
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

3   String '03FF'H is a command frame with an undefined or not implemented control field with P = 1.
5   See ISO 7776, Section 5.3.4

Table 120. Test Case Dynamic Behavior

Test Case Name : DL1_202
Group : DL1/DL1_IMPROPER/
Purpose : Verify that the IUT discards a response frame with an undefined or not implemented control field with F = 1 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01FF'H)	HEX_1		2
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '01FF'H is a response frame with undefined or not implemented control field with F = 1.

Table 121. Test Case Dynamic Behavior

Test Case Name : DL1_203
Group : DL1/DL1_IMPROPER/
Purpose : Verify that the IUT discards a SABM/P = 1 with an address different from A,B,C or D in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! SABM START TMO1	SABM_41		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 122. Test Case Dynamic Behavior

Test Case Name	: DL1_204
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a SABM/P = 1 with an FCS error in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033F'H) START TMO1	FCS_ERROR_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '033F'H is a SABM/P = 1 frame with an associated FCS error.

Table 123. Test Case Dynamic Behavior

Test Case Name	: DL1_205
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a DM/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! DM START TMO1	DM_11		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 124. Test Case Dynamic Behavior

Test Case Name	: DL1_206
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a DM/F = 0 with an information field in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '010FFF'H is a DM/F = 0 frame with a single octet information field of all "1"s.

Table 125. Test Case Dynamic Behavior

Test Case Name	: DL1_207
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that, in the disconnected phase,the IUT upon receipt of a SABM/P = 1 with an information field,either discards the frame or sends a DM/F = 1 response frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033FFF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_31	PASS	
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   String '033FFF'H is a SABM/P = 1 frame with a single octet information field of all "1"s.

Table 126. Test Case Dynamic Behavior

Test Case Name	: DL1_208
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that, in the disconnected phase,the IUT upon receipt of a UA/F = 0 with an information field,while in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0163FF'H is a UA/F = 0 frame with a single octet information field of all "1"s.

Table 127. Test Case Dynamic Behavior

Test Case Name	: DL1_209
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that, in the disconnected phase,the IUT upon receipt of a RR/P = 1 with an information field, either discards the frame or sends a DM/F = 1 response frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0311FF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_31	PASS	
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0311FF'H is an RR/P = 1 frame with a single octet information field of all "1"s.

Table 128. Test Case Dynamic Behavior

Test Case Name	: DL1_210
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that, in the disconnected phase, the IUT upon receipt of a RNR/P = 1 with an information field,either discards the frame or sends a DM/F = 1 response frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			2
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0315FF'H)	HEX_1		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_31	PASS	
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0315FF'H is an RNR/P = 1 frame with a single octet information field of all "1"s.

Table 129. Test Case Dynamic Behavior

Test Case Name	: DL1_211
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that, in the disconnected phase, the IUT upon receipt of a REJ/P = 1 with an informtion field, either discards the frame or sends a DM/F = 1 response frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			2
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0319FF'H)	HEX_1		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_31	PASS	
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0319FF'H is an REJ/P = 1 frame with a single octet information field of all "1"s.

Table 130. Test Case Dynamic Behavior

Test Case Name	: DL1_212
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 0 frame containing an information field longer than the maximum established length in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0)	LONG_30		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 131. Test Case Dynamic Behavior

Test Case Name	: DL1_213
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a DISC/P = 0 with an information field in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0343FF'H is a DISC/P = 0 frame with a single octet informtion field of all "1"s.

Table 132. Test Case Dynamic Behavior

Test Case Name	: DL1_214
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a DISC/P = 1 with an information field in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0353FF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_31	PASS	
6		? DM	DM_30		
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0353FF'H is a DISC/P = 1 frame with a single octet informtion field of all "1"s.

Table 133. Test Case Dynamic Behavior

Test Case Name	: DL1_215
Group	: DL1/DL1_IMPROPER/
Purpose	: Verify that the IUT discards a SABM/P = 1 with an information field in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '032FFF'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   String '032FFF'H is a SABM/P = 1 frame with a single octet informtion field of all "1"s.

Table 134. Test Case Dynamic Behavior

Test Case Name	: DL1_301
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to an I/P = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0) START TMO1	I_31		
3	L1	? DM	DM_31	PASS	
4		? DM	DM_30		
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 135. Test Case Dynamic Behavior

Test Case Name	: DL1_302
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to an RR/P = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_31		
3	L1	? DM	DM_31	PASS	
4		? DM	DM_30		
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 136. Test Case Dynamic Behavior

Test Case Name	: DL1_303
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to an RNR/P = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_31		
3	L1	? DM	DM_31	PASS	
4		? DM	DM_30		
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 137. Test Case Dynamic Behavior

Test Case Name	: DL1_304
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to an REJ/P = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_31		
3	L1	? DM	DM_31	PASS	
4		? DM	DM_30		
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 138. Test Case Dynamic Behavior

Test Case Name	: DL1_305
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards a UA/F = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! UA START TMO1	UA_10		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 139. Test Case Dynamic Behavior

Test Case Name	: DL1_306
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards a UA/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! UA START TMO1	UA_11		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 140. Test Case Dynamic Behavior

Test Case Name	: DL1_307
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an FRMR/F = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R)	FRMR_10		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 141. Test Case Dynamic Behavior

Test Case Name	: DL1_308
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an FRMR/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R)	FRMR_11		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 142. Test Case Dynamic Behavior

Test Case Name	: DL1_309
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an I/P = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0)	I_30		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

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Table 143. Test Case Dynamic Behavior

Test Case Name	: DL1_310
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_12		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 144. Test Case Dynamic Behavior

Test Case Name	: DL1_311
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/F = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_12		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 145. Test Case Dynamic Behavior

Test Case Name	: DL1_312
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 0 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_12		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 146. Test Case Dynamic Behavior

Test Case Name	: DL1_313
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_13		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 147. Test Case Dynamic Behavior

Test Case Name	: DL1_314
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_13		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 148. Test Case Dynamic Behavior

Test Case Name	: DL1_315
Group	: DL1/DL1_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 1 in the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_13		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 149. Test Case Dynamic Behavior

Test Case Name : DL1_316
Group : DL1/DL1_INOPPORTUNE/
Purpose : Verify that the IUT discards an RR/P = 0 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_30		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 150. Test Case Dynamic Behavior

Test Case Name : DL1_317
Group : DL1/DL1_INOPPORTUNE/
Purpose : Verify that the IUT discards an RNR/P = 0 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_30		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 151. Test Case Dynamic Behavior

Test Case Name : DL1_318
Group : DL1/DL1_INOPPORTUNE/
Purpose : Verify that the IUT discards an REJ/P = 0 in the disconnected phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL1_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_30		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 152. Test Case Dynamic Behavior					
Test Case Name	: DL1_319				
Group	: DL1/DL1_INOPPORTUNE/				
Purpose	: Verify that the IUT discards an I/P = 0 frame with no information field in the disconnected phase.				
Default	:				
Comments	:				
Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL1_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0)	I_32		
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL1_CHK			
5		? DM	DM_30		
6		GOTO L1			
7		+ OTHER_RESPONSE			

5.13 Verification of the IUT link disconnection phase

If the PIXIT claims that the link disconnection phase is unreachable, then the tests in this clause are not selected.

Table 153. Test Case Dynamic Behavior				
Test Case Name	: DL2_101			
Group	: DL2/DL2_PROPER/			
Purpose	: Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 received in the link disconnection phase . This situation corresponds to a DISC and DISC collision.			
Default	:			
Comments	:			

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! DISC START TMO1	DISC_30		2
3		? UA	UA_30	(PASS)	
4		[IUT_TYPE = "X25_1980"]			4
5		+ DL2_CHK			
6		[IUT_TYPE < > "X25_1980"]			6
7		[LCRa = TRUE]			
8		+ DL2_CHK			
9		[LCRb = TRUE]			
10		[STABLE_DP]			
11		+ DL1_CHK			
12		+ INIT_LINK			
13		[LCRc = TRUE] START T1			
14		? TIMEOUT T1			
15		[STABLE_DP]			
16		+ DL1_CHK			
17		+ INIT_LINK			
18		+ OTHER_RESPONSE			
19		[TRUE]		INCONC	
20		+ OTHER_RESPONSE			
21		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   The situation shown in this test case corresponds to a DISC and DISC collision.

4   IUT of X.25-1980 vintage are expected to remain in the link disconnection phase waiting for a UA response.

6   IUT conforming to ISO 7776 or CCITT X.25-1984 have the option of remaining in the link disconnection phase of changing to the disconnected phase. This is specified in subclause 5.3.5 and in subclause 2.4.4.5.1 of ISO 7776 and CCITT X.25-1984, respectively

Table 154. Test Case Dynamic Behavior

Test Case Name	: DL2_102
Group	: DL2/DL2_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the link disconnection phase . This situation corresponds to a DISC and DISC collision.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! DISC START TMO1	DISC_31		2
3		? UA	UA_31	(PASS)	
4		[IUT_TYPE = "X25_1980"]			4
5		+ DL2_CHK			
6		[IUT_TYPE < > "X25_1980"]			6
7		[LCRa = TRUE]			
8		+ DL2_CHK			
9		[LCRb = TRUE]			
10		[STABLE_DP]			
11		+ DL1_CHK			
12		+ INIT_LINK			
13		[LCRc = TRUE] START T1			
14		? TIMEOUT T1			
15		[STABLE_DP]			
16		+ DL1_CHK			
17		+ INIT_LINK			
18		+ OTHER_RESPONSE			
19		+ OTHER_RESPONSE			
20		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   The situation shown in this test case corresponds to a DISC and DISC collision.

4   IUT of X.25-1980 vintage are expected to remain in the link disconnection phase waiting for a UA response.

6   IUT conforming to ISO 7776 or CCITT X.25-1984 have the option of remaining in the link disconnection phase of changing to the disconnected phase. This is specified in subclause 5.3.5 and in subclause 2.4.4.5.1 of ISO 7776 and CCITT X.25-1984, respectively

Table 155. Test Case Dynamic Behavior

Test Case Name	: DL2_103
Group	: DL2/DL2_PROPER/
Purpose	: Verify that the IUT sends a DM/F = 0 in response to a SABM /P = 0 received in the link disconnection phase . This situation corresponds to a DISC and SABM collision. The IUT is expected to enter the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! SABM	SABM_30		
3		START TMO1			
4		? DM	DM_30	PASS	
5		+ OTHER_RESPONSE			
6		? TIMEOUT TMO1		FAIL	

Table 156. Test Case Dynamic Behavior

Test Case Name	: DL2_104
Group	: DL2/DL2_PROPER/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to a SABM/P = 1 received in the link disconection phase . This situation corresponds to a DISC and SABM collision. The IUT is expected to enter the disconnected phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! SABM START TMO1	SABM_31		
3		? DM	DM_31	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 157. Test Case Dynamic Behavior

Test Case Name	: DL2_105
Group	: DL2/DL2_PROPER/
Purpose	: Verify proper IUT behavior in the link disconnection phase upon receiving a proper DM response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! DM	DM_1 (P_F_BIT)	(PASS)	
3		[STABLE_DP]			
4		+ DL1_CHK			
5		+ INIT_LINK			

Table 158. Test Case Dynamic Behavior

Test Case Name	: DL2_106
Group	: DL2/DL2_PROPER/
Purpose	: Verify that in the link disconnection phase, upon receiving a DM/F = 0 response, when the last DISC command from the IUT was with P = 1, the IUT shall consider the DM response to represent a collision condition and shall remain in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		[P_F_BIT = on]			
3		! DM START TMO1	DM_10		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL2_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = off]		INCONC	

Table 159. Test Case Dynamic Behavior

Test Case Name	: DL2_107
Group	: DL2/DL2_PROPER/
Purpose	: Verify proper IUT behaviour in the link disconnection phase upon receiving a proper UA response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! UA	UA_1 (P_F_BIT)	(PASS)	
3		[STABLE_DP]			
4		+ DL1_CHK			
5		+ INIT_LINK			

Table 160. Test Case Dynamic Behavior

Test Case Name	: DL2_201
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that, in the link disconnection phase, the IUT discards a command frame with an undefined or not implemented control field with P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '03FF'H is a command frame with undefined or not implemented control field with P = 1.

Table 161. Test Case Dynamic Behavior

Test Case Name	: DL2_202
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards a response frame with an undefined or not implemented control field with F = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '01FF'H is a response frame with undefined or not implemented control field with F = 1.

Table 162. Test Case Dynamic Behavior

Test Case Name	: DL2_203
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards a DISC/P = 0 with information field in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0343FF'H is a DISC/P = 0 frame with an added information field of one octet of all "1"s.

Table 165. Test Case Dynamic Behavior

Test Case Name	: DL2_206
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards a DM with an appropriate F bit setting, but with an additional information field in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		[P_F_BIT = off]			
3		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		3
4		? TIMEOUT TMO1		(PASS)	
5		+ DL2_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = on]			
8		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '011FFF'H) START TMO1	HEX_1		8
9		? TIMEOUT TMO1		(PASS)	
10		+ DL2_CHK			
11		+ OTHER_RESPONSE			

Detailed Comments:

3   String '010FFF'H is a DM/F = 0 frame with an added information field of one octet of all "1"s.
8   String '011FFF'H is a DM/F = 1 frame with an added information field of one octet of all "1"s.

Table 166. Test Case Dynamic Behavior

Test Case Name	: DL2_207
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 1 frame containing an information field longer than the maximum established length in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0, I_Frame.control.mod8.nr : = 0) START TMO1	LONG_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 167. Test Case Dynamic Behavior

Test Case Name	: DL2_208
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards an RR/P = 1 with an information field in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0311FF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0311FF'H is an RR/P = 1 frame with an added information field of one octet of all "1"s.

Table 168. Test Case Dynamic Behavior

Test Case Name	: DL2_209
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards an RNR/P = 1 with an information field in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0315FF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0315FF'H is an RNR/P = 1 frame with an added information field of one octet of all "1"s.

Table 169. Test Case Dynamic Behavior

Test Case Name	: DL2_210
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards an REJ/P = 1 with an information field in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0319FF'H) START TMO1	HEX_1		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 170. Test Case Dynamic Behavior

Test Case Name	: DL2_211
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards a DISC with an address different from A, B, C or D in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL2_STATE			
2		! DISC START TMO1	DISC_40		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 171. Test Case Dynamic Behavior

Test Case Name	: DL2_212
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that the IUT discards a DISC/P = 0 with an FCS error, in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343'H) START TMO1	FCS_ERROR_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '0343'H is a DISC/P = 0 frame with an associated FCS error.

Table 172. Test Case Dynamic Behavior

Test Case Name	: DL2_213
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that in the case of X.25 1980, if the IUT is in the link disconnection phase and if the last DISC command from the IUT was with P = 0, then a DM/F = 1 shall be discarded and the IUT will remain in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		[P_F_BIT = off]			
3		! DM START TMO1	DM_11		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL2_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = on]		INCONC	

Table 173. Test Case Dynamic Behavior

Test Case Name	: DL2_214
Group	: DL2/DL2_IMPROPER/
Purpose	: Verify that in the link disconnection phase, upon receiving an improper UA response (invalid F bit), the IUT shall discard the UA and remain in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		[P_F_BIT = off]			2
3		! UA START TMO1	UA_11		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL2_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = on]			
8		! UA START TMO1	UA_10		
9		? TIMEOUT TMO1		(PASS)	
10		+ DL2_CHK			
11		+ OTHER_RESPONSE			

Detailed Comments:

2   CCITT X.25 1980 only

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Table 174. Test Case Dynamic Behavior

Test Case Name	: DL2_301
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/P = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 175. Test Case Dynamic Behavior

Test Case Name	: DL2_302
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/P = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 176. Test Case Dynamic Behavior

Test Case Name	: DL2_303
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/P = 1 in the link disconnection phase
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 177. Test Case Dynamic Behavior

Test Case Name	: DL2_304
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/P = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 178. Test Case Dynamic Behavior

Test Case Name	: DL2_305
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/P = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 179. Test Case Dynamic Behavior

Test Case Name	: DL2_306
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/P = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 180. Test Case Dynamic Behavior

Test Case Name	: DL2_307
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an FRMR/F = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 181. Test Case Dynamic Behavior

Test Case Name	: DL2_308
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 182. Test Case Dynamic Behavior

Test Case Name	: DL2_309
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 183. Test Case Dynamic Behavior

Test Case Name	: DL2_310
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/F = 1 in the link disconnection phase
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 184. Test Case Dynamic Behavior

Test Case Name	: DL2_311
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/F = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 185. Test Case Dynamic Behavior

Test Case Name	: DL2_312
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 186. Test Case Dynamic Behavior

Test Case Name	: DL2_313
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 187. Test Case Dynamic Behavior

Test Case Name	: DL2_314
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an an FRMR/F = 1 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_11		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 188. Test Case Dynamic Behavior

Test Case Name	: DL2_315
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an I/P = 0 in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0) START TMO1	I_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 189. Test Case Dynamic Behavior

Test Case Name	: DL2_316
Group	: DL2/DL2_INOPPORTUNE/
Purpose	: Verify that the IUT discards an I/P = 1 received in the link disconnection phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0) START TMO1	I_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

Table 190. Test Case Dynamic Behavior				
Test Case Name	: DL2_317				
Group	: DL2/DL2_INOPPORTUNE/				
Purpose	: Verify that the IUT discards an I/P = 0 frame with no information field in the link disconnection phase.				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL2_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0) START TMO1	I_32		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL2_CHK			
5		+ OTHER_RESPONSE			

5.14 Verification of link setup phase

Table 191. Test Case Dynamic Behavior

Test Case Name	: DL3_101
Group	: DL3/DL3_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 0 in response to a SABM/P = 0 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! SABM START TMO1	SABM_30		2
3		? UA	UA_30	(PASS)	
4		[IUT_TYPE = "X25_1980"]			
5		+ DL3_CHK			5
6		[IUT_TYPE < > "X25_1980"]			6
7		[LCRa = TRUE]			
8		+ DL3_CHK			
9		[LCRb = TRUE]			
10		+ DL4_CHK2			
11		[LCRc = TRUE] START T1			
12	L1	? TIMEOUT T1			
13		+ DL4_CHK1			
14		+ ACCEPTABLE_UNEXPECTED_DL4			
15		GOTO L1			
16		+ OTHER_RESPONSE			
17		+ OTHER_RESPONSE			
18		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   The situation shown in this test case corresponds to a SABM and SABM collision.

5   IUT of X.25-1980 vintage are expected to remain in the link set-up phase waiting for a UA response.

6   IUT conforming to ISO 7776 or CCITT X.25-1984 have the option of remaining in the link set-up phase of changing to the information transfer phase. This is specified in subclause 5.3 .5 and in subclause 2.4.4.5.1 of ISO 7776 and CCITT X.25-1984, respectively.

Table 192. Test Case Dynamic Behavior

Test Case Name	: DL3_102
Group	: DL3/DL3_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a SABM/P = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! SABM START TMO1	SABM_31		2
3		? UA	UA_31	(PASS)	
4		[IUT_TYPE = "X25_1980"]			
5		+ DL3_CHK			5
6		[IUT_TYPE < > "X25_1980"]			6
7		[LCRa = TRUE]			
8		+ DL3_CHK			
9		[LCRb = TRUE]			
10		+ DL4_CHK2			
11		[LCRc = TRUE] START T1			
12	L1	? TIMEOUT T1			
13		+ DL4_CHK1			
14		+ ACCEPTABLE_UNEXPECTED_DL4			
15		GOTO L1			
16		+ OTHER_RESPONSE			
17		+ OTHER_RESPONSE			
18		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   The situation shown in this test case corresponds to a SABM and SABM collision.

5   IUT of X.25-1980 vintage are expected to remain in the link set-up phase waiting for a UA response.

6   IUT conforming to ISO 7776 or CCITT X.25-1984 have the option of remaining in the link set-up phase of changing to the information transfer phase. This is specified in subclause 5.3 .5 and in subclause 2.4.4.5.1 of ISO 7776 and CCITT X.25-1984, respectively.

Table 193. Test Case Dynamic Behavior

Test Case Name	: DL3_103
Group	: DL3/DL3_PROPER/
Purpose	: Verify that the IUT sends a DM/F = 0 in response to a DISC/P = 0 in the link set-up phase. This situation corresponds to a SABM and DISC collision.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! DISC START TMO1	DISC_30		
3		? DM	DM_30	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 194. Test Case Dynamic Behavior

Test Case Name	: DL3_104
Group	: DL3/DL3_PROPER/
Purpose	: Verify that the IUT sends a DM/F = 1 in response to a DISC/P = 1 in the link set-up phase. This situation corresponds to a SABM and DISC collision.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! DISC START TMO1	DISC_31		
3		? DM	DM_31	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 195. Test Case Dynamic Behavior

Test Case Name	: DL3_105
Group	: DL3/DL3_PROPER/
Purpose	: Verify that in the link set-up phase, upon receiving a proper UA response, the IUT shall enter the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! UA (V_S : = 0, V_R : = 0)	UA_1 (P_F_BIT)	(PASS)	
3		+ DL4_CHK2			

Table 196. Test Case Dynamic Behavior

Test Case Name	: DL3_106
Group	: DL3/DL3_PROPER/
Purpose	: Verify that in the link set-up phase,the IUT shall ignore a DM/F = 0, in case of a SABM and DM collision where SABM from IUT has P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		[P_F_BIT = on]			
3		! DM START TMO1	DM_10		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL3_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = off]		INCONC	

Table 197. Test Case Dynamic Behavior

Test Case Name	: DL3_107
Group	: DL3/DL3_PROPER/
Purpose	: Verify that in the link set-up phase, if the last SABM command from the IUT was with P = 1, then upon receiving a DM/F = 1 response, the IUT either sends a DISC/P = 1 or a SABM/P = 1 or a DM/F = 0 or does not respond.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		[P_F_BIT = on]			
3		! DM START T1	DM_11		
4		? DISC	DISC_11	PASS	
5		? SABM	SABM_11	PASS	
6		? DM	DM_30	PASS	
7		? TIMEOUT T1		(PASS)	
8		+ DL1_CHK			
9		+ OTHER_RESPONSE			
10		[P_F_BIT = off]		INCONC	

Table 198. Test Case Dynamic Behavior

Test Case Name	: DL3_201
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards a command frame with an undefined or not implemented control field with P = 1 in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '03FF'H is a command frame with undefined or not implemented control field with P = 1.

Table 199. Test Case Dynamic Behavior

Test Case Name	: DL3_202
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards a response frame with an undefined or not implemented control field in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01FF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '01FF'H is a response frame with undefined or not implemented control field

Table 200. Test Case Dynamic Behavior

Test Case Name : DL3_203
Group : DL3/DL3_IMPROPER/
Purpose : Verify that the IUT discards a UA with an appropriate F bit setting but with an additional information field in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		[P_F_BIT = on]			
3		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0173FF'H)	HEX_1		3
		START TMO1			
4		? TIMEOUT TMO1		(PASS)	
5		+ DL3_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = off]			
8		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H)	HEX_1		8
		START TMO1			
9		? TIMEOUT TMO1		(PASS)	
10		+ DL3_CHK			
11		+ OTHER_RESPONSE			

Detailed Comments:

3   String '0173FF'H is a UA/F = 1 frame with an added information field of one octet of all "1"s.
8   String '0163FF'H is a UA/F = 0 frame with an added information field of one octet of all "1"s.

Table 201. Test Case Dynamic Behavior

Test Case Name : DL3_204
Group : DL3/DL3_IMPROPER/
Purpose : Verify that the IUT discards a DISC/P = 0 with information field in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H)	HEX_1		
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 202. Test Case Dynamic Behavior

Test Case Name : DL3_205
Group : DL3/DL3_IMPROPER/
Purpose : Verify that the IUT discards a SABM/P = 1 with information field in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033FFF'H)	HEX_1		
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 203. Test Case Dynamic Behavior

Test Case Name	: DL3_206
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards a DM with an appropriate F bit but with an information field in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		[P_F_BIT = off]			
3		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H)	HEX_1		3
		START TMO1			
4		? TIMEOUT TMO1		(PASS)	
5		+ DL3_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = on]			
8		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '011FFF'H)	HEX_1		8
		START TMO1			
9		? TIMEOUT TMO1		(PASS)	
10		+ DL3_CHK			
11		+ OTHER_RESPONSE			

Detailed Comments:

3   String '010FFF'H is a DM/F = 0 frame with an added information field of one octet of all "1"s.

8   String '011FFF'H is a DM/F = 1 frame with an added information field of one octet of all "1"s.

Table 204. Test Case Dynamic Behavior

Test Case Name	: DL3_207
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 1 with an information field which is longer than the maximum established length in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0)	LONG_31		
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 205. Test Case Dynamic Behavior

Test Case Name	: DL3_208
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 0 with no information field while in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0)	I_32		
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 206. Test Case Dynamic Behavior					
Test Case Name	: DL3_209				
Group	: DL3/DL3_IMPROPER/				
Purpose	: Verify that the IUT discards an RR/P = 1 with an information field in the link set-up phase.				
Default	:				
Comments	:				
Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0311FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			
Detailed Comments:					
2		String '0311FF'H is a RR/P = 1 frame with an added information field of one octet of all "1"s.			

Table 207. Test Case Dynamic Behavior					
Test Case Name	: DL3_210				
Group	: DL3/DL3_IMPROPER/				
Purpose	: Verify that the IUT discards an RNR/P = 1 with an inforamtion field in the link set-up phase.				
Default	:				
Comments	:				
Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0315FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			
Detailed Comments:					
2		String '0315FF'H is a RNR/P = 1 frame with an added information field of one octet of all "1"s.			

Table 208. Test Case Dynamic Behavior					
Test Case Name	: DL3_211				
Group	: DL3/DL3_IMPROPER/				
Purpose	: Verify that the IUT discards an REJ/P = 1 with an information field in the link set-up phase.				
Default	:				
Comments	:				
Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0319FF'H)	HEX_1		2
		START TMO1			
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			
Detailed Comments:					
2		String '0319FF'H is a REJ/P = 1 frame with an added information field of one octet of all "1"s.			

Table 209. Test Case Dynamic Behavior

Test Case Name	: DL3_212
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards a SABM/P = 1 with an address different from A, B, C or D while in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! SABM START TMO1	SABM_41		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 210. Test Case Dynamic Behavior

Test Case Name	: DL3_213
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that the IUT discards a SABM/P = 1 with an FCS error in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033F'H) START TMO1	FCS_ERROR_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '033F'H is a SABM/P = 1 frame with an associated FCS error.

Table 211. Test Case Dynamic Behavior

Test Case Name	: DL3_214
Group	: DL3/DL3_IMPROPER/
Purpose	: Verify that in the link set-up phase, if an IUT is of X.25 1980 type, then it would discard a DM/F = 1 if the last SABM from the IUT was P = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		[P_F_BIT = off]			
3		! DM START TMO1	DM_11		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL3_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = on]		INCONC	

Table 212. Test Case Dynamic Behavior

Test Case Name : DL3_215
Group : DL3/DL3_IMPROPER/
Purpose : Verify that the IUT discards a UA with an invalid F bit in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		[P_F_BIT = on]			
3		! UA START TMO1	UA_10		
4		? TIMEOUT TMO1		(PASS)	
5		+ DL3_CHK			
6		+ OTHER_RESPONSE			
7		[P_F_BIT = off]			
8		! UA START TMO1	UA_11		
9		? TIMEOUT TMO1		(PASS)	
10		+ DL3_CHK			
11		+ OTHER_RESPONSE			

Table 213. Test Case Dynamic Behavior

Test Case Name : DL3_301
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an RR/P = 1 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 214. Test Case Dynamic Behavior

Test Case Name : DL3_302
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an RR/P = 0 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 215. Test Case Dynamic Behavior

Test Case Name	: DL3_303
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 216. Test Case Dynamic Behavior

Test Case Name	: DL3_304
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RR/F = 0 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 217. Test Case Dynamic Behavior

Test Case Name	: DL3_305
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an FRMR/F = 0 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 218. Test Case Dynamic Behavior

Test Case Name	: DL3_306
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an FRMR/F = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_11		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 219. Test Case Dynamic Behavior

Test Case Name : DL3_307
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an I/P = 0 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0, I_Frame.control.mod8.nr : = 0) START TMO1	I_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 220. Test Case Dynamic Behavior

Test Case Name : DL3_308
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an I/P = 1 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0, I_Frame.control.mod8.nr : = 0) START TMO1	I_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 221. Test Case Dynamic Behavior

Test Case Name : DL3_309
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an RNR/P = 0 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 222. Test Case Dynamic Behavior

Test Case Name : DL3_310
Group : DL3/DL3_INOPPORTUNE/
Purpose : Verify that the IUT discards an RNR/F = 0 received in the link set-up phase.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL3_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 223. Test Case Dynamic Behavior

Test Case Name	: DL3_311
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/P = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 224. Test Case Dynamic Behavior

Test Case Name	: DL3_312
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/P = 0 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 225. Test Case Dynamic Behavior

Test Case Name	: DL3_313
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 0 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 226. Test Case Dynamic Behavior

Test Case Name	: DL3_314
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/P = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_31		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 227. Test Case Dynamic Behavior

Test Case Name	: DL3_315
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an RNR/F = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

Table 228. Test Case Dynamic Behavior

Test Case Name	: DL3_316
Group	: DL3/DL3_INOPPORTUNE/
Purpose	: Verify that the IUT discards an REJ/F = 1 received in the link set-up phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL3_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL3_CHK			
5		+ OTHER_RESPONSE			

5.15 Verification of information transfer phase

Table 229. Test Case Dynamic Behavior

Test Case Name	: DL4_101
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! DISC START TMO1	DISC_31		
3	L1	? UA	UA_31	(PASS)	
4		[STABLE_DP]			
5		+ DL1_CHK			
6		[UNRSP]		PASS	
7		+ INIT_LINK			
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 230. Test Case Dynamic Behavior

Test Case Name	: DL4_102
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 1 in the information transfer phase either sends a UA/F = 1 or it sends a DM/F = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! SABM START TMO1	SABM_31		
3	L1	? DM	DM_31	(PASS)	
4		[STABLE_DP]			
5		+ DL1_CHK			
6		[UNRSP]		PASS	
7		+ INIT_LINK			
8		? UA (V_S := 0, V_R := 0)	UA_31	(PASS)	
9		+ DL4_CHK1			
10		+ ACCEPTABLE_UNEXPECTED_DL4			
11		GOTO L1			
12		+ OTHER_RESPONSE			
13		? TIMEOUT TMO1		FAIL	

Table 231. Test Case Dynamic Behavior

Test Case Name	: DL4_103
Group	: DL4/DL4_PROPER/
Purpose	: Verify proper IUT behavior on receiving FRMR/F = 0 in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_31		
3	L1	? RR	RR_33		
4		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr. = V_R) START TMO1	FRMR_10	(PASS)	
5	L2	? DISC	DISC_11		
6		? SABM	SABM_11		
7		? SABM [IUT_TYPE = "X25_1980"]	SABM_10		
8		? DISC [IUT_TYPE = "X25_1980"]	DISC_10		
9		? DM	DM_30		
10		+ ACCEPTABLE_UNEXPECTED_DL4			
11		GOTO L2			
12		+ OTHER_RESPONSE			
13		? TIMEOUT TMO1		FAIL	
14		? RNR	RNR_33		
15		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_10	(PASS)	
16	L3	? DISC	DISC_11		
17		? SABM	SABM_11		
18		? SABM [IUT_TYPE = "X25_1980"]	SABM_10		
19		? DISC [IUT_TYPE = "X25_1980"]	DISC_10		
20		? DM	DM_30		
21		+ ACCEPTABLE_UNEXPECTED_DL4			
22		GOTO L3			
23		+ OTHER_RESPONSE			
24		? TIMEOUT TMO1		FAIL	
25		+ ACCEPTABLE_UNEXPECTED_DL4			
26		GOTO L1			
27		+ OTHER_RESPONSE			
28		? TIMEOUT TMO1		FAIL	

Table 232. Test Case Dynamic Behavior

Test Case Name	: DL4_104
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT acknowledges a a valid I/P = 0 frame.
Default	:
Comments	: Verify that, when the IUT is in the information transfer phase and receives a valid I frame whose send sequence number is equal to the IUT receive state variable V(R), the IUT shall accept the information field of this frame, increment its receive state variable V(R) by one, and take one of the following actions: a) If the IUT is not in a busy state now, then: 1) If an I frame is available for transmission, the IUT shall transmit an RR frame first to acknowledge the received I frame, or the IUT shall transmit an RR frame first to acknowledge the received I frame. 2) If no I frame is available,the IUT shall transmit an RR frame with N(R) equal to the value of IUT V(R). b) If the IUT is now in the busy condition,it shall transmit an RNR frame with N(R) equal to the value of the IUT V(R).

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_30		
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? I_Frame [(I_Frame.control.mod8.nr = V_S) AND (I_Frame.control.mod8.ns = V_R)]	I_10		
6		(V_R: = V_R + 1)		PASS	
7		? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
8		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
9		+ NORMAL_INFORMATION_TRANSFER			
10		GOTO L1			
11		+ OTHER_RESPONSE			
12		? TIMEOUT TMO1		FAIL	

Table 233. Test Case Dynamic Behavior

Test Case Name	: DL4_105
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT acknowledges a valid I/P = 1 frame.
Default	:
Comments	: Verify that, when the IUT is in the information transfer phase and receives a valid I/P = 1 frame whose send sequence number equals the IUT receive state variable V(R), the IUT accepts the information field of this frame, increments its receive state variable V(R) by one, and takes one of the following actions : a) If the IUT is not in a busy state now, the IUT transmits an RR/F = 1 frame with N(R) equal to the value of the IUT receive state variable V(R). b) If the IUT is now in the busy condition, it transmits an RNR frame with N(R) equal to the value of the IUT V(R).

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_31		
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? RR [RR.control.mod8.nr = V_S]	RR_33	PASS	
6		? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
7		+ NORMAL_INFORMATION_TRANSFER			
8		GOTO L1			
9		+ OTHER_RESPONSE			
10		? TIMEOUT TMO1		FAIL	

Table 234. Test Case Dynamic Behavior

Test Case Name	: DL4_106
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT responds to a proper RR/P = 1 command in the information transfer phase.
Default	:
Comments	: Verify that, when the IUT is in the information transfer phase and receives a valid RR/P = 1 frame whose send sequence number equals the IUT receive state variable V(R), the IUT considers the N(R) contained in this frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R)-1. Since at this point there are no outstanding acknowledgements from the tester, the IUT does one of the following: a) If the IUT is not in a busy condition now, IUT transmits an RR/F = 1 frame with N(R) equal to the value of the IUT receive state variable V(R). b) If the IUT is now in the busy condition, it transmits an RNR frame with N(R) equal to the value of the IUT V(R) .

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_31		
3	L1	? RR [RR.control.mod8.nr = V_S]	RR_33	PASS	
4		? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
5		+ NORMAL_INFORMATION_TRANSFER			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 235. Test Case Dynamic Behavior

Test Case Name : DL4_107
Group : DL4/DL4_PROPER/
Purpose : Verify that in the information transfer phase if the IUT receives an REJ/P = 1 command frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame. Prior to this transmission the IUT shall send an RR/F = 1 response to the received REJ/P = 1 command frame.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		(V_R: = 1)			
4		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_31		4
5		? RR [RR.control.mod8.nr = V_S]	RR_33	(PASS)	
6		+ IUT_RETRANSMITS_I_FRAME (1)			6
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   IUT sends 2 I frames.
4   Reject last I frame.
6   Retransmits last I frame

Table 236. Test Case Dynamic Behavior

Test Case Name : DL4_108
Group : DL4/DL4_PROPER/
Purpose : Verify that in the information transfer phase if the IUT receives an REJ/P = 0 command frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		(V_R: = 1)			
4		! REJ (REJ.control.mod8.nr: = V_R)	REJ_30	(PASS)	4
5		+ IUT_RETRANSMITS_I_FRAME (1)			5

Detailed Comments:

2   IUT sends 2 I frames.
4   Reject last I frame.
5   IUT retransmits last I frame.

Table 237. Test Case Dynamic Behavior

Test Case Name : DL4_109
Group : DL4/DL4_PROPER/
Purpose : Verify that in the information transfer phase if the IUT receives an REJ/F = 0 respond frame, then the IUT shall set its send state variable V(S) to N(R) of the received REJ frame control field and shall retransmit the corresponding I frame.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		(V_R: = 1)			
4		! REJ (REJ.control.mod8.nr: = V_R)	REJ_12	(PASS)	4
5		+ IUT_RETRANSMITS_I_FRAME (1)			5

Detailed Comments:

2   IUT sends 2 I frames
4   Rejects last I frames.
5   IUT retransmits last I frame.

Table 238. Test Case Dynamic Behavior

Test Case Name	: DL4_110
Group	: DL4/DL4_PROPER/
Purpose	: Verify proper IUT behavior in the information transfer when the IUT receives a DM/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! DM START TMO1	DM_10		
3	L1	? DISC	DISC_11	PASS	
4		? SABM	SABM_11	PASS	
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
6		? DISC [IUT_TYPE = "X25_1980"] .	DISC_10	PASS	
7		? DM	DM_30	PASS	
8		+ NORMAL_INFORMATION_TRANSFER			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 239. Test Case Dynamic Behavior

Test Case Name	: DL4_111
Group	: DL4/DL4_PROPER/
Purpose	: Verify that when the IUT receives, during the information transfer phase, an I frame with a N(S) greater than the IUT V(R) value, simulating (for example) a situation of one or more I frame(s) not received due to transmission error, it responds with an REJ command or response frame with a N(R) value equal to the value of the IUT receive state variable, V(R).
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = (V_S + 1) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		2
3	L1	? REJ [REJ.control.mod8.nr = V_S]	REJ_10	(PASS)	
4		+ DL4_CHK2			
5		? REJ [REJ.control.mod8.nr = V_S]	REJ_32	(PASS)	
6		+ DL4_CHK2			
7		? REJ [REJ.control.mod8.nr = V_S]	REJ_11		
8		! RR (RR.control.mod8.nr: = V_R)	RR_13	(PASS)	
9		+ DL4_CHK2			
10		+ NORMAL_INFORMATION_TRANSFER			
11		GOTO L1			
12		+ OTHER_RESPONSE			
13		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Out of sequence N(S)

Table 240. Test Case Dynamic Behavior

Test Case Name	: DL4_112
Group	: DL4/DL4_PROPER/
Purpose	: Verify that if the IUT receives a valid I/P = 0 frame with zero length information field, while it is in the information transfer phase, it shall increment by one the value of its receive state variable and respond with an I or RR or RNR frame with a N(R) equal to the updated value of the IUT receive state variable.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.nr: = V_R, I_Frame.control.mod8.ns: = V_S)	I_32		
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? I_Frame [(I_Frame.control.mod8.nr = V_S) AND (I_Frame.control.mod8.ns = V_R)]	I_10	PASS	
6		? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
7		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
8		+ NORMAL_INFORMATION_TRANSFER			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 241. Test Case Dynamic Behavior

Test Case Name	: DL4_113
Group	: DL4/DL4_PROPER/
Purpose	: Verify that if the IUT receives a two valid I frames with a single flag in between, while it is in the information transfer state, it increments by two the value of its receive state variable and responds with an RR or RNR frame with an N(R) equal to the updated value of the IUT receive state variable. The P bit Is set to "1" on the second frame from the tester.
Default	:
Comments	: This test case cannot be specified in TTCN. The syntax used in this test case is not part of the TTCN standard (ISO 9646-3).

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_30		2
3		(V_S := (V_S + 1) MOD Md)			
4		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_31		4
5		(V_S := (V_S + 1) MOD Md)			
6		START TMO1			
7	L1	? RR [RR.control.mod8.nr = V_S]	RR_33	PASS	
8		? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
9		+ NORMAL_INFORMATION_TRANSFER_2			
10		GOTO L1			
11		+ OTHER_RESPONSE			
12		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Queue the first I frame

4   Queue the second I frame with P = 1 and then send both I frame with only one flag between frames

Table 242. Test Case Dynamic Behavior

Test Case Name	: DL4_114
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT in the information transfer phase, can manage its send window correctly. For this test, the IUT send window is the range of values for the IUT send state variable V(S), starting at the current value and going up to (V(S)+k), where k is the IUT parameter for maximum number of outstanding I frames. For the purpose of this test, the IUT shall transmit I frames that have a N(S) value within the send window.
Default	:
Comments	: For this test, the IUT send window is the range of values for the IUT send state variable V(S), starting at the current value and going up to (V(S)+k), where k is the IUT parameter for maximum number of outstanding I frames. For the purpose of this test, the IUT shall transmit I frames that have a N(S) value within the send window. Acknowledgements from tester will rotate (increment sequentially by one) the send window for the IUT. The IUT window rotation shall be observed over the entire valid range of sequence numbers. The IUT shall stop the window rotation function when outstanding acknowledgements are not sent from the tester.

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		(TOT_STEP: =0)			2
3	again	+ IUT_SENDS_I_FRAMES (2,TRUE)			
4		(TOT_STEP: =TOT_STEP+2)			
5		+ IUT_SENDS_I_FRAMES (k,FALSE)			
6		(TOT_STEP: =TOT_STEP+k)			
7		START HALF_T1(T1_ONE/2)			7
8		? TIMEOUT HALF_T1			
9		(V_R: =(V_R+k) MOD Md)			
10		[TOT_STEP < Md]			
11		GOTO again			
12		[TOT_STEP > = Md]		(PASS)	
13		+ DL4_CHK1			13
14		+ OTHER_RESPONSE			14

Detailed Comments:

2   TOT_STEP is a variable to count the total number of steps, to cover the full range of sequence number for IUT V(S).

7   Wait for HALF_T1.

13   Finished Md.

14   Outside window (it failed!)

Table 243. Test Case Dynamic Behavior

Test Case Name	: DL4_115
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT sends a UA/F=0 in response to a DISC/P=0 received in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! DISC START TMO1	DISC_30		
3	L1	? UA	UA_30	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL4			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 244. Test Case Dynamic Behavior

Test Case Name	: DL4_116			
Group	: DL4/DL4_PROPER/			
Purpose	: Verify that the IUT upon receiving a SABM/P = 0 in the information transfer phase either sends a UA/F = 0 or it may send a DM/F = 0 frame.			
Default	:			
Comments	:			

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! SABM START TMO1	SABM_30		
3	L1	? DM	DM_30	(PASS)	
4		[STABLE_DP]			
5		+ DL1_CHK			
6		[UNRSP]		PASS	
7		+ INIT_LINK			
8		? UA (V_S := 0, V_R := 0)	UA_30	(PASS)	
9		+ DL4_CHK1			
10		+ ACCEPTABLE_UNEXPECTED_DL4			
11		GOTO L1			
12		+ OTHER_RESPONSE			
13		? TIMEOUT TMO1		FAIL	

Table 245. Test Case Dynamic Behavior

Test Case Name	: DL4_117			
Group	: DL4/DL4_PROPER/			
Purpose	: When the IUT is in the information transfer phase and recives a valid RR/P = 0, the IUT shall consider the N(R) contained in this frame as an acknowledgements of all I frames it has transmitted with an N(S) up to and including the received N(R) -1.			
Default	:			
Comments	: Since at this point there are no outstanding acknowledgement from the tester, the IUT shall do one of the following: a) If the IUT is not in the busy state,the IUT may either transmit an RR/F = 0 with N(R) equal to the value of the IUT receive state variable V(R),or nothing. b) If the IUT is now in the busy condition,it shall transmit an RNR/F = 0 with N(R) equal to the value of the IUT V(R).			

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_30		
3	L1	? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
4		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
5		? TIMEOUT TMO1		(PASS)	
6		+ DL4_CHK1			
7		+ NORMAL_INFORMATION_TRANSFER			
8		GOTO L1			
9		+ OTHER_RESPONSE			

Table 246. Test Case Dynamic Behavior

Test Case Name	: DL4_118
Group	: DL4/DL4_PROPER/
Purpose	: When the IUT is in the inforamtion transfer phase and receives a valid RR/F = 0, the IUT shall consider the N(R) contained in this frame as an acknowledgedment of all I frames it has transmitted with an N(S) up to and including the received N(R) -1.
Default	:
Comments	: Since at this point there are no outstanding acknowledgements from the tester, the IUT shall do one of the following: a) If the IUT is not in a busy state,the IUT may either transmit an RR/F = FALSe with N(R) equal to the value of the IUT receive state variable V(R),or nothing. b) If the IUT is now in the busy condition, it shall transmit an RNR/F = 0 with N(R) equal to the value of the IUT V(R).

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_12		
3	L1	? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
4		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
5		? TIMEOUT TMO1		(PASS)	
6		+ DL4_CHK1			
7		+ NORMAL_INFORMATION_TRANSFER			
8		GOTO L1			
9		+ OTHER_RESPONSE			

Table 247. Test Case Dynamic Behavior

Test Case Name	: DL4_119
Group	: DL4/DL4_PROPER/
Purpose	: Verify that the IUT does not transmit information frames while the tester is in the busy condition and that after the tester exits the busy condition by transmitting an RR/P = 0, the IUT sends an I frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			
3		START TWO_T1(T1_ONE*2)			
4	L1	? RR	RR_11	(PASS)	
5		+ TESTER_BUSY			
6		? RNR	RNR_11	(PASS)	
7		+ TESTER_BUSY			
8		? REJ	REJ_11	(PASS)	
9		+ TESTER_BUSY			
10		+ NORMAL_INFORMATION_TRANSFER			
11		GOTO L1			
12		+ OTHER_RESPONSE			
13		? TIMEOUT TWO_T1		FAIL	

Table 248. Test Case Dynamic Behavior

Test Case Name	: DL4_201
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives,in the information transfer phase, a UA/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! UA START TMO1	UA_10		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 249. Test Case Dynamic Behavior

Test Case Name	: DL4_202
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives, in the information transfer phase, a UA/F = 1 response
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! UA START TMO1	UA_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 250. Test Case Dynamic Behavior

Test Case Name	: DL4_203
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives, in the information transfer phase, an unsolicited FRMR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! FRMR (FRMR i_field mod8 vs: = V_S, FRMR.i_field mod8.vr: = V_R) START TMO1	FRMR_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 251. Test Case Dynamic Behavior

Test Case Name	: DL4_204
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify proper IUT behaviour when the IUT receives, in the information transfer phase, an unsolicited DM/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! DM START TMO1	DM_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 252. Test Case Dynamic Behavior

Test Case Name	: DL4_205
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that if the IUT,in the information transfer phase, receives an I/P = 0 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			2
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R + 7) START TMO1	I_30		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '1000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Invalid N(R)

Table 253. Test Case Dynamic Behavior

Test Case Name	: DL4_206
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase transmits an FRMR/F = 0 with a properly encoded Y bit, on receiving an I/P = 0 frame with an information length which exceeds the maximum established length.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			2
2		! I_Frame (I_Frame.control.mod8.nr: = V_R, I_Frame.control.mod8 .ns: = V_S) START TMO1	LONG_30		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0100'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Long (I) frame

Table 254. Test Case Dynamic Behavior

Test Case Name	: DL4_207			
Group	: DL4/DL4_IMPROPER/			
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to a command frame with undefined or not implemented control field with P = 1. Verify also that the C/R bit shall be set to "0" along with a properly encoded W bit.			
Default	:			
Comments	:			

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H)	HEX_1		2
		START TMO1			
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '03FF'H is a command frame with an undefined or not implemented control field with P = 1.

Table 255. Test Case Dynamic Behavior

Test Case Name	: DL4_208			
Group	: DL4/DL4_IMPROPER/			
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to a response frame with an undefined or not implemented control field with F = 0. Verify also that the C/R bit shall be set to "1" along with a properly encoded W bit.			
Default	:			
Comments	:			

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01EF'H)	HEX_1		2
		START TMO1			
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '01EF'H is a response frame with an undefined or not implemented control field with F = 0.

Table 256. Test Case Dynamic Behavior

Test Case Name	: DL4_209
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase,the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   DM/F = 0 with single octet information field of "1"s.

Table 257. Test Case Dynamic Behavior

Test Case Name	: DL4_210
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. Verify also that the C/R bit is set to "0" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   DISC/P = 0 with single octet information field of "1"s.

Table 258. Test Case Dynamic Behavior

Test Case Name	: DL4_211
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an informtion field. Verify also that the C/R bit is set to "0" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type : = '033FFF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   SABM/P = 1 with single octet information field of "1"s.

Table 259. Test Case Dynamic Behavior

Test Case Name	: DL4_212
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase,the IUT transmits an FRMR/F = 0 in response to a UA/F = 0 with an information field. Verify also the C/R bit is set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '63'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'E0'H) AND (FRMR.i_field.mod8 .control = '63'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   UA/F = 0 with single octet information field of "1"s.

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Table 260. Test Case Dynamic Behavior

Test Case Name	: DL4_213
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase ,the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 261. Test Case Dynamic Behavior

Test Case Name	: DL4_214
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 262. Test Case Dynamic Behavior

Test Case Name	: DL4_215
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 0 in response to an REJ/F = 0 with an information field. Verify also that the C/R bit shall be set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL4_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 263. Test Case Dynamic Behavior

Test Case Name	: DL4_216
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 264. Test Case Dynamic Behavior

Test Case Name	: DL4_217
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 frame in response to an RNR/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 265. Test Case Dynamic Behavior

Test Case Name	: DL4_218
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that in the information transfer phase, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. Verify also that the C/R bit shall be set to "0" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL4			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

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Table 266. Test Case Dynamic Behavior

Test Case Name	: DL4_219
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that the IUT discards an I frame with an FCS error in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '031000'H) START TMO1	FCS_ERROR_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL4_CHK2			
5		+ NORMAL_INFORMATION_TRANSFER			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   I frame with FCS error

Table 267. Test Case Dynamic Behavior

Test Case Name	: DL4_220
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 1 frame with an incorrect address in information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R) START TMO1	I_4 (P_F_BIT)		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL4_CHK2			
5		+ NORMAL_INFORMATION_TRANSFER			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   I frame with invalid address

Table 268. Test Case Dynamic Behavior

Test Case Name	: DL4_221
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that the IUT discards a frame which is too short in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03'H) START TMO1	HEX_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL4_CHK2			
5		+ NORMAL_INFORMATION_TRANSFER			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   Frame with less than 32 bits.

Table 269. Test Case Dynamic Behavior

Test Case Name	: DL4_222
Group	: DL4/DL4_IMPROPER/
Purpose	: Verify that the IUT discards an I/P = 1 frame which is aborted before the closing flag in the information transfer phase.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type : = '031000'H) START TMO1	ABORT_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL4_CHK2			
5		+ NORMAL_INFORMATION_TRANSFER			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   Frame abortion may take place anywhere after the string, in which case extra octets will be added before abortion.

Table 270. Test Case Dynamic Behavior

Test Case Name	: DL4_301
Group	: DL4/DL4_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited RR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 271. Test Case Dynamic Behavior

Test Case Name	: DL4_302
Group	: DL4/DL4_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited RNR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL4			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 272. Test Case Dynamic Behavior

Test Case Name	: DL4_303
Group	: DL4/DL4_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives in the information transfer phase, an unsolicited REJ/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC	DISC_11	PASS	
5		? SABM	SABM_11	PASS	
6		? DM	DM_30	PASS	
7		+ ACCEPTABLE_UNEXPECTED_DL4			
8		GOTO L1			
9		+ OTHER_RESPONSE			
10		? TIMEOUT TMO1		FAIL	

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Table 273. Test Case Dynamic Behavior

Test Case Name	: DL5_101
Group	: DL5/DL5_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 in the frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! DISC START TMO1	DISC_31		
3		? UA	UA_31	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 274. Test Case Dynamic Behavior

Test Case Name	: DL5_102
Group	: DL5/DL5_PROPER/
Purpose	: Verify that the IUT, upon receiving a SABM/P = 1 in the frame rejection condition, either sends a UA/F = 1 or sends a DM/F = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! SABM START TMO1	SABM_31		
3		? DM	DM_31	PASS	
4		? UA	UA_31	PASS	
5		+ OTHER_RESPONSE			
6		? TIMEOUT TMO1		FAIL	

Table 275. Test Case Dynamic Behavior

Test Case Name	: DL5_103
Group	: DL5/DL5_PROPER/
Purpose	: Verify proper IUT behaviour in the frame rejection condition when the IUT receives an FRMR/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R)	FRMR_10	(PASS)	
3		+ INIT_LINK			

Table 276. Test Case Dynamic Behavior

Test Case Name	: DL5_104
Group	: DL5/DL5_PROPER/
Purpose	: Verify proper IUT behavior in the frame rejection condition when the IUT receives a DM/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! DM	DM_10	(PASS)	
3		+ INIT_LINK			

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Table 277. Test Case Dynamic Behavior

Test Case Name	: DL5_105
Group	: DL5/DL5_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 received in the frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! DISC START TMO1	DISC_30		
3		? UA	UA_30	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 278. Test Case Dynamic Behavior

Test Case Name	: DL5_106
Group	: DL5/DL5_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 0 in the frame rejection condition either sends a UA/F = 0 or it sends a DM/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! SABM START TMO1	SABM_30		
3		? DM	DM_30	PASS	
4		? UA	UA_30	PASS	
5		+ OTHER_RESPONSE			
6		? TIMEOUT TMO1		FAIL	

Table 279. Test Case Dynamic Behavior

Test Case Name	: DL5_201
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that if the IUT, while in the frame rejection condition, receives an I/P = 1 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 1 and with the FRMR information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R + 5) START TMO1	I_31		2
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Invalid N(R)

Table 280. Test Case Dynamic Behavior

Test Case Name	: DL5_202
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to a command frame with undefined or not implemented control field with P = 1. Verify also that the information field of the FRMR frame is encoded as in DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H) START TMO1	HEX_1		2
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '03FF'H is a command frame with undefined or not implemented control field with P = 1

Table 281. Test Case Dynamic Behavior

Test Case Name	: DL5_203
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall discard a response frame with an undefined or not implemented control field with F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01EF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   String '01FF'H is a command frame with an undefined or not implemented control field with F = 0

Table 282. Test Case Dynamic Behavior

Test Case Name	: DL5_204
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall transmit an FRMR in response to a SABM/P = 1 with an information field. Verify also that the information field of the FRMR is encoded as in DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033FFF'H) START TMO1	HEX_1		2
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   SABM/P = 1 with single octet information field.

Table 283. Test Case Dynamic Behavior

Test Case Name	: DL5_205
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to a DISC/P = 1 with an information field. Verify also that the information field of the FRMR frame is encoded as in DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0353FF'H) START TMO1	HEX_1		2
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   DISC/P = 1 with single octet information field.

Table 284. Test Case Dynamic Behavior

Test Case Name	: DL5_206
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. Verify also that the information field of the FRMR shall be encoded as in DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 285. Test Case Dynamic Behavior

Test Case Name	: DL5_207
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an informtion field. Verify also that the information field of the FRMR frame shall be encoded as in DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 286. Test Case Dynamic Behavior

Test Case Name : DL5_208
Group : DL5/DL5_IMPROPER/
Purpose : Verify that in the frame rejection condition, the IUT shall transmit an FRMR/P = 1 in response to an REJ/F = 1 with an information field. Verify also that the information field of the FRMR shall be encoded as in DL5_STATE.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 287. Test Case Dynamic Behavior

Test Case Name : DL5_209
Group : DL5/DL5_IMPROPER/
Purpose : Verify that in the frame rejection condition, the IUT shall discard a UA/F = 0 with an information field.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   UA/F = 0 with single octet info.field

Table 288. Test Case Dynamic Behavior

Test Case Name : DL5_210
Group : DL5/DL5_IMPROPER/
Purpose : Verify that in the frame rejection condition, the IUT shall discard a DM/F = 0 with an information field.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   DM/F = 0 with single octet info.field.

Table 289. Test Case Dynamic Behavior

Test Case Name	: DL5_211
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall discard an RR/F = 0 with an informtion field.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 290. Test Case Dynamic Behavior

Test Case Name	: DL5_212
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall discard an RNR/F = 0 with an information field.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 291. Test Case Dynamic Behavior

Test Case Name	: DL5_213
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that in the frame rejection condition, the IUT shall discard an REJ/F = 0 with an information field.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 292. Test Case Dynamic Behavior

Test Case Name	: DL5_214
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT discards an unsolicited UA/F = 0 response in the frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! UA START TMO1	UA_10		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 293. Test Case Dynamic Behavior

Test Case Name	: DL5_215
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT discards an unsolicited UA/F = 1 response in the frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! UA START TMO1	UA_11		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 294. Test Case Dynamic Behavior

Test Case Name	: DL5_216
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT discards an unsolicited DM/F = 1 response in the frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! DM START TMO1	DM_11		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 295. Test Case Dynamic Behavior

Test Case Name	: DL5_217
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT discards an SABM/P = 0 with an incorrect address in frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! SABM START TMO1	SABM_40		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   SABM/P = 0 with invalid address

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Table 296. Test Case Dynamic Behavior

Test Case Name	: DL5_218
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT discards a SABM/P = 0 with an FCS error, in frame rejection condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL5_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '032F'H) START TMO1	FCS_ERROR_1		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

2   SABM/P = 0 with FCS error

Table 297. Test Case Dynamic Behavior

Test Case Name	: DL5_219
Group	: DL5/DL5_IMPROPER/
Purpose	: Verify that the IUT, in the frame rejection condition on receiving an I/P = 1 frame with an informtion field which exceeds the maximum established length, transmits an FRMR frame with F = 1 and with the FRMR information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.nr: = V_R, I_Frame.control.mod8 .ns: = V_S) START TMO1	LONG_31		2
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Long I frame

Table 298. Test Case Dynamic Behavior

Test Case Name	: DL5_301
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition either discards an I/P = 0 or transmits an FRMR/F = 0 with the information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0,I_Frame.control.mod8.nr : = 0) START TMO1	I_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Table 299. Test Case Dynamic Behavior

Test Case Name	: DL5_302
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame reject condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an I/P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = 0, I_Frame.control.mod8.nr : = 0) START TMO1	I_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 300. Test Case Dynamic Behavior

Test Case Name	: DL5_303
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an RR/P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 301. Test Case Dynamic Behavior

Test Case Name	: DL5_304
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR informtion field encoding resulting from DL5_STATE, in response to an RNR/P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 302. Test Case Dynamic Behavior

Test Case Name	: DL5_305
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition sends an FRMR/F = 1 with the FRMR information field encoding resulting from DL5_STATE, in response to an REJ/P = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_31		
3		? FRMR	FRMR_34 (IS, IR, Z_W)	PASS	
4		+ OTHER_RESPONSE			
5		? TIMEOUT TMO1		FAIL	

Table 303. Test Case Dynamic Behavior

Test Case Name	: DL5_306
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition either discards an RR/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Table 304. Test Case Dynamic Behavior

Test Case Name	: DL5_307
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition either discards an RNR/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Table 305. Test Case Dynamic Behavior

Test Case Name : DL5_308
Group : DL5/DL5_INOPPORTUNE/
Purpose : Verify that the IUT In the frame rejection condition either discards an REJ/P = 0, or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_30		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Table 306. Test Case Dynamic Behavior

Test Case Name : DL5_309
Group : DL5/DL5_INOPPORTUNE/
Purpose : Verify that the IUT in the frame rejection condition discards an RR/F = 1.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! RR (RR.control.mod8.nr: = 0)	RR_13		
3		START TMO1			
4		? TIMEOUT TMO1		(PASS)	
5		+ DL5_CHK			
6		+ OTHER_RESPONSE			

Table 307. Test Case Dynamic Behavior

Test Case Name : DL5_310
Group : DL5/DL5_INOPPORTUNE/
Purpose : Verify that the IUT in the frame rejection condition discards an RNR/F = 1.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 308. Test Case Dynamic Behavior

Test Case Name : DL5_311
Group : DL5/DL5_INOPPORTUNE/
Purpose : Verify that the IUT in the frame rejection condition discards an REJ/F = 1.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL5_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_13		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 309. Test Case Dynamic Behavior

Test Case Name	: DL5_312
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition discards an RR/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RR (RR.control.mod8.nr: = 0) START TMO1	RR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 310. Test Case Dynamic Behavior

Test Case Name	: DL5_313
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition discards an RNR/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! RNR (RNR.control.mod8.nr: = 0) START TMO1	RNR_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 311. Test Case Dynamic Behavior

Test Case Name	: DL5_314
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition discards an REJ/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! REJ (REJ.control.mod8.nr: = 0) START TMO1	REJ_12		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		+ OTHER_RESPONSE			

Table 312. Test Case Dynamic Behavior

Test Case Name	: DL5_315
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that the IUT in the frame rejection condition on receiving an I/P = 0 frame with no information field, either discards the I/P = 0 or sends a FRMR/F = 0 with the FRMR information field encoding resulting from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	I_32		
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Table 313. Test Case Dynamic Behavior

Test Case Name	: DL5_316
Group	: DL5/DL5_INOPPORTUNE/
Purpose	: Verify that if the IUT in the frame rejection condition receives an I/P = 0 frame with an out of sequence N(S), either discards the I/P = 0 or transmits an FRMR/F = 0 with the FRMR information field encoding from DL5_STATE.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL5_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = (V_S + 2) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		2
3		? TIMEOUT TMO1		(PASS)	
4		+ DL5_CHK			
5		? FRMR	FRMR_33 (IS, IR, Z_W)	PASS	
6		+ OTHER_RESPONSE			

Detailed Comments:

2   Incorrect N(S)

5.17 Verification of IUT busy condition

Table 314. Test Case Dynamic Behavior

Test Case Name	: DL6_101
Group	: DL6/DL6_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 in the IUT busy condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! DISC START TMO1	DISC_31		
3	L1	? UA	UA_31	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL6			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 315. Test Case Dynamic Behavior

Test Case Name	: DL6_102
Group	: DL6/DL6_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 1 in the IUT busy condition, either sends a UA/F = 1 or it sends a DM/F = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! SABM START TMO1	SABM_31		
3	L1	? DM	DM_31	PASS	
4		? UA	UA_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 316. Test Case Dynamic Behavior

Test Case Name	: DL6_103
Group	: DL6/DL6_PROPER/
Purpose	: Verify that when a CCITT X.25 1980 or 1984 IUT is in the IUT busy condition, and receives a valid I/P = 1 whose send sequence number equals the IUT receive state variable V(R), the IUT will accept and process the contents of the N(R) field and return an RNR/F = 1 response. The received frame may or may not be acknowledged by the IUT.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	I_31		
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
4		? RNR [RNR.control.mod8.nr = (V_S + 1) MOD Md]	RNR_33	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

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Table 317. Test Case Dynamic Behavior

Test Case Name	: DL6_104
Group	: DL6/DL6_PROPER/
Purpose	: Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/P = 0 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in this frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. The IUT shall process this N(R) value and either return an RNR/F = 0, or return nothing .
Default	:
Comments	: This test shall apply only when the minimum busy time is considerably larger than TMO1.

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL6_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_30		
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS (PASS)	
4		? TIMEOUT TMO1			
5		+ DL6_CHK			
6		+ ACCEPTABLE_UNEXPECTED_DL6			
7		GOTO L1			
8		+ OTHER_RESPONSE			

Table 318. Test Case Dynamic Behavior

Test Case Name	: DL6_105
Group	: DL6/DL6_PROPER/
Purpose	: Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/P = 1 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in this frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. The IUT shall return an RNR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL6_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_31		
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL6			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 319. Test Case Dynamic Behavior

Test Case Name	: DL6_106
Group	: DL6/DL6_PROPER/
Purpose	: Verify that while in the IUT busy condition, if the IUT receives an RNR/P = 0 command, then the IUT shall set its send state variable V(S) to N(R) of the received RNR control field and shall not transmit subsequent I frames, until the busy condition is cleared from the tester. The IUT may either send no response to this command frame, or may send an RNR/F = 0 to confirm that IUT is still in the busy condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL6_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_30		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL6_CHK			
5		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
6		+ ACCEPTABLE_UNEXPECTED_DL6			
7		GOTO L1			
8		+ OTHER_RESPONSE			

Table 320. Test Case Dynamic Behavior

Test Case Name	: DL6_107		
Group	: DL6/DL6_PROPER/		
Purpose	: Verify that while in the IUT busy condition, if the IUT receives an RNR/P = 1 command, then the IUT shall set its send state variable V(S) to N(R) of the received RNR frame control field and shall not transmit (or retransmit) the corresponding I frames until an RR or REJ frame is received from the tester. The IUT shall respond with an RNR/F = 1 to confirm that the IUT is still in the busy condition.		
Default	:		
Comments	:		

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_31		
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL6			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 321. Test Case Dynamic Behavior

Test Case Name	: DL6_108		
Group	: DL6/DL6_PROPER/		
Purpose	: Verify that when the IUT receives, during the IUT busy condition, a DM/F = 0 response, it shall initiate link resetting procedure or return a DM/F = 0 response to ask the tester to initiate link set-up procedure .		
Default	:		
Comments	:		

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! DM START TMO1	DM_10		
3	L1	? DISC	DISC_11	PASS	
4		? SABM	SABM_11	PASS	
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
6		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 322. Test Case Dynamic Behavior

Test Case Name	: DL6_109		
Group	: DL6/DL6_PROPER/		
Purpose	: Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 in the IUT busy condition.		
Default	:		
Comments	:		

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! DISC START TMO1	DISC_30		
3	L1	? UA	UA_30	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL6			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 323. Test Case Dynamic Behavior

Test Case Name	: DL6_110
Group	: DL6/DL6_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 0 in the IUT busy condition either sends a UA/F = 0 or it sends a DM/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! SABM START TMO1	SABM_30		
3	L1	? DM	DM_30	PASS	
4		? UA	UA_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		? TIMEOUT TMO1		FAIL	

Table 324. Test Case Dynamic Behavior

Test Case Name	: DL6_111
Group	: DL6/DL6_PROPER/
Purpose	: Verify that, when the IUT is in the IUT busy condition, and receives a valid RR/F = 0 whose receive sequence number equals the IUT send state variable V(S), the IUT shall consider the N(R) contained in the frame as an acknowledgement of all I frames it has transmitted with an N(S) up to and including the received N(R) -1. Since at this point the IUT is still busy, it shall discard the RR frame after processing the N(R) field as described above.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_12		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL6_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Table 325. Test Case Dynamic Behavior

Test Case Name	: DL6_112
Group	: DL6/DL6_PROPER/
Purpose	: Verify that in the IUT busy condition, if the IUT receives an RNR/F = 0 response, then the IUT shall set its send state variable V(S) to N(R) of the received RNR control field and shall not transmit subsequent I frames, until the busy condition is cleared from the tester.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_12		
3		? TIMEOUT TMO1		(PASS)	3
4		+ DL6_CHK			
5		+ OTHER_RESPONSE			

Detailed Comments:

3   Discard is OK

Table 326. Test Case Dynamic Behavior

Test Case Name	: DL6_201
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives during the IUT busy condition, a UA/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! UA START TMO1	UA_10		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 327. Test Case Dynamic Behavior

Test Case Name	: DL6_202
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives during the IUT busy condition, a UA/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! UA START TMO1	UA_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 328. Test Case Dynamic Behavior

Test Case Name	: DL6_203
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives during the IUT busy condition, an FRMR/F = 0 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_10		
3	L1	? DISC	DISC_11	PASS	
4		? SABM	SABM_11	PASS	
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
6		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 329. Test Case Dynamic Behavior

Test Case Name	: DL6_204
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives during the IUT busy condition, an FRMR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 330. Test Case Dynamic Behavior

Test Case Name	: DL6_205
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives during the IUT busy condition, an unsolicited DM/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! DM START TMO1	DM_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 331. Test Case Dynamic Behavior

Test Case Name	: DL6_206
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that if the IUT, while in the IUT busy condition, receives an I/P = 0 frame with an invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = (V_R + 7) MOD Md) START TMO1	I_30		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '1000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Invalid N(R)

Table 332. Test Case Dynamic Behavior

Test Case Name	: DL6_207
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that the IUT, while in the IUT busy condition, transmits an FRMR with proper Y bit setting, on receiving an I/P = 0 frame with an information field which exceeds the maximum established length.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			2
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R) START TMO1	LONG_30		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0100'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   Long I frame

Table 333. Test Case Dynamic Behavior

Test Case Name	: DL6_208
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR frame in response to a command frame with an undefined or not implemented control field with P = 1. The C/R bit shall be set to "0" and the W bit shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			2
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H) START TMO1	HEX_1		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H)]	FRMR_32	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_32	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '03FF'H is a command frame with an undefined or not implemented control field with P = 1.

Table 334. Test Case Dynamic Behavior

Test Case Name : DL6_209
Group : DL6/DL6_IMPROPER/
Purpose : Verify that in the IUT busy condition, the IUT shall transmit an FRMR frame in response to a response frame with an undefined or not implemented control field with F = 0. The C/R bit shall be set to "1" and the W bit shall be set properly.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01EF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H)]	FRMR_32	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_32	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '01EF'H is a response frame with an undefined or not implemented control field with F = 0.

Table 335. Test Case Dynamic Behavior

Test Case Name : DL6_210
Group : DL6/DL6_IMPROPER/
Purpose : Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 frame with an informtion field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '010FFF'H is a DM/F = 0 frame with a single octet information field of all "1" s

Table 336. Test Case Dynamic Behavior

Test Case Name	: DL6_211
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H)	HEX_1		2
		START TMO1			
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2　　　String '034FF'H is a DISC/P = 0 frame with a single octet information field of all "1"s.

Table 337. Test Case Dynamic Behavior

Test Case Name	: DL6_212
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bit shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '033FFF'H)	HEX_1		2
		START TMO1			
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2　　　String '033FFF'H is a SABM/P = 1 frame with a single octet information field of "1"s.

Table 338. Test Case Dynamic Behavior

Test Case Name	: DL6_213
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to a UA/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '63'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '63'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '0163FF'H is a UA/F = 0 frame with a single octet information field of all "1"s.

Table 339. Test Case Dynamic Behavior

Test Case Name	: DL6_214
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL6_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 340. Test Case Dynamic Behavior

Test Case Name	: DL6_215
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 341. Test Case Dynamic Behavior

Test Case Name	: DL6_216
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 0 in response to an REJ/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 342. Test Case Dynamic Behavior

Test Case Name	: DL6_217
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 343. Test Case Dynamic Behavior

Test Case Name	: DL6_218
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 344. Test Case Dynamic Behavior

Test Case Name	: DL6_219
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that in the IUT busy condition, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 345. Test Case Dynamic Behavior

Test Case Name	: DL6_220
Group	: DL6/DL6_IMPROPER/
Purpose	: When the IUT is in the IUT busy condition, and receives a valid I/P = 0 frame whose send sequence number is equal to the IUT receive state variable V(R), the IUT shall discard the information field of this frame, but process its N(R) receive sequence number and take one of the following actions: a) If the IUT is still in a busy state then, it may transmit an RNR/F = 0, or b) the IUT may transmit nothing .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	I_30		
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL6_CHK			
5		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
6		+ ACCEPTABLE_UNEXPECTED_DL6			
7		GOTO L1			
8		+ OTHER_RESPONSE			

Table 346. Test Case Dynamic Behavior

Test Case Name	: DL6_221
Group	: DL6/DL6_IMPROPER/
Purpose	: When an ISO 7776 IUT is in the IUT busy condition, and receives a valid I/P = 1 whose send sequence number equals the IUT receive state variable V(R), the IUT will accept and process the contents of the N(R) field and shall return an RNR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	I_31		
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL6			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 347. Test Case Dynamic Behavior

Test Case Name	: DL6_222
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that when the IUT receives, during the IUT busy condition, an I/P = 0 frame with a N(S) greater than the IUT V(R) value, simulating (for example) a situation of one or more I frame(s) not received due to transmission error, the IUT shall respond with an RNR/F = 0 response frame with a N(R) value equal to the value of the IUT receive state variable, V(R) or discard the I/P = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = (V_S + 2) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		2
3	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
4		? TIMEOUT TMO1		(PASS)	
5		+ DL6_CHK			
6		+ ACCEPTABLE_UNEXPECTED_DL6			
7		GOTO L1			
8		+ OTHER_RESPONSE			

Detailed Comments:

2   Out of sequence N(S)

Table 348. Test Case Dynamic Behavior

Test Case Name	: DL6_223
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that the IUT discards an RR/P = I with an incorrect address in the IUT busy condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_41		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL6_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   RR/P = 1 frame with an invalid address.

Table 349. Test Case Dynamic Behavior

Test Case Name	: DL6_224
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that the IUT discards an RR/P = 1 with an FCS error in the IUT busy condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0311'H)	FCS_ERROR_1		2
		START TMO1			
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL6_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL6			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   RR/P = 1 frame with an FCS error.

Table 350. Test Case Dynamic Behavior

Test Case Name	: DL6_225
Group	: DL6/DL6_IMPROPER/
Purpose	: Verify that if the IUT receives a valid I/P = 0 frame with zero length information field in the IUT busy condition, it shall either send RNR or discard the received frame.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! I_Frame (I_Frame.control.mod8.nr: = V_R, I_Frame.control.mod8.ns: = V_S)	I_32		
3		START TMO1			
4	L1	? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
5		? TIMEOUT TMO1		(PASS)	
6		+ DL6_CHK			
7		+ ACCEPTABLE_UNEXPECTED_DL6			
8		GOTO L1			
9		+ OTHER_RESPONSE			

Table 351. Test Case Dynamic Behavior

Test Case Name	: DL6_301
Group	: DL6/DL6_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited RR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 352. Test Case Dynamic Behavior

Test Case Name	: DL6_302
Group	: DL6/DL6_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited RNR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 353. Test Case Dynamic Behavior

Test Case Name	: DL6_303
Group	: DL6/DL6_INOPPORTUNE/
Purpose	: Verify proper IUT behavior when the IUT receives, during the IUT busy condition, an unsolicited REJ/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL6_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL6			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

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5.18 Verification of sent reject condition

Table 354. Test Case Dynamic Behavior

Test Case Name	: DL7_101
Group	: DL7/DL7_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 1 in response to a DISC/P = 1 received in the sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! DISC START TMO1	DISC_31		
3	L1	? UA	UA_31	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL7			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 355. Test Case Dynamic Behavior

Test Case Name	: DL7_102
Group	: DL7/DL7_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 1 in the sent reject condition, either sends a UA/F = 1 or it sends a DM/F = 1.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! SABM START TMO1	SABM_31		
3	L1	? DM	DM_31	PASS	
4		? UA	UA_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 356. Test Case Dynamic Behavior

Test Case Name	: DL7_103
Group	: DL7/DL7_PROPER/
Purpose	: Verify that when the IUT is in the sent reject condition, and receives a valid I/P = 0 frame whose send sequence number is equal to the IUT receive state variable V(R), the IUT shall accept the information field of this frame, and process its N(R) receive sequence number and take one of the following actions : a) If the IUT is now in a busy state, it may transmit an RNR/F = 0, or b) the IUT may transmit an RR/F = 0 or an I frame, and clear the sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_30		
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
6		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
7		? I_Frame [(I_Frame.control.mod8.nr = V_S) AND (I_Frame.control.mod8.ns = V_R)]	I_10	PASS	
8		? I_Frame [(I_Frame.control.mod8.nr = V_S) AND (I_Frame.control.mod8.ns = V_R)]	I_11	PASS	
9		+ ACCEPTABLE_UNEXPECTED_DL7			
10		GOTO L1			
11		+ OTHER_RESPONSE			
12		? TIMEOUT TMO1		FAIL	

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Table 357. Test Case Dynamic Behavior

Test Case Name	: DL7_104
Group	: DL7/DL7_PROPER/
Purpose	: Verify that, when the IUT is in the sent reject condition, and receives a valid I/P = 1 frame whose send sequence number is equal to the receive state variable V(R), the IUT shall accept the information field of this frame, and process its N(R) receive sequence number and the information field of this frame, and process its N(R) receive sequence number and take one of the following actions: a) If the IUT is now in a busy state, it may transmit an RNR/F = 1, or b) the IUT may transmit an RR/F = 1 and clear the sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8.nr: = V_R)	I_31		
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? RR [RR.control.mod8.nr = V_S]	RR_33	PASS	
6		? RNR [RNR.control.mod8.nr = V_S]	RNR_33	PASS	
7		+ ACCEPTABLE_UNEXPECTED_DL7			
8		GOTO L1			
9		+ OTHER_RESPONSE			
10		? TIMEOUT TMO1		FAIL	

Table 358. Test Case Dynamic Behavior

Test Case Name	: DL7_105
Group	: DL7/DL7_PROPER/
Purpose	: Verify that in the sent reject condition, if the IUT receives an REJ/P = 0 command, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		! I_Frame (I_Frame.control.mod8.ns: = V_S + 1, I_Frame.control.mod8.nr: = V_R) START TMO1	I_30		3
4		? REJ [REJ.control.mod8.nr = V_S]	REJ_32		4
5		! REJ (REJ.control.mod8.nr = V_R)	REJ_30	(PASS)	
6		+ IUT_RETRANSMITS_I_FRAME (1)			6
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2	IUT sends 2 I-frames with no acknowledgement.
3	N(S) error
4	Rejects last I frame
6	IUT retransmits last frame.

Table 359. Test Case Dynamic Behavior

Test Case Name	: DL7_106
Group	: DL7/DL7_PROPER/
Purpose	: Verify that in the sent reject condition, if the IUT receives an REJ/P = 1 command, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		I I_Frame (I_Frame.control.mod8.ns: = (V_S + 1) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		3
4		? REJ [REJ.control.mod8.nr = V_S]	REJ_32		
5		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_31		
6		? RR [RR.control.mod8.nr = V_S]	RR_33	(PASS)	
7		+ IUT_RETRANSMITS_I_FRAME (1)			7
8		? REJ [REJ.control.mod8.nr = V_S]	REJ_33	(PASS)	
9		+ IUT_RETRANSMITS_I_FRAME (1)			9
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	
12		+ OTHER_RESPONSE			
13		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2	IUT sends 2 I-frames with no acknowledgement.
3	N(S) Error
7	IUT transmit last frame.
9	IUT retransmits last frame.

Table 360. Test Case Dynamic Behavior

Test Case Name	: DL7_107
Group	: DL7/DL7_PROPER/
Purpose	: Verify that when the IUT receives, during the sent reject condition, a DM/F = 0 response, it shall either initiate link resetting procedure or return a DM/F = 0 response to ask the tester IUT to initiate link set-up procedure.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! DM START TMO1	DM_10		
3	L1	? DISC	DISC_11	PASS	
4		? SABM	SABM_11	PASS	
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
6		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		? TIMEOUT TMO1		FAIL	

Table 361. Test Case Dynamic Behavior

Test Case Name	: DL7_108
Group	: DL7/DL7_PROPER/
Purpose	: Verify that if the IUT receives a valid I/P = 0 frame with zero length information field in the sent reject condition, it shall increment by one the value of its receive state variable and respond with an I or RR or RNR with a N(R) equal to the updated value of the IUT receive state variable.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.nr: = V_R, I_Frame.control.mod8.ns: = V_S)	I_32		2
3		(V_S: = V_S + 1)			
4		START TMO1			
5	L1	? I_Frame [(I_Frame.control.mod8.nr = V_S) AND (I_Frame.control.mod8.ns = V_R)]	I_10	PASS	
6		? RR [RR.control.mod8.nr = V_S]	RR_32	PASS	
7		? RNR [RNR.control.mod8.nr = V_S]	RNR_32	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   No information field.

Table 362. Test Case Dynamic Behavior

Test Case Name	: DL7_109
Group	: DL7/DL7_PROPER/
Purpose	: Verify that the IUT sends a UA/F = 0 in response to a DISC/P = 0 in the sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL7_STATE			
2		! DISC START TMO1	DISC_30		
3	L1	? UA	UA_30	PASS	
4		+ ACCEPTABLE_UNEXPECTED_DL7			
5		GOTO L1			
6		+ OTHER_RESPONSE			
7		? TIMEOUT TMO1		FAIL	

Table 363. Test Case Dynamic Behavior

Test Case Name	: DL7_110
Group	: DL7/DL7_PROPER/
Purpose	: Verify that the IUT upon receiving a SABM/P = 0 while in the sent reject condition either sends a UA/F = 0 or a DM/F = 0.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL7_STATE			
2		! SABM START TMO1	SABM_30		
3	L1	? DM	DM_30	PASS	
4		? UA	UA_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 364. Test Case Dynamic Behavior

Test Case Name	: DL7_111	
Group	: DL7/DL7_PROPER/	
Purpose	: Verify that in the sent reject condition, if the IUT receives an REJ/F = 0 response, then the IUT shall set its send state variable V(S) to N(R) of the received REJ control field and shall retransmit the corresponding I frame(s).	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL4_STATE			
2		+ IUT_SENDS_I_FRAMES (2,FALSE)			2
3		! I_Frame (I_Frame.control.mod8.ns: = (V_S + 1) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		3
4		? REJ [REJ.control.mod8.nr = V_S]	REJ_32		
5		! REJ (REJ.control.mod8.nr: = V_R)	REJ_12	(PASS)	
6		+ IUT_RETRANSMITS_I_FRAME (1)			6
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   IUT sends 2 I-frames with no acknowledgement.
3   N(S) Error
6   IUT retransmits last frame.

Table 365. Test Case Dynamic Behavior

Test Case Name	: DL7_201	
Group	: DL7/DL7_IMPROPER/	
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, a UA/F = 0 response.	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! UA START TMO1	UA_10		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 366. Test Case Dynamic Behavior

Test Case Name	: DL7_202	
Group	: DL7/DL7_IMPROPER/	
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, a UA/F = 1 response.	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! UA START TMO1	UA_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 367. Test Case Dynamic Behavior

Test Case Name	: DL7_203
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that when the IUT receives, during the sent reject condition, an FRMR/F = 0 response, it may either initiate link resetting procedure or return a DM/F = 0 response to ask the tester to initiate link set-up procedure.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_10		
3	L1	? DISC	DISC_11	PASS	
4		? SABM	SABM_11	PASS	
5		? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
6		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 368. Test Case Dynamic Behavior

Test Case Name	: DL7_204
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, an FRMR/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! FRMR (FRMR.i_field.mod8.vs: = V_S, FRMR.i_field.mod8.vr: = V_R) START TMO1	FRMR_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 369. Test Case Dynamic Behavior

Test Case Name	: DL7_205
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited DM/F = 1 response.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! DM START TMO1	DM_11		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 370. Test Case Dynamic Behavior

Test Case Name	: DL7_206
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that if the IUT, while in the sent reject condition, receives an I frame with a invalid N(R) value, then the IUT shall transmit an FRMR/F = 0, with a properly encoded Z bit.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = (V_R + 7) MOD Md) START TMO1	I_30		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '1000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'E0'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 371. Test Case Dynamic Behavior

Test Case Name	: DL7_207
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that the IUT in the sent reject condition, transmits an FRMR/F = 0 with proper Y bit setting, on receiving an I frame with an information field which exceeds the maximum established length.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	LONG_30		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0100'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '00'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:	
2	Long I frame

Table 372. Test Case Dynamic Behavior

Test Case Name	: DL7_208				
Group	: DL7/DL7_IMPROPER/				
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to a command frame with undefined or not implemented control field with P = 1. The C/R bit shall be set to "0" and the W bit shall be set properly.				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL7_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '03FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = 'FF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '03FF'H is a command frame with undefined or not implemented control field with P = 1.

Table 373. Test Case Dynamic Behavior

Test Case Name	: DL7_209
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a response frame with undefined or not implemented control field with F = 0. The C/R bit shall be set to "1" and the W bit shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Comments
1		+ DL7_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '01EF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0001'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = 'EF'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '01EF'H is a response frame with undefined or not implemented control field with F = 0.

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Table 374. Test Case Dynamic Behavior

Test Case Name	: DL7_210
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a DM/F = 0 with information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '010FFF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '0F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '010FFF'H is a DM/F = 0 with a single octet information field of "1"s.

Table 375. Test Case Dynamic Behavior

Test Case Name	: DL7_211
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a DISC/P = 0 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '0343FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '43'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '0343FF'H is a DISC/P = 0 with a single octet information field of "1"s.

Table 376. Test Case Dynamic Behavior

Test Case Name	: DL7_212				
Group	: DL7/DL7_IMPROPER/				
Purpose	: Verify that In the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to a SABM/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits sahll be set properly .				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		I Unformatted_Frame_Type (Unformatted_Frame_Type: = '033FFF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H)]	FRMR_31	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '3F'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_31	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '033FFF'H is a SABM/P = 1 with a single octet information field of "1"s.

Table 377. Test Case Dynamic Behavior

Test Case Name	: DL7_213				
Group	: DL7/DL7_IMPROPER/				
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to a UA/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .				
Default	:				
Comments	:				

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		I Unformatted_Frame_Type (Unformatted_Frame_Type: = '0163FF'H) START TMO1	HEX_1		2
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '63'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '63'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Detailed Comments:

2   String '0163FF'H is a UA/F = 0 with a single octet Information field of "1"s.

Table 378. Test Case Dynamic Behavior

Test Case Name	: DL7_214
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to an RR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '01'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 379. Test Case Dynamic Behavior

Test Case Name	: DL7_215
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 in response to an RNR/F = 0 with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '05'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 380. Test Case Dynamic Behavior

Test Case Name	: DL7_216
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 0 frame in response to an REJ/F = 0 frame with an information field. The C/R bit shall be set to "1" and the W and X bits shall be set properly.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_10		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H)]	FRMR_30	PASS	
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND (FRMR.i_field.mod8 .c_r = on) AND (FRMR.i_field.mod8.control = '09'H) AND (IUT_TYPE = "ISO_7776")]	FRMR_30	PASS	
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 381. Test Case Dynamic Behavior

Test Case Name	: DL7_217
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an RR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! RR_L (RR_L.control.mod8.nr: = V_R) START TMO1	RR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H)]			
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '11'H)			
		AND (IUT_TYPE = "ISO_7776")]			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 382. Test Case Dynamic Behavior

Test Case Name	: DL7_218
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an RNR/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! RNR_L (RNR_L.control.mod8.nr: = V_R) START TMO1	RNR_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H)]			
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '15'H)			
		AND (IUT_TYPE = "ISO_7776")]			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 383. Test Case Dynamic Behavior

Test Case Name	: DL7_219
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that in the sent reject condition, the IUT shall transmit an FRMR/F = 1 in response to an REJ/P = 1 with an information field. The C/R bit shall be set to "0" and the W and X bits shall be set properly .
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! REJ_L (REJ_L.control.mod8.nr: = V_R) START TMO1	REJ_L_31		
3	L1	? FRMR [(FRMR.i_field.mod8.zyxw = '0011'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H)]			
4		? FRMR [(FRMR.i_field.mod8.zyxw = '0000'B) AND	FRMR_31	PASS	
		(FRMR.i_field.mod8 .c_r = off) AND (FRMR.i_field.mod8.control = '19'H)			
		AND (IUT_TYPE = "ISO_7776")]			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			
8		? TIMEOUT TMO1		FAIL	

Table 384. Test Case Dynamic Behavior

Test Case Name	: DL7_220
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that the IUT discards a frame with an incorrect address in sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = V_S, I_Frame.control.mod8 .nr: = V_R) START TMO1	I_4 (P_F_BIT)		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL7_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   I frame with invalid address

Table 385. Test Case Dynamic Behavior

Test Case Name	: DL7_221
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that the IUT discards a frame with an FCS error in the sent reject condition.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! Unformatted_Frame_Type (Unformatted_Frame_Type: = '031000'H) START TMO1	FCS_ERROR_1		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL7_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   I frame with FCS error

Table 386. Test Case Dynamic Behavior

Test Case Name	: DL7_222
Group	: DL7/DL7_IMPROPER/
Purpose	: Verify that during the sent reject condition, the IUT discards an I frame with a N(S) greater than the IUT V(R) value.
Default	:
Comments	:

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL7_STATE			
2		! I_Frame (I_Frame.control.mod8.ns: = (V_S + 1) MOD Md, I_Frame.control .mod8.nr: = V_R) START TMO1	I_30		2
3	L1	? TIMEOUT TMO1		(PASS)	
4		+ DL7_CHK			
5		+ ACCEPTABLE_UNEXPECTED_DL7			
6		GOTO L1			
7		+ OTHER_RESPONSE			

Detailed Comments:

2   Out of sequence N(S)

Table 387. Test Case Dynamic Behavior

Test Case Name	: DL7_301	
Group	: DL7/DL7_INOPPORTUNE/	
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited RR/F = 1 response.	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! RR (RR.control.mod8.nr: = V_R) START TMO1	RR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 388. Test Case Dynamic Behavior

Test Case Name	: DL7_302	
Group	: DL7/DL7_INOPPORTUNE/	
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited RNR/F = 1 response.	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! RNR (RNR.control.mod8.nr: = V_R) START TMO1	RNR_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

Table 389. Test Case Dynamic Behavior

Test Case Name	: DL7_303	
Group	: DL7/DL7_INOPPORTUNE/	
Purpose	: Verify proper IUT behavior when the IUT receives, during the sent reject condition, an unsolicited REJ/F = 1 response.	
Default	:	
Comments	:	

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com- ments
1		+ DL7_STATE			
2		! REJ (REJ.control.mod8.nr: = V_R) START TMO1	REJ_13		
3	L1	? SABM [IUT_TYPE = "X25_1980"]	SABM_10	PASS	
4		? DISC [IUT_TYPE = "X25_1980"]	DISC_10	PASS	
5		? DISC	DISC_11	PASS	
6		? SABM	SABM_11	PASS	
7		? DM	DM_30	PASS	
8		+ ACCEPTABLE_UNEXPECTED_DL7			
9		GOTO L1			
10		+ OTHER_RESPONSE			
11		? TIMEOUT TMO1		FAIL	

5.19 System parameters and error recovery tests

In the following test cases, a timeout equal to twice the value of T1 is used. This is docne since the test purpose is not to check the accuracy of T1, rather to verify the frame repetition mechanism of the IUT.

Table 390. Test Case Dynamic Behavior

Test Case Name : DL8_1_101
Group : DL8/
Purpose : Verify that an IUT,after transmitting DM/F=0 as a link set-up request,would retransmit a DM/F=0,if no response is received for a time duration of T1.
Default :
Comments : T1 is an IUT system parameter.

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		< IUT I DM >	DM_30		2
3		START TOPR			
4		? DM	DM_30		
5		START TWO_T1(2*T1_ONE)			
6		? DM	DM_30	PASS	
7		+ OTHER_RESPONSE			
8		? TIMEOUT TWO_T1		FAIL	
9		+ OTHER_RESPONSE			
10		? TIMEOUT TOPR		INCONC	

Detailed Comments:

2   Some action may be required to initiate a link set-up request from the IUT. The description of this action is outside the scope of ISO/IEC 8882.

Table 391. Test Case Dynamic Behavior

Test Case Name : DL8_1_102
Group : DL8/
Purpose : Verify that an IUT,after transmitting DM/F=0 as a link set-up request,would make N2-1 attempts by retransmitting a DM/F=0 frame and starting timer T1.
Default :
Comments :

Nr	Label	Behavior Description	Constraints Ref	Verdict	Com-ments
1		+ DL1_STATE			
2		< IUT I DM >	DM_30		2
3		START TOPR			
4		? DM	DM_30		
5		REPEAT DM_TMO_RECOVERY UNTIL [STEP = N2-1]			
6		[TRUE]		PASS	6
7		+ OTHER_RESPONSE			
8		? TIMEOUT TOPR		INCONC	

Detailed Comments:

2   Some action may be required to initiate a link set-up request from the IUT. The description of this action is outside the scope of ISO/IEC 8882.
6   Appropriate higher level recovery by IUT is expected at this point.