MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 10.3
STD: Fig. 9, Fig. 11, Fig. 17

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:

Link out of service

CONFIGURATION:

1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<----------

1 – 0
SIOS

1 – 0 SIOS
---------->

: start

<----------

1 – 0
SIO

1 – 0 SIO
---------->

<----------

1 – 0
SIN

1 – 0 SIE
---------->

1 – 0 ½ corrupt LSSU
---------->

1 – 0 ½ SIE
---------->

T4 ½
(Pe) ½
½

<----------

<----------

1 – 0
SIN

1 – 0
FISU

TEST DESCRIPTION

1.

Start link at A, check emergency proving started from B.

2.

Generate x number of corrupt LSSUs (e.g. CRC error) at B. (5 > x Tie).

3.

Check that link aligns successfully.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.2 STD:
Fig. 13, Fig. 14

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST:
VAT, CPT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<----------

1 – 0
FISU

1 – 0 FISU

---------->

1 – 0 MSU
(FIB+FSN=80)
(BIB+BSN=FF)
---------->

<----------
1 – 0
FISU

(FIB+FSN=FF)

(BIB+BSN=80)

1 – 0 FISU
(FIB+FSN=80)
(BIB+BSN=FF)
---------->

<----------
1 – 0
MSU

(FIB+FSN=80)

(BIB+BSN=80)

1 – 0 FISU
(FIB+FSN=80)
(BIB+BSN=80)
---------->

<----------

1 – 0
FISU

(FIB+FSN=80)

(BIB+BSN=80)

TEST DESCRIPTION

1.

Generate an MSU at B.

2.

Check that A receives the MSU correctly, and returns a positive acknowledgement.

3.

Generate an MSU at A.

4.

Check that B receives the MSU correctly, and returns a positive acknowledgement.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.3 STD:
Fig. 13

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:

Link in service

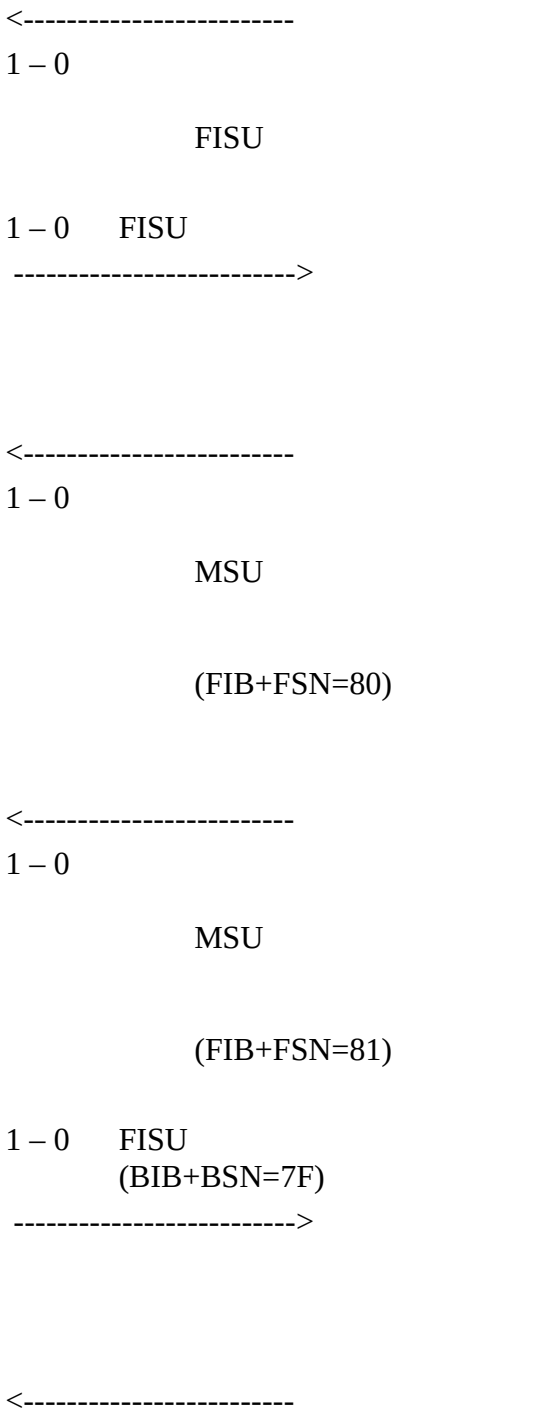
CONFIGURATION: 1

TYPE OF TEST:

VAT

EXPECTED SIGNAL UNIT SEQUENCE:

	SP
	B
	SP
	A
Link	
Link	


<----------
1 – 0
FISU
1 – 0 FISU
---------->
<----------
1 – 0
MSU
(FIB+FSN=80)
<----------
1 – 0
MSU
(FIB+FSN=81)
1 – 0 FISU
(BIB+BSN=7F)
---------->
<----------

1 – 0

MSU

(FIB+FSN=00)

<----------

1 – 0

MSU

(FIB+FSN=01)

TEST DESCRIPTION

1.

Send MSU from A.

2.

Reply with negative acknowledgement from B.

3.

Check that A retransmits the MSU.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.3 STD:
Fig. 13

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST:
VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<----------

1 – 0

FISU

1 – 0 FISU
(BIB+BSN=FF)
---------->

<----------
1 – 0
MSU

(FIB+FSN=80)

.

.

<----------
1 – 0

MSU

(FIB+FSN=FE)

<----------
1 – 0

FISU

(FIB+FSN=FE)

1 – 0 FISU
(BIB+BSN=7F)
---------->

<----------

1 – 0

MSU

(FIB+FSN=00)

.

.

<----------

1 – 0

MSU

(FIB+FSN=7E)

TEST DESCRIPTION

1.

Generate MSUs at A, at a rate of 100 per second, in order to fill the RTB before the EDA timer T7 expires.

2.

No acknowledgements are sent from B until the last message is received, then send negative acknowledgement to the first message received.

3.

Check that the complete contents of the RTB are retransmitted.

MTP LEVEL 2

TEST NUMBER:

8.4

PAGE:

1 OF 1

REFERENCE: Q.703 § 5.2
STD: Fig. 14

TITLE:

Transmission and reception control (Basic)

SUB TITLE: Single MSU with erroneous FIB

PURPOSE: To ensure correct performance when an MSU with erroneous FIB is received

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP
B

SP
A

Link

Link

<----------

1 – 0
FISU

(BIB+BSN=7F)

1 – 0 FISU
(FIB+FSN=7F)

---------->

1 – 0 MSU
(FIB+FSN=80)
---------->

<----------

1 – 0
FISU

(BIB+BSN=7F)

1 – 0 FISU
(FIB+FSN=00)

---------->

1 – 0 FISU
(FIB+FSN=00)
---------->

<----------

1 – 0
FISU

(BIB+BSN=FF)

1 – 0 MSU
(FIB+FSN=80)
---------->

<----------

1 – 0
FISU

(BIB+BSN=80)

TEST DESCRIPTION

1.

Generate an MSU at B with FIB inverted.

2.

Check A discards the MSU.

3.

Generate 2 FISUs at B with correct FIB.

4.

Check A discards the FISU and negative acknowledgement returned.

5.

Check that B retransmits the MSU correctly, and positive acknowledgement returned.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.2
STD: Fig. 14

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<----------

1 – 0
FISU

1 – 0 FISU

---------->

1 – 0 MSU
(FIB+FSN=80)
---------->

<----------
1 – 0
FISU

(BIB+BSN=80)

1 – 0 MSU
(FIB+FSN=80)

---------->

1 – 0 FISU
(FIB+FSN=81)
---------->

<----------
1 – 0
FISU

(BIB+BSN=00)

1 – 0

---------->

<----------

1 – 0
FISU

(BIB+BSN=01)

TEST DESCRIPTION

1.

Generate an MSU at B, check A receives the MSU correctly and returns a positive acknowledgement.

2.

Duplicate the FSN at B, check that A responds with a negative acknowledgement.

3.

Retransmit the MSU with correct FSN, check that A replies with a positive acknowledgement.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.2
STD:
Fig. 14

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST:
VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<----------

1 – 0

FISU

(BIB+BSN=FF)

1 – 0

---------->

1 – 0

---------->

1 – 0

---------->

1 – 0

---------->

<----------
1 – 0

FISU

(BIB+BSN=7F)

1 – 0

---------->

<----------
1 – 0

FISU

(BIB+BSN=00)

TEST DESCRIPTION

1.

A single MSU with FIB inverted in error is sent to A, followed by FISUs with correct FIBs.

2.

Check that A returns a negative acknowledgement for the MSU.

3.

Retransmit the MSU correctly.

4.

Check that A receives the MSU correctly and returns a positive acknowledgement.

MTP LEVEL 2

TEST NUMBER:

PAGE: 1 OF 1

REFERENCE: Q.703 § 5.3
STD:
Fig. 14

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST:
VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<----------

1 – 0
FISU

1 – 0 FISU
(FIB+FSN=FF)

---------->

1 – 0 FISU
(FIB+FSN=7F)
---------->

1 – 0 FISU
(FIB+FSN=FF)
---------->

1 – 0 FISU
(FIB+FSN=7F)
---------->

<----------
1 – 0
SIOS

TEST DESCRIPTION

1.

Generate FISUs with the FIB inverted at B.

2.

Check that A responds with link out of service.