

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:

Link out of service

CONFIGURATION:

TYPE OF TEST:

VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-----

1 – 0

SIOS

1 – 0

----->

----->

yyy

:
start

<-----

1 – 0

SIO

1 – 0

----->

<-----

1 – 0

SIN

1 – 0

----->



TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from B are ignored without impact on the system. xxx are successively SIO, SIN, SIE, SIPO, SIB, aberrant LSSU (non-existing status, one and two octets), FISU and MSU.

2.

Check that the unexpected orders $yyy = \text{Stop}$ from level 3 are ignored without impact on system (if applicable).

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 9

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:
Link out of service

CONFIGURATION:

TYPE OF TEST:
VAT

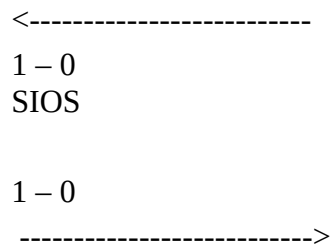
EXPECTED SIGNAL UNIT SEQUENCE:

B

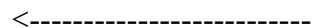
A

Link

Link



: start



1 – 0

SIO

----->

yyy

1 – 0

----->

<-----

1 – 0

SIN

1 – 0

----->

<-----

1 – 0

FISU

1 – 0

----->

TEST DESCRIPTION

1.

Check that the unexpected signal unit xxx received from B are ignored without impact on the system. xxx are successively SIOS, SIPO, SIB, aberrant LSSU, FISU and MSU.

2.

Check that the unexpected orders yyy received from Level 3 are ignored without impact on the system. yyy are successively clear EM and start (if applicable).

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
 STD: Fig. 9

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:

Link out of service

CONFIGURATION:

TYPE OF TEST:

VAT

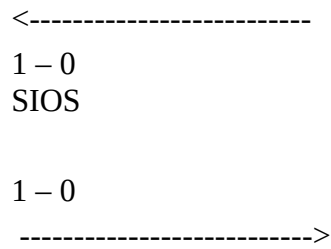
EXPECTED SIGNAL UNIT SEQUENCE:

B

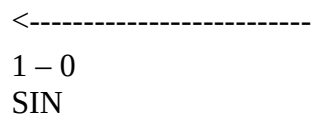
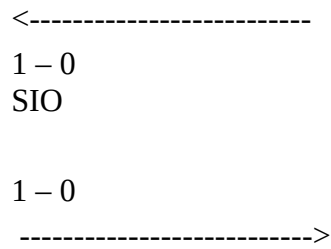
A

Link

Link



: start



----->

yyy

1 - 0

----->

<-----

1 - 0

FISU

1 - 0

----->

TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from B are ignored without impact on the system. xxx are successively SIO, SIPO, SIB, aberrant LSSU, FISU and MSU.

2.

Check that the unexpected orders yyy received from Level 3 are ignored without impact on the system. yyy are successively clear EM and start (if applicable).

MTP, LEVEL 2

TEST NUMBER:
2.4

PAGE: 1 OF 1

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 9

TITLE:

SUB TITLE:

PURPOSE: To check that unexpected signal units/orders are ignored

PRE-TEST CONDITIONS:

Link out of service

CONFIGURATION:

1

TYPE OF TEST:

VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-----

1 - 0
SIOS

1 - 0

----->

:
start

<-----

1 - 0
SIO

1 - 0

----->

<-----

1 - 0
SIN

1 - 0

----->

----->

yyy



TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from B are ignored without impact on the system. xxx are successively SIPO, SIB, aberrant LSSU, FISU and MSU.

2.

Check that the unexpected orders yyy received from Level 3 are ignored without impact on the system. yyy are successively clear EM and start (if applicable).

Note – The reception of SIB in “Initial alignment” state may possibly cause link failure after transferring to “In service” state because of the T6 expiration.

MTP, LEVEL 2

TEST NUMBER:
2.5

PAGE: 1 OF 1

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE: To check that unexpected signal units/orders are ignored

PRE-TEST CONDITIONS:
Link out of service

CONFIGURATION:
1

TYPE OF TEST: VAT

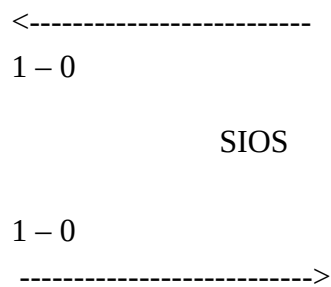
EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link



:
start

<-----

1 - 0

SIO

1 - 0

----->

<-----

1 - 0

SIN

1 - 0

----->

<-----

1 - 0

FISU

----->

yyy

1 - 0

----->

TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from B are ignored without impact on the system. xxx are successively SIB and aberrant LSSU.

2.

Check that the unexpected orders yyy received from level 3 are ignored without impact on the system. yyy are successively set EM, clear EM, clear LPO and Start (if applicable).

Note – The reception of SIB in “Aligned ready” state may possibly cause link failure after transferring to “In service” state because of the T6 expiration.

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE: To check that unexpected signal units/orders are ignored

PRE-TEST CONDITIONS:
Link out of service

CONFIGURATION:

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-----
1 - 0

SIOS

1 - 0
----->

: set LPO

: start

<-----
1 - 0

SIO

1 - 0
----->

<-----

1 - 0

SIN

1 - 0

----->

<-----

1 - 0

SIPO

----->

yyy

1 - 0

----->

<-----

1 - 0

SIPO

TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from B are ignored without impact on the system. xxx are successively SIB and aberrant LSSU.

2.

Check that the unexpected orders yyy received from level 3 are ignored without impact on the system. yyy are successively set EM, clear EM, clear LPO and Start (if applicable).

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:

Link in service

CONFIGURATION:

TYPE OF TEST:

VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-----

1 - 0
FISU

1 - 0

----->

----->

yyy

<-----

1 - 0
FISU

1 - 0

----->

TEST DESCRIPTION

1.

Check that an aberrant LSSU received from B is ignored without impact on the system.

2.

Check that the unexpected orders yyy received from level 3 are ignored without impact on the system. yyy are successively set EM, clear EM, clear LPO and Start (if applicable).

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 7, 11
 STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:
Link in service

CONFIGURATION:
1

TYPE OF TEST:
VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

:
set LPO

<-----

1 – 0
SIPO

----->

yyy

1 – 0

----->

TEST DESCRIPTION

1.

Check that the unexpected signal units xxx received from A are ignored without impact on the system. xxx are successively SIB and aberrant LSSU.

2.

Check that the unexpected orders yyy received from level 3 are ignored without impact on the system. yyy are successively set EM, clear EM and Start (if applicable).

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 §§ 4, 10.2
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE: To test the response to a transmission failure – detected by SUERM – when in
“Aligned ready” state

PRE-TEST CONDITIONS:
Link out of service

CONFIGURATION:

1

TYPE OF TEST: VAT

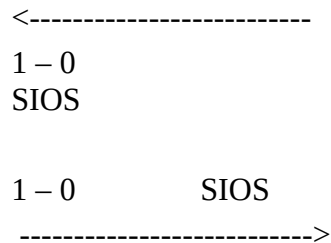
EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link



: start

<-----
1-0
SIO

1-0
SIO
----->

<-----
1-0
SIN

1-0
SIN
----->

<-----
1-0
FISU

:
break Tx

<-----
1-0
SIOS

TEST DESCRIPTION

1.

Break Tx path at B when in “Aligned ready” state, check that the SUERM detects the failure and the link is taken out of service.

2.

Repeat test, break Tx at A.

MTP, LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE:
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE: To check the response to a link failure after corruption of two FIBs – detected by reception control – while in Aligned ready State.

PRE-TEST CONDITIONS:
 Aligned ready

CONFIGURATION:
 1

TYPE OF TEST:
 VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP

B

SP

A

Link

Link

<-----

1 - 0
FISU

1 - 0

FISU corrupt FIB

(FIB+FSN=7F)

----->

1 - 0

FISU corrupt FIB

(FIB+FSN=7F)

----->

<-----

1 - 0
SIOS

TEST DESCRIPTION

1.

Check that receipt of two FISUs at A with corrupt FIB's at link aligned ready state causes the link to be taken out of service.

MTP, LEVEL 2

TEST NUMBER:
3.3

PAGE: 1 OF 1

REFERENCE: Q.703 §§ 8, 10.3
STD: Fig. 8

TITLE:

SUB TITLE:

PURPOSE: To test the response to a break in the transmission path – detected by SUERM – in
“Aligned not ready” state

PRE-TEST CONDITIONS:
Link out of service

CONFIGURATION:

TYPE OF TEST: VAT

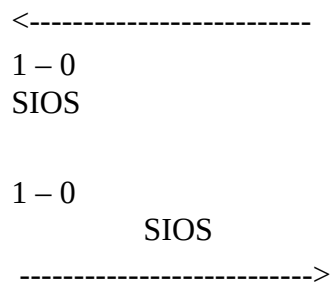
EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link



:
set LPO

:
start

<-----
1 - 0
SIO

1 - 0
SIO
----->

<-----
1 - 0
SIN

1 - 0
SIN
----->

<-----
1 - 0
SIPO

:
break Tx

<-----

1 – 0
SIOS

TEST DESCRIPTION

1.

Set LPO at A.

2.

Start link alignment at A.

3.

In link aligned not ready state break Tx at B and check link is taken out of service.

4.

Repeat test for B with break in Tx at A, check link is taken out of service.

5.

The Tx path must be broken before Timer T1 expires.