MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.3, 8
               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 not ready"

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
 -------------------------->
```

```
                :
                set LPO




                :
                start
```

```
<--------------------------
1 – 0
SIO


1 – 0
 -------------------------->
```

```
<--------------------------
1 – 0
SIN


1 – 0
 -------------------------->
```

```
<---------------------------
1 – 0
SIPO


1 – 0


 -------------------------->


1 – 0


 -------------------------->




<-------------------------
1 – 0
SIOS
```

TEST DESCRIPTION

1.

Set LPO at A.

2.

Start link alignment at A.

3.

Send two corrupt FISUs (corrupt FIBs) on link aligned not ready.

4.

Check link is taken out of service at A.

MTP LEVEL 2

TEST NUMBER:

PAGE:

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

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
                  Link in service

CONFIGURATION: 1

TYPE OF TEST:
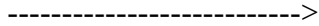   VAT, CPT

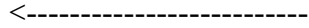EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<--------------------------
1 – 0
FISU

1 – 0
 ------------------------->

            :
            break Tx

<--------------------------

SIOS

TEST DESCRIPTION

1.

Break Tx at B, check SIOS returned from A.

2.

Repeat test, break at A.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.3
                    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 service"

PRE–TEST CONDITIONS:
Link in service

CONFIGURATION: 1

TYPE OF TEST:
VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-------------------------
1 – 0

                    FISU

1 – 0

 ---------------------------->

1 – 0

 ---------------------------->

1 – 0

 ---------------------------->

<-------------------------
1 – 0

                    SIOS

TEST DESCRIPTION

<div align="center">1.</div>

Check that receipt of two FISUs at A with corrupt FIBs at link in service state causes the link to be taken out of service.

MTP LEVEL 2

TEST NUMBER:

PAGE:

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

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
                    Link in service
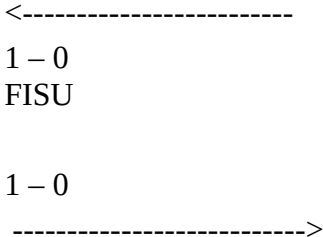
CONFIGURATION: 1

TYPE OF TEST:
                VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<----------------------------
1 – 0
FISU

1 – 0
 --------------------------->

          : set LPO

<-------------------------
1 – 0
                SIPO

             :
          break Tx

<-------------------------
1 – 0
                SIOS

TEST DESCRIPTION

1.

Break Tx path at B when in "Processor outage" 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: Q.703 § 5.3, 8
          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 "Processor outage"

PRE–TEST CONDITIONS:
                    Link in service

CONFIGURATION:
                    1

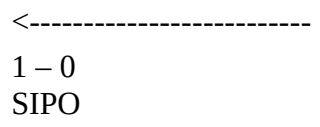TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

<-------------------------
1 – 0
FISU

1 – 0
 -------------------------->

        :
        set LPO

<-------------------------
1 – 0
SIPO

1 – 0

-------------------------->

1 – 0

-------------------------->

<-------------------------
1 – 0
SIOS

TEST DESCRIPTION

<div align="center">1.</div>

Check that receipt of two FISUs at A with corrupt FIBs on processor outage state causes the link to be taken out of service.

MTP LEVEL 2

TEST NUMBER:
                4.1

PAGE: 1 OF 1

REFERENCE: Q.703 § 8
                STD: Fig. 10

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

213   **Fascicle VI.9 – Q.781**

1 – 0

 ------------------------->

:
set LPO

<--------------------------
1 – 0

SIPO

:
clear LPO

<--------------------------
1 – 0

FISU

<--------------------------
1 – 0

MSU

(FIB+FSN=80)

TEST DESCRIPTION

1.

Set LPO at A while link in service.

2.

Check message is discarded.

3.

Clear LPO at A.

4.

Check MSU is sent correctly.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 8
                STD:
                Fig. 10

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
                    Link in service. PO set at B

CONFIGURATION:
                1

TYPE OF TEST:

VAT
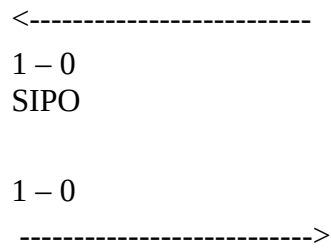

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

: set LPO

<--------------------------

1 – 0

SIPO

1 – 0
 -------------------------->

<--------------------------
1 – 0

SIPO

                  :
                clear LPO

1 – 0
 -------------------------->

<--------------------------
1 – 0
SIPO

TEST DESCRIPTION

1.

Set LPO at A.

2.

Clear LPO at B.

3.

Check is SIPO sent from A.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 8
                    STD:
                    Fig. 10

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:
                PO set at A and B

CONFIGURATION:
            1

TYPE OF TEST:
          VAT

EXPECTED SIGNAL UNIT SEQUENCE:

B

A

Link

Link

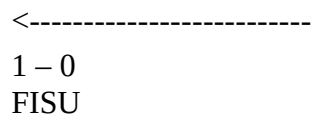<-------------------------
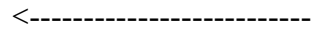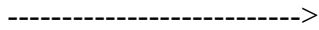1 – 0
SIPO

1 – 0
 ------------------------->

                    :
                    clear LPO

<--------------------------
1 – 0
FISU

                    :
                    clear LPO

```
1 – 0
 ------------------------->




<-------------------------
1 – 0
FISU
```

TEST DESCRIPTION

1.

Clear LPO at A.

2.

Clear LPO at B.

3.

Check is FISU sent from A.

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 4.1
          STD: Fig. 11

TITLE:

SUB TITLE:

PURPOSE: To test the signal unit delimitation, alignment, and error detection action on receipt
          of an MSU containing seven or more consecutive '1's

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    corrupt MSU
         (FIB+FSN=80)
         (containing seven
         consecutive '1's)
 -------------------------->




<-------------------------
1 – 0
FISU

(BSN unchanged)

1 – 0    FISU
 -------------------------->
```

TEST DESCRIPTION

1.

Send a corrupt MSU at B containing seven consecutive '1's.

2.

Check that A discards the signal unit, and goes into octet counting mode.

3.

On reception of a correct FISU, check that A leaves the octet counting mode and remains in the "in service" state.

MTP LEVEL 2

TEST NUMBER:
            5.2

PAGE: 1 OF 1

REFERENCE: Q.703 § 4.1
                  STD:
                  Fig. 11

TITLE:

SUB TITLE:

PURPOSE: To test the signal unit delimitation, alignment, error detection action on receipt of signal unit greater than the maximum length

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   corrupt MSU
          (FIB+FSN=80)
          (signal unit length
          > max. allowed)
 -------------------------->

<-------------------------
1 – 0
FISU

(BSN unchanged)

1 – 0   FISU

 --------------------------->

TEST DESCRIPTION

1.

Send corrupt MSU at B with maximum length plus extra bits and good sumcheck.

2.

Check A discards the signal unit, and goes into octet counting mode.

3.

On reception of a correct FISU, check that A leaves the octet counting mode and remains in the "in service" state.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 4.1
                    STD:
                    Fig. 11

TITLE:

SUB TITLE:

PURPOSE: To test the signal unit delimitation, alignment and error detection action on receipt of
         signal unit less than the minimum length

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=FF)

1 – 0   FISU
 ------------------------->

1 – 0   corrupt MSU
          (FIB+FSN=80)
          (signal unit less
          than 6 octets)
 ------------------------->

<-------------------------
1 – 0

              FISU

              (BSN unchanged)

1 – 0   FISU
 ------------------------->

TEST DESCRIPTION

1.

Generate a corrupt MSU at B of less than 6 octets (i.e. less than 5 octets between flags).

2.

Check A discards the signal unit, and goes into octet counting mode.

3.

On reception of a correct FISU, check that A leaves the octet counting mode and remains in the "in service" state.

MTP LEVEL 2

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 2
                STD:
                Fig. 11

TITLE:

SUB TITLE:

PURPOSE:

PRE–TEST CONDITIONS:

                Link in service

CONFIGURATION:

          1

TYPE OF TEST:
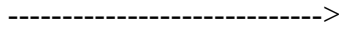
        VAT

EXPECTED SIGNAL UNIT SEQUENCE:

     SP

     B
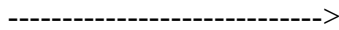
        SP
        A

Link

Link

1 – 0   FISU

----------------------------->

case 1

FISU F FISU

case 2

FISU F F FISU

n(³ 2)

F: Flag

n=number of flags

1 – 0   FISU

----------------------------->

TEST DESCRIPTION

1.

Check that single and n flags, case 1 and case 2 respectively, can be received.