

**MTP LEVEL 2**

TEST NUMBER:

PAGE:

REFERENCE: Q.703 § 5.3  
STD: Fig. 14

TITLE:

SUB TITLE:

PURPOSE:

PRE-TEST CONDITIONS:

CONFIGURATION:

TYPE OF TEST:

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

1 – 0    FISU  
          (FIB+FSN=FF)

----->

<-----

1 – 0  
FISU

## TEST DESCRIPTION

1.

Generate one FISU with a corrupt FIB at B, and check that the link status remains in service.

**MTP LEVEL 2**

TEST NUMBER: 8.9

PAGE: 1 OF 1

REFERENCE: Q.703 § 5.2 STD: Fig. 10, Fig. 14

TITLE: Transmission and reception control (Basic)

SUB TITLE: Single FISU prior to RPO being set

PURPOSE: To test the response to RPO while in the abnormal FIB state

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

FISU (one only)

(FIB+FSN=7F)

----->

1 - 0

SIPO

----->

1 - 0

MSU

(FIB+FSN=80)

----->

1 - 0

FISU

(FIB+FSN=80)



-----> a)

1 - 0  
FISU

(FIB+FSN=80)

----->

<-----

1 - 0  
FISU

(BIB+BSN=7F)

1 - 0

MSU

(FIB+FSN=00)

----->

<-----

1 - 0

FISU

(BIB+BSN=00)

a) RPO at A has recovered, but this FISU is discarded.

## TEST DESCRIPTION

1.

Generate one FISU at B with abnormal FIB.

2.

Send SIPO from B, followed by an MSU.

3.

Check A responds correctly with negative acknowledgement and a retransmission is received correctly.

**Tableau [T76.781], p.**

**H.T. [T77.781]**

**MTP LEVEL 2**

TEST NUMBER: 8.10

PAGE: 1 OF 1

REFERENCE: Q.703 § 5.3    STD: Fig. 14

TITLE: Transmission and reception control (Basic)

SUB TITLE: Abnormal BSN – single MSU

PURPOSE: To test the response to an abnormal BSN

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)

(BIB+BSN=FF)

----->



1 – 0

MSU

(FIB+FSN=80)

(BIB+BSN=BF)

----->

1 – 0

FISU

(FIB+FSN=80)

(BIB+BSN=FF)

-----> a)

1 - 0

FISU

(FIB+FSN=80)

(BIB+BSN=FF)

----->

<-----

1 - 0

FISU

(BIB+BSN=7F)

1 - 0

MSU

(FIB+FSN=00)

(BIB+BSN=FF)

----->

<-----

1 - 0

FISU

(BIB+BSN=00)

a) Though UNB: = 1, abnormal BSNR is not canceled.

## TEST DESCRIPTION

1.

Generate a single MSU with abnormal BSN at B, followed by FISUs with correct BSN.

2.

Check that A responds with a negative acknowledgement.

3.

Retransmit the MSU correctly at B.

4.

Check that the MSU is received correctly and positive acknowledgement is given.

**Tableau [T77.781], p.**

**H.T. [T78.781]**

**MTP LEVEL 2**

TEST NUMBER: 8.11

PAGE: 1 OF 1

REFERENCE: Q.703 § 5.3    STD: Fig. 14

TITLE: Transmission and reception control (Basic)

SUB TITLE: Abnormal BSN – two consecutive FISUs

PURPOSE: To test the response to abnormal BSNs in two consecutive FISUs

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

FISU

(BIB+BSN=BF)

----->

1 - 0

FISU

(BIB+BSN=BF)

----->

1 - 0

FISU

(BIB+BSN=FF)

----->

<-----

1 - 0

SIOS

TEST DESCRIPTION

1.

Generate two consecutive FISUs at B with abnormal BSNs.

2.

Check that A responds by taking the link out of service.

**Tableau [T78.781], p.**

**H.T. [T79.781]**

**MTP LEVEL 2**

TEST NUMBER: 8.12

PAGE: 1 OF 1

REFERENCE: Q.703 § 5.3    STD: Fig. 14

TITLE: Transmission and reception control (Basic)

SUB TITLE: Excessive delay of acknowledgement

PURPOSE: To test the transmission control response to the expiration of EDA timer T7

PRE-TEST CONDITIONS: Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP B

SP A



Link

Link

<-----

1 - 0

T7 | FISU

1 - 0

FISU

(BIB+BSN=FF)

----->

<-----

1 - 0

T7 | MSU

T7 | (FIB+FSN=80)

T7 |

T7 |

<-----

1 - 0

T7 | SIOS

## TEST DESCRIPTION

1.

Generate an MSU at A.

2.

Discard the received MSU at B and send no acknowledgement to A for more than T7 period.

3.

Check that the link is taken out of service by SIOS generated at A after T7 has expired.

4.

Timer T7 shall be in the range 0.5 secs to 2.0 secs.

**Tableau [T79.781], p.**

**H.T. [T80.781]**

**MTP LEVEL 2**

TEST NUMBER: 8.13

PAGE: 1 OF 1

REFERENCE: Q.703 § 7    STD: Fig. 14

TITLE: Transmission and reception control (Basic)

SUB TITLE: Level 3 Stop command

PURPOSE: To test the response to a Stop command

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

----->

: stop

<-----

1 - 0



SIOS

TEST DESCRIPTION

1.

Give Stop command at A.

2.

Check that A responds with link out of service.



**Tableau [T80.781], p.**

**H.T. [T81.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.1

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.2    STD: Fig. 15, Fig. 16

TITLE: Transmission and reception control (PCR)

SUB TITLE: MSU transmission and reception

PURPOSE: To check basic MSU transmission and reception

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

1 - 0  
FISU

(FSN=7F, BSN=0)

----->

<-----



1 - 0  
FISU

(FSN=0, BSN=7F)

1 - 0  
MSU

(FSN=0, BSN=0)

----->

<-----

1 - 0  
FISU

(FSN=0, BSN=0)

## TEST DESCRIPTION

1.

Generate an MSU at A.

2.

Check that B receives the MSU correctly.

3.

Check that A sends FISUs after receiving an FISU with a positive acknowledgement.

4.

Generate an MSU at B.

5.

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



**Tableau [T81.781], p.**

**H.T. [T82.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.2

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.3    STD: Fig. 15, Fig. 16

TITLE: Transmission and reception control (PCR)

SUB TITLE: Priority control

PURPOSE: To check the preventive retransmission procedure

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->



<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=1, BSN=7F)

<-----

1 - 0

MSU

(FSN=2, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=1, BSN=7F)

<-----

1 - 0

MSU

(FSN=2, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=0)

----->

1 - 0

FISU

(FSN=7F, BSN=1)

----->

1 – 0

FISU

(FSN=7F, BSN=2)

----->

<-----

1 – 0

FISU

(FSN=2, BSN=7F)

## TEST DESCRIPTION

1.

Generate two MSUs at A.

2.

No positive acknowledgement is sent from B.

3.

Check that MSUs are retransmitted at A.

4.

Generate another MSU at A.

5.

Check that B receives MSUs correctly.

6.

Reply with positive acknowledgements at B.



7.

Check that A stops retransmission after receiving the positive acknowledgement for the last MSU in RTB and sends FISU.

**Tableau [T82.781], p.**

**H.T. [T83.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.3

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.4    STD: Fig. 15

TITLE: Transmission and reception control (PCR)

SUB TITLE: Forced retransmission with the value N1

PURPOSE: To check that “RTB full” is detected by N1 and forced retransmission occurs

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=7E, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=X, BSN=7F)

1 - 0

FISU



(FSN=7F, BSN=0)

----->

<-----

1 - 0

MSU

(FSN=X+1, BSN=7F)

<-----

1 - 0

MSU

(FSN=7F, BSN=7F)

TEST DESCRIPTION

1.

Generate 128 MSUs at A, at a rate of 100 per second, in order to fill the RTTB before the EDA timer T7 expires.

2.

No positive acknowledgement is sent from B until a forced retransmission starts at A.

3.

Reply with a positive acknowledgement with BSN=0 before T7 expires at A.

4.

Check that the forced retransmission is canceled after the transmission of the last MSU in RTB.

*Note* – N1 is the maximum number of MSUs which are available for retransmission.

(The value of N1 is normally 127).

**Tableau [T83.781], p.**

**H.T. [T84.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.4

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.4    STD: Fig. 15

TITLE: Transmission and reception control (PCR)

SUB TITLE: Forced retransmission with the value N2

PURPOSE: To check that “RTB full” is detected by N2 and forced retransmission starts

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->



<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=N-1, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=X, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=a-1)

----->

<-----

1 - 0

MSU

(FSN=a, BSN=7F)

<-----

1 - 0

MSU

(FSN=N, BSN=7F)

(a > X)

TEST DESCRIPTION

1.

Generate  $N+1$  MSUs at A, (the octet count of  $N$  MSUs is larger than  $N2$ ).

2.

Send no positive acknowledgement at B until a forced retransmission starts at A.

3.

Check that B receives the MSUs with  $FSN=0$  up to  $FSN=N-1$  but does not receive the MSU with  $FSN=N$ .

4.

Reply with a positive acknowledgement with  $BSN=a-1$  at B.

5.

Check that the retransmission restarts from the next value of FSN which is acknowledged by B when the retransmission is interrupted.

6.

Check that B receives the MSU with FSN=N.

*Note* – N2 is the maximum number of octets which are available for retransmission.

**Tableau [T84.781], p.**

**H.T. [T85.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.5

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.4    STD: Fig. 15



TITLE: Transmission and reception control (PCR)

SUB TITLE: Forced retransmission cancel

PURPOSE: To check that the forced retransmission is canceled when BSN equal to FSNL 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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=7E, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=X, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7E)

----->

<-----

1 - 0

MSU

(FSN=7F, BSN=7F)

## TEST DESCRIPTION

1.

Generate N1+1 MSUs at A, (e.g. 128).

2.

Send no positive acknowledgement at B until a retransmission occurs at A.

3.

Reply with a positive acknowledgement with BSN=7E at B.



4.

Check that a forced retransmission is canceled and the MSU with FSN=7F is sent at A.

*Note 1* – FSNL is the FSN of the last MSU in RTB.

*Note 2* – Alternatively, the number of octets threshold (N2), instead of the number of MSUs threshold (N1), could be used to start forced retransmission.

**Tableau [T85.781], p.**

**H.T. [T86.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.6

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.4    STD: Fig. 15

TITLE: Transmission and reception control (PCR)

SUB TITLE: Repetition of forced retransmission

PURPOSE: To check that the forced retransmission repeats when “RTB full” is still detected after finishing a forced retransmission

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=7E, BSN=7F)

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

<-----

1 - 0

MSU

(FSN=7E, BSN=7F)

<-----

1 - 0

MSU



(FSN=0, BSN=7F)

TEST DESCRIPTION

1.

Generate MSUs at A at a rate of N per second, in order to make A repeat a forced retransmission.

( $N \leq 127 \div T$ , where T = lower limit of T7)

2.

No acknowledgement is sent from B.

3.

Check that A repeats a forced retransmission.



**Tableau [T86.781], p.**

**H.T. [T87.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.7

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.2    STD: Fig. 15

TITLE: Transmission and reception control (PCR)

SUB TITLE: MSU transmission while RPO set

PURPOSE: To ensure correct performance while RPO is set

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)



: set LPO

1 – 0  
SIPO

(FSN=7F, BSN=7F)  
----->

<-----  
1 – 0  
FISU

(FSN=0, BSN=7F)

: clear LPO

1 – 0

MSU

(FSN=0, BSN=7F)

----->

<-----

1 - 0

MSU

(FSN=0, BSN=7F)

1 - 0

MSU

(FSN=0, BSN=0)

----->

<-----

1 - 0

FISU

(FSN=0, BSN=0)

TEST DESCRIPTION

1.

Generate an MSU at A.

2.

Instead of sending positive acknowledgement, set and keep PO at B.

3.

Check A stops a retransmission of the MSU and sends FISUs, and not detect link failure by the expiration of T7.

4.

Cease PO and send an MSU with no positive acknowledgement at B.

5.

Check A starts a retransmission of the MSU.

6.

Generate an MSU with a positive acknowledgement at B.

7.

Check A receives the MSU and responds correctly.



**Tableau [T87.781], p.**

**H.T. [T88.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.8

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.3    STD: Fig. 16



TITLE: Transmission and reception control (PCR)

SUB TITLE: Abnormal BSN – Single MSU

PURPOSE: To test the response to an abnormal BSN

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

1 – 0

MSU

(FSN=0, BSN=0)

----->

1 – 0

MSU

(FSN=0, BSN=7F)

----->

1 – 0

MSU

(FSN=0, BSN=7F)

----->

<-----

1 – 0

FISU

(FSN=7F, BSN=0)

## TEST DESCRIPTION

1.

Generate a single MSU at B with abnormal BSN followed by retransmission of that MSU with normal BSN.

2.

Check that A responds with a positive acknowledgement and not detect link failure.



**Tableau [T88.781], p.**

**H.T. [T89.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.9

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.3    STD: Fig. 16



TITLE: Transmission and reception control (PCR)

SUB TITLE: Abnormal BSN – Two MSUs

PURPOSE: To test the response to two consecutive MSUs with an MSU having normal BSN between them

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

1 – 0

MSU

(FSN=0, BSN=7E)

----->

1 – 0

MSU

(FSN=0, BSN=7F)

----->

1 – 0

MSU

(FSN=0, BSN=7E)

----->

<-----

1 – 0

SIOS

(FSN=7F, BSN=7F)

## TEST DESCRIPTION

1.

Generate two consecutive MSUs at B with abnormal BSN with an MSU having normal BSN between them.

2.

Check that all MSUs are discarded at A.

3.

Check that A responds by taking the link out of service.

**Tableau [T89.781], p.**

**H.T. [T90.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.10

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.2    STD: Fig. 16



TITLE: Transmission and reception control (PCR)

SUB TITLE: Unexpected FSN

PURPOSE: To check the reception control response to an MSU with unexpected FSN

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

1 – 0

MSU

(FSN=0, BSN=7F)

----->

1 – 0

MSU

(FSN=2, BSN=7F)

----->

<-----

1 - 0

FISU

(FSN=7F, BSN=0)

TEST DESCRIPTION

1.

Generate an MSU with unexpected FSN at B.

2.

Check A discards the MSU with unexpected FSN and not sends acknowledgement for that MSU.

**Tableau [T90.781], p.**

**H.T. [T91.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.11

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.3    STD: Fig. 15

TITLE: Transmission and reception control (PCR)

SUB TITLE: Excessive delay of acknowledgement

PURPOSE: To test the transmission control response to the expiration of EDA timer T7

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

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=7F, BSN=7F)

----->

<-----

1 - 0

| MSU

| (FSN=0, BSN=7F)

| T7

| T7

| T7

<-----

1 - 0

SIOS

(FSN=0, BSN=7F)

TEST DESCRIPTION

1.

Generate an MSU at A.

2.

Suspend sending positive acknowledgement at B for more than T7 period.

3.

Check that A sends SIOs instead of retransmission of MSU after T7 expires.

4.

Timer T7 shall be in the range 0.5 secs to 2.0 secs.

**Tableau [T91.781], p.**

**H.T. [T92.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.12

PAGE: 1 OF 1

REFERENCE: Q.703 § 6.2    STD: Fig. 16

TITLE: Transmission and reception control (PCR)

SUB TITLE: FISU with FSN expected for MSU

PURPOSE: To check that the received FISU having FSN expected for MSU is discarded

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

(FSN=7F, BSN=7F)

----->

<-----

1 – 0

FISU

(FSN=7F, BSN=7F)

1 - 0

FISU

(FSN=0, BSN=7F)

----->

<-----

1 - 0

FISU

(FSN=7F, BSN=7F)

## TEST DESCRIPTION

1.

Generate an FISU with FSN expected for MSU at B.

2.

Check that A discards the FISU and responds with an FISU with correct BSN.



**Tableau [T92.781], p.**

**H.T. [T93.781]**

**MTP LEVEL 2**

TEST NUMBER: 9.13

PAGE: 1 OF 1

REFERENCE: Q.703 § 7    STD: Fig. 16

TITLE: Transmission and reception control (PCR)

SUB TITLE: Level 3 Stop command

PURPOSE: To test the response to a Stop command

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  
----->

: stop

<-----  
1 - 0  
SIOS

## TEST DESCRIPTION

1.

Give Stop command at A.

2.

Check that A responds with link out of service.



**Tableau [T93.781], p.**

**H.T. [T94.781]**

**MTP LEVEL 2**

TEST NUMBER: 10.1

PAGE: 1 OF 1

REFERENCE: Q.703 § 9    STD: Fig. 19

TITLE: Congestion Control

SUB TITLE: Congestion abatement

PURPOSE: To check the congestion abatement procedure

PRE-TEST CONDITIONS: Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP B

SP A

Link

Link

T5 | : make congestion

T5 | : state

<-----

1 - 0

T5 | SIB

T5 |

T5 |

T5 |

<-----

1 - 0

T5 | SIB

T5 |

T6 |



T5 | : clear congestion

T5 | : state

<-----

1 - 0

T5 | FISU

TEST DESCRIPTION

1.

Make congestion state at A and check A sends SIB.

(Implementation of congestion control is not specified.)

2.

Check B receives SIBs at the interval of T5.

3.

Clear congestion state at A and check A stops sending SIBs.

4.

Timer T5 shall be in the range 80 ms to 120 ms.



**Tableau [T94.781], p.**

**H.T. [T95.781]**

**MTP LEVEL 2**

TEST NUMBER: 10.2

PAGE: 1 OF 1

REFERENCE: Q.703 § 9.2    STD: Fig. 19

TITLE: Congestion Control

SUB TITLE: Timer T7

PURPOSE: To check timer T7 is restarted at the reception of SIB (without expiring of T6)

PRE-TEST CONDITIONS: Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP B

SP A

Link

Link

.

1-0

1-0

1 - 0

1 - 0

.

SIB

SIB



SIB

FISU

.

|

|

| Ct

|

|

| Bt

|

|

|  
<-----

----->

----->

----->

----->

1 - 0

MSU

|

|

|

|

| T6

|

|

|

|

|

## TEST DESCRIPTION

1.

Generate an MSU at A.

2.

Generate SIBs at B with the time intervals of T5 for Ct, instead of positive acknowledgement.



3.

Check that link remains in service during Ct.

4.

Send FISU with positive acknowledgement from B after Bt expires.

5.

Check that link remains in service.

6.

Ct = more than T7 and less than T6.

7.

Bt = less than T7.

8.

(Ct + Bt) is less than T6.

**Tableau [T95.781], p.**

**H.T. [T96.781]**

**MTP LEVEL 2**

TEST NUMBER: 10.3

PAGE: 1 OF 1

REFERENCE: Q.703 § 9.3    STD: Fig. 19

TITLE: Congestion Control

SUB TITLE: Timer T6

PURPOSE: To check “Remote Congestion” Timer T6

PRE-TEST CONDITIONS: Link in service

CONFIGURATION: 1

TYPE OF TEST: VAT

EXPECTED SIGNAL UNIT SEQUENCE:

SP B

SP A

Link

Link

1 – 0

1 – 0

1 – 0

1 – 0

SIB

SIB

SIB

SIB

----->

----->

----->



----->

<-----

.

1 - 0

|

|

|

| T6

|

|

|

|

SIOS

TEST DESCRIPTION

1.

Generate SIB at B until Timer T6 expires.

2.

Check link becomes out of service.

3.

Timer T6 shall be in the range 3 secs to 6 secs (8 to 12 secs for 4.8 kbit/s).

