INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.806

Corrigendum 1
(08/2004)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

Digital networks – General aspects

Characteristics of transport equipment – Description methodology and generic functionality

Corrigendum 1

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As of the date of approval of this Recommendation, ITU [had/had not] received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

Corrigendum 1 to Recommendation G.806

CHARACTERISTICS OF TRANSPORT EQUIPMENT – DESCRIPTION METHODOLOGY AND GENERIC FUNCTIONALITY

Corrigendum 1

1 Introduction

This corrigendum contains editorial and technical corrections, to the 02/2004 revision of Recommendation G.806.

2 Corrections

2.1 Subclause 5.9

Replace the third paragraph:

"cY" represents the fault cause "Y" which is (will be) declared if the boolean expression "D and (not E) and (not F) and G" is true. Otherwise (expression is false), the fault cause is (will be) cleared. MON will often be a term in this equation (see 2.2.1).

With:

"cY" represents the fault cause "Y" which is (will be) declared if the boolean expression "D and (not E) and (not F) and G" is true. Otherwise (expression is false), the fault cause is (will be) cleared. MON will often be a term in this equation (see 6.1).

2.2 Subclause 6.2.6.4

Replace the text:

GFP Client Signal Fail (dCSF) is raised when a GFP frame with correct tHEC, with a PTI="100" and a UPI value of either "0000 0001" or "0000 0010" is received. dUPM is cleared when no such GFP client management frame is received in N x 1000 ms or a valid GFP client data frame is received. A value of 3 is suggested for N.

With:

GFP Client Signal Fail (dCSF) is raised when a GFP frame with correct tHEC, with a PTI="100" and a UPI value of either "0000 0001" or "0000 0010" is received. dCSF is cleared when no such GFP client management frame is received in N x 1000 ms or a valid GFP client data frame is received. A value of 3 is suggested for N.

2.3 Subclause 6.3.6

Replace the Note:

Note - aTSFprot and aTSF will be identical for network elements that support error defects assuming bursty distribution of errors. For such networks, dEXC is assumed to be permanently false (see 2.2.2.5.2).

With:

Note - aTSFprot and aTSF will be identical for network elements that support error defects assuming bursty distribution of errors. For such networks, dEXC is assumed to be permanently false (see 6.2.3.1.2).

2.4 Subclause 6.4

Replace the first paragraph:

This subclause presents in generic terms the defect correlations within trail termination, adaptation and connection functions. Specific details are presented in each atomic function. See 1.10 for a description of the applied specification technique.

With:

This subclause presents in generic terms the defect correlations within trail termination, adaptation and connection functions. Specific details are presented in each atomic function. See 5.9 for a description of the applied specification technique.

2.5 Subclause 6.4.1

Replace the Note 4:

Note 4 - Refer to subclause 2.2.1 for a MON description.

With:

Note 4 - Refer to subclause 6.1 for a MON description.

2.6 Subclause 6.5.1

Replace the Note 2 in Table 6-11:

Note 2 – For backward compatibility the specification is as follows: every second, the number of errors is counted and "translated" into the pN_EBC according to ITU-T G.826, Annex 3

With:

Note 2 – For backward compatibility the specification is as follows: every second, the number of errors is counted and "translated" into the pN_EBC according to ITU-T G.826, Annex C

2.7 Subclause 6.5.3

Replace the Note 1 in Table 6-11:

Note 1 – For backward compatibility the specification is as follows: every second, the number of errors is counted and "translated" into the pF_EBC according to ITU-T G.826, Annex 3

With:

Note 1 – For backward compatibility the specification is as follows: every second, the number of errors is counted and "translated" into the pF_EBC according to ITU-T G.826, Annex C

2.8 Clause 8

In the text and figures of the clause and all its sub clauses remove all the occurrences of "MI_" in text strings (eg. "MI_CMuxConfig" -> "CMuxConfig").

2.9 Subclause 8.5.2.2

Replace the first paragraph of the frame delineation process:

Frame delineation: GFP frame delineation is performed as defined in 6.3.1/G.7041. Frame delineation is assumed to be achieved (IF) when the process is in the "SYNC" state. Frame delineation is assumed to be lost (OOF) when the process is not in the "SYNC" state. Idle GFP frames participate in the delineation process and are then discarded.

With:

Frame delineation: GFP frame delineation is performed as defined in 6.3.1/G.7041. Frame delineation is assumed to be achieved when the process is in the "SYNC" state. Frame delineation is assumed to be lost when the process is not in the "SYNC" state. Idle GFP frames participate in the delineation process and are then discarded.

2.10 Subclause 8.5.3.2

Replace the figure 8-14:

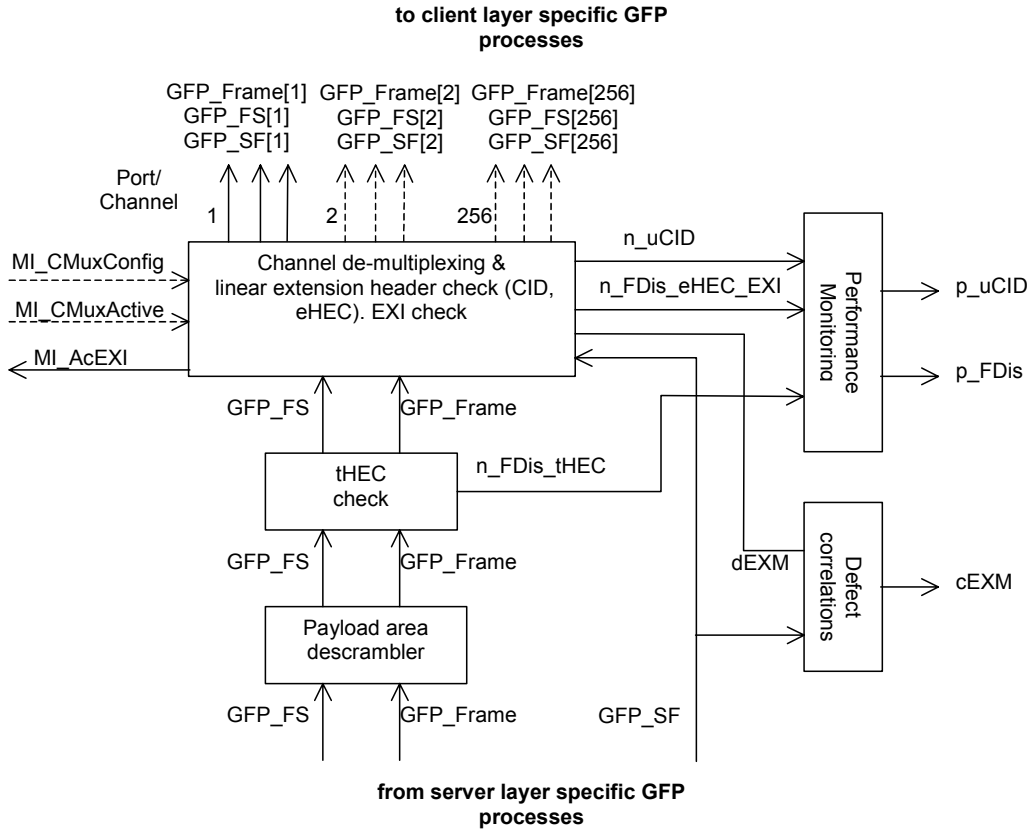


Figure 8-14/G.806 – Common GFP Sink processes

With:

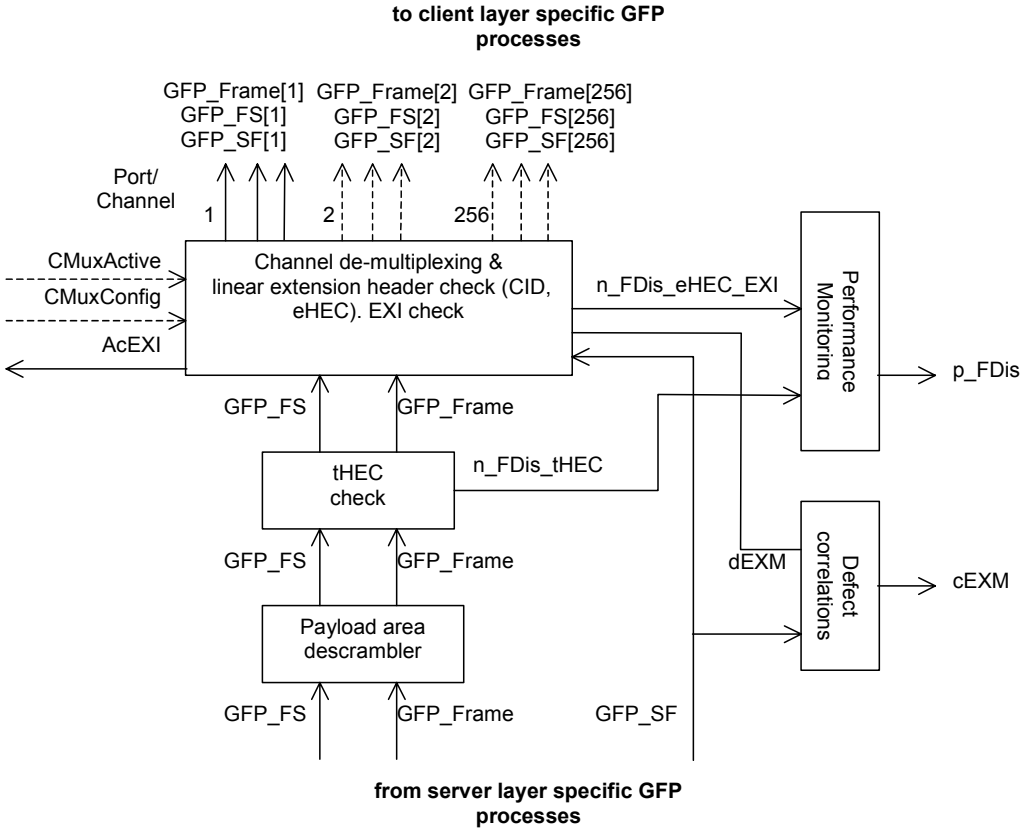


Figure 8-14/G.806 – Common GFP Sink processes

Replace the fourth paragraph of the Channel de-multiplexing, linear extension header check, EXI check process:

In case GFP channel multiplexing is not supported or not active (MI_CMuxActive=true) the accepted EXI (AcEXI) is compared with the value "0000". If it has a different value the frame is discarded. All discarded frames are indicated by n_FDis_eHEC_EXI.

With:

In case GFP channel multiplexing is not supported or not active (CMuxActive=false) the accepted EXI (AcEXI) is compared with the value "0000". If it has a different value the frame is discarded. All discarded frames are indicated by n_FDis_eHEC_EXI.

2.11 Subclause 10.1.1.1

Replace the figure 10-4:

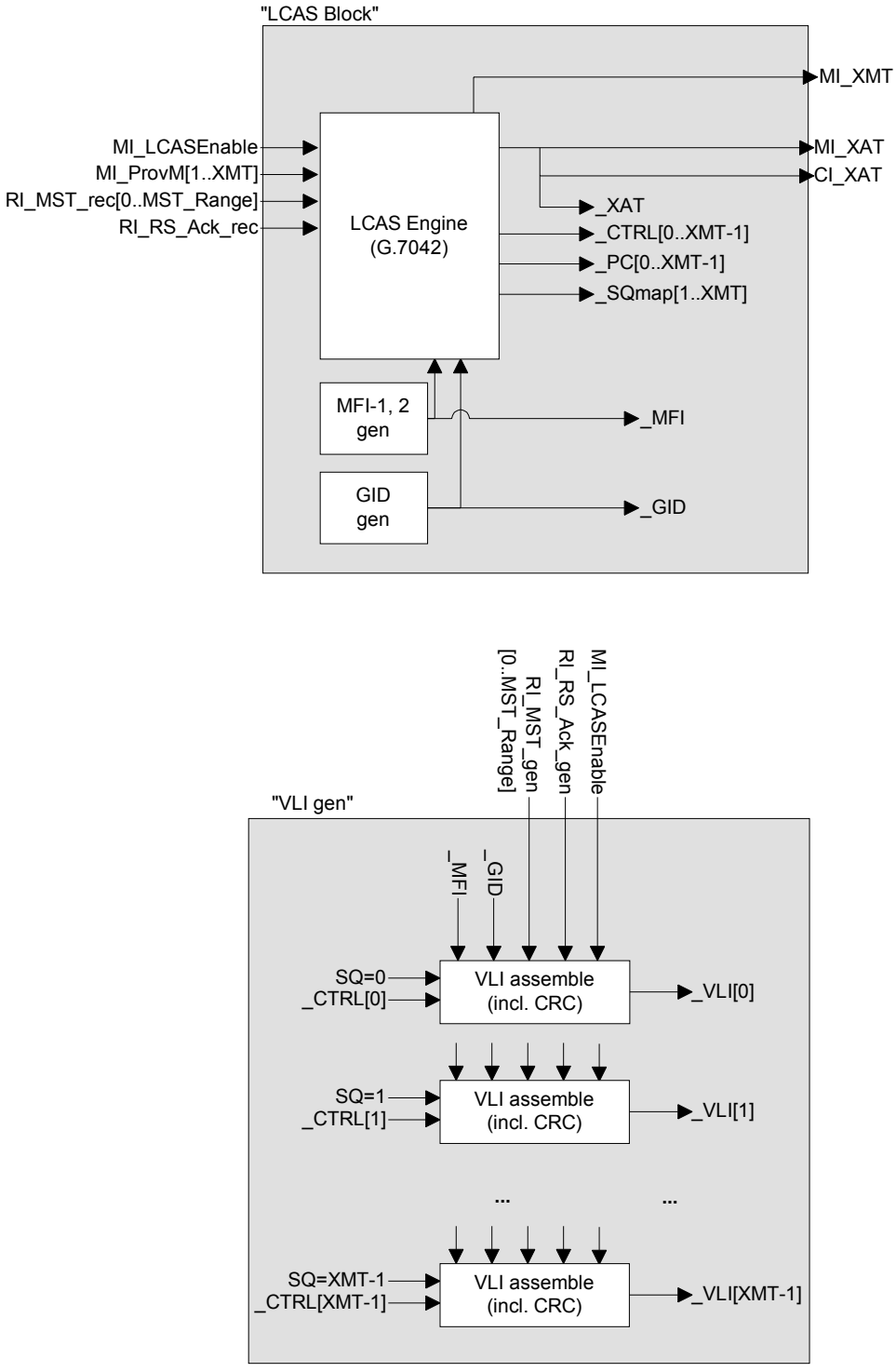


Figure 10-4/G.806 – P-Xv/P-X-L_A_So processes (subdiagrams)

With:

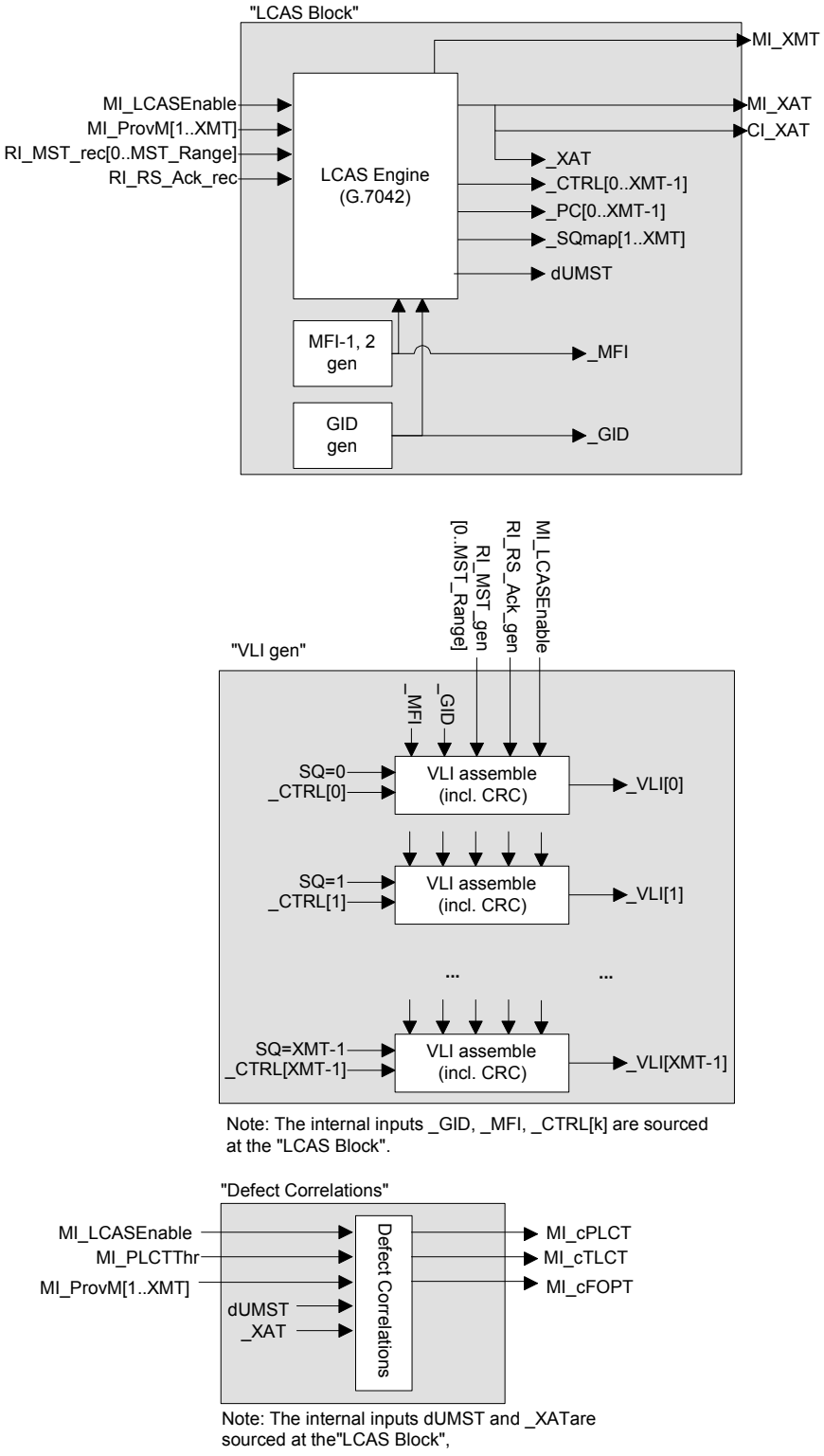


Figure 10-4/G.806 – P-Xv/P-X-L_A_So processes (subdiagrams)

Replace the dUMST defect definition:

Persistent unexpected MST (dUMST): A persistent detection (longer than a time t_{detect}) of RI_MST_rec[i]=0 (OK), while no RS-ACK is pending, for a member that carries the "IDLE" control word shall give rise to a dUMST defect. The defect shall be cleared as soon as RI_MST_rec[i]=1 (FAIL) is detected persistently (longer than t_{clear}) for all members with those control words. The value of the t_{detect}, t_{clear} parameters is ffs.

With:

Persistent unexpected MST (dUMST): A persistent detection (longer than a time t_{detect}) of RI_MST_rec[i]=0 (OK), while no RS-ACK is pending, for a member that does not carry the "ADD", "NORM", "EOS" or "DNU" control words shall give rise to a dUMST defect. The defect shall be cleared as soon as RI_MST_rec[i]=1 (FAIL) is detected persistently (longer than t_{clear}) for all members not carrying those control words. The value of the t_{detect}, t_{clear} parameters is ffs.

2.12 Subclause 10.1.1.2

Add to table 10-2 in the Output column under "P-Xv/P-X-L_A_Sk_MP":

P-Xv/P-X-L_A_Sk_MI_cLOA

Replace the figure 10-7:

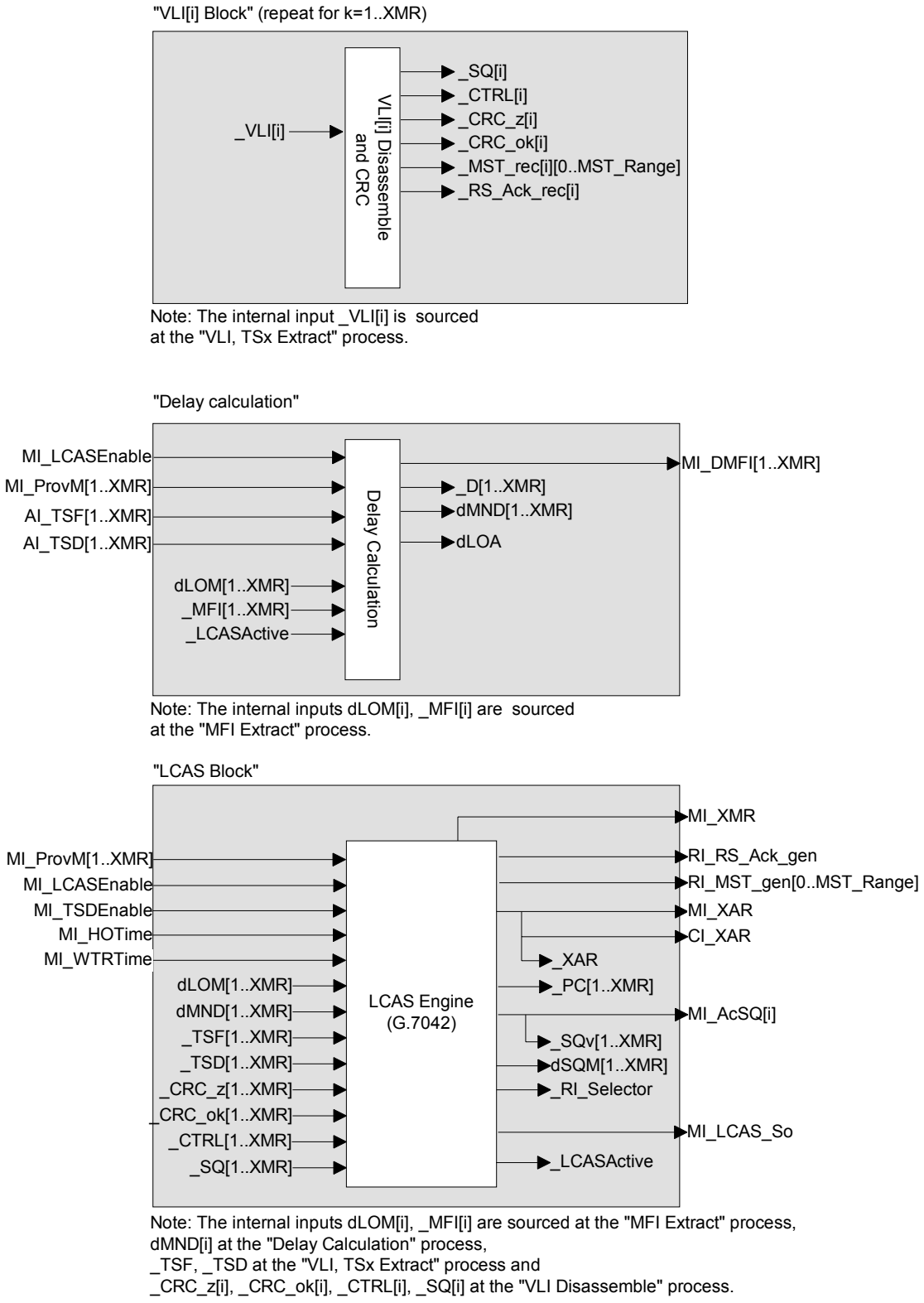


Figure 10-7/G.806 – P-Xv/P-X-L_A_Sk processes (sub diagrams I)

With:

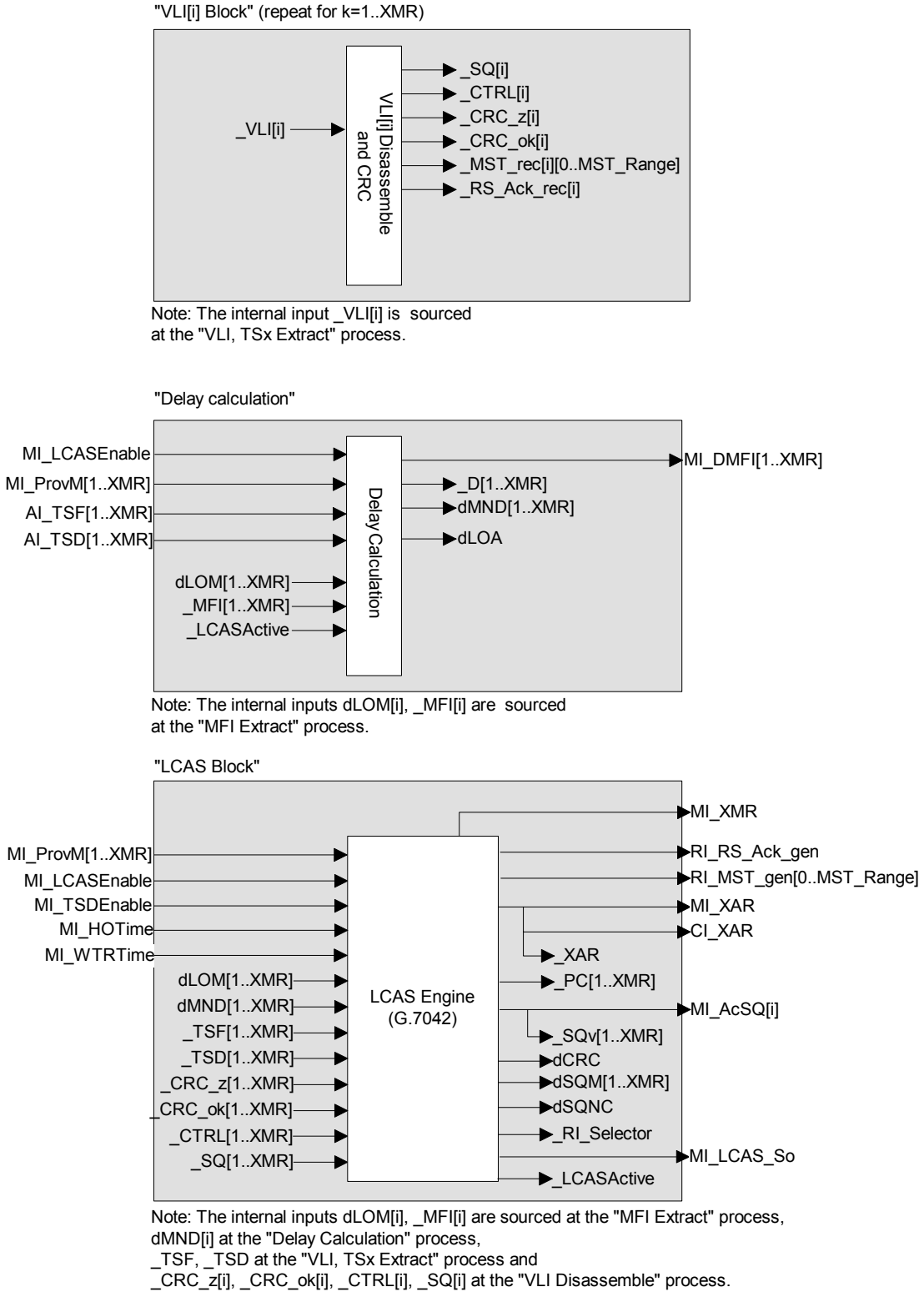


Figure 10-7/G.806 – P-Xv/P-X-L_A_Sk processes (sub diagrams I)

Replace the figure 10-8:

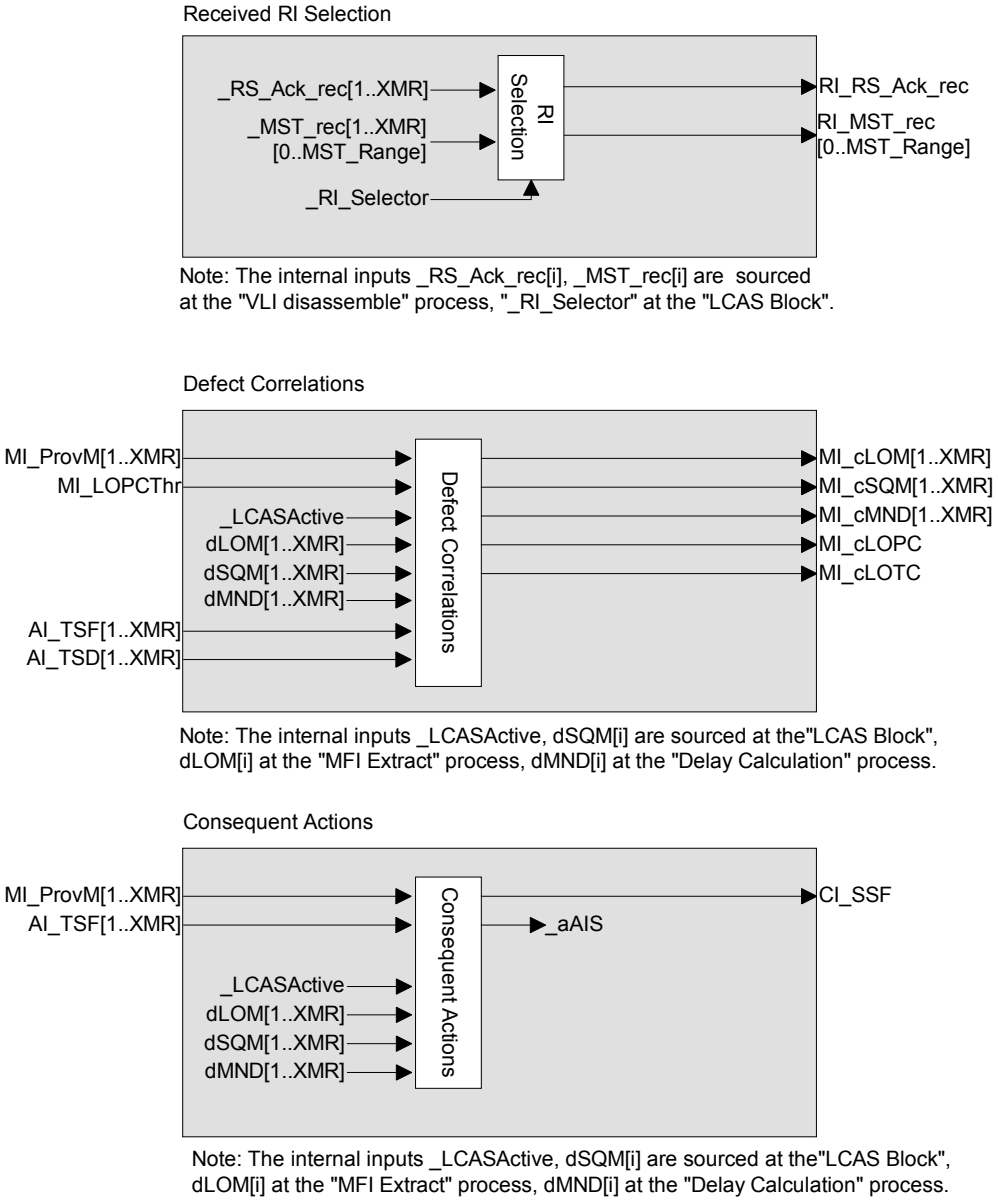
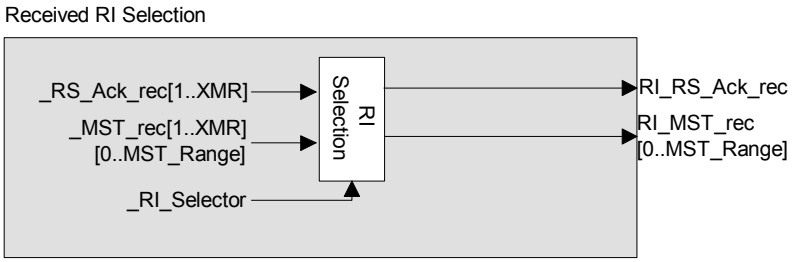
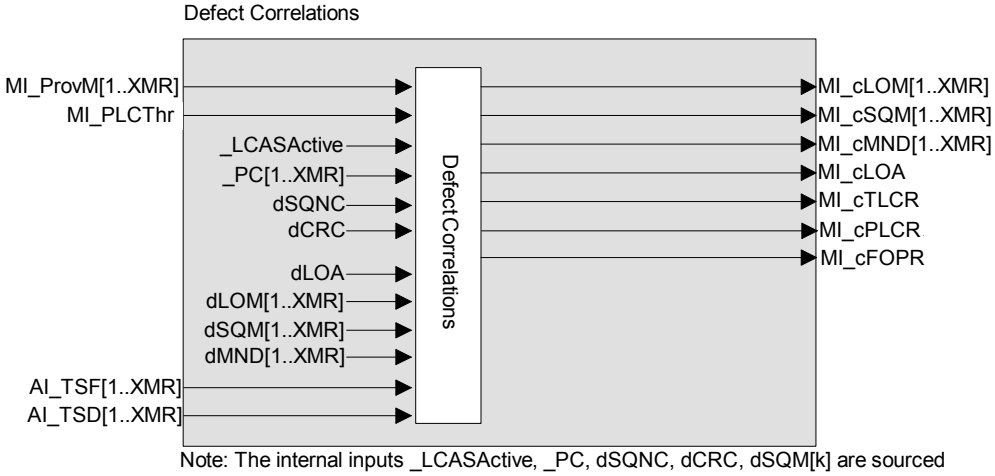


Figure 10-8/G.806 – P-Xv/P-X-L_A_Sk processes (sub diagrams II)

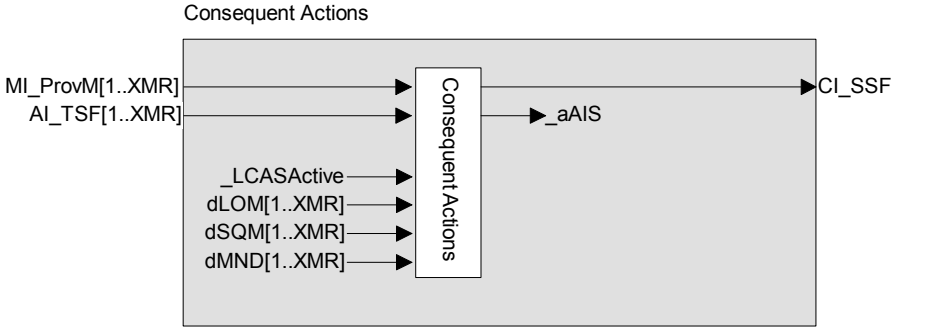
With:



Note: The internal inputs _RS_Ack_rec[k], _MST_rec[k] are sourced at the "VLI disassemble" process, "_RI_Selector" at the "LCAS Block".



Note: The internal inputs _LCASActive, _PC, dSQNC, dCRC, dSQM[k] are sourced at the"LCAS Block", dLOM[k] at the "MFI Extract" process, dMND[k], dLOA at the "Delay Calculation" process.



Note: The internal inputs _LCASActive, dSQM[k] are sourced at the"LCAS Block", dLOM[k] at the "MFI Extract" process, dMND[k] at the "Delay Calculation" process.

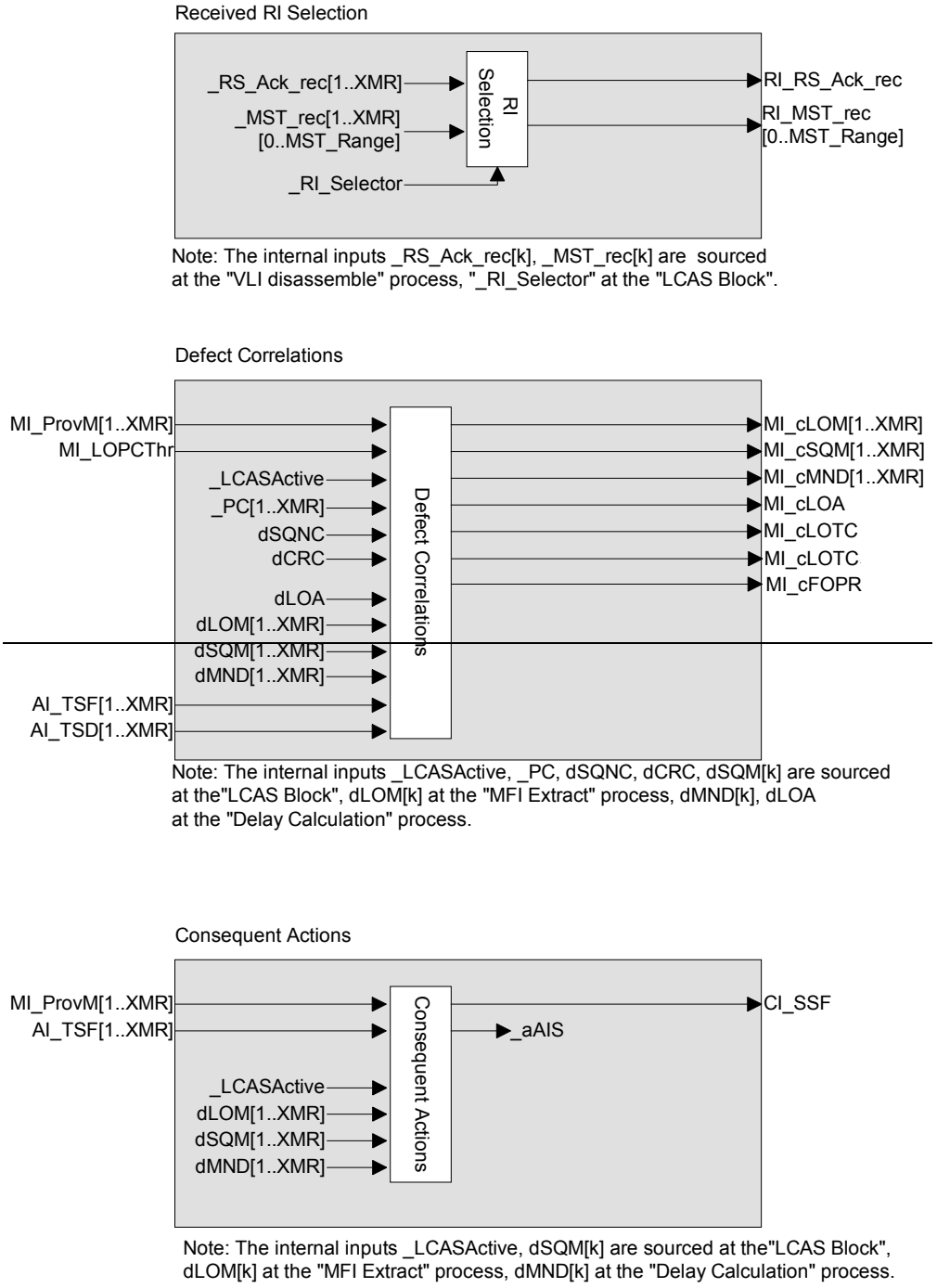


Figure 10-8/G.806 – P-Xv/P-X-L_A_Sk processes (sub diagrams II)

Replace the _PC generation in the LCAS Engine process:

- _PC[1..X_{MR}]: Indication of whether a particular member is an active member (i.e. is carrying payload) at a particular time. For each index i, the process shall calculate _PC[i] as follows:
  - MI_ProvM[i]=0 ➔ _PC[i]=0
  - MI_ProvM[i]=1 ➔

- (_TSF[i]) or (dLOM[i]) or (dMND[i]) ➔ _PC[i]=0
- not ((_TSF[i]) or (dLOM[i]) or (dMND[i])) ➔ _PC[i] as determined by the LCAS protocol in G.7042 (=1 if the protocol determines it is carrying payload, =0 otherwise)

With:

- _PC[1..X_{MR}]: Indication of whether a particular member is an active member (i.e. is carrying payload) at a particular time. For each index i, the process shall calculate _PC[i] as follows:
  - MI_ProvM[i]=0 ➔ _PC[i]=0
  - MI_ProvM[i]=1 ➔ _PC[i] as determined by the LCAS protocol in G.7042 (=1 if the protocol determines it is carrying payload, =0 otherwise)

Replace the _SQv[1..X_{MR}] generation in the LCAS Engine process:

- _SQv[1..X_{MR}]: Validated sequence number. For each index i, the process shall calculate _SQv[i] as follows:
  - (MI_ProvM[i]=0) or (_TSF[i]) or (dLOM[i]) or (dMND[i]) ➔ _SQv[i]=n/a
  - else
    - _CRC_ok[i]=1 ➔ _SQv[i]=_SQ[i]
    - _CRC_ok[i]=0 ➔ _SQv[i] retains its previous value

With:

- _SQv[1..X_{MR}]: Validated sequence number. For each index i, the process shall calculate _SQv[i] as follows:
  - (MI_ProvM[i]=0) or (((_TSF[i]) or (dLOM[i]) or (dMND[i])) and (HOTimer not running)) or (_CTRL[i]=IDLE) ➔ _SQv[i]=n/a
  - else
    - _CRC_ok[i]=1 ➔ _SQv[i]=_SQ[i]
    - _CRC_ok[i]=0 ➔ _SQv[i] retains its previous value

Replace the _RI_Selector generation in the LCAS Engine process:

- _RI_Selector: Member index used to select the remote information set sent to the source (see RI Selection process below). _RI_Selector shall be chosen from among those indexes i satisfying:
  - (_PC[i] =1) and (_CRC_ok[i] = 1)

If this is an empty set, then _RI_Selector shall be sourced as "n/a".

Note 2 - This value is an error indication towards the RI Selection process.

Otherwise the specific choice of _RI_Selector is implementation specific since the LCAS Source sends the same MST values simultaneously in the control packets of all members of a VCG.

Note 3 - The LCAS protocol as defined in G.7042 is used in this process to calculate some outputs. The instance of the protocol used here shall have the following characteristics:

With:

- _RI_Selector: Member index used to select the remote information set sent to the source (see RI Selection process below). _RI_Selector shall be chosen from among those indexes i satisfying:
  - (MI_ProvM[i]=1) and not ((_TSF[i]) or (dLOM[i]) or (dMND[i])) and (_CRC_ok[i] = 1)

If this is an empty set, then _RI_Selector shall be sourced as "n/a".

Note 2 - This value is an error indication towards the RI Selection process.

Otherwise the specific choice of _RI_Selector is implementation specific since the LCAS Source sends the same MST values simultaneously in the control packets of all members of a VCG.

Note 3 - The LCAS protocol as defined in G.7042 is used in this process to calculate some outputs. The instance of the protocol used here shall have the following characteristics: