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Contact:	Yuji Tochio Fujitsu Japan	Tel: +81-44-754-8829 Fax: +81-44-754-2741 Email: tochio@jp.fujitsu.com
Contact:	Huub van Helvoort Huawei Technologies Co., Ltd. P.R.China	Tel: +31 649248936 Fax: Email: hhelvoort@huawei.com

Please don't change the structure of this table, just insert the necessary information.

Abstract

This document contains the initial draft G.8121.1 as proposed in WD04.

Drafting status

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8.3	**Queuing process**	Reference G.8121
8.4	**MPLS-TP-specific GFP-F processes**	Reference G.8121
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8.8.2	Loopback (LB) Process	Based on existing G.8121 (TD458/3)
8.8.3	Loss Measurement (LM) Process	Based on existing G.8121 (TD458/3)
8.8.4	Delay Measurement (DM) Process	
8.8.5	One Way Delay Measurement (1DM) Process	
8.8.6	Test (TST) Process	Based on existing G.8121 (TD458/3)
9	**MPLS-TP layer functions**	Add high level texts based on G.8121

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10	**MPLS-TP to Non-MPLS-TP client adaptation functions**	Reference G.8121
11	**Non-MPLS-TP Server to MPLS-TP adaptation functions**	Reference G.8121

G.8121.1/Y.1382.1

Characteristics of MPLS-TP equipment functional blocks supporting G.8113.1/Y.1373.1

Summary

<Mandatory material>

Keywords

<Optional>

1 Scope

This recommendation describes…

2 References

The following ITU-T Recommendations and other references contain provisions, which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T G.806]

[ITU-T G.8121]

[ITU-T G.8113.1]

[ITU-T G.8131.1]

[TBD]

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3 Definitions

<Check in the ITU-T Terms and definitions database on the public website whether the term is already defined in another Recommendation. It may be more consistent to refer to such a definition rather than redefine it>

3.1 Terms defined elsewhere:

This Recommendation uses the following terms defined elsewhere:

3.1.1 <Term 1> [Reference]: <optional quoted definition>

[TBD]

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 <Term 3>: <definition>

[TBD]

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

[TBD]

5 Conventions

6 Supervision

The generic supervision functions are defined in clause 6 in [ITU-T G.806]. Protocol neutral supervision functions for the MPLS-TP network are defined in this clause6 in [ITU-T G.8121]. Specific supervision functions for the MPLS-TP network are defined in this clause.

6.1 Defects

[TBD? See clause 6.1 in [ITU-T G.8121]?]

6.2 Consequent actions

For generic consequent actions, see ITU-T Rec. G.806. For the specific consequent actions applicable to MPLS-TP, refer the specific atomic functions.

6.3 Defect correlations

For the defect correlations, see the specific atomic functions.

6.4 Performance filters

ffs

7 Information flow across reference points

Information flow for MPLS-TP functions is defined in clause 9. A generic description of information flow is defined in clause 7/G.806.

8 MPLS-TP processes

8.1 G-ACh Process

See the clause 8.1in [ITU-T G.8121]

8.2 TC/Label processes

See the clause 8.2in [ITU-T G.8121]

8.3 Queuing process

See the clause 8.3in [ITU-T G.8121]

8.4 MPLS-TP-specific GFP-F processes

See the clause 8.4in [ITU-T G.8121]

8.5 Control Word (CW) processes

See the clause 8.5in [ITU-T G.8121]

8.6 OAM related Processes used by Server adaptation functions

8.6.1 Selector Process

See the clause 8.6.1[ITU-T G.8121]

8.6.2 AIS (Alarm Reporting) Insert Process

[From TD458/3 or WD30]

[Note: check if the text can be referred to G.8121]

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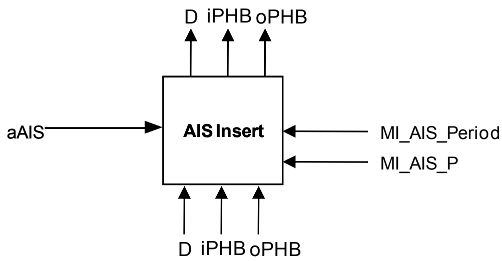

Figure 8-9 – AIS Insert process

Figure 8-9 shows the AIS Insert Process Symbol and Figure 8-10 defines the behaviour. If the aAIS signal is true, the AIS Insert process continuously generates MT_CI traffic units where the MT_CI_D signal contains the AIS signal until the aAIS signal is false. The generated AIS traffic units are inserted in the incoming stream, i.e., the output stream contains the incoming traffic units and the generated AIS traffic units.

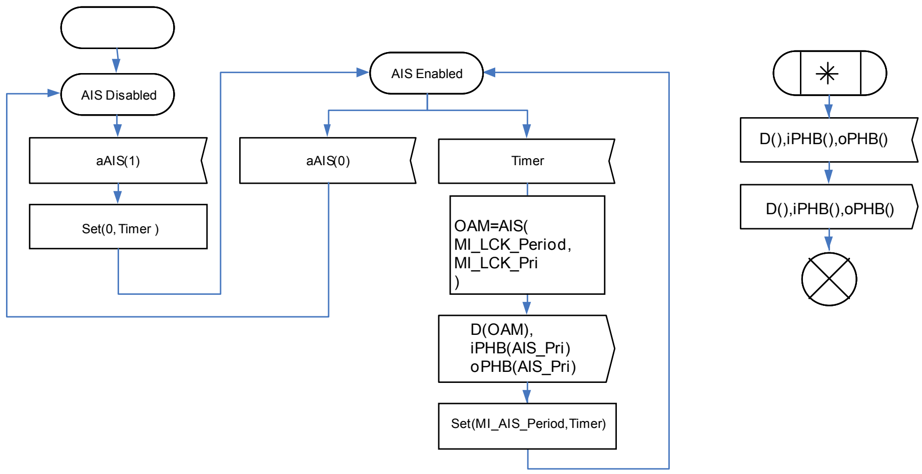

Figure 8-10 – AIS Insert behaviour

The period between consecutive AIS traffic units is determined by the MI_AIS_Period parameter. Allowed values are once per second and once per minute; the encoding of these values is defined in Table 8-2. Note that these encoding are the same as for the LCK generation process.

Table 8-2 – AIS period values

3-bits	Period Value	Comments
000-011	Invalid Value	Invalid value for AIS PDUs
100	1s	1 frame per second
101	Invalid Value	Invalid value for AIS PDUs
110	1 min	1 frame per minute
111	Invalid Value	Invalid value for AIS PDUs

The MT_CI_D signal contains an M_SDU field. The format of the M_SDU field for AIS traffic units is defined in [ITU-T G.8113.1].

The periodicity (as defined by MI_AIS_Period) is encoded in the three least significant bits of the Flags field in the AIS PDU using the values from Table 8-2.

8.6.3 LCK (Lock Reporting) Generate Process

[From TD458/3 or WD30] [Note: check if the text can be referred to G.8121]

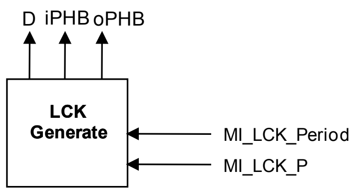

Figure 8-5 – LCK Generation process

The LCK Generation Process generates MT_CI traffic units where the MT_CI_D signal contains the LCK signal. Figure 8-6 defines the behaviour of the LCK Generation Process.

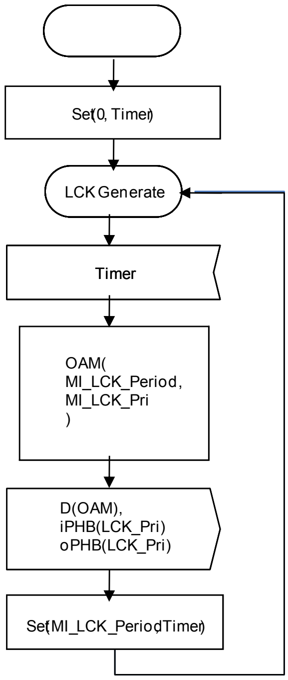

Figure 8-6 – LCK Generation behaviour

The LCK Generation Process continuously generates LCK Traffic Units; every time the Timer expires a LCK Traffic Unit will be generated. The period between two consecutive traffic units is determined by the MI_LCK_Period input signal. Allowed values are defined in Table 8-1.

Table 8-1 – LCK period values

3-bits	Period Value	Comments
000-011	Invalid Value	Invalid value for LCK PDUs
100	1s	1 frame per second
101	Invalid Value	Invalid value for LCK PDUs
110	1 min	1 frame per minute
111	Invalid Value	Invalid value for LCK PDUs

The MT_CI_D signal contains an M_SDU field. The format of LCK tunits is defined in [ITU-T G.topam].
The periodicity (as defined by MI_LCK_Period) is encoded in the three least significant bits of the Flags field in the LCK PDU using the values from Table 8-1.

The value of the MT_CI_PHB signal associated with the generated LCK traffic units is defined by the MI_LCK_Pri input parameter.

8.7 OAM related Processes used by adaptation functions

8.7.1 MCC/SCC Mapping Insert and De-mapping Process

See the clause 8.7.1in [ITU-T G.8121]

8.7.2 APS Insert and ExtractProcess

See the clause 8.7.2 in [ITU-T G.8121]

8.7.3 CSF Insert and Extract Process

See the clause 8.7.3 in [ITU-T G.8121]

8.8 Pro-active and on-demand OAM related Processes

[Note: check if the text can be referred to G.8121 and G.8021]

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8.8.1 CCM Process

[From TD458/3 or WD30]

8.8.1.1 Overview

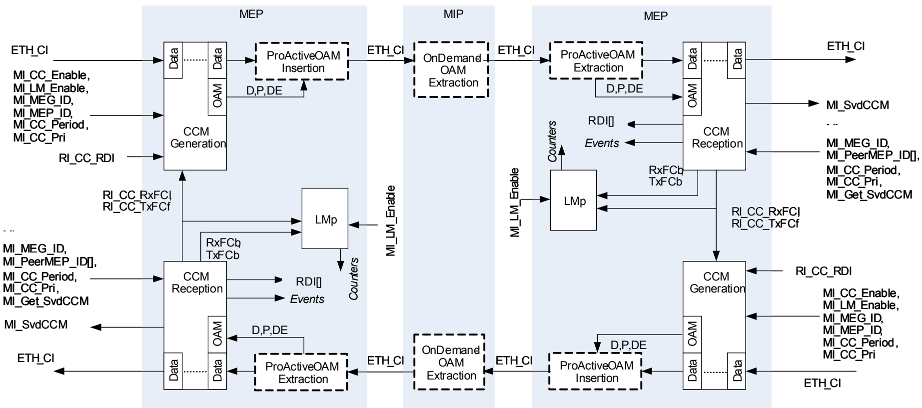

Figure 8-x – Overview of Processes involved with Continuity Check

Figure 8-x gives an overview of the processes involved in the CC. The CCM Generation process generates the CCM frames if MI_CC_Enable is true. The MI_MEG_ID and MI_MEP_ID are the MEG and MEP IDs of the MEP itself and these IDs are carried in the CCM frame. The CCM frames are generated with a periodicity determined by MI_CC_Period and with a priority determined by MI_CC_Pri. If MI_LM_Enable is set the CCM frames will also carry Loss Measurement information. The Generated CCM Traffic Units are inserted in the flow of MT_CI by the OAM MEP Source Insertion Process.

The CCM frames pass transparently through MIPs.

The OAM MEP Sink Extraction process extracts the CCM Unit from the flow of ETH_CI and the CCM Reception process processes the received CCM Traffic Unit. It compares the received MEG ID with the provisioned MI_MEG_ID, and the received MEP_ID with the provisioned MI_PeerMEP_ID[], that contains the list of all expected peer MEPs in the MEG. Based on the processing of this frame one or more events may be generated that serve as input for the Defect Detection Process (not shown in Figure 8-x).

RDI information is carried in the CCM frame based upon the RI_CC_RDI input. It is extracted in the CCM Reception Process.

8.8.1.2 CCM Generation Process

Figure 8-x shows the CCM Generation Process Symbol and Figure 8-x describes the behaviour.

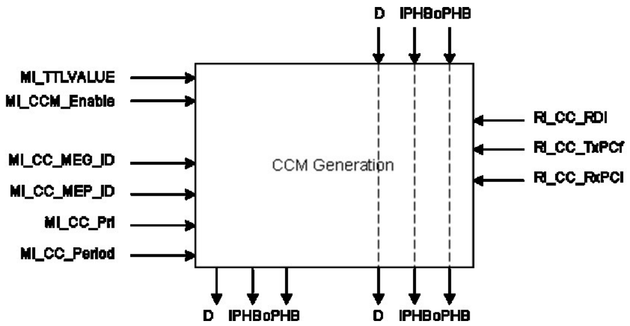

Figure 8-x/G.8121/Y.1381 – CCM Generation process symbol

This process generates MPLS-TP CI traffic units where MT_CI_D signal contains the CCM traffic units for pro-active monitoring and counts all data frames with PHB equal to MI_CCM_PHB (TxPCl).

The D, iPHB and oPHB signal are forwarded unchanged as indicated by the dotted lines in Figure 8-xx

The CC-V Generation process can be enabled and disabled using the MI_CCM_Enable signal.

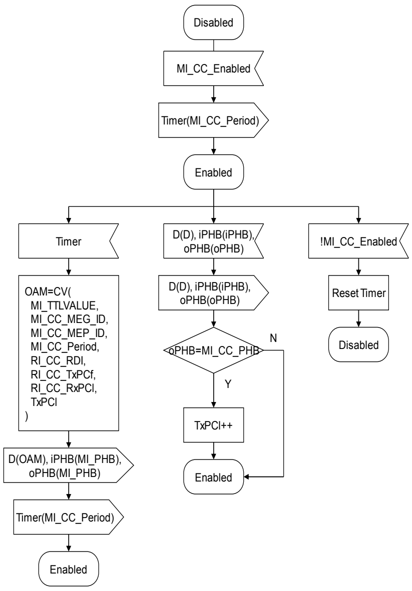

Figure 8-x/G.8121/Y.1381 – CCM Generation process

The period between the generating consecutive CCM traffic units is determined by the MI_CCM_Period parameter. Allowed values and the encoding of these values are defined in Table 8-3.

Table 8-3/G.8121/Y.1381 – CCM Period Values

MI_CV_Period	Period Value	Comments
000	Invalid Value	Invalid value for CC-V PDUs
001	3.33ms	300 frames per second
010	10ms	100 frames per second
011	100ms	10 frames per second
100	1s	1 frame per second
101	10s	6 frames per minute
110	1 min	1 frame per minute
111	10 min	6 frame per hour

[Note: G.tpoam introduces 3.3ms, 100ms, 1s only]

8.8.1.3 CCM Reception Process

Figure 8-7 shows the CCM Reception Process Symbol and Figure 8-8 describes the behaviour.

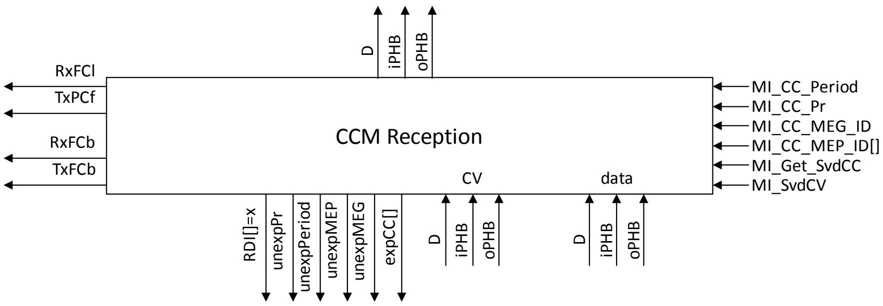

Figure 8-x/G.8121/Y.1381 – CCM Reception process Symbol

The CC-V reception process transparently forwards all the data frames and counts all data frames that have PHB (per-hop behaviour) equal to MI_CCM_PHB.

Furthermore the CCM reception process processes received CCM OAM traffic units. It checks the various fields of the OAM PDU and generates the corresponding events (as defined in clause 6).

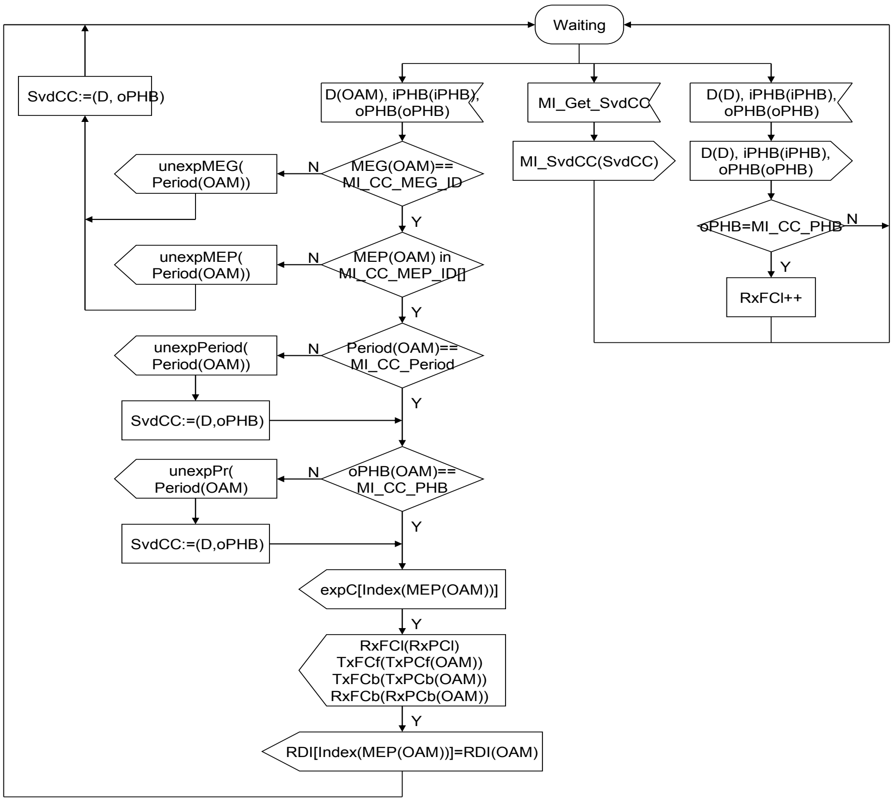

Figure 8-x/G.8121/Y.1381 – CCM Reception process

8.8.2 Loopback (LB) Process

[From TD458/3 or WD30]

8.8.2.1 Overview

Figure 8-21 shows the different processes inside MEPs and MIPs that are involved in the Loopback Protocol.

The MEP OnDemand-OAM Source insertion process is defined in clause 9.2.1.1, the MEP OnDemand-OAM Sink extraction process in clause 9.4.1.2, the MIP OnDemand-OAM Sink Extraction process in clause 9.2.1.2, and the MIP OnDemand-OAM Source insertion process in clause 9.4. In summary, they insert and extract MT_CI OAM signals into and from the stream of MT_CI_D Traffic Units. The other processes are defined into this clause.

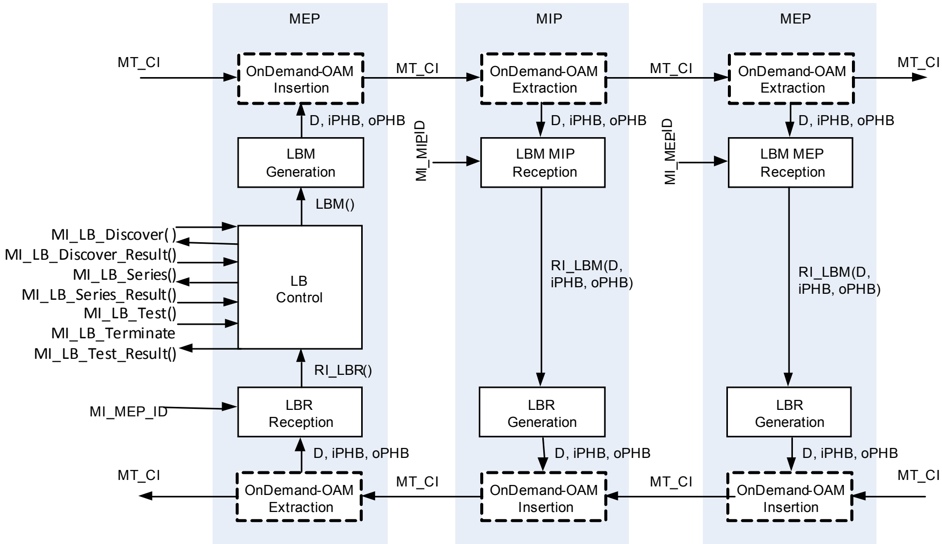

Figure 8-xx – Overview of Processes involved with Loopback
[MI_MEP_ID needs to be verified...]

The LBM Protocol is controlled by the LB Control Process. There are three possible MI signals that can trigger the LB protocol:

- MI_LB_Discover( )
- MI_LB_Series().
- MI_LB_Test()

The details are described later in this clause.

The LBM Control Protocol triggers the LBM Generation Process to generate an LBM Traffic Unit that is received and forwarded by MIPs and received by MEPs in the same MEG. The LBM Control process controls the number of LBM generated and the period between consecutive LBM Traffic Units.

The LBM MIP/MEP reception processes process the received LBM Traffic Units and as a result the LBR Generation Process may generate an LBR Traffic Unit in response. The LBR Reception Process receives and processes the LBR Traffic Units..

The LBM Control Process processes these received values to determine the result of the requested LB operation. The result is communicated back using the following MI signals:

- MI_LB_Discover_Result():.
- MI_LB_Series_Result()::
  - OO: Number of LBR Traffic Units that were received out of order (OO).
- MI_LB_Test_Result(): Reports back the total number of LBM frames sent (Sent) as well as the total number of LBR frames received (REC); for the latter counts of specific errors are reported:
  - CRC: Number of LBR frames where the CRC in the pattern failed.
  - BER: Number of LBR frames where there was a bit error in the pattern.

- OO: Number of LBR frames that were received out of order.

The detailed functionality of the various processes is defined below.

8.8.2.2 LB Control Process

8.8.2.3 LBM Generation Process

8.8.2.4 MIP LBM Reception Process

8.8.2.5 MEP LBM Reception Process

8.8.2.6 LBR Generation Process

8.8.2.7 LBR Reception Process

8.8.3 Loss Measurement (LM) Process

[From TD458/3 or WD30]

8.8.3.1 Overview

Figure 8-x shows the different processes inside MEPs and MIPs that are involved in the Loss Measurement Protocol.

The MEP OnDemand-OAM Source insertion process is defined in clause 9.2, the MEP OnDemand-OAM Sink extraction process in clause 9.2, the MIP OnDemand-OAM Sink Extraction process in clause 9.4, and the MIP OnDemand-OAM Source insertion process in clause 9.4. In summary, they insert and extract MT_CI OAM signals into and from the stream of MT_CI_D Traffic Units together with the complementing PHB signals going through an MEP and MIP.

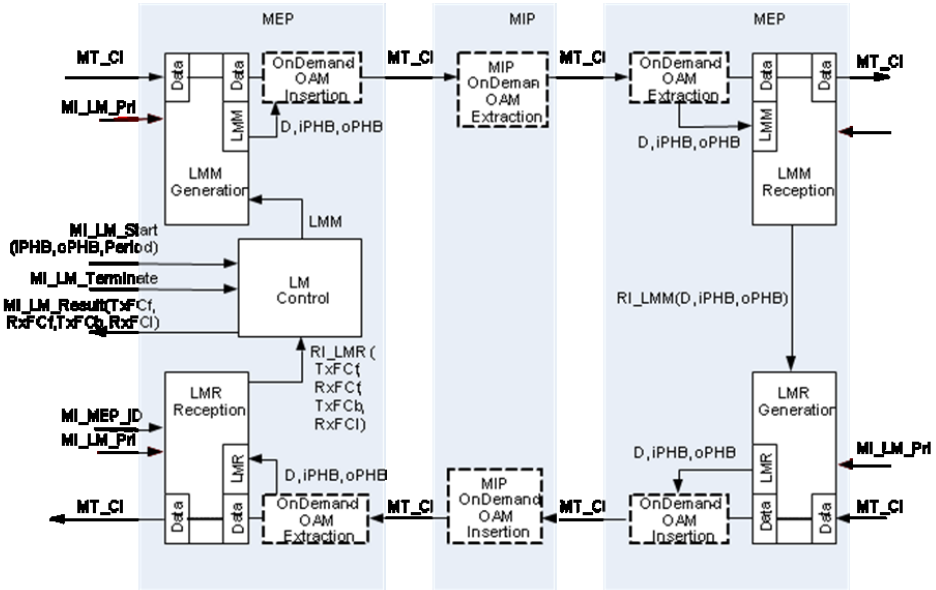

Figure 8-33 – Overview of Processes involved with Loss Measurement
[MI_MEP_ID needs to be verified...]

The LM control process controls the LM protocol. The protocol is activated upon receipt of the MI_LM_Start(iPHB, oPHB, Period) signal and remains activated until the MI_LM_Terminate signal is received.

The result is communicated via the MI_LM_Result(N_TF, N_LF, F_TF, F_LF) signal.

The LMM Generation Protocol generates an LMM Traffic Unit that passes transparently through MIPs, but that will be processed by the LMM Reception Process in MEPs. The LMR Generation Process generates an LMR Traffic Unit in response to the receipt of an LMM Traffic Unit. The LMR Reception process receives and processes the LMR Traffic Units.

The behaviour of the processes is defined below.

Note that the LMM Generation and LMR Generation Process are both part of the LMx Generation Process. Similarly the LMM Reception and the LMR Reception Process are both part of the LMx Reception Process.

8.8.3.2 LM Control Process

8.8.3.3 LMx Generation Process

8.8.3.4 LMx Reception Process

8.8.4 Delay Measurement (DM) Process

[From TD458/3 or WD30]

8.8.4.1 Overview

Figure 8-41 shows the different processes inside MEPs and MIPs that are involved in the Delay Measurement Protocol.

The MEP OnDemand-OAM Source insertion process is defined in clause 9.2, the MEP OnDemand-OAM Sink extraction process in clause 9.2, the MIP OnDemand-OAM Sink Extraction process in clause 9.4, and the MIP OnDemand-OAM Source insertion process in clause 9.4. In summary, they insert and extract MT_CI OAM signals into and from the stream of MT_C_D Traffic Units and the complementing PHB signals going through an MEP and MIP;

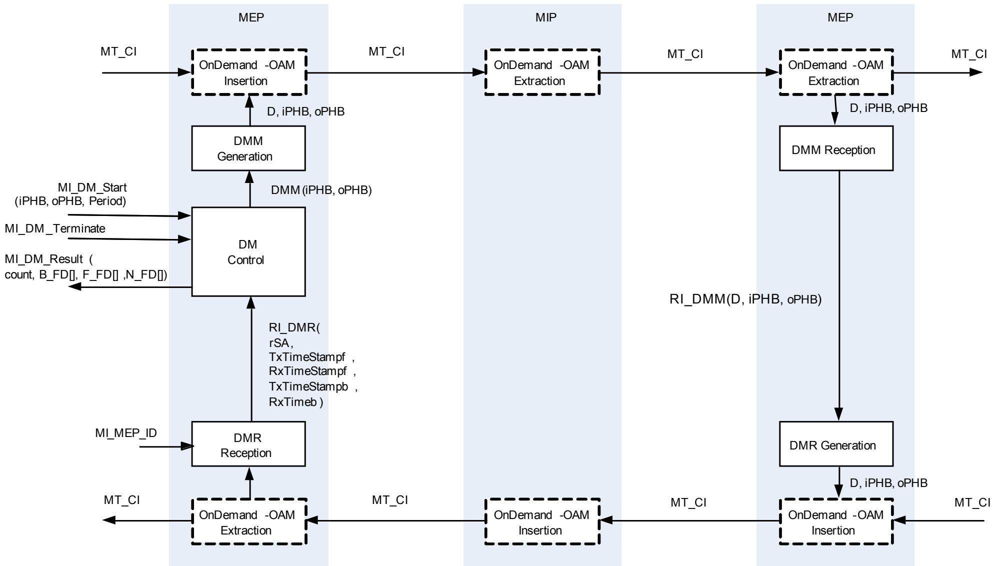

Figure 8-xx – Overview of Processes involved with Delay Measurement
[MI_MEP_ID needs to be verified...]

The DM control process controls the DM protocol. The protocol is activated upon receipt of the MI_DM_Start(DA,P,Period) signal and remains activated until the MI_DM_Terminate signal is received. The result is communicated via the MI_DM_Result(count, B_FD[], F_FD[] ,N_FD[]) signal.

The DMM generation process generates DMM Traffic Units that pass through MIPs transparently, but are received and processed by DMM Reception processes in MEPs. The DMR Generation process may generate a DMR Traffic Unit in response. This DMR Traffic Unit also passes transparently through MIPs, but is received and processed by DMR Reception processes in MEPs.

At the Source MEP side, the DMM generation process stamps the value of the Local Time to the TxTimeStampf field in the DMM message when the first bit of the frame is transmitted. Note well that at the sink MEP side, the DMM reception process stamps the value of the Local Time to the RxTimeStampf field in the DMM message when the last bit of the frame is received.

The DMR generation and reception process stamps with the same way as the DMM generation and reception process.

8.8.4.2 DM Control Process

8.8.4.3 DMM Generation Process

8.8.4.4 DMM Reception Process

8.8.4.5 DMR Generation Process

8.8.4.6 DMR Reception Process

8.8.5 One Way Delay Measurement (1DM) Process

[From TD458/3 or WD30]

8.8.5.1 8.1.11.1 Overview

Figure 8-x shows the different processes inside MEPs and MIPs that are involved in the One Way Delay Measurement Protocol.

The MEP OnDemand-OAM Source insertion process is defined in clause 9.2, the MEP OnDemand-OAM Sink extraction process in clause 9.2, the MIP OnDemand-OAM Sink Extraction process in clause 9.4, and the MIP OnDemand-OAM Source insertion process in clause 9.4. In summary, they insert and extract MT_CI OAM signals into and from the stream of MT_CI_D Traffic Units and the complementing PHB signals going through an MEP and MIP.

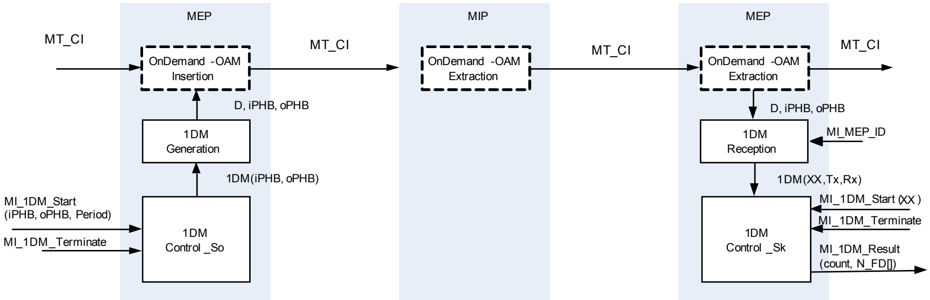

Figure 8-xx – Overview of Processes involved with One Way Delay Measurement [MEP_ID and XX need to be verified]

The 1DM protocol is controlled by the 1DM Control_So and 1DM Control_Sk processes. The 1DM Control_So process triggers the generation of 1DM Traffic Units upon the receipt of an MI_1DM_Start(iPHB, oPHB, Period) signal. The 1DM Control_Sk process processes the information from received 1DM Traffic Units after receiving the MI_1DM_Start(iPHB, oPHB, Period) signal.

The 1DM generation process generates 1DM messages that pass transparently through MIPs and are received and processed by the 1DM Reception Process in MEPs.

At the Source MEP side, The 1DM generation process stamps the value of the Local Time to the TxTimeStampf field in the 1DM message when the first bit of the frame is transmitted. Note well that at the sink MEP side, the 1DM reception process records the value of the Local Time when the last bit of the frame is received.

8.8.5.2 DM Control_So Process

8.8.5.3 DM Generation Process

8.8.5.4 DM Reception Process

8.8.5.5 DM Control_Sk Process

8.8.6 Test (TST) Process

[From TD458/3 or WD30]

8.8.6.1 Overview

Figure 8-xx shows the different processes inside MEPs and MIPs that are involved in the Test Protocol.

The MEP OnDemand-OAM Source insertion process is defined in clause 9.2, the MEP OnDemand-OAM Sink extraction process in clause 92, the MIP OnDemand-OAM Sink Extraction process in clause 9.4, and the MIP OnDemand-OAM Source insertion process in clause 9.4. In summary, they insert and extract MT_CI OAM signals into and from the stream of MT_CI_D Traffic Units together with the complementing PHB signals going through an MEP and MIP.

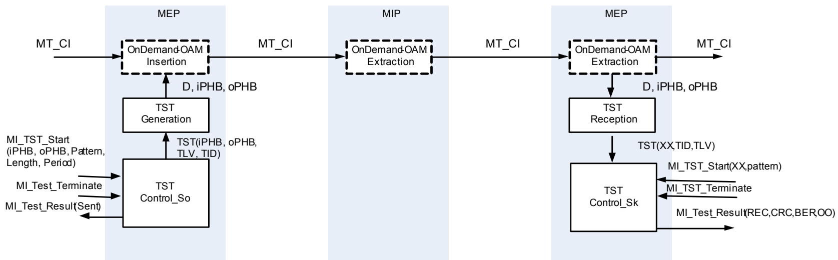

Figure 8-xx – Overview of Processes involved with Test Protocol
[MEP_ID and XX need to be verified]

The TST protocol is controlled by the TST Control_So and TST Control_Sk processes. The TST Control_So process triggers the generation of TST Traffic Units after the receipt of an MI_TST_Start (iPHB, oPHB, Pattern, Length, Period) signal. The TST Control_Sk process processes the information from received TST Traffic Units after receiving the MI_TST_Start (Pattern) signal.

The TST generation process generates TST messages that pass transparently through MIPs and are received and processed by the TST Reception Process in MEPs.

The processes are defined below.

8.8.6.2 TST Control_So Process

8.8.6.3 TST Generation Process

8.8.6.4 TST Reception Process

8.8.6.5 TST Control_Sk Process

9 MPLS-TP processes

9.1 Connection Functions (MT_C)

See the clause 9 in [ITU-T G.8121]

9.1.1 Sub-network connection protection process

See the clause 9 in [ITU-T G.8121]

9.2 Termination functions

9.2.1 MPLS-TP Trail Termination function (MT_TT)

[Editor's note: Contributions invited]

The bidirectional MPLS-TP Trail Termination (MT_TT) function terminates the MPLS-TP OAM to determine the status of the MPLS-TP (sub)layer trail. The MT_TT function is performed by a co-located pair of the MPLS-TP trail termination source (MT_TT_So) and sink (MT_TT_Sk) functions as shown in Figure 9-a1.

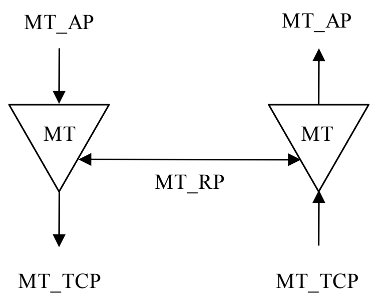

Figure 9-a1/G.8121.1/Y.1381.1 – MT_TT

9.2.1.1 MPLS-TP Trail Termination Source function (MT_TT_So)

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The MT_TT_So function determines and inserts the TTL value in the shim header TTL field and adds MPLS-TP OAM for pro-active monitoring to the MT_AI signal at its MT_AP.

The information flow and processing of the MT_TT_So function is defined with reference to Figure9-a2.

• Symbol:

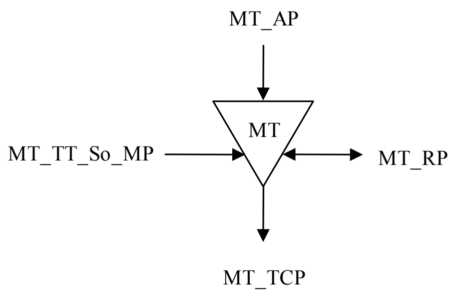

Figure9-a2/G.8121.1/Y.1381.1 –MT_TT_So function

• Interfaces:

Table 9-a1/G.8121.1/Y.1381.1 – MT_TT_So inputs and outputs

Input(s)	Output(s)
MT_AP: **MT_RP:**) **MT_TT_So_MP:** **MT_TP:**	**MT_CP:** **MT_RP:**

• Processes:

The processes associated with the MT_TT_So function are as depicted in Figure 9-a3.

<Figure>

Figure xx/G.8121/Y.1381 –MT_TT_So process diagram

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• Defects:

None.

• Consequent actions:

None.

• Defect correlations:

None.

• Performance monitoring:

None.

9.2.1.2 MPLS-TP Trail Termination Sink function (MT_TT_Sk)

The MT_TT_Sk function reports the state of the MPLS-TP Trail (Network Connection). It extracts MPLS-TP trail OAM - for pro-active monitoring - from the MPLS-TP signal at its MT_TCP, detects defects, counts during 1-second periods errors and defects to feed Performance Monitoring when connected and forwards the defect information as backward indications to the companion MT_TT_So function.

Note – The MT_TT_Sk function extracts and processes one level of MPLS-TP OAM irrespective of the presence of more levels.

The information flow and processing of the MT_TT_Sk function is defined with reference to Figure 9-a4.

• Symbol:

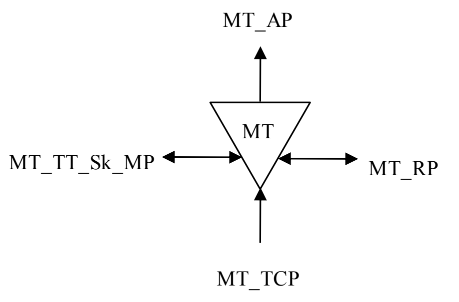

Figure 9-a4/G.8121.1/Y.1381.1 – MT_TT_Sk function

• Interfaces:

Table 9-2/G.8121.1/Y.1381.1 – MT_TT_Sk inputs and outputs

Input(s)	Output(s)
MT_TCP:	MT_AP:

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Input(s)	Output(s)
MT_RP: MT_TT_Sk_MP: MT_TP:	MT_RP: MT_TT_Sk_MP:]

• Processes:

The processes associated with the MT_TT_Sk function are as depicted in Figure xx.

<Figure>

Figure xx/G.8121.1/Y.1381.1 – MT_TT_Sk process diagram

• Defects:

ffs

• Consequent actions:

ffs

• Defect correlations:

ffs

• Performance monitoring:

Ffs.

9.3 Adaptation functions

9.3.1 MPLS-TP to MPLS-TP adaptation function (MT/MT_A)

This atomic functions are defined in clause 9.3.1 in G.8121. They use the OAM protocol specific AIS insertion process and LCK generation process as defined in clause 8.6.2 and 8.6.3.

9.4 MT Diagnostic Function

9.4.1 MT Diagnostic Trail Termination Functions for MEPs (MTDe)

[Editor's note: Contributions invited]

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9.4.1

The bidirectional MTDe Flow Termination (MTDe_TT) function is performed by a co-located pair of MTDe flow termination source (MTDe_TT_So) and sink (MTDe_TT_Sk) functions as shown in Figure 9-c1.

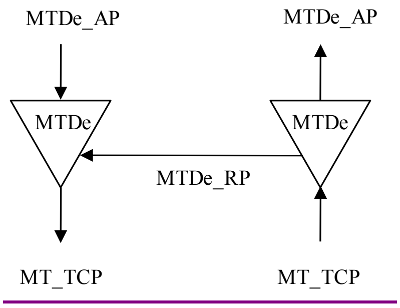

Figure 9-c1/G.8121/Y.1381 – MTDe_TT

9.4.1.1 MT Diagnostic Flow Termination Source Function for MEPs (MTDe_FT_So)

[Editor's note: Contributions invited]

The MTDe_FT_So Process diagram is shown in Figure 9-c2.

Symbol

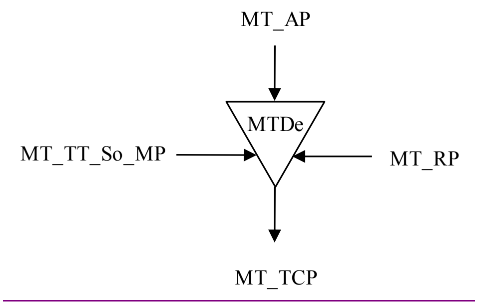

Figure 9-c2 – MTDe_TT_So symbol

Interfaces

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Table 9-c1 – MTDe_TT_So interfaces

Input(s)	Output(s)
MTDe_AP:	**MT_CP:**
MTDe_RP:	**MT_RP:**
MTDe_TT_So_MP:	**MTDe_TT_So_MP:**
MTDe_TT_So_TP:	

Processes

<Figure>

Figure 9-c3 – MTDe_FT_So Process

Defects None.

Consequent actions None.

Defect correlations None.

Performance monitoring None.

9.4.1.2 MT Diagnostic Trail Termination Sink Function for MEPs (MTDe_TT_Sk)

Symbol

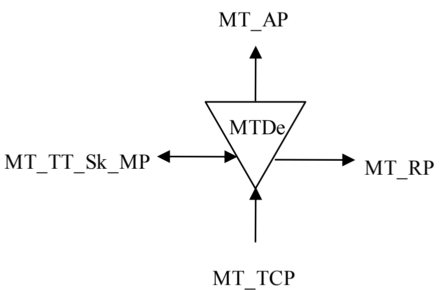

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Figure 9-c4 – MTDe_TT_Sk symbol

Interfaces

Table 9-c2 – MTDe_TT_Sk interfaces

Input(s)	Output(s)
MT_TCP: MT_RP: MTDe_TT_Sk_MP: MTDe_TP:	MTDe_AP: MTDe_RP: MTDe_FT_Sk_MP:

Processes

<Figure>

Figure 9-c5 – MTDe_TT_Sk Process

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Defects None

Consequent actions None

Defect correlations None

Performance monitoring None

9.4.2 MT Diagnostic Flow Termination Functions for MIPs

[Ed note: Contributions ~~invited~~ invited~~*Need to define only MTDi_TT. MTDi/MT_A will refer to G.8121*~~*]*

9.4.2.1 MT Diagnostic Trail Termination Functions for MIPs

The MTDi/MT adaptation function is an empty function; it is included to satisfy the modelling rules.

The bidirectional MTD/MT adaptation function is performed by a co-located pair of MTDi/MT adaptation source (MTDi/MT_A_So) and sink (MTDi/MT_A_Sk) functions.

9.4.2.1.1 MT Diagnostic Trail Termination Source Function for MIPs (MTDi_TT_So)

Symbol

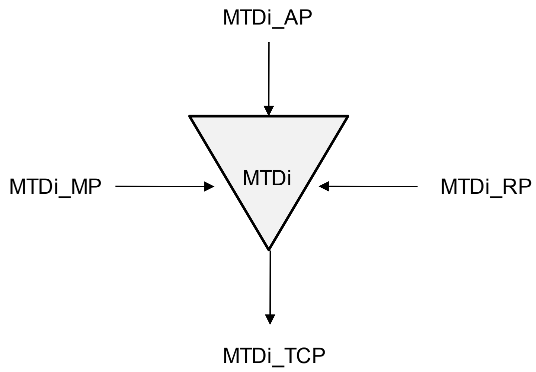

Figure 9-x1 – MTDi_TT_So symbol

Interfaces

Table 9-y1 – MTDi_TT_So interfaces

Inputs	Outputs
MTDi_AP MTDi_RP MTDi_TT_So_MP	MTDi_TCP

Processes

<Figure>

Figure 9-x2 – MTDi_TT_So Process

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Defects None.

Consequent actions None.

Defect correlations None.

Performance monitoring None.

9.4.2.1.2 MT Diagnostic Trail Termination Sink Function for MIPs (MTDi_TT_Sk)

Symbol

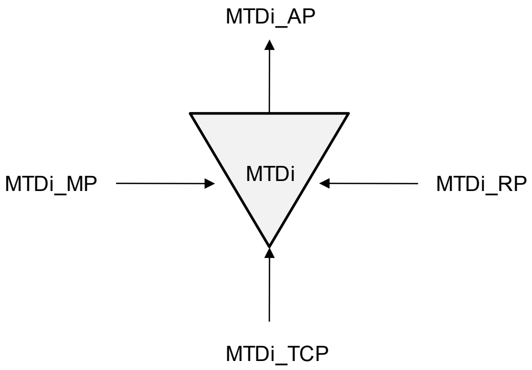

Figure 9-x3 – MTDi_TT_Sk symbol

Interfaces

Table 9-y2 – MTDi_TT_Sk interfaces

Inputs	Outputs
MTDi_TCP **MTDi_TT_Sk_MP**	**MTDi_AP** MTDi_RP

Processes

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<Figure>

Figure 9-x4 – MTDi_TT_Sk Process

Defects None.

Consequent actions None.

Defect correlations None.

Performance monitoring None.

9.4.2.2 MTDi to MT Adaptation functions (MTDi/MT_A)

These atomic functions are defined in clause 9.4.2.2 in G.8121.

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10 MPLS-TP to Non-MPLS-TP client adaptation functions

This atomic functions are defined in clause 10 in G.8121.

11 Non-MPLS-TP Server to MPLS-TP adaptation functions

These atomic functions are defined in clause 11 in G.8121. They use the OAM protocol specific AIS insertion process and LCK generation process as defined in clause 8.6.2 and 8.6.3.