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Abstract

This document provides Draft Corrigendum 1 to G.8121.2 (2016). The updates consist of wd1014-24r1 and the agreement per C.1928.

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Annex

Corrigendum 1 to Recommendation ITU-T G.8121.2/Y.1381.2

Characteristics of MPLS-TP equipment functional blocks supporting ITU-T G.8113.2/Y.1372.2 OAM mechanisms: Corrigendum 1

Summary

Corrigendum 1 to Recommendation ITU-T G.8121.2/Y.1381.2 (2016):

- Clarifies the configuration of MI_CC_Enable and MI_CVp_Enable
- Adds missing "OAM Tool" MIs for AIS and LCK at MT_TT_Sk
- Removes irrelevant indexes in a few "OAM Tool" MIs

Corrigendum 1 to Recommendation ITU-T G.8121.2/Y.1381.2

Characteristics of MPLS-TP equipment functional blocks supporting ITU-T G.8113.2/Y.1372.2 OAM mechanisms: Corrigendum 1

1) Scope of Corrigendum 1

This corrigendum:

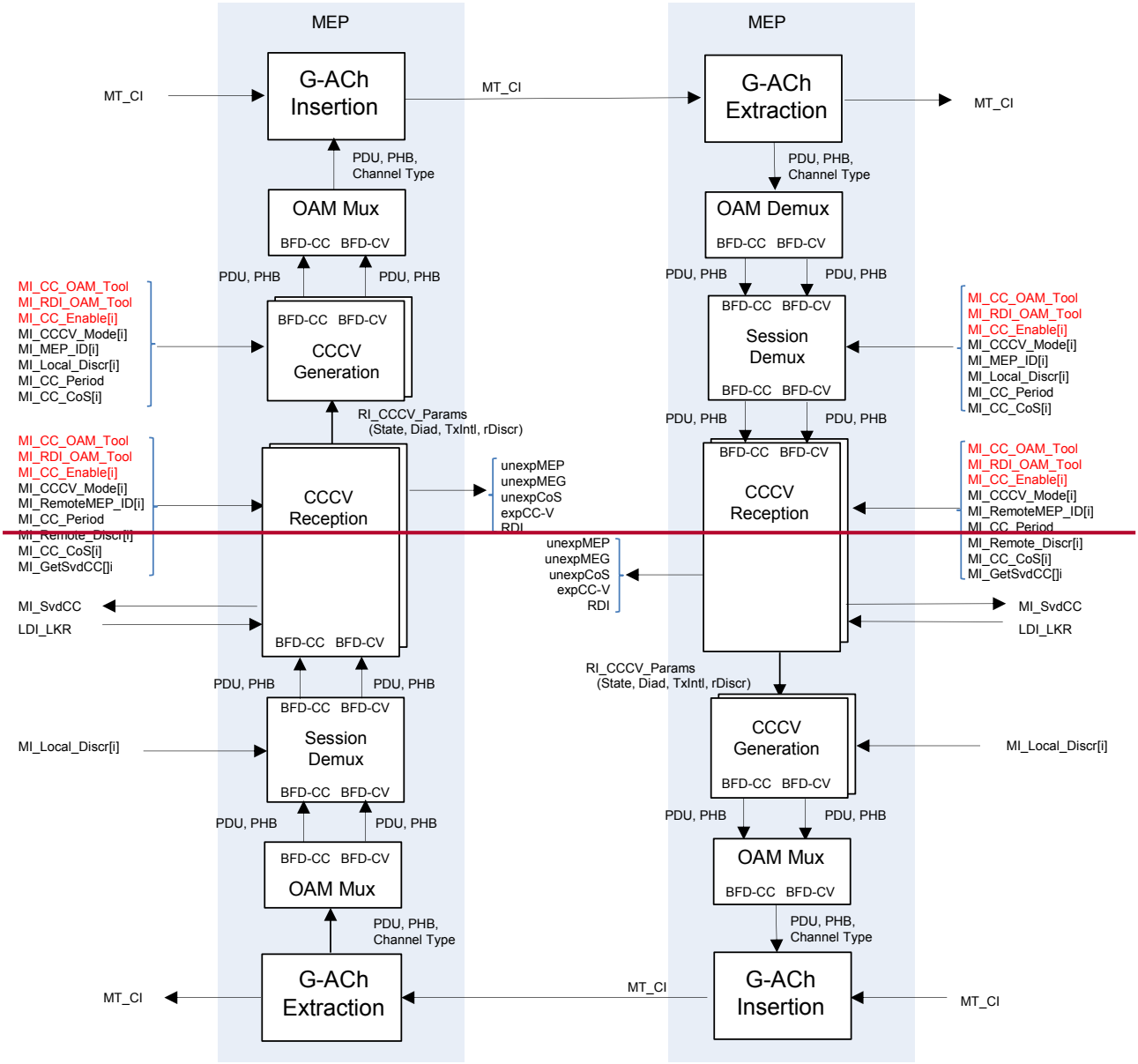
- Clarifies the configuration of MI_CC_Enable and MI_CVp_Enable
- Adds missing "OAM Tool" MIs for AIS and LCK at MT_TT_Sk
- Removes irrelevant indexes in a few "OAM Tool" MIs

2) Clause 8.8.1, Proactive Continuity Check and Connectivity Verification (CC/CV)

Update clause 8.8.1 as indicated:

8.8.1. CC/CV Processes

An overview of the CC/CV processes is shown in the Figure 8-4 below:


MEP
MEP
MT_CI
G-ACh Insertion
MT_CI
G-ACh Extraction
MT_CI
PDU, PHB, Channel Type
PDU, PHB, Channel Type
OAM Mux
BFD-CC BFD-CV
OAM Demux
BFD-CC BFD-CV
PDU, PHB
PDU, PHB
PDU, PHB
PDU, PHB
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CC_Enable[i]
MI_CCCV_Mode[i]
MI_MEP_ID[i]
MI_Local_Discr[i]
MI_CC_Period
MI_CC_CoS[i]
BFD-CC BFD-CV
CCCV Generation
BFD-CC BFD-CV
Session Demux
BFD-CC BFD-CV
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CC_Enable[i]
MI_CCCV_Mode[i]
MI_MEP_ID[i]
MI_Local_Discr[i]
MI_CC_Period
MI_CC_CoS[i]
RI_CCCV_Params
(State, Diad, TxIntl, rDiscr)
PDU, PHB
PDU, PHB
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CC_Enable[i]
MI_CCCV_Mode[i]
MI_RemoteMEP_ID[i]
MI_CC_Period
MI_Remote_Discr[i]
MI_CC_CoS[i]
MI_GetSvdCC[]i
CCCV Reception
unexpMEP
unexpMEG
unexpCoS
expCC-V
RDI
BFD-CC BFD-CV
BFD-CC BFD-CV
unexpMEP
unexpMEG
unexpCoS
expCC-V
RDI
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CC_Enable[i]
MI_CCCV_Mode[i]
MI_RemoteMEP_ID[i]
MI_CC_Period
MI_Remote_Discr[i]
MI_CC_CoS[i]
MI_GetSvdCC[]i
MI_SvdCC
LDI_LKR
MI_SvdCC
LDI_LKR
PDU, PHB
PDU, PHB
RI_CCCV_Params
(State, Diad, TxIntl, rDiscr)
BFD-CC BFD-CV
Session Demux
BFD-CC BFD-CV
MI_Local_Discr[i]
CCCV Generation
BFD-CC BFD-CV
MI_Local_Discr[i]
PDU, PHB
PDU, PHB
PDU, PHB
PDU, PHB
BFD-CC BFD-CV
OAM Mux
BFD-CC BFD-CV
OAM Mux
PDU, PHB, Channel Type
PDU, PHB, Channel Type
MT_CI
G-ACh Extraction
MT_CI
G-ACh Insertion
MT_CI

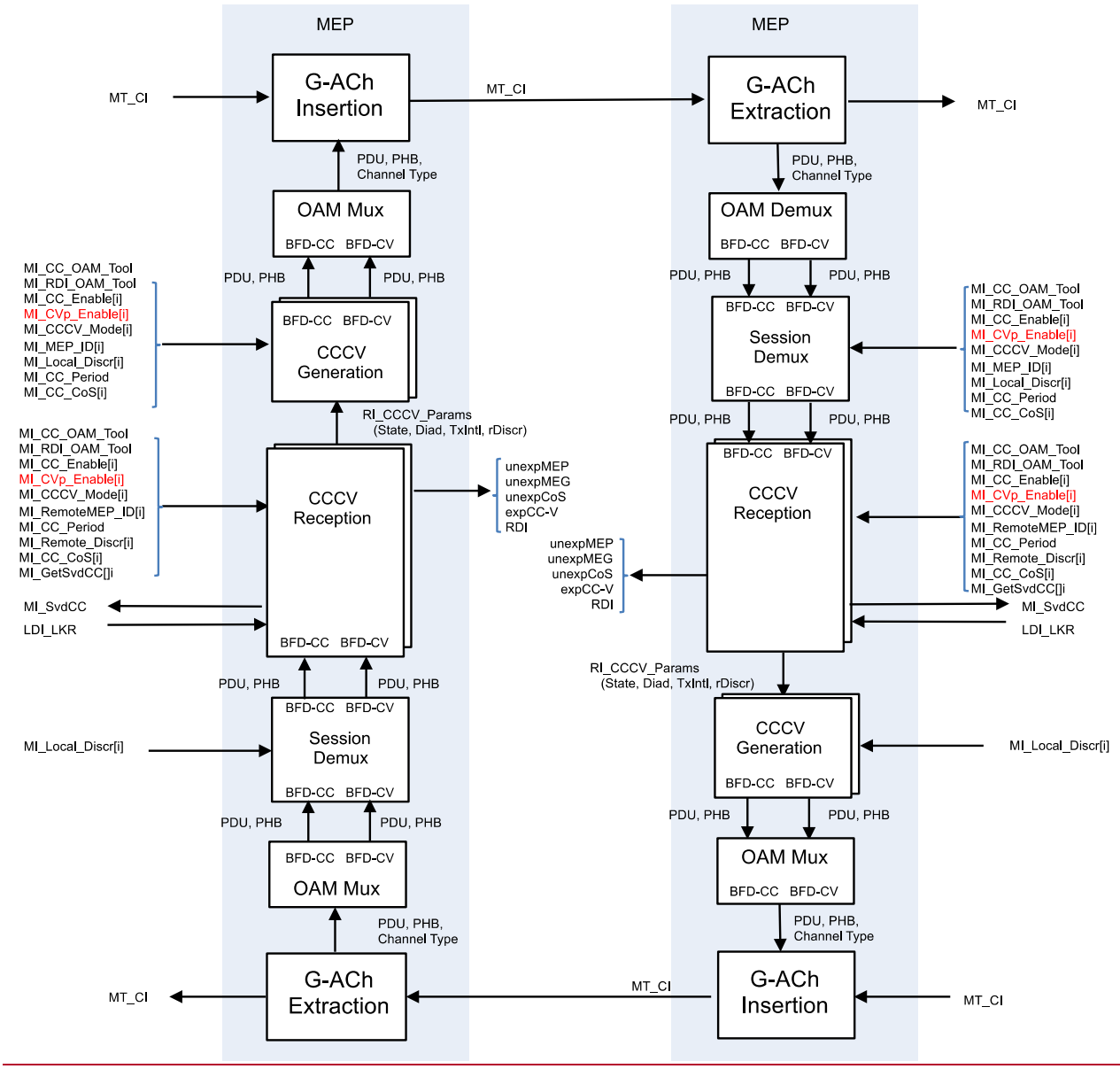


Figure 8-4/G.8121.2/Y.1381.2 – Overview of CC/CV processes

The CCCV reception process controls the operation of the CCCV protocol. It operates when MI_CC_Enable and MI_CVp_Enable are~~is~~ TRUE, according to the value of MI_CCCV_Mode. MI_CCCV_Mode takes one of the following values:

- COORD – Coordinated mode; operate a single co-ordinated BFD session
- SRC – Independent Source; operate as the source MEP in an independent BFD session
- SINK – Independent Sink; operate as the sink MEP in an independent BFD session

Note- [RFC 6428] defines two modes for bidirectional LSPs operation, i.e. Coordinated mode and Independent mode. In independent mode, separate sessions are used for each direction and a given MEP operates as the source for one session and the sink for the other session. Thus, there are three possible values for MI_CCCV_Mode as shown above.

Multiple instances of the CCCV reception process may be created for multiple BFD sessions; when operating in independent mode, it is expected that a pair of instances are created, one acting as the source and one as the sink.

MI_CC_Period specifies the desired period between successive BFD-CC messages, and MI_PeerMEP_ID specifies the MEP ID value to expect in received messages, in one of the formats described in [RFC 6428].

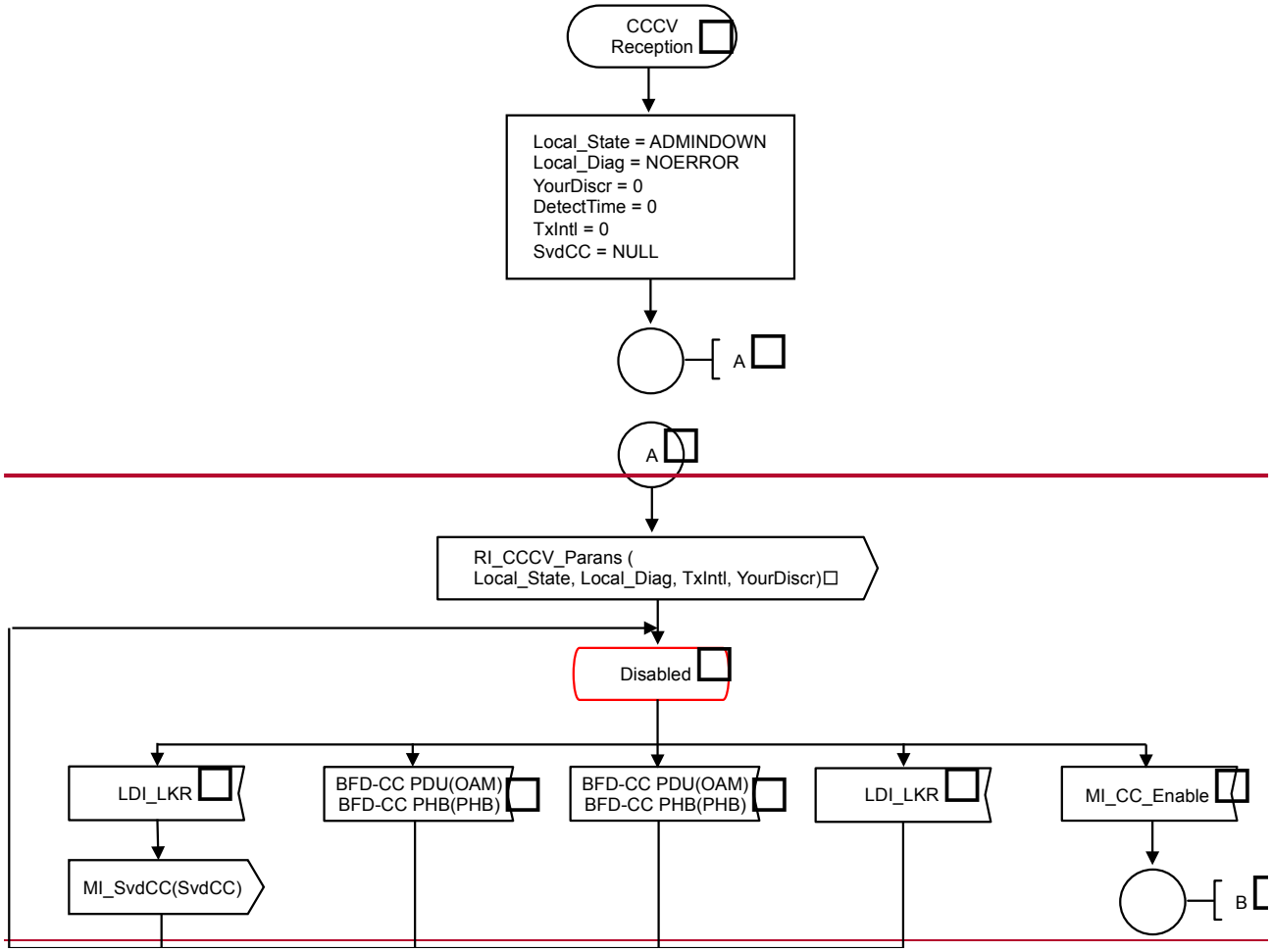
The CCCV generation process sends periodic BFD-CC and BFD-CV messages, when MI_CC_Enable and MI_CVp_Enable are~~is~~ TRUE. There is a separate instance of the process for each corresponding instance of the CCCV reception process. MI_MEP_ID and MI_Local_Discr specify the local MEP ID (in one of the formats described in [RFC 6428]) and session discriminator values to send in the packets.

The Session Demux process demultiplexes received BFD-CC and BFD-CV messages to the correct instance of the CCCV reception process, based on the "Your discriminator" field in the received BFD-CC or BFD-CV packet. Demultiplexing of received packets where the "Your discriminator" field is 0 is for further study.

8.8.1.1. CCCV Reception Process

The CCCV Reception Process controls the operation of the BFD protocol, according to MI_CC_Enable, MI_CVp_Enable and MI_CCCV_Mode. Multiple instances of the CCCV Reception Process can be instantiated. Each one has a corresponding instance of the CCCV Generation Process; the contents and period for sending CCCV packets are controlled via the RI_CCCV_Params(state, diag, TX-interval,your-discriminator) signal.

The CCCV Reception Process is described in Figure 8-5a, Figure 8-5b, and Figure 8-5c. In Disabled state, all received BFD-CC and BFD-CV packets are discarded and no packets are sent. In Enabled state, received BFD-CC packets are processed, and received BFD-CV packets are processed when the BFD state machine is UP. BFD-CC and BFD-CV packets are sent, except if the process is operating in SINK mode. When MI_CC_Enabled and MI_CVp_Enable are~~is~~ set to FALSE, the process moves to Disabling state so that the ADMIN_DOWN diagnostic code can be signalled to the peer MEP. The process stays in Disabling state for three times the transmit interval, before moving to Disabled state. In Disabling state, BFD-CC packets are sent, but received BFD-CC and BFD-CV packets are used only for updating the timer.


CCCV
Reception
Local_State = ADMINDOWN
Local_Diag = NOERROR
YourDiscr = 0
DetectTime = 0
TxIntl = 0
SvdCC = NULL
A
A
RI_CCCV_Parans (
Local_State, Local_Diag, TxIntl, YourDiscr)
Disabled
LDI_LKR
BFD-CC PDU(OAM)
BFD-CC PHB(PHB)
BFD-CC PDU(OAM)
BFD-CC PHB(PHB)
LDI_LKR
MI_CC_Enable
MI_SvdCC(SvdCC)
B

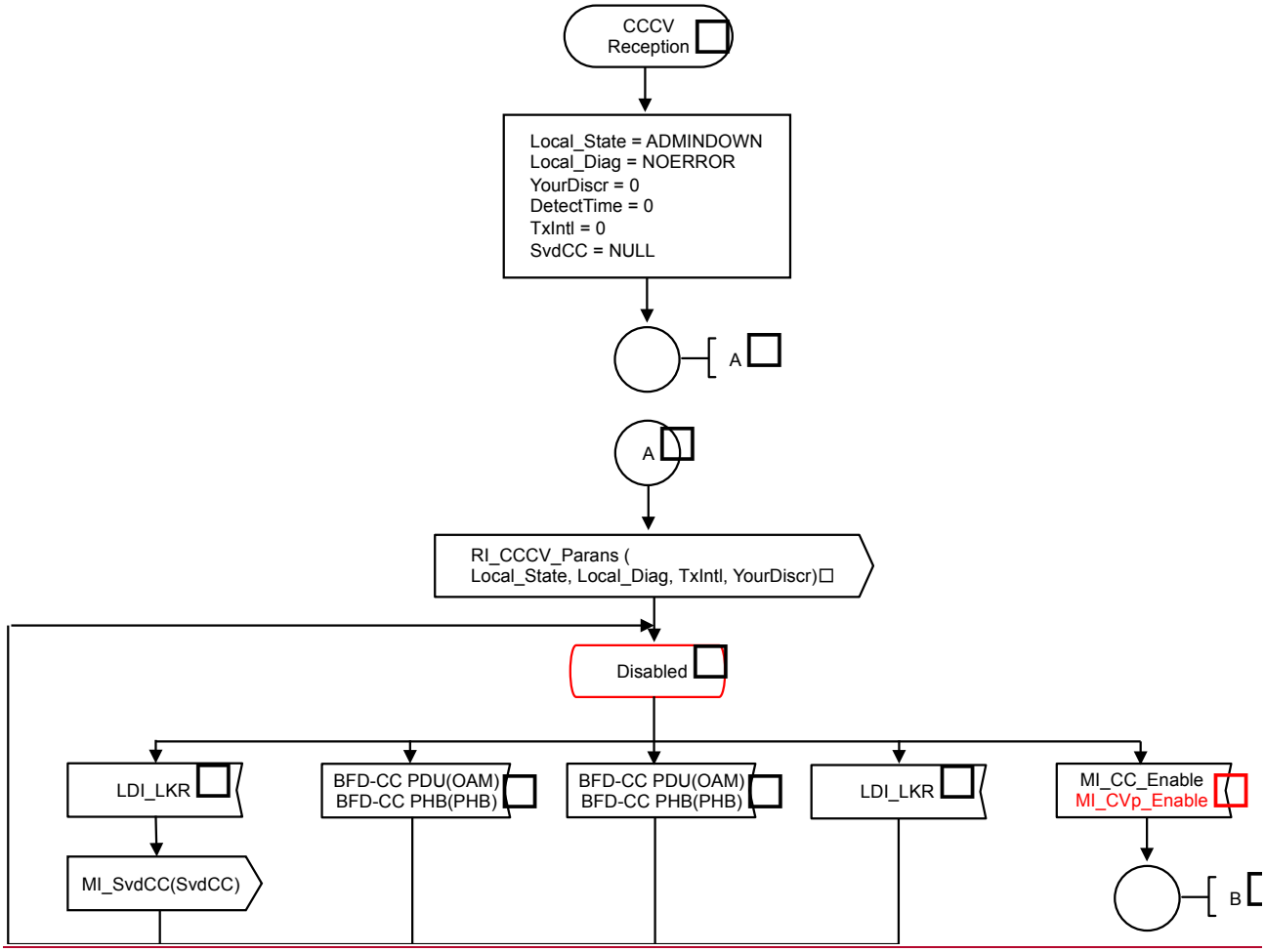
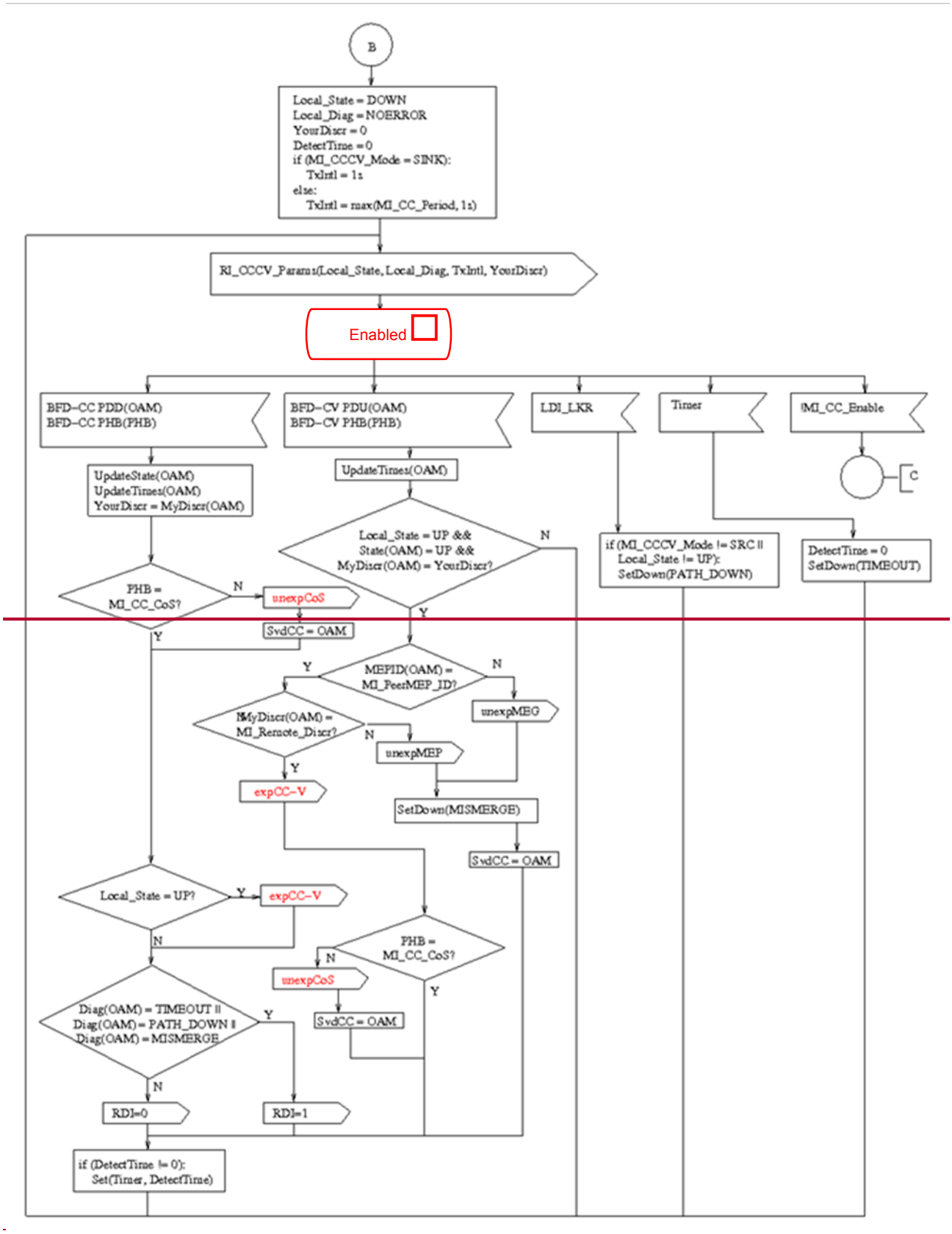


Figure 8-5a/G.8121.2/Y.1381.2 - CCCV Reception Process


B
Local_State = DOWN
Local_Diag = NOERROR
YourDiscr = 0
DetectTime = 0
if (MI_CCCV_Mode = SINK):
TxIntl = 1s
else:
TxIntl = max(MI_CC_Period, 1s)
RI_CCCV_Params(Local_State, Local_Diag, TxIntl, YourDiscr)
Enabled
BFD-CC PDD(OAM)
BFD-CC PHB(PHB)
BFD-CV PDU(OAM)
BFD-CV PHB(PHB)
LDI_LKR
Timer
MI_CC_Enable
C
UpdateState(OAM)
UpdateTimes(OAM)
YourDiscr = MyDiscr(OAM)
UpdateTimes(OAM)
Local_State = UP &&
State(OAM) = UP &&
MyDiscr(OAM) = YourDiscr?
N
Y
if (MI_CCCV_Mode != SRC ||
Local_State != UP):
SetDown(PATH_DOWN)
DetectTime = 0
SetDown(TIMEOUT)
PHB =
MI_CC_CoS?
N
unexpCoS
SvdCC = OAM
Y
MEPID(OAM) =
MI_PeerMEP_ID?
Y
N
unexpMEG
MyDiscr(OAM) =
MI_Remote_Discr?
N
unexpMEP
Y
expCC-V
SetDown(MISMERGE)
SvdCC = OAM
Local_State = UP?
Y
expCC-V
N
PHB =
MI_CC_CoS?
N
unexpCoS
Y
SvdCC = OAM
Diag(OAM) = TIMEOUT ||
Diag(OAM) = PATH_DOWN ||
Diag(OAM) = MISMERGE
Y
N
RDI=0
RDI=1
if (DetectTime != 0):
Set(Timer, DetectTime)

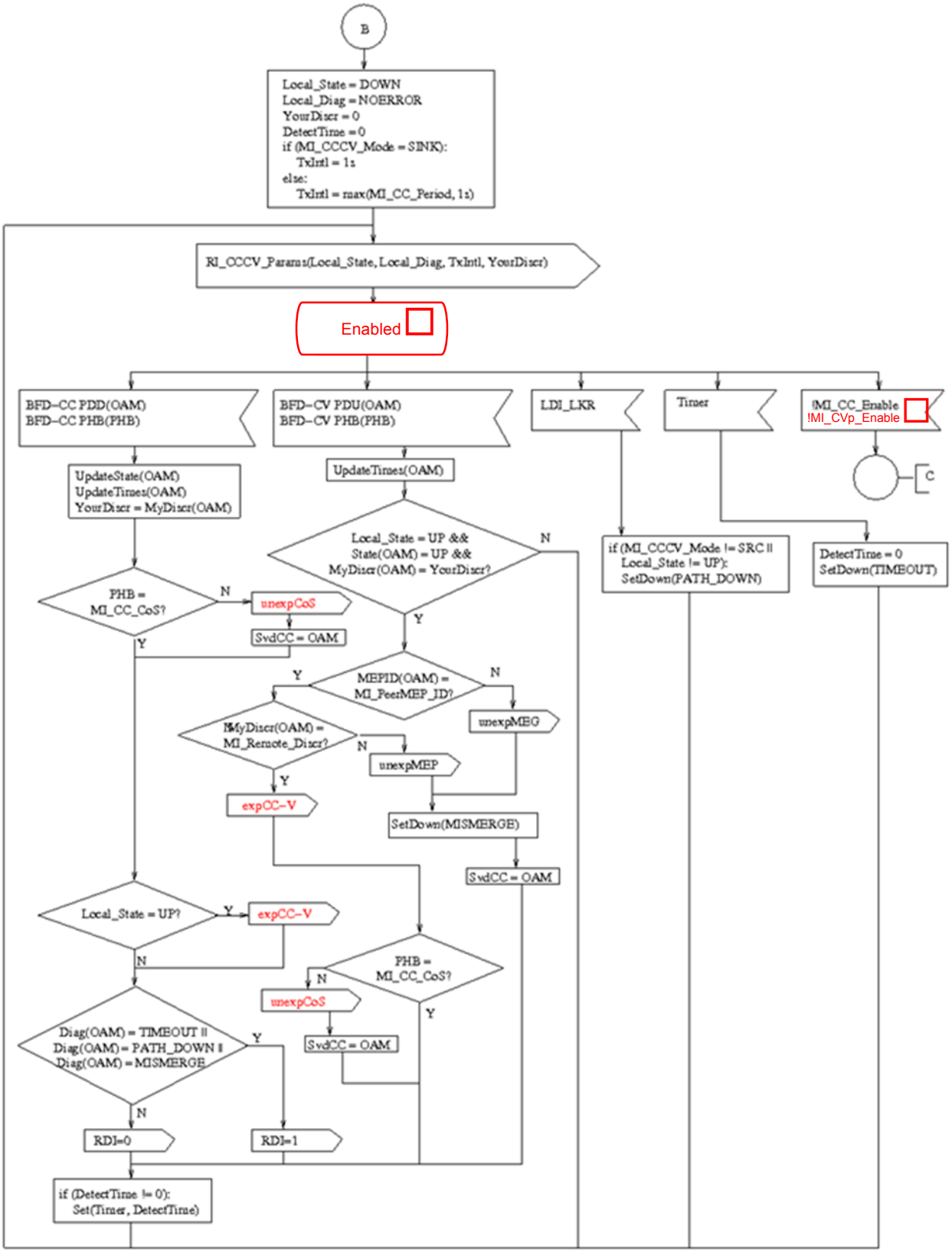


Figure 8-5b/G.8121.2/Y.1381.2 - CCCV Reception Process

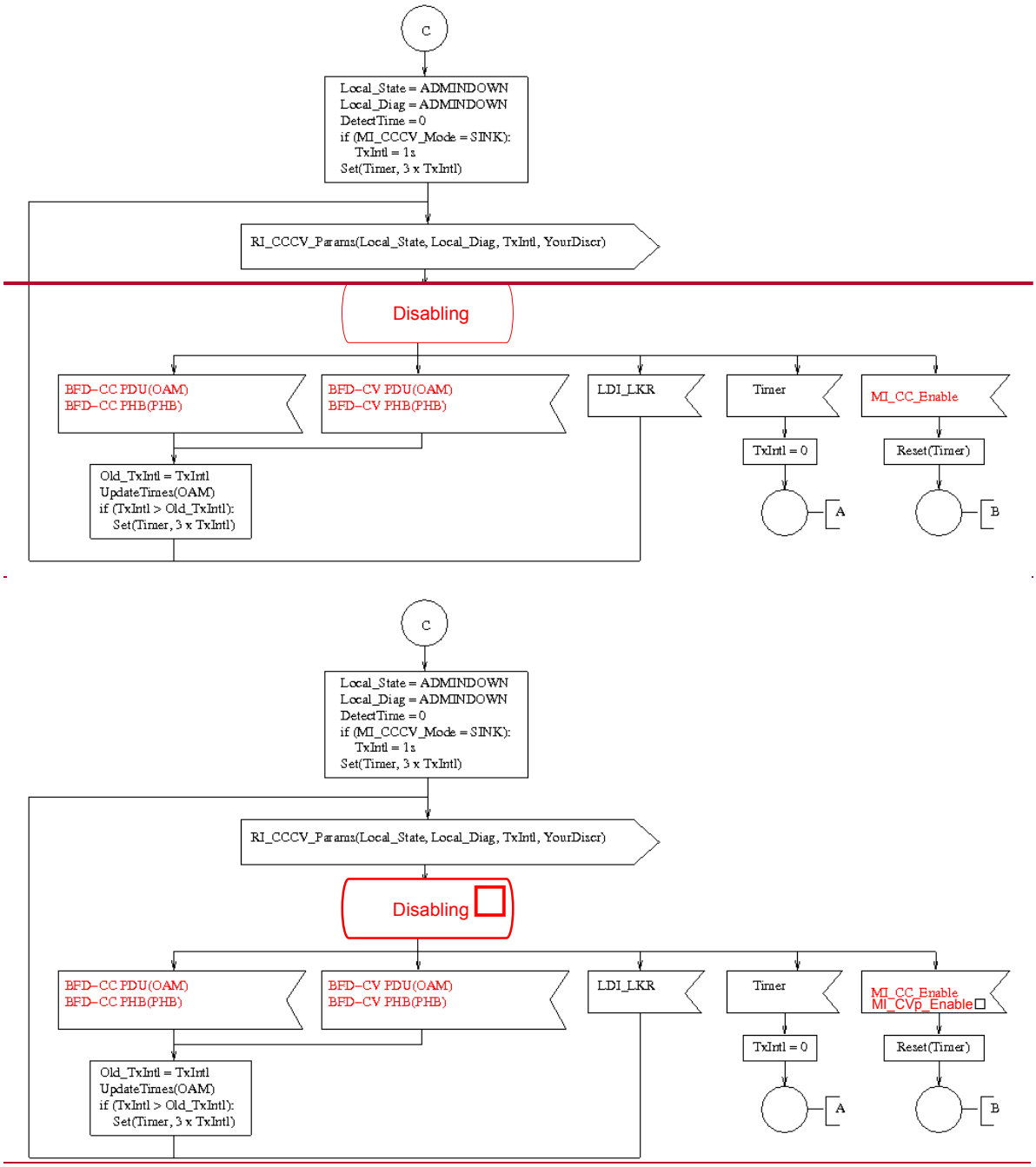
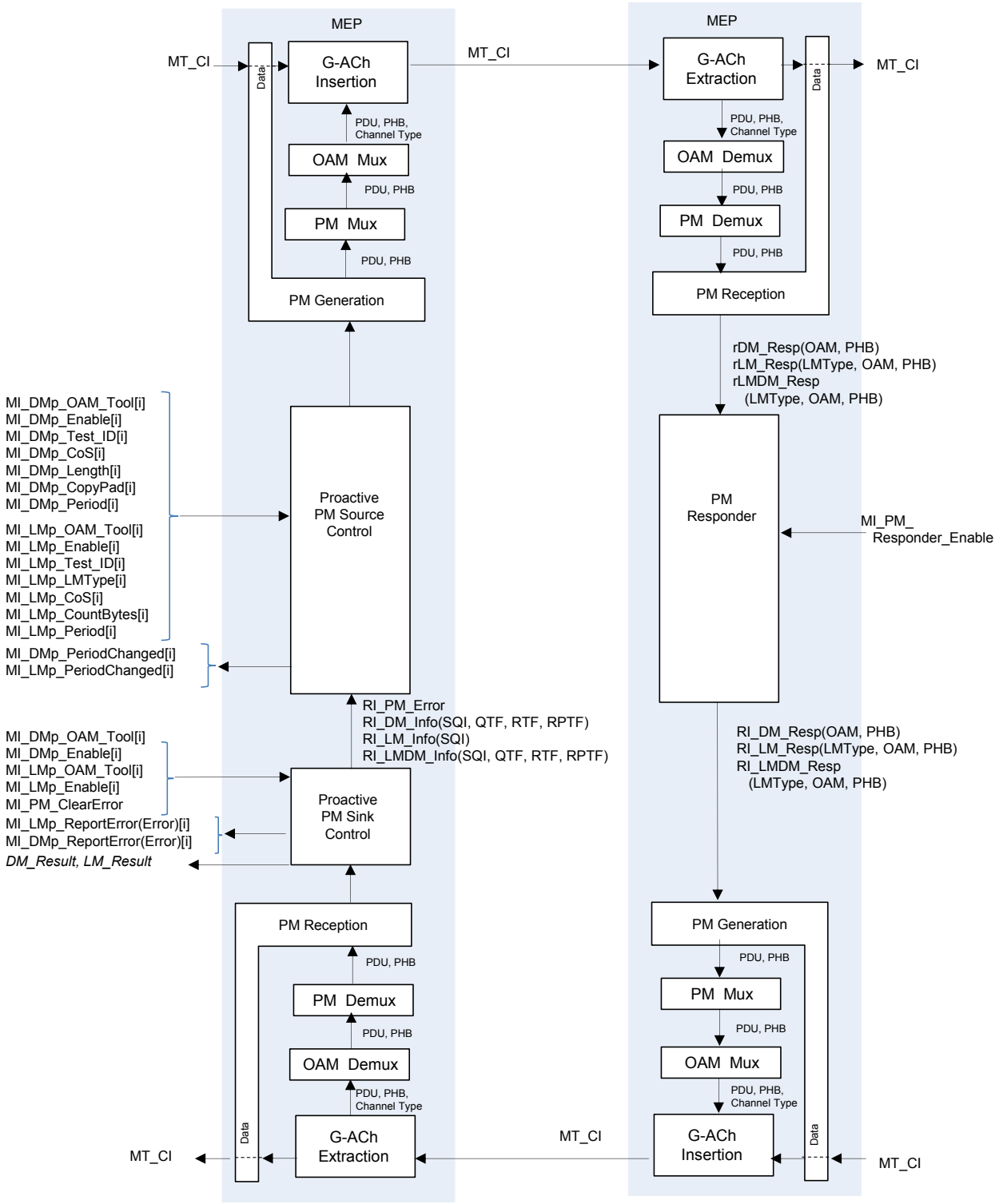


Figure 8-5c/G.8121.2/Y.1381.2 - CCCV Reception Process

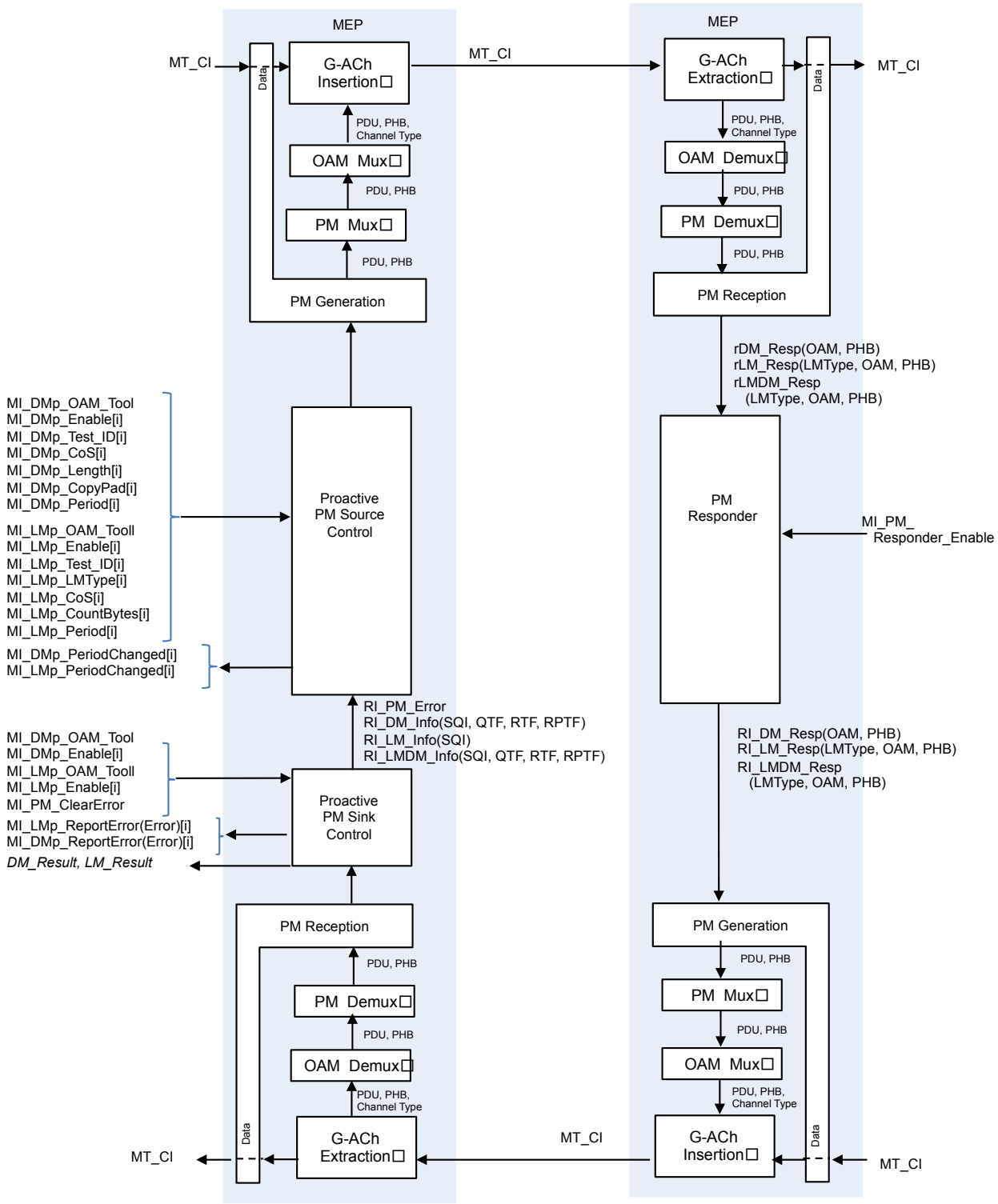
<..>

3) Clause 8.8.4, Proactive Packet Loss Measurement (LMp)

Replace Figure 8-13 ~~as below~~:


MEP
MEP
MT_CI
Data
G-ACh Insertion
MT_CI
G-ACh Extraction
Data
MT_CI
PDU, PHB, Channel Type
OAM Mux
PDU, PHB
PM Mux
PDU, PHB
PM Generation
PDU, PHB, Channel Type
OAM Demux
PDU, PHB
PM Demux
PDU, PHB
PM Reception
rDM_Resp(OAM, PHB)
rLM_Resp(LMType, OAM, PHB)
rLMDM_Resp
(LMType, OAM, PHB)
MI_DMp_OAM_Tool[i]
MI_DMp_Enable[i]
MI_DMp_Test_ID[i]
MI_DMp_CoS[i]
MI_DMp_Length[i]
MI_DMp_CopyPad[i]
MI_DMp_Period[i]
MI_LMp_OAM_Tool[i]
MI_LMp_Enable[i]
MI_LMp_Test_ID[i]
MI_LMp_LMType[i]
MI_LMp_CoS[i]
MI_LMp_CountBytes[i]
MI_LMp_Period[i]
Proactive PM Source Control
PM Responder
MI_PM_ Responder_Enable
MI_DMp_PeriodChanged[i]
MI_LMp_PeriodChanged[i]
RI_PM_Error
RI_DM_Info(SQI, QTF, RTF, RPTF)
RI_LM_Info(SQI)
RI_LMDM_Info(SQI, QTF, RTF, RPTF)
RI_DM_Resp(OAM, PHB)
RI_LM_Resp(LMType, OAM, PHB)
RI_LMDM_Resp
(LMType, OAM, PHB)
MI_DMp_OAM_Tool[i]
MI_DMp_Enable[i]
MI_LMp_OAM_Tool[i]
MI_LMp_Enable[i]
MI_PM_ClearError
Proactive PM Sink Control
MI_LMp_ReportError(Error)[i]
MI_DMp_ReportError(Error)[i]
DM_Result, LM_Result
PM Reception
PDU, PHB
PM Demux
PDU, PHB
OAM Demux
PDU, PHB, Channel Type
PM Generation
PDU, PHB
PM Mux
PDU, PHB
OAM Mux
PDU, PHB, Channel Type
Data
G-ACh Extraction
MT_CI
MT_CI
G-ACh Insertion
Data
MT_CI

By:


MEP
MEP
MT_CI
Data
G-ACh Insertion☐
MT_CI
G-ACh Extraction☐
Data
MT_CI
PDU, PHB, Channel Type
OAM Mux☐
PDU, PHB
PM Mux☐
PDU, PHB
PM Generation
PDU, PHB, Channel Type
OAM Demux☐
PDU, PHB
PM Demux☐
PDU, PHB
PM Reception
rDM_Resp(OAM, PHB)
rLM_Resp(LMType, OAM, PHB)
rLMDM_Resp
(LMType, OAM, PHB)
MI_DMp_OAM_Tool
MI_DMp_Enable[i]
MI_DMp_Test_ID[i]
MI_DMp_CoS[i]
MI_DMp_Length[i]
MI_DMp_CopyPad[i]
MI_DMp_Period[i]
MI_LMp_OAM_TooII
MI_LMp_Enable[i]
MI_LMp_Test_ID[i]
MI_LMp_LMType[i]
MI_LMp_CoS[i]
MI_LMp_CountBytes[i]
MI_LMp_Period[i]
Proactive PM Source Control
PM Responder
MI_PM_ Responder_Enable
MI_DMp_PeriodChanged[i]
MI_LMp_PeriodChanged[i]
RI_PM_Error
RI_DM_Info(SQI, QTF, RTF, RPTF)
RI_LM_Info(SQI)
RI_LMDM_Info(SQI, QTF, RTF, RPTF)
RI_DM_Resp(OAM, PHB)
RI_LM_Resp(LMType, OAM, PHB)
RI_LMDM_Resp
(LMType, OAM, PHB)
MI_DMp_OAM_Tool
MI_DMp_Enable[i]
MI_LMp_OAM_TooII
MI_LMp_Enable[i]
MI_PM_ClearError
Proactive PM Sink Control
MI_LMp_ReportError(Error)[i]
MI_DMp_ReportError(Error)[i]
DM_Result, LM_Result
PM Reception
PDU, PHB
PM Demux☐
PDU, PHB
OAM Demux☐
PDU, PHB, Channel Type
PM Generation
PDU, PHB
PM Mux☐
PDU, PHB
OAM Mux☐
PDU, PHB, Channel Type
Data
MT_CI
G-ACh Extraction☐
MT_CI
G-ACh Insertion☐
Data
MT_CI

4) Clause 9.2.1, MPLS-TP Trail Termination function (MT_TT)

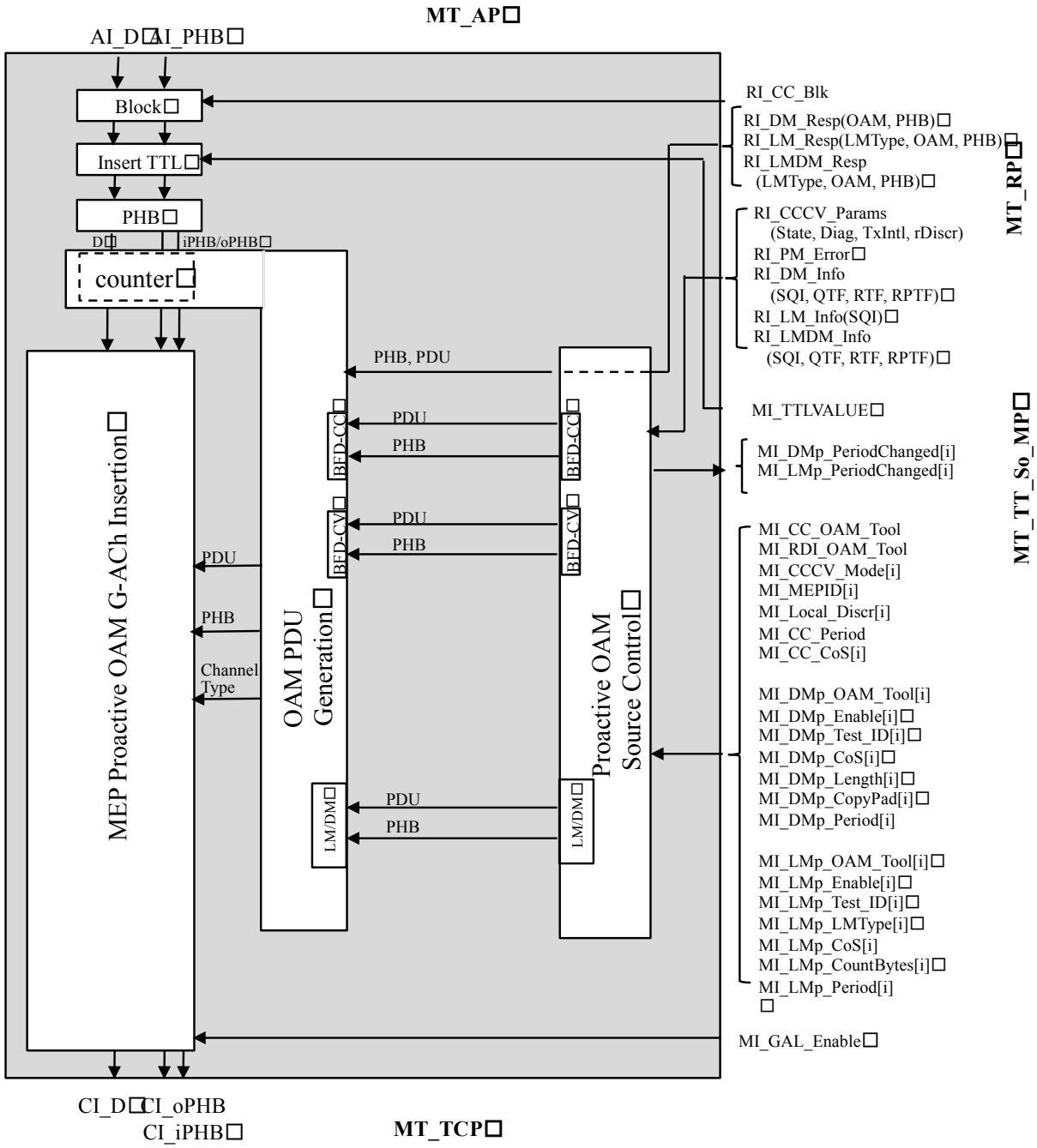
Update Table 9-1 as indicated:

Table 9-1/G.8121.2/Y.1381.2 – MT_TT_So inputs and outputs

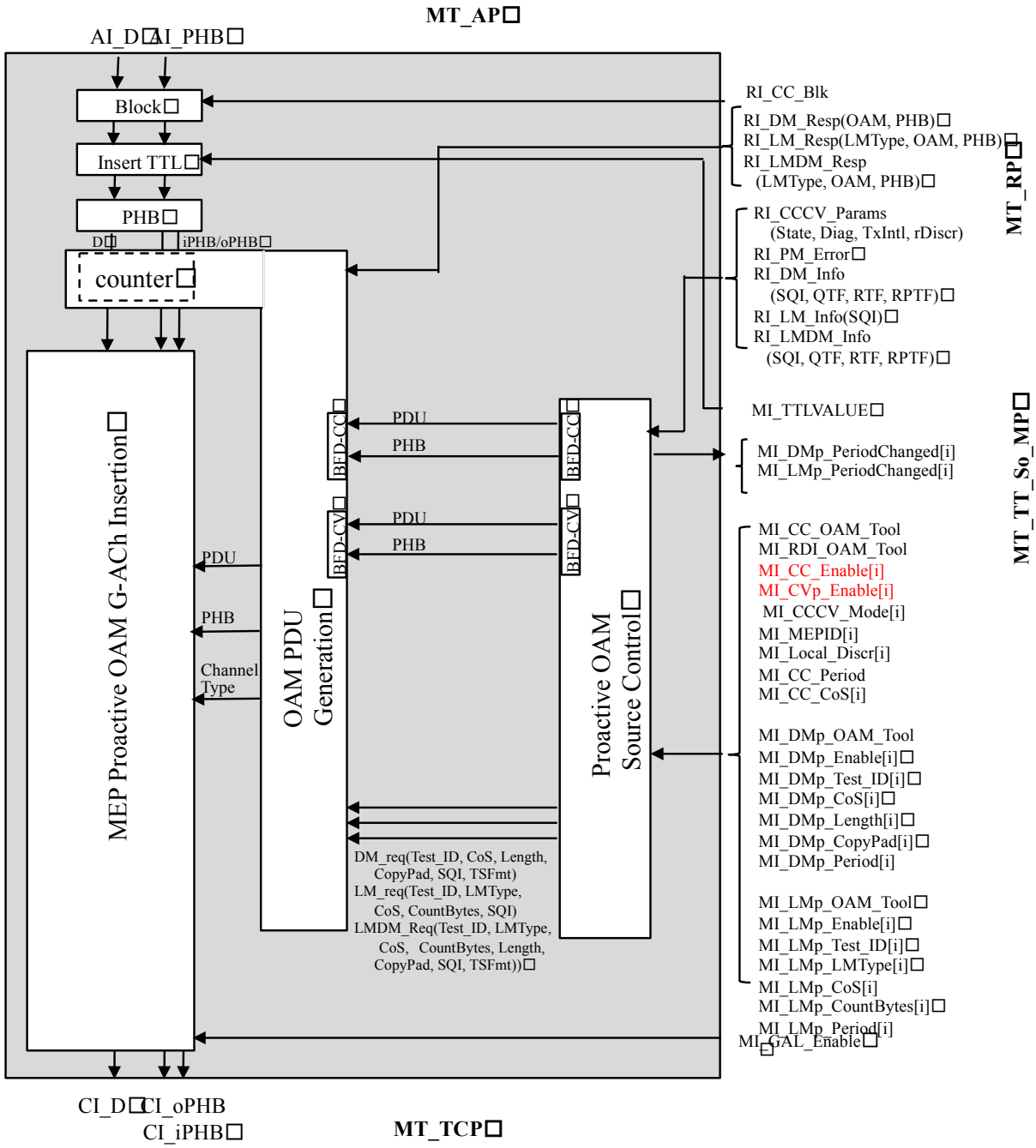
Input(s)	Output(s)
MT_AP: MT_AI_D MT_AI_PHB **MT_RP:** MT_RI_CCCV_Params(State, Diag, TxIntl, rDiscr) MT_RI_CC_Blk MT_RI_DM_Resp(OAM, PHB) MT_RI_LM_Resp(LMType, OAM, PHB) MT_RI_LMDM_Resp (LMType, OAM, PHB) MT_RI_PM_Error MT_RI_DM_Info(SQI, QTF, RTF, RPTF) MT_RI_LM_Info(SQI) MT_RI_LMDM_Info(SQI, QTF, RTF, RPTF) **MT_TT_So_MP:** MT_TT_So_MI_ GAL_Enable MT_TT_So_MI_TTLValue MT_TT_So_MI_CC_OAM_Tool~~[…]~~ MT_TT_So_MI_RDI_OAM_Tool~~[…]~~ MT_TT_Sk_MI_CC_Enable[1…M_{CCCV}] MT_TT_Sk_MI_CVp_Enable[1…M_{CCCV}] MT_TT_So_MI_CCCV_Mode[1…M_{CCCV}] MT_TT_So_MI_MEPID[1…M_{CCCV}] MT_TT_So_MI_Local_Discr[1…M_{CCCV}] MT_TT_So_MI_CC_Period MT_TT_So_MI_CC_CoS[1…M_{CCCV}] MT_TT_So_MI_DMp_OAM_Tool~~[…]~~ MT_TT_So_MI_DMp_Enable[1...M_{DMp}] MT_TT_So_MI_DMp_Test_ID[1...M_{DMp}]	**MT_CP:** MT_CI_D MT_CI_oPHB MT_CI_iPHB **MT_TT_So_MP:** MT_TT_So_MI_DMp_PeriodChanged[1...M_{DMp}] MT_TT_So_MI_LMp_PeriodChanged[1...M_{LMp}]

MT_TT_So_MI_DMp_CoS[1...M_{DMp}] MT_TT_So_MI_DMp_Length[1...M_{DMp}] MT_TT_So_MI_DMp_CopyPad[1...M_{DMp}] MT_TT_So_MI_DMp_Period[1...M_{DMp}] MT_TT_So_MI_LMp_OAM_Tool~~[…]~~ MT_TT_So_MI_LMp_Enable[1...M_{LMp}] MT_TT_So_MI_LMp_Test_ID[1...M_{LMp}] MT_TT_So_MI_LMp_LMType[1...M_{LMp}] MT_TT_So_MI_LMp_CoS[1...M_{LMp}] MT_TT_So_MI_LMp_CountBytes[1...M_{LMp}] MT_TT_So_MI_LMp_Period[1...M_{LMp}]	

Replace Figure 9-3 ~~as below~~:


MT_AP
AI_D
AI_PHB
Block
Insert TTL
PHB
D
iPHB/oPHB
counter
MEP Proactive OAM G-ACh Insertion
OAM PDU Generation
Proactive OAM Source Control
BFD-CC
BFD-CV
LM/DM
PHB, PDU
PDU
PHB
Channel Type
RI_CC_Blk
RI_DM_Resp(OAM, PHB)
RI_LM_Resp(LMType, OAM, PHB)
RI_LMDM_Resp (LMType, OAM, PHB)
MT_RP
RI_CCCV_Params (State, Diag, TxIntl, rDiscr)
RI_PM_Error
RI_DM_Info (SQI, QTF, RTF, RPTF)
RI_LM_Info(SQI)
RI_LMDM_Info (SQI, QTF, RTF, RPTF)
MI_TTLVALUE
MI_DMp_PeriodChanged[i]
MI_LMp_PeriodChanged[i]
MT_TT_So_MP
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CCCV_Mode[i]
MI_MEPID[i]
MI_Local_Discr[i]
MI_CC_Period
MI_CC_CoS[i]
MI_DMp_OAM_Tool[i]
MI_DMp_Enable[i]
MI_DMp_Test_ID[i]
MI_DMp_CoS[i]
MI_DMp_Length[i]
MI_DMp_CopyPad[i]
MI_DMp_Period[i]
MI_LMp_OAM_Tool[i]
MI_LMp_Enable[i]
MI_LMp_Test_ID[i]
MI_LMp_LMType[i]
MI_LMp_CoS[i]
MI_LMp_CountBytes[i]
MI_LMp_Period[i]
MI_GAL_Enable
CI_D
CI_oPHB
CI_iPHB
MT_TCP

By:



5) Clause 9.2.1.2, MPLS-TP Trail Termination Sink function (MT_TT_Sk)

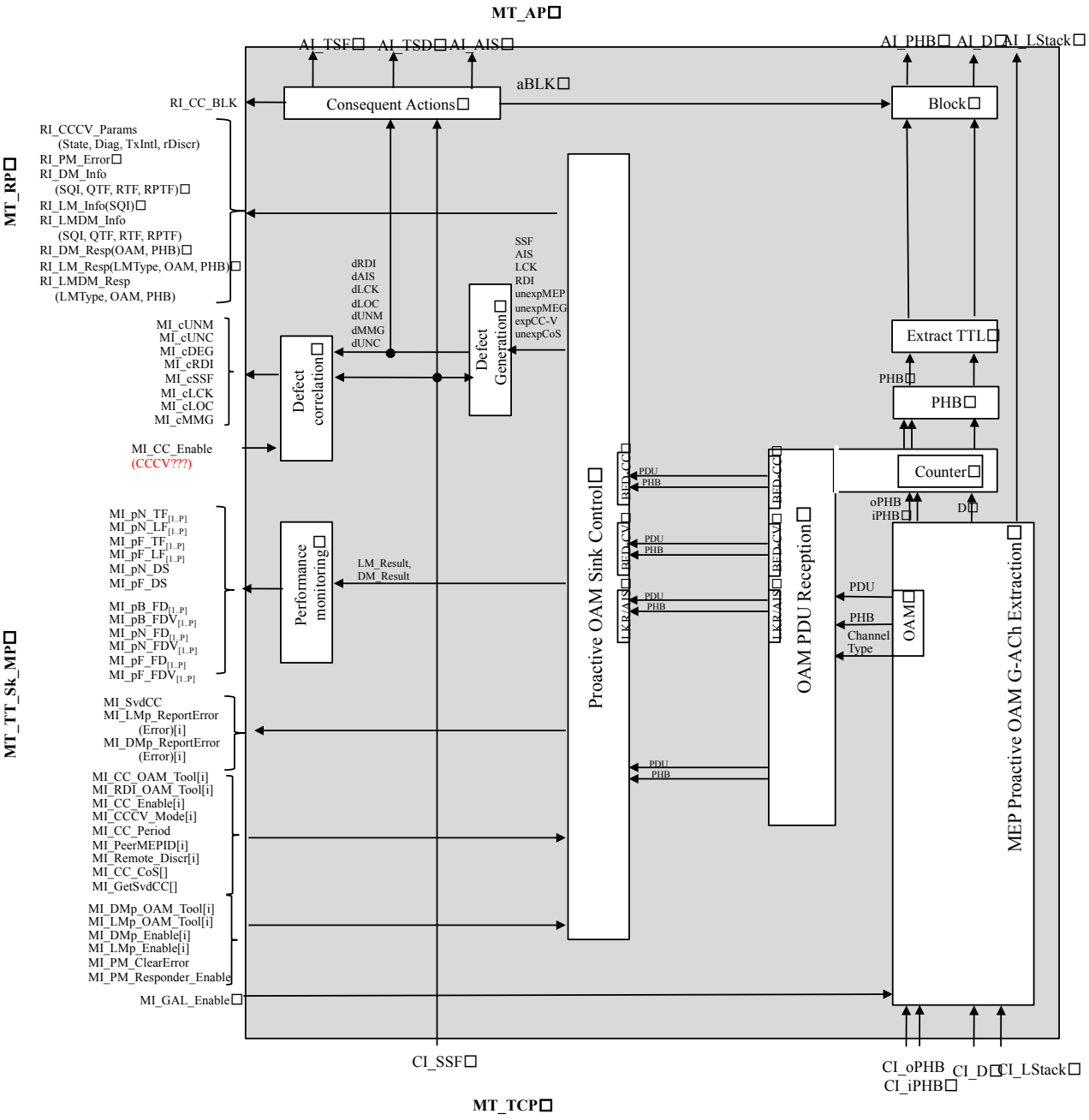
Update Table 9-2 as indicated:

Table 9-2/G.8121.2/Y.1381.2 – MT_TT_Sk inputs and outputs

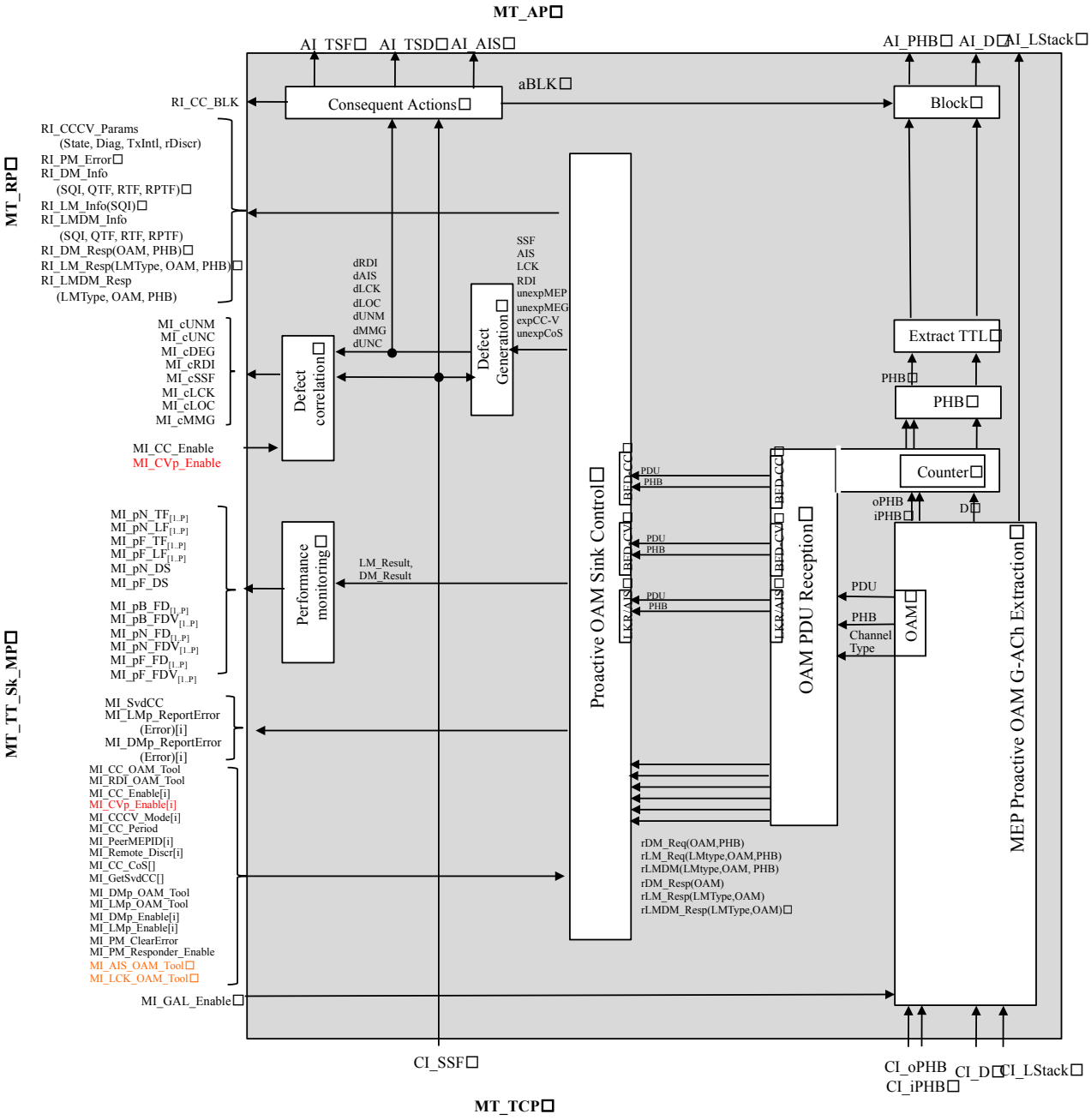
Input(s)	Output(s)
MT_TCP: MT_CI_D MT_CI_iPHB	**MT_AP:** MT_AI_D MT_AI_PHB MT_AI_TSF

Input(s)	Output(s)
MT_CI_oPHB MT_CI_SSF MT_CI_LStack **MT_TT_Sk_MP:** MT_TT_Sk_MI_GAL_Enable MT_TT_Sk_MI_ CC_OAM_Tool~~[…]~~ MT_TT_Sk_MI_ RDI_OAM_Tool~~[…]~~ MT_TT_Sk_MI_CC_Enable[1…M_{CCCV}] MT_TT_Sk_MI_CVp_Enable[1…M_{CCCV}] MT_TT_Sk_MI_CCCV_Mode[1…M_{CCCV}] MT_TT_Sk_MI_CC_Period MT_TT_Sk_MI_PeerMEPID[1…M_{CCCV}] MT_TT_Sk_MI_Remote_Discr[1…M_{CCCV}] MT_TT_Sk_MI_CC_CoS[…] MT_TT_Sk_MI_GetSvdCC[1…M_{CCCV}] MT_TT_Sk_MI_DMp_OAM_Tool~~[…]~~ MT_TT_Sk_MI_LMp_OAM_Tool~~[…]~~ MT_TT_Sk_MI_DMp_Enable[1...M_{DMp}] MT_TT_Sk_MI_LMp_Enable[1...M_{LMp}] MT_TT_Sk_MI_PM_ClearError MT_TT_Sk_MI_PM_Responder_Enable MT_TT_Sk_MI_AIS_OAM_Tool MT_TT_Sk_MI_LCK_OAM_Tool	MT_AI_TSD MT_AI_AIS MT_AI_LStack **MT_RP:** MT_RI_CCCV_Params(State, Diag, TxIntl, rDiscr) MT_RI_CC_Blk MT_RI_DM_Resp(OAM, PHB) MT_RI_LM_Resp(LMType, OAM, PHB) MT_RI_LMDM_Resp(LMType, OAM, PHB) MT_RI_PM_Error MT_RI_DM_Info(SQI, QTF, RTF, RPTF) MT_RI_LM_Info(SQI) MT_RI_LMDM_Info(SQI, QTF, RTF, RPTF) **MT_TT_Sk_MP:** MT_TT_Sk_MI_SvdCC MT_TT_Sk_MI_cSSF MT_TT_Sk_MI_cLCK MT_TT_Sk_MI_cLOC[] MT_TT_Sk_MI_cMMG MT_TT_Sk_MI_cUNM MT_TT_Sk_MI_cUNC MT_TT_Sk_MI_cDEG MT_TT_Sk_MI_cRDI MT_TT_Sk_MI_DMp_ReportError(Error)[1...M_{DMp}] MT_TT_Sk_MI_LMp_ReportError(Error)[1...M_{LMp}] MT_TT_Sk_MI_pN_LF[1...P] MT_TT_Sk_MI_pN_TF[1...P] MT_TT_Sk_MI_pF_LF[1...P] MT_TT_Sk_MI_pF_TF[1...P] MT_TT_Sk_MI_pF_DS MT_TT_Sk_MI_pN_DS MT_TT_Sk_MI_pB_FD[1...P] MT_TT_Sk_MI_pB_FDV[1...P] MT_TT_Sk_MI_pN_FD[1...P] MT_TT_Sk_MI_pN_FDV[1...P] MT_TT_Sk_MI_pF_FD[1...P] MT_TT_Sk_MI_pF_FDV[1...P]

Replace Figure 9-3:



By:


MT_AP
AI_TSF
AI_TSD
AI_AIS
AI_PHB
AI_D
AI_LStack
aBLK
RI_CC_BLK
Consequent Actions
Block
MT_RP
RI_CCCV_Params
(State, Diag, TxIntl, rDiscr)
RI_PM_Error
RI_DM_Info
(SQI, QTF, RTF, RPTF)
RI_LM_Info(SQI)
RI_LMDM_Info
(SQI, QTF, RTF, RPTF)
RI_DM_Resp(OAM, PHB)
RI_LM_Resp(LMType, OAM, PHB)
RI_LMDM_Resp
(LMType, OAM, PHB)
SSF
AIS
LCK
RDI
unexpMEP
unexpMEG
expCC-V
unexpCoS
dRDI
dAIS
dLCK
dLOC
dUNM
dMMG
dUNC
Defect Generation
Extract TTL
PHB
PHB
MI_cUNM
MI_cUNC
MI_cDEG
MI_cRDI
MI_cSSF
MI_cLCK
MI_cLOC
MI_cMMG
Defect correlation
MI_CC_Enable
MI_CVp_Enable
Counter
oPHB
iPHB
D
Proactive OAM Sink Control
PDU
PHB
RED CC
RED CV
LKR/AIS
OAM PDU Reception
MI_pN_TF[1..P]
MI_pN_LF[1..P]
MI_pF_TF[1..P]
MI_pF_LF[1..P]
MI_pN_DS
MI_pF_DS
MI_pB_FD[1..P]
MI_pB_FDV[1..P]
MI_pN_FD[1..P]
MI_pN_FDV[1..P]
MI_pF_FD[1..P]
MI_pF_FDV[1..P]
Performance monitoring
LM_Result,
DM_Result
PDU
PHB
Channel Type
OAM
MEP Proactive OAM G-ACh Extraction
MT_TT_Sk_MP
MI_SvdCC
MI_LMp_ReportError
(Error)[i]
MI_DMp_ReportError
(Error)[i]
MI_CC_OAM_Tool
MI_RDI_OAM_Tool
MI_CC_Enable[i]
MI_CVp_Enable[i]
MI_CCCV_Mode[i]
MI_CC_Period
MI_PeerMEPID[i]
MI_Remote_Discr[i]
MI_CC_CoS[]
MI_GetSvdCC[]
MI_DMp_OAM_Tool
MI_LMp_OAM_Tool
MI_DMp_Enable[i]
MI_LMp_Enable[i]
MI_PM_ClearError
MI_PM_Responder_Enable
MI_AIS_OAM_Tool
MI_LCK_OAM_Tool
MI_GAL_Enable
rDM_Req(OAM,PHB)
rLM_Req(LMtype,OAM,PHB)
rLMDM(LMtype,OAM, PHB)
rDM_Resp(OAM)
rLM_Resp(LMType,OAM)
rLMDM_Resp(LMType,OAM)
CI_SSF
CI_oPHB
CI_iPHB
CI_D
CI_LStack
MT_TCP