INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2009-2012

COM 15 – LS 295 – E

English only

Original: English

Question(s): 10/15

LIAISON STATEMENT

Source: ITU-T Study Group 15

Title: Reply to the IETF MPLS working group last call on "A Packet Loss and Delay Measurement Profile for MPLS-based Transport Networks (ref #051.01)" (ref #051.02)

LIAISON STATEMENT

For action to: -

For comment to: IETF MPLS WG

For information to: -

Approval: Agreed to by correspondence (8 March 2011)

Deadline: 1 June 2011

Contact: Huub van Helvoort
Huawei Technologies Ltd.
P. R. China

Tel: +31 649248936
Email: Huub.van.Helvoort@huawei.com

Thank you for your liaison statement (Ref # 051.01) requesting a review by the ITU-T of the draft *"A Packet Loss and Delay Measurement Profile for MPLS-based Transport Networks"*.

Please note that in the past weeks the Q10/15 experts have been very busy preparing for the ITU-T SG15 plenary meeting and attending this meeting in Geneva 14-25 February 2011.

Considering the limited amount of time, the Q10/15 experts may send more comments at a later date.

We request that you address the comments and provide us a new version of *draft-ietf-mpls-tp-loss-delay-profile*. Q10/15 would like to have an opportunity to review the next version of this draft before approval.

———

Experts of Q10/15 have reviewed `draft-ietf-mpls-tp-loss-delay-profile-02` and `draft-ietf-mpls-loss-delay-01` in order to provide comments on these drafts.

Because the reviewers may not have been aware of the following dependency:

The draft-ietf-mpls-loss-delay-01 is an MPLS draft that needs to satisfy the needs of the whole of the MPLS community. This needs to be reviewed for technical errors, and for capabilities that MPLS-TP needs that are not addressed. However it is a super-set of the MPLS-TP by intention and should remain so.

The draft-ietf-mpls-tp-loss-delay-profile-02 is the MPLS-TP profile, and should be describing the fixing of parameters and selection of options for the MPLS-TP case (only). Where options are already fixed by existing MPLS-TP documents (ECMP comes to mind) that should be covered by reference rather than through restatement.

their comments may have been directed towards the wrong draft.

_____

LS497 draft-ietf-mpls-loss-delay-01, section 2.7.3,
Please add at the end the paragraph "These concerns don't arise in MPLS-TP, because ECMP doesn't apply there."

LS497 draft-ietf-mpls-loss-delay-01, section 2.7.6, parag 4,
Please add at the end of this paragraph: "There is no limitation of direct LM in MPLS-TP, as PHP is disabled and we cannot presume a control plane, which is the case of LDP."

LS497 draft-ietf-mpls-loss-delay-01, section 2.7.7,
There must be a clear definition of which frames integrate the loss measurement scope, for MPLS-TP. Please clarify.

LS497 draft-ietf-mpls-loss-delay-01, section 3.1,
The need of 4 counters is not clear: after the xLM message does A->B->A, the last (4th) measurement is done at reception, so why writing the results into the PDU? The 4th counter isn't really needed.

LS497 draft-ietf-mpls-loss-delay-01, section 3.5.2,
The addressing should be aligned with the identifiers draft and not have a different implementation for these PDUs.

LS497 draft-ietf-mpls-loss-delay-01, section 3.5.3,
"Session Query Interval" is useless in an NMS environment. Thus, please add to the end of this section "Not applicable to MPLS-TP".

LS497 draft-ietf-mpls-loss-delay-01, section …,
Please consider a new PDU: let's name it PRO-xLM+DM for now. The format could be the same as DLM+DM (with correction suggested in section 3.1). Each time a frame is transmitted, A writes into the PDU counters
-A_TxP[n] the number of packets Tx by A at the time this PDU is sent
-A_RxP[n] the number of packets Rx at A at the time it got a PDU from B
-B_TxP[n] the number of packets Tx by B the last time it Tx a PDU to A

We can thus do LM calculations both ways with half the PDUs. Loss measurement @A would be:

A_TxLoss = A_TxP[n] - A_TxP[n-1] - (B_RxP[n] - B_RxP[n-1])
A_RxLoss = B_TxP[n] - B_TxP[n-1] - (A_RxP[n] - A_RxP[n-1])
(A_RxP is a counter internally kept @A)
For unidireccional applications (say B->A), A_TxLoss has no meaning and A only cares about B_TxP.

_____