



Question(s): 10/15

LIAISON STATEMENT

Source: ITU-T Study Group 15

Title: MPLS-TP OAM Framework draft reviewed (ref # 014.02)

LIAISON STATEMENT

For action to: IETF WG MPLS

Approval: Agreed to by Q10/15 (by correspondence)

Deadline: 11 April 2010

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Thank you for your liaison statement (ref # 014.01) soliciting early review comments by ITU-T of the MPLS-TP OAM Framework draft.

The experts of Q10/15 have reviewed draft-ietf-mpls-tp-oam-framework-04.txt by correspondence.

The following comments were received:

1. Section 1.2 – point 5: (agreement)

States: *"AIS/Lock Indication are generate by a MIP node (to be define as a node hosting a MIP) w/o saying that they are generated by a MIP.*

The general framework will describe the mechanism for intermediate nodes to insert packets and each specific framework document..."

If we adopt this, it will be confusing since the role/definition of MIP as described in other parts must be changed. Moreover, the difference between MIP and intermediate node may become unclear.

So it is required to have a clear definition of MIP and intermediate node.

2. Section 1.2 – point 7:

Clarify that in ITU-T practice, the return path, if present, is always the backward direction (i.e., support of other return paths is not required).

ITU-T transport technologies require/support unidirectional paths but do not require/support bi-directional OAM on unidirectional paths. This means that it is only required to run unidirectional OAM on unidirectional connections). However, this does not preclude the definition of non MPLS-TP return path (as agreed in past discussions) but just to clarify that they are not needed/required by ITU-T.

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3. Section 1.2 – point 8:

To avoid confusion with the terminology of loopback, the following distinction should be captured:
There are:

- data plane Loopback (that can work only out-of-service and loops back both OAM and user data traffic at the loop point) , and
- OAM Loopback (that usually works in-service and provides on-demand CV and relies upon the reply to some OAM packets, e.g., LSP Ping Messages).

The need to support data plane Loopback was questioned during IETF review held in the Hiroshima meeting and an open issue was raised and documented in the draft, see item 14 below.

4. Section 3 (introduction of this section)

The context of *"but also on arbitrary parts of transport paths, defined as Tandem Connections, between any two arbitrary points along a path."* should be moved to the introduction of section 4.

And the following 2 paragraphs are redundant (a little long) so editorial clean up is requested.
Or it is considered to create sub-section that indicates configuration consideration as described in other sections for OAM tools configuration.

" When a control plane is not present, the management plane configures these functional components. Otherwise they can be configured either by the management plane or by the control plane.

These functional components should be instantiated when the path is created by either the management plane or by the control plane (if present). Some components may be instantiated after the path is initially created (e.g. PST). "

5. Section 3.2 (page 17):

MIP sending messages: In Y.1731, MIP only monitors and does not respond by sending messages. It seems that the MIP becomes active and similar in functionality to the MEP (assume that the MIP OAM response messages are separate packets).

6. Section 3.2 (page 18):

The statement "A node at the edge of an MEG can also support a MEP and a per-interface MIP at the two sides of the forwarding engine". It is not clear what the purpose and the meaning of such a statement is.

5. Section 3.5:

It is not clear why the PST concept is defined:

Operational differences exist between hierarchical LSP used for tunneling/trunking, PST or TCM. If the intention is to distinguish these concepts based on the operational differences, then it is worth defining all the three concepts. If the intention is not to consider operational differences, then it is worth just considering hierarchical LSPs (unless other than operational differences are identified).
Section 4 of the draft already states:

" Hierarchical LSPs are also supported in the form of path segment tunnels. "

6. Section 4 (introduction of this section)

The last bullet, is it PPSTME? (or should it be PTCME)

7. Section 4.*:

Please put/add acronyms such as (SME) in the title of sub-section

8. Section 4.1:

Please add description of the relationship between Sec** and PSN** LSP. I.e. it is required to indicate where the Sec** belongs.

9. Section 4.1:

Figures 4 and 5 are not clear. For example they do not actually show LSRs or LERs

10. Section 4.3:

MPLS-TP LSP PST ME seems to be similar in functionality to TCM ME.

11. Section 5 (general comments):

There are some (= not all) sub-sections for application consideration. However, it is questionable to have these specific description here since this draft is for OAM framework, not solution. It is requested to consider whether they should be included. If required, it should indicate appropriate requirements as well in RFC5654 and/or OAM-req draft

12. Section 5.1.2:

It should be confirmed that defect correlations are outside the scope of this draft and will be defined in ITU-T G.8121. Then the editor's note can be removed.

13. Section 5.6.2:

(Note see also item 11 above)

It states:

" o Contribution to far-end performance monitoring - The indication of the far-end defect condition may be used to account on network operator contribution to the bidirectional performance monitoring process.

CSF supports the application described in Appendix VIII of ITU-T G.806 [18]. "

Note that recommendation G.806 Appendix VIII describes only the unidirectional case.

14. Section 6.3:

The following note should be moved and merged into section 1.2-point 8. We need more discussion about the necessity and usage of data plane loopback, however data plane loopback does not seem to be limited to diagnostic, that is, specific OAM function.

"Editors' note: Need further investigation about the need to support a data-plane loopback. If needed, which layer does have to support this function (i.e. the MPLS-TP layer or its server layer?) It is also needed to understand whether it is needed to specify where this data-plane loopback takes place within the equipment"

Should there be any further technical changes to the draft, we would appreciate the opportunity to provide additional review and comments.