

IEEE 802.3da SPMD TF: MPoE: Multiple MPLs per DTE

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Background

- The group has been talking about “additional power pairs” for a long time
- David Brandt submitted several comments regarding support for additional power pairs for MPoE against D2.2
 - The comments include: 100, 101, 102, 103, 104, 105, 106, 107, 108, 109.
 - I support these changes, but I believe that the proposed resolutions from David are not sufficient.
- This presentation and the associated document provide supporting material for my late comment on this topic.

Clause 30: What needs to change?

- Change oMPSE/oMPD definitions to allow for one (oPHYEntity) to many (oMPSE/oMPD) relationships
- Add/modify MPSE/MPD objects to:
 - support multiple MPis per DTE.
 - support the one-many relationship.
 - Use bitmaps (aka SEQUENCE) to report supported/detected system types.

Clause 79: What needs to change?

- Change MPSE/MPD Status TLVs to support:
 - an array of MPIs per DTE
 - an MPI Index within a DTE
 - per MPSE : output voltage, maximum output current
 - per MPD: input voltage
- Change Power Allocated TLV to support:
 - multiple power allocation entries per DTE (add MPI Index to each entry).
- PICS:
 - updates to match changes above.

Clause 189: What needs to change?

- Modify “189.1 Overview”
 - Add text for multiple MPIs per DTE.
- Add new subclause “189.1.2a MPI and DTE association” to different types of MPI and DTE associations supported by MPoE.
- Modify “189.3 System type power requirements” to define a new “Independent” system type for MPIs that are not associated with a DTE.
- Modify “189.4.1” to exclude “Type Independent”
- Modify “189.5.1” to include “Type Independent”.
- PICS:
 - updates to match changes above.

Open Issues

- Clause 30 management modelling and reporting for MPIs not associated with a DTE.

Detailed proposal

- Refer to `jones_3da_01_lldp_mpoe_proposal.pdf`

Straw Poll and Motion – May 2025

- Straw Poll #??
 - Would you support adopting the text in pages 6-18 of jones_3da_01_may_2025.pdf to add explicit support for Multiple MPIs per DTE .
 - voting at:
 - Y:
 - N:
 - A:
- Motion #??
 - Adopt the text in pages 6-18 of jones_3da_01_may_2025.pdf to add explicit support for Multiple MPIs per DTE, with editorial license to reformat and correct “editorial” errors (e.g., typos, mis-numberings).
 - Mover: Peter Jones
 - Seconder:
 - voting at:
 - Y:
 - N:
 - A:
 - Motion passes/fails.

Consensus

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