

# Minutes IEEE 802.3cc 25GSMF TF AdHoc meeting May 3<sup>rd</sup>, 2017

Prepared by David Lewis

## Presentations posted at:

<http://www.ieee802.org/3/cc/public/adhoc/index.shtml>

## Introduction / David Lewis:

Meeting began at 2:00 pm PT.

1. Ad hoc meeting was decided on late when it became apparent that Mr. Dawe wanted to present some material on reducing minimum extinction ratio for both variants.
2. Chair reminded participants that the sponsor ballot on D3.0 is still open and that votes can be cast and comments submitted until 11<sup>th</sup> May at 23:59 ET.

## Presentations/Discussion.

### Improved Extinction Ratio Limits / Piers Dawe, Mellanox Technologies

- This was the subject of unresolved negative comments during WG ballot and recirculation.
- Presenter made the point that low cost transmitters, such as DFB lasers have improved signal quality properties when operated at relatively low extinction ratio. Charts illustrating the allowed transmitter settings and the range of signals seen at the receiver show that if the extinction ratio is reduced to 3 dB (-LR) and to 3.5 dB (-ER) there is little impact on the worst case overload signals seen by the receiver.
- There was some discussion about the performance of APD receivers with low extinction ratio signals. It was suggested that we ask Mr. Huang (SiFotonics) who presented APD data at the San Antonio task force meeting, whether there is data with extinction ratios lower than the 4.5 dB case he presented.

### Question and Discussion about MPI penalties / Jonathan King, Finisar

- Mr. King asked the question of what assumptions had been made about MPI penalty in the link budget for 25GBASE-LR.
- The chair answered that MPI is not explicitly called out as a separate penalty in the same manner as 10GBASE-LR and 100GBASE-LR4. When the original specification was written, MPI was being added to the various PAM4 optical link budgets, but not considered for the NRZ optical links. It was thought that for NRZ modulation, MPI would not be a significant issue. However, it appears that because we chose a transmitter reflectance of -12 dB, there could be some applications with multiple -26 dB connectors that would incur a significant penalty in a maximum insertion loss link.
- Mr. King agreed to prepare a presentation on the subject, and would consider submitting a comment against D3.0.

Meeting closed – ~3:30pm PT

<b>Attendees (from Webex + emails)</b>	Affiliation	Attended 5/3
Name		
David Lewis	Lumentum	y

Kohichi Tamura	Oclaro	y
Piers Dawe	Mellanox	y
Greg Bradburn	Cisco	Y
Jonathan King	Finisar	y
Raymond Nering	Cisco	y