

# Optical track closing report

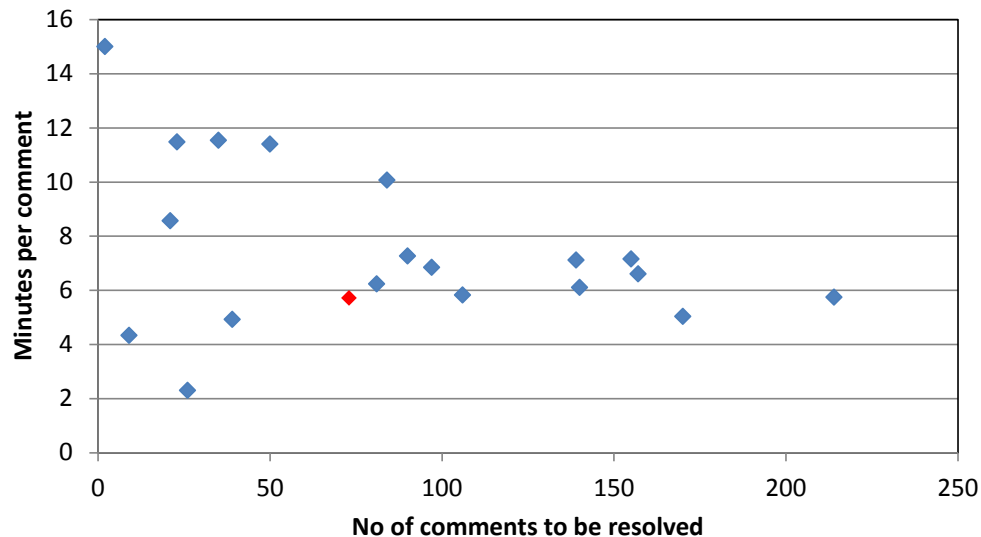
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IEEE P802.3bs Task Force, Dallas, November 2015

# Progress

- Comment resolution
  - Resolved all 70 T/TR and 4 E/ER comments for 121, 122, 123 allocated to optics track
- Optical track resolved comments for 6.95 hours
  - 73 comments resolved works out as 5.7 minutes per comment
  - Thanks to the Editors and Optics track members for their hard work in preparation for and during this meeting

P802.3ba, P802.3bg & P802.3bm Comment Resolution



# Items decided upon and open issues

- Rx 3 dB bandwidth removed (Comment #32)
- Transmitter OMA<sub>inner</sub> removed from Clause 122 (Comment #73)
  - Minimum TDP increased to 1 dB for 400GBASE-DR4
- Parameters in power budget Table 123-9 aligned with Table 122-8 (Comment #84)
- MDI details for 400GBASE-DR4 as per Clause 95 (except SMF) (Comment #178)
  
- TDP method remains TBD
  - Consensus that methods should be the same for Clauses 122 and 123
  - Need for additional eye mask test remains TBD
- Stressed receiver sensitivity method remains TBD
- Reflection budget remains TBD
- OMA and ER definitions remain TBD

# Discussion on TDP / TDEC issues

After all of the comments were resolved, the optical track held a discussion on TDP / TDEC.

The following page contains notes of this discussion taken by Jonathan King and reviewed by the group.

# SMF TDP discussion

- 1) TDEC/TDP - must test with, and without, w/c fibre
- 2) TDP or TDEC - TDEC first choice, TDP is a fall back
  - Show TDEC correlates with measured penalty
  - Fill out detailed description of TDEC test for PAM4 including Tx noise treatment because of the EQ
- 3) (TDP/TDEC) AND Eye-mask ?
  - If TDEC works, just TDEC, because its done with, and without, w/c fibre
    - If TDEC doesn't work, TDP is fall back, and then eye mask may be a useful addition.
- 4) What EQ and ref Rx bandwidth ? (EQ always present)
- 5) Test Pattern(s) – SSPR-like (<32k symbols)
- 6) Decision point
  - what area (threshold, timing points) within the equalized transmitter eye should be used to define errors count in TDEC or TDP.
    - Eg if AC coupled, how should **thresholds** for upper and lower eyes be set ?
    - How should a PAM4 CDR set the **timing point** for the upper middle and lower eyes ?

Thanks!