Comments against D2.0 for discussion on MMF ad hoc 16th Jan 2014

Working document maintained by

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Comments/responses for discussion

- 173 ~ describe non-FEC operation
- TDP related comments (13, 19, 148, 146, and perhaps some of 158, 149)
- No other topics were proposed for discussion.

Comment 173 – slide 1

Comment Type **T**
There are low latency applications that will seek to operate a 100GBASE-SR4 link with FEC disabled. There is no stated operating range in Table 95-5 that can be achieved with FEC disabled.

SuggestedRemedy
Add footnote to Table 95-5 stating either "There is no required operating range with FEC disabled" or "With FEC disabled, the required operating range is <0.5 m to <TBD value> m for OM3 and <0.5 m to <TBD value> m for OM4.“

PROPOSED REJECT.
The agreed link model showed no link distance could be guaranteed without the RS-FEC (see petrilla_03_1112_mmf) and additional optical specs on the transmitter (e.g. RIN).

It may be more appropriate to change this response to :

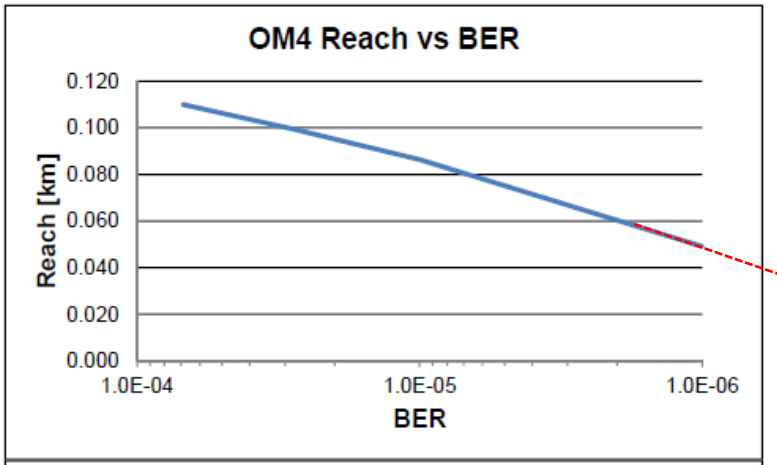
‘Proposed accept in principle’

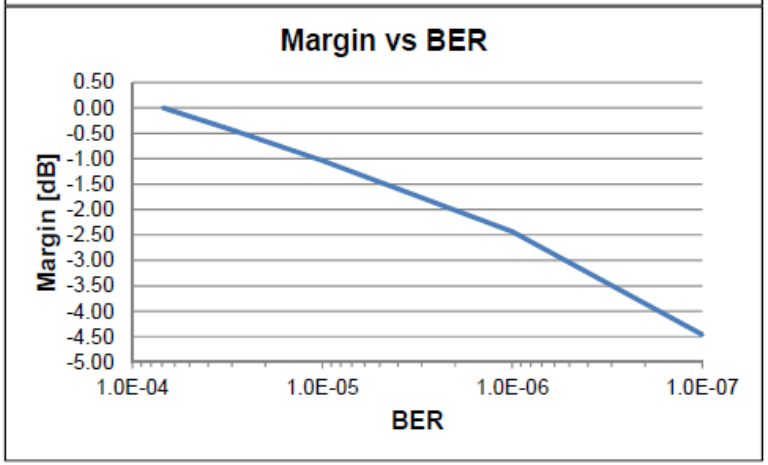
- The agreed link model showed no link distance could be guaranteed without the RS-FEC, (see petrilla_03_1112_mmf).
- Add footnote to Table 95-5 stating “FEC may not be disabled for any reach“
- Add footnote to Table 95.1, RS-FEC row: “The option of disabling the Clause 91 FEC may not be used“ *final wording to be agreed in comment resolution*

Comment 173 – slide 2

- Petrilla_03_1112 shows:

100G SR4: BER & Link Model Results





Results of sensitivity analysis based on example link model defined in reference section

- In the charts on the left Reach and Margin are shown as a function of BER for the optical link defined by the example link model.
- Here retimers are embedded in the Tx and Rx: TP1 TJ = 0.22 UI, TP4 TJ = 0.78 UI and TJ(4:1) = 0.56 UI.
- An increase in the BER requirement from 6.9×10^{-5} to 2.8×10^{-5} results in a margin loss of 0.46 dB or an OM4 reach reduction from 110 m to 100 m.

Zero reach for ~BER<10^{-8}

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TDP related comments

- What to do about TDP / Tx VEC for this draft ?
  - Comments 13, 19, 148, 146, and some of 158, 149.
  - If we don't adopt the Tx VEC alternative to TDP test, then should we update the TDP value and TDP test Rx bandwidth to take out the effect of chromatic dispersion ?
  - If we agree that's sensible then would we:
    - Propose Reject 13 (and continue to investigate the VEC proposal in the MMF ad hoc)
    - Propose Accept 19, subject to review of petrilla_01_0114
    - Propose Reject 148
    - Propose Accept in Principle 146, 158 and 149, referencing comment 19

Notes made by ad hoc chair, after the meeting:

- *There was lengthy discussion on link modeling of TDP and the proposed TxVEC test, but no clear consensus on how to address TDP related comments should the Tx VEC test not be adopted in Indian Wells. This was at least partly due to the fact that there are several presentations scheduled for review during the Indian Wells meeting which are associated with comments on TDP and the proposed TxVEC test, and which have not been available to MMF ad hoc participants.*