MMF ad hoc report

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MMF ad hoc activity since Dallas meeting

- Three MMF ad hoc calls: Dec. 19th 2013, and Jan. 10th, 16th 2014
  - Meeting minutes and presented materials are available on the 40G & 100G FOTF website: http://www.ieee802.org/3/bm/public/mmfadhoc/index.html
- Highlights:
  - Three presentations were reviewed:
  - 'Draft 100G SR4 TDP update' – John Petrilla, *petrilla_01d2_1213_mmf*
  - 'Modal Noise update' – Petar Pepeljugoski, *pepeljugoski_01_1212_mmf*
  - 'Draft 100G SR4 TDP update' – John Petrilla, *petrilla_01_0114_mmf*
    - We have agreed that the lower (2 dB) ER spec does not require a change to the allocation for mode partition noise, and that any change of RIN penalty at lower ER is controlled by the TDP spec.
    - We are still looking at whether modal noise penalty needs to change.
    - An alternative to the TDP test has been proposed (including specific changes to clause 95) which uses a statistical VEC (vertical eye closure) measurement. Details are shown in *petrilla_01_0114_optx*. This topic is still being studied.
- Further work:
  - Continue the work to finalize the 100GBASE-SR4 standard.
- Next meetings: yes… dates TBD

- List of topics for finalization
  - TDP
    - The difference between TDP and Allocation for penalties
    - The offset for ‘Tx OMA min’ spec vs the ‘Tx OMA minus TDP’ spec (currently 0.9 dB)
    - TDP filter currently includes effect of bandwidth due to spectral width – should it be removed ?
    - Review TDP limit to be sure it is a safe predictor of Tx performance.
    - Reference transmitter RIN specification
  - Longer wavelength capable receivers
  - In the SRS test, the VEC definition currently includes some of the noise in the eye, should this change for an FEC supported link?
  - Tx eye-mask spec review
  - Review relaxed (2dB) ER spec. for signal borne noise:
    - Mode partition noise ***– no change to allocation required.***
    - RIN ***– captured as part of TDP, no change to allocation required.***
    - Modal noise ***– further analysis is on-going***