# MMF ad hoc report

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# MMF ad hoc activity since York meeting

- Four MMF ad hoc calls: Sept 19$^{th}$, Oct 8$^{th}$, 24$^{th}$, Nov 6$^{th}$, 2013.
  - Meeting minutes and presented materials are available on the 40G & 100G FOTF website:  http://www.ieee802.org/3/bm/public/mmfadhoc/index.html
- Highlights:  Having achieved a technically complete draft spec, we are now in a phase of fine tuning.
  - We have agreed a list of topics for finalization
  - We have started to address these topics, several presentations have been reviewed:
    - *100GBASE-SR4 link penalties vs ER: MNP, MPN, RIN*, Jonathan King, 8$^{th}$ Oct 2013
    - *Modal noise in 100GBASE-SR4*, Piers Dawe, 24$^{th}$ Oct 2013
    - *Modal noise in 100GBASE-SR4 update*, Piers Dawe, 6$^{th}$ Nov 2013
    - So far, 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.
- Further work:
  - Continue the work to finalize the 100GBASE-SR4 standard.
- Next meetings:   yes… dates TBD

- List of topics for finalization
  - Reference transmitter RIN specification
  - 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)
  - Longer wavelength capable receivers
  - TDP filter currently includes effect of bandwidth due to spectral width – should it be removed ?
  - In the SRS test, the VECP definition currently includes some of the noise in the eye, should this change for an FEC supported link?
  - Review TDP limit to be sure it is a safe predictor of Tx performance.
  - 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, but any change for ER is expected to be small.*