MMF Ad Hoc meeting minutes

24th Oct 2013

Approved minutes

recorded by jonathan king

MMF ad hoc meeting minutes, 24th Oct. 2013

- **Meeting started** at 9 am Pacific, chaired by Jonathan King.
- **Attendee list** was taken from the Webex attendee list, 19 attendees were noted.
- **Presentations** shared in the MMF ad hocs can be found at the MMF ad hoc web page.
  - *http://www.ieee802.org/3/bm/public/mmfadhoc/meetings/index.html*
- **IEEE patent policy:** Attendees were reminded of the IEEE patent policy
  - *http://www.ieee802.org/3/patent.html*
- **Agenda slides were agreed** after adding an agenda item to 'craft text to describe how MPN and modal noise penalties increase with noise terms'.
- **Meeting minutes for 8th Oct** were approved.
- **Presentations:**
  - An updated list of 'topics for further study' was shown by jonathan king
  - 'Modal Noise in 100GBASE-SR4' – Piers Dawe
- **Discussion:**
  - Piers presented work looking at the impact of lower ER on RIN, mode partition noise, and modal noise link penalties. He confirmed that no change to the MPN penalty was needed, and that that the TDP spec limits the combined penalties for RIN_OMA , Tx_ISI and path penalty, so the RIN penalty resulting from lower ER spec is capped. Piers' said that a lower ER means a higher peak power for constant OMA, which would tend to increase the modal noise term. Piers' work showed that modal noise penalty increases as approximately the square of the noise term, with which the group agreed, after some discussion covering the added agenda item '… to describe how MPN and modal noise penalty increase with modal noise terms'. Jonathan asked what modal loss had been assumed, and whether this should be updated. There were some questions as to whether the specified total connector loss and max loss of a single connector were still appropriate for parallel fibre connectors. It was noted that connector manufacturers are moving away from a simple max connector loss spec to a statistically based 'mean' and '97% cumulative probability' definition.
- **Meeting ended** at 10.30 am.
- **Next meeting:**   Thursday 6th November, 9am to 10.30 am

Attendees

Pete Anslow, Ciena

David Brown, Semtech

Jose Castro, Panduit

Piers Dawe, Mellanox

Patrick Decker, Oracle

Mike Dudek, Qlogic

Galen Fromm, Cray

Ali Ghiasi, independent

Wenbin Jiang,

Myles Kimmitt, Emulex

Jonathan King, Finisar

Greg LeCheminant, Agilent

Petar Pepeljugoski, IBM

John Petrilla, Avago Technologies

Rick Pimpinella, Panduit

Rick Rabanovich, Alcatel-Lucent

Randy Rannow,

Nathan Tracy, TE

CK Wong, FCI