

SMF Ad Hoc report

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Introduction

The 40 Gb/s and 100 Gb/s Fiber Optic Task Force SMF Ad Hoc has:

- Held five conference calls since the Orlando meeting:
 - 2 April, 9 April, 16 April, 23 April, 30 April 2013
- Reviewed 10 presentations:
 - 100G Parallel SMF Skew [petrilla 01 0413 smf](#)
 - 100Gb/s SMF PMDs [cole 01b 0413 smf](#)
 - 100Gb/s SMF PMDs [cole 02c 0413 smf](#)
 - 100G CWDM Link Attributes [petrilla 02a 0413 smf](#)
 - 100GBASE-ER4-lite PMD Considerations [cole 03 0413 smf](#)
 - PSM4 & CWDM [welch 01 0413 smf](#)
 - Towards Consensus 100GBASE-CWDM Baseline Proposal [vlasov 01a 0413 smf](#)
 - Link Cost Analyses: PSM4, LR4, and SR10 [welch 02 0413 smf](#)
 - Optical Connection Specs for PSM4 [kolesar 01 0413 smf](#)
 - 100GBASE-ER4-lite PMD Status & Next Steps [cole 04 0413 smf](#)
- Meeting minutes and presentations can be found at:
 - <http://www.ieee802.org/3/bm/public/smfadhoc/meetings/index.html>

Proposals

[petrilla_01_0413_smf](#) contained analysis of skew in a 4 fiber parallel SMF PMD.

[cole_01b_0413_smf](#) and [cole_02c_0413_smf](#) reported some end user comments on parallel cabling and compared the cost between the evolving 100GBASE-LR4 and the proposed parallel SMF solution. [welch_02_0413_smf](#) also compared the cost of these two solutions together with 100GBASE-SR10

[petrilla_02a_0413_smf](#) made proposals as to how the CWDM budget might be modified to account for directly modulated DFB lasers

[welch_01_0413_smf](#) compared the link budgets for the 4 fiber parallel and CWDM proposals

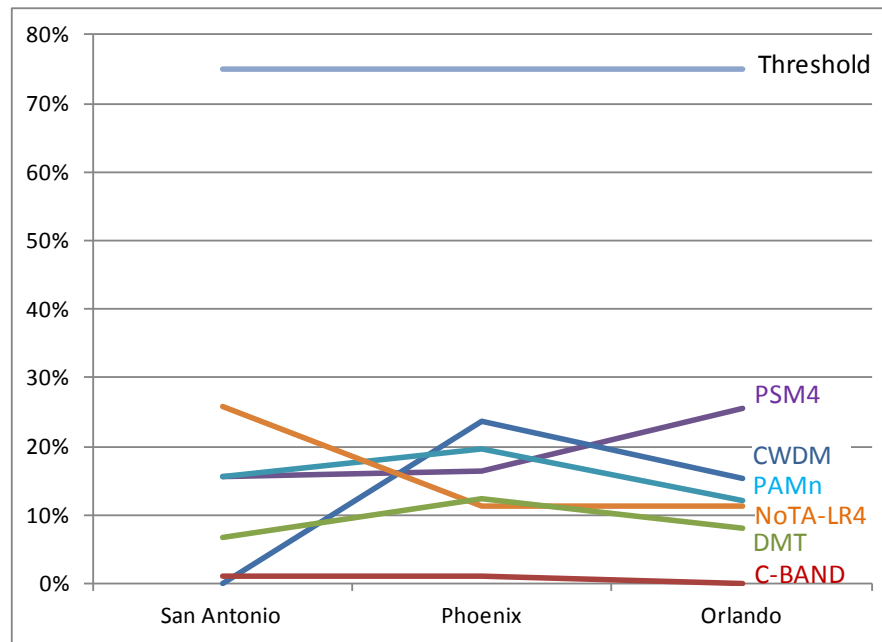
[vlasov_01a_0413_smf](#) contained a modified power budget for the CWDM proposal

[kolesar_01_0413_smf](#) discussed the connector at the proposed 4 fiber parallel MDI and proposed performance requirements for it.

[cole_03_0413_smf](#) and [cole_04_0413_smf](#) discussed the possibility of adding a new PMD “100GBASE-ER4-lite” to the P802.3bm project

Consensus?

I would support a baseline proposal for a SMF PMD based on:



So there was still no consensus on a new PMD proposal in Orlando (distribution continues to change between successive polls).

Have the presentations in the five SMF Ad Hoc meetings helped to build sufficient consensus to allow a decision on how the 500m over SMF objective will be met?

Task Force decision

The Task Force has an objective:

Define a 100 Gb/s PHY for operation up to at least 500 m of SMF

The Distinct Identity response contains:

6. The amendment will enable new PHY types over SMF which consist of the existing 100GBASE-LR4 and 100GBASE-ER4 optical PMDs with four electrical interconnect lanes in each direction.
The amendment will define a new 100 Gb/s SMF PMD in addition to these if it can be shown that a SMF PMD with a shorter reach than 100GBASE-LR4 has sufficient cost, density, or power difference to justify an additional SMF PMD type.

The Task Force needs to make a decision as to how the 500m over SMF objective will be met or risk slipping against the adopted timeline.

Thanks!