

HSSG Fiber Optic Adhoc Meeting Notes 4/04/2007

Attendees:

Last	First	Employer	Affiliation
Anslow	Pete	Nortel Networks	Nortel Networks
Barrass	Hugh	Cisco Systems	Cisco Systems
Chang	Frank	Vitesse	Vitesse
Clairardin	Xavier	Self Employed	Kotura
Cole	Chris	Finisar	Finisar
Dallesasse	John	Emcore	Emcore
Dambrosia	John	Force 10	Force 10
Dawe	Piers	Avago Technology	Avago Technology
Dhliwayo	Jabulani	Corning	Corning
Dove	Daniel	Dove Networking Solutions	ProCurve Networking by HP
Dudek	Mike	Picolight	Picolight
Green	Larry	Ixia	Ixia
Jiang	Wenbin	JDSU	JDSU
Keisuke	Kojima	Mitsubishi Electric Research Lab	Mitsubishi Electric Research Lab
Maki	Jeffery	Juniper Networks	Juniper Networks
McSorley	Greg	Amphenol	Amphenol
Miao	Tremont	Analog Devices	Analog Devices
Patel	Shashi	Foundry Networks	Foundry Networks
Pepeljugoski	Petar	IBM	IBM
Schrans	Thomas	Optical Communication Products	Optical Communication Products
Song	Steve	Exelight	Exelight
Swanson	Steve	Corning	Corning
Tatah	Karim	Cray	Cray
Tsumura	Eddie	Exelight	Exelight

Notes:

Prior to presentations, the chair provided a reference to IEEE patent policy on the web and requested all members to take a moment to read.

<http://grouper.ieee.org/groups/802/3/patent.html>

Pete's Presentation

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Petar P: Should we consider other effects like polarization, etc?

Pete A: There are some well known differences between fiber... to include real data into the spreadsheet is tricky because you suffer from the problem that information is sometimes too optimistic

Petar P: In some countries where legacy is prevalent, we might need more data to support those fibers

Pete A: Even DPQSK or 25G/lane over 40Km would likely be able to operate over such fibers

Frank: We need guidelines for all parameters

Dan: Are there any other parameters that we should be including in the spreadsheet?

Pete A: Not in a position to put down something that is useful. Some info available, for example at recent

OFC, some operators were presenting PMD distribution information.

Chris: Don't see us spending time on that. Loss & Dispersion are key parameters. Dave Cunningham made a presentation in Dallas where he referenced the 10G spreadsheets & the value they provide. In particular, shows the loss in the 1310 window, which is important.

Piers: Easy question, is skew delay the integral of chromatic dispersion?

Pete: Y.

Piers: Concerned about the method applied to derive data, that it is different than conventional (Piers correct me if I misstated this)

Piers: 10G EPON people re-arranging the look/feel of the spreadsheet. Would we want to accept this as the basis for forward movement, then align with the 10G EPON activity as they proceed?

Pete A: 10G EPON is addressing different problems.

John Jaeger: <I totally missed John's point and was unable to transcript>

Chris C: update to models going to be much bigger task.

Conversation got too fast for chair to record. Feel free to insert if you have it.

Paul K: We should include splices in the straw poll wording.

Straw Poll: Adopt spreadsheet "FOAH_anslow_02_0407.xls" as the basis for future work and presentations in the HSSG with regard to attenuation, dispersion & skew for single mode fiber cables including splices.

No Objection:

Chris Cole's Presentation

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Added Optical Amplification and Dispersion Compensation terms into spreadsheet.

Mike D: Should we add "cooled" as a term?

Chris C: Believes this term is very implementation dependent in most cases, and thus difficult to capture. Agrees it is an important parameter. Maybe belongs on 2nd sheet.

Mike D: OA and DC are costs as well vs technical feasibility.

Chris: Yes, ultimately all things translate to cost.

Dan D: What about adding cooling only to mandatory boxes?

Chris C: 10x10DML1310 10/140 & all four 2x50G boxes would be included other candidates? 40K DML 5x20 or 4x25 maybe

Chris C: Will make the changes and send out

Chris C: Any concerns with boxes labeled OA or DC? Should we add/subtract?

Pete A :Why is ML not EML in the table now?

Chris C: Possible that modulator structure might be different than assumed.

Pete A: Would we not also add 10x10 ML?

Chris C: yes

Chris C: Which boxes are you looking at? We are looking at 5x20 and 4x25 1310 DML and ML

John D: When TF is formed, people will begin to compare alternatives

Chris C: Will send out on reflector to request input on what people are investigating

Chris C: Moving on, Slide 4 listed alternatives Pete, did I get this right?

Pete: No. No end points defined.

Chris C: CWDM expected 40% cost savings for uncooled approaches, 4-5 channel pretty feasible

Chris C: Speaking to slide 6, adopting an optimum grid is going to be very important if WDM used.

Pete A: Comment on "strongly resonate with * note, not with proposal to rename to IWDM.

Chris C: Looking for input from other members of FOAH to provide optimum grid.

Pete A: Brief mention of 40G, any need for input from FOAH on that topic? I believe there is a need for this. If 10x10, pretty straight forward how you might proceed... 4x10. However, if we went 5x20 or 4x25, it might change how you would proceed.

Chris C: Strictly data center, not any indication of 10Km or 40Km reach requirements.

Piers: What if 40G were 5x and 100G were 20x?

John: Requests for presentation time are due by April