


High Speed Study Group

Fiber Optic Adhoc Report

April 2007

Dan Dove

Dove Networking Solutions

Representing

ProCurve Networking by HP

One Teleconference In April

<http://www.ieee802.org/3/hssg/public/foah/docs.html>

- April 4th – 2 hours

- 24 attendees
- 2 presentations
 - Single Mode Fibre Parameters & Spreadsheet - Anslow
 - 100GE SMF WDM Grid Observations – Cole
- Subsequent to the presentations we had some dialogue
- A poll of the callers was raised..

“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” which passed with no objection.

HSSG-FOAH Working Table:

Reach (Technical) Feasibility of 100GE Alternatives

SMF	10km 1310nm	40km 1310nm	10km 1550nm	40km 1550nm
10x10G DML	yes + CL	yes + CL + OA	yes	maybe + OA
10x10G ML	yes + CL	yes + CL + OA	yes	yes + OA
5x20G / 4x25G DML	yes	maybe + OA	maybe	maybe + DC
5x20G / 4x25G ML	yes	yes + OA	yes	yes + DC
2x50G DQPSK I/Q ML	yes + CL	yes + CL + OA + DC	yes + CL + DC	yes + CL + OA + DC
1x100G TDM ML	yes + CL + OA	yes + CL + OA + DC	yes + CL + OA + DC	yes + CL + OA + DC

CL = Cooling (or semi-cooling,) OA = Optical Amplification, DC = Dispersion Compensation

Green shading designates alternatives under detailed study by Fiber Optic Ad Hoc contributors

Wrap Up:

Significant discussion on the single-mode alternatives

Clear consensus within the adhoc that technical and economic feasibility for 100m and 10Km are achievable

As chair of adhoc, I was expecting presentation to demonstrate economic feasibility of 40G and technical and economic feasibility of 40Km to be presented, however, no presentations were provided.

I recommend proponents of those solutions bring them into the April meeting.

Thank you!