10km Reach Objective Discussion Review

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Historical Perspective

- September 2006 Reach Ad Hoc Formed
 - Key question to be answered How much of the LR market is actually used for 10km applications?

November 2006

- Concerns regarding IEEE Ad Hoc conducting surveys
- HSSG adopts 10km on SMF Reach objective
 - Big HSSG voters Y: 86 N: 0 A: 4
 - 802.3 voters Y: 40 N: 0 A: 4

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- cole_01_1107
 - 3km has some cost advantage and is aligned with a standard (TIA)
 - 4km addresses some high end data center applications
- goergen_01_1107
 - How much of the LR market is
 - 2 to 4 km SMF
 - 4 to 10 km SMF
 - Unpublished data regarding SMF deployed cabling
 - 47% < 4km, 43% 4 to 10km
 - Data questioned is fiber length shipped representative of installed fiber length (source believes it is)
 - Based on known data, cost analysis exercise indicated 10km better choice
 - Agreement by group 3 reach objectives not good

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cole_03_1107: relative cost analysis

Scenario 1

- C3 = 75% C10
- C40 = 200% C10
- Change objective to 3 / 4 km if Volume10 < 25% Volume3</p>
- Scenario 2
 - C3 = 85% C10
 - C40 = 175% C10
 - Change objective to 3 / 4km if Volume10 < 20% Volume3</p>

Graph of cole_03_1107 Equation





IEEE 802.3 Seoul, Korea, September Interim

Where are we now?

- Any new reach deployment data?
- New input on relative costs?
- What about connector loss?

Thank You