

40G SMF PMD Ad Hoc – Opening conference call meeting

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## Summary of barbieri\_01\_0108\*

- barbieri\_01\_0108 initially presented the case for 40G as an inter-switch link technology. Then, given that 40G will not be limited to just server access, it concluded by recommending the 802.3BA Task Force to consider expanding the range of PMDs required to fulfill the inter-switch application.
- In particular barbieri\_01\_0108 proposed adopting a new objective to add 40G SMF with minimum reach of 10km.

## Why 40G SMF?

## **Data Center perspective**

- Based on feedback from multiple end users (mostly Cisco customers) in different customer segments, there is significant expectation that 40G will first be adopted on inter-switch links inside and outside the data center.
- Similar expectation around 40G applications is evidenced also in <a href="http://www.ieee802.org/3/ba/public/jan08/flatman\_01\_0108.pdf">http://www.ieee802.org/3/ba/public/jan08/flatman\_01\_0108.pdf</a> (slide "Data Center Link Speed the next 5 years").
- Metro/inter-building/interoffice applications, where SMF is a requirement, are the first to adopt HSE technologies.
- Standard SMF is also recognized in the infrastructure standard (TIA-942) for Data Centers and given the limited reach on OM-3 fiber (100m), 40G SMF will find applications inside the data center.
- Although there are customer segments (Web companies, cable providers, high-end financials etc.) whose bandwidth needs mandate the early adoption of 100G, the bulk of the market is driven by cost. 40G cost is projected to be significantly less than for 100G particularly on SMF applications, therefore it represents a more immediate opportunity for the cost-sensitive end user base to adopt an HSE technology.

## **Ad-Hoc activities**

- •Build supporting material & presentations in the areas of: technical feasibility, economic feasibility, broad market potential and distinct identity for the new objective.
- •Need to demonstrate that it is possible to modify the 5 criteria responses to support a the new objective to add SMF support for 40G.