Reach Questionnaire

1) Approximately how many 10 GbE switch ports are currently deployed in your network?

2) What is your primary application for 10 GbE?

Data Center Internet Exchange (service provider) High Performance Computing (including clusters) Campus Backbone Metro Area network (service provider) Long haul WAN

3) For the above application of 10 GbE, what is the approximate distribution of interface types currently deployed?

Also for each interface type please indicate the typical and maximum reach in meters of your deployment of 10 GbE for this application.

(If your deployment of 10 GbE is split quite evenly across multiple applications listed above, please use multiple copies of this questionnaire to fully characterize your 10 GbE network.)

| Interface Type | % of ports | typical reach | max reach |
|-------------------|------------|---------------|-----------|
| 10GBase-LR | | | |
| 10GBase-LRM | | | |
| 10GBase-LX4 MMF | | | |
| 10GBase-LX4 SMF | | | |
| 10GBase-LR | | | |
| 10GBase-ER | | | |
| "10GBase-ZR" 80km | | | |
| 10GBase-CX4 | | | |

4) Please estimate the number of 10 GbE ports that you expect to be deployed in your network 2 years from now.

5) Please indicate your expected requirements for 10 GbE interface types and reaches 2 years from now.

| Interface Type | % of ports | typical reach | max reach needed |
|---------------------------|-----------------------|----------------------|---------------------|
| 10GBase-LR | - | | |
| 10GBase-LRM | | | |
| 10GBase-LX4 MMF | | | |
| 10GBase-LX4 SMF | | | |
| 10GBase-LR | | | |
| 10GBase-ER | | | |
| "10GBase-ZR" 80km | | | |
| 10GBase-CX4 | | | |
| 10GBase-T | | | |
| 6) What would be your pri | mary application of 1 | 00 GbE (or another s | ignificantly higher |

6) What would be your primary application of 100 GbE (or another significantly higher speed next generation version of Ethernet)?
Same as 10 GbE
Data Center
Internet Exchange (service provider)
High Performance Computing (clusters)
Campus Backbone

Metro Area network (service provider) Long Haul WAN

7) What would be your expected reach requirements in meters for 100 GbE for the above primary application?

Typical Reach ______ Minimum Reach Required to be widely deployed for this application______ Desired Maximum Reach

8) Which factors do you expect to be the dominant consideration in your selection of 100 GbE interface types?

a) Broad applicability allowing a single solution to be common to a range of deployment variations (e.g., in the data center, for both horizontal connectivity and vertical (riser) connectivity or e.g., in the metro, deployment in the MAN distribution, aggregation, and core layers of the MAN).

b) Minimum interface costs to meet reach requirements

- c) Compatibility with existing media installations (e.g., MMF and SMF)
- d) Combination of the above considerations to minimize TCO

e) Other. Please specify:_____

9) As a solution for short reach applications (<150 to 300 meters) would you consider preterminated MMF ribbon cable (possibly with as many as 20 fiber pairs) as a viable alternative to a single fiber pair solution (likely to be based on some form of WDM)?

a) Yes, if the ribbon cable interface is less than one half the cost of the single fiber pair interface b) Yes, if the ribbon cable interface is less than three quarters the cost of the single fiber pair interface

c) Yes, if the ribbon cable interface is the same cost as the single fiber pair interface

d) No, would not consider ribbon cable regardless of interface cost advantage