## Reach Cabling Survey: High Speed Study Group Page 1 of 2

## Cabling & Distances

**Service Provider Transport:** Please specify the typical distances between switches, routers or transport devices in your network for these environments

Please also specify what is the type of fiber (MMF, SMF) or is copper deployed in these areas today. If you are deploying copper cabling, please specify Cat 5/5e/6/6e+/7

Rack to rack	
Intra POP	
Metro Access	
Long haul	

**Data Centers (Service Provider or Enterprise):** Please specify the typical distances between switches, routers or transport devices in your network for these environments

Please also specify what is the type of fiber (MMF, SMF) or is copper deployed in these areas today. If you are deploying copper cabling, please specify Cat 5/5e/6/6e+/7

Server to access switch
Access switch to aggregation
switch
Aggregation switch to core
switch
Data center to data center

**Enterprise LAN**: Please specify the typical distances between switches or routers in your network for horizontal or vertical risers.

Please also specify what is the type of fiber (MMF, SMF) or is copper deployed in these areas today. If you are deploying copper cabling, please specify Cat 5/5e/6/6e+/7

Wiring closet to distribution Distribution to core

Building to building

**Research / Government Organization**: Your environment may be a mix of Ethernet over the WAN and campus topologies, please fill in the details under any category that matches from either of the above (service provider, enterprise, data center)

## Bandwidth / Cabling Survey: High Speed Study Group Page 2 of 2

## **Bandwidth Trends** If you have bandwidth limitations in your network today, are these bottlenecks occurring at an aggregation points or the core? What are the typical interface speeds at this bottleneck points? What is the next interface speed you would need to satisfy your bandwidth needs? How do you expect bandwidth / traffic needs to change over the next 5 years? For example, do you expect more locations to be bandwidth limited? Do you see your organization moving to high speed interfaces? If you have no bandwidth bottlenecks today, where would you expect them in 5 years? Also please revisit the questions above for this future timing. Can you provide an estimate of how many locations, or ports that are currently a bottleneck, or a projection over the next 5 years? What is your typical port trunking methodology, to scale physical links? How many ports will you trunk in a typical LAG? Why do you cap the total number of links to the value mentioned above? What applications are driving bandwidth? And what is the average bandwidth per user? If you can not get a higher speed interface, what would you do? Or what impact would this have on your ability to support your user base? Can you share your network topology for discussion within the IEEE?