



Meta Thoughts on “First Mile”

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Thinking about the problem

- **Bandwidth**
- **Topologies**
- **Obligations**

B/W – Self fulfilling prophecy

- **The degree to which we provide B/W will be the degree to which it is consumed.**
- **We must assume that the “Access Telecommunications Moore’s Law” will die and be replaced (eventually or after catch up) with Moore’s Law**
 - **Ethernet: ~ 4 years per order magnitude**
 - **Moore’s Law: ~ 6 years per order magnitude**
 - **Telecom Law: ~ ? years per order magnitude**

B/W – where to start from...

- **Without some COMPELLING technical or economic reason, we should pick speeds that match traditional Ethernet:**
 - **10 Mb/s**
 - **100 Mb/s**
 - **1 Gb/s**
 - **10 Gb/s**

New Topology – upgrade by design

- **We must give M O R E serious thought about upgrade potential than was ever required for the enterprise**
 - **The ideal of pulling new media for an upgrade should be REPULSIVE to us.**

Only do it once!
 - **The same architecture must support the needs of large, small & home business and residential use.**

Obligations

- **5 Criteria**
- **L o n g t e r m perspective**
- **Protect “Ethernet Brand”**
 - **No Market Confusion**
 - **Optimal number of solutions**
 - **Bruce Tolley: “more than 1, less than 3”**
 - **Can’t do everything that is of benefit to humanity**
- **KISS**
- **Plug and Play == Interoperability**

Request to chair

- **Now is probably a good time to give a brief tutorial on the standards process:**
 - Usual agenda / timeline / phases of process
 - PAR / 5 Criteria / Objectives
 - Voting (SG vs TF vs 802.3...) & membership
 - Impact of 75% threshold
 - “Culture”
 - What exactly is “Ethernet” (== 802.3)
 - Review 802.3z Objectives?
 - Review 802.3ae Objectives?
 - Pontification of “senior members?”

- **We pledge allegiance...**