

5 Criteria Responses

- Proposed edits to the PAR A 5 Criteria Working Draft as adopted at the Jan. 2007 meeting
 - http://www.ieee802.org/3/hssg/HSSG_PARA_5C_WD_0107.pdf
- Additionally – side note:
 - Updated the excel spreadsheet compilation – will send out to the reflector for additional review & solicit comments from the study group participants
 - Added in the presentations which the group heard on Tuesday & Wednesday
 - Made a couple of minor changes (added a few ‘Y’s) based upon presenters input during this meeting
 - 128 presentations now included in the mapping

5 Criteria Response Edits

- 3 possible changes have been raised based upon the presentations at this meeting –
 1. Clarify Economic Feasibility technology comparison
 2. Make Broad Market Potential #1 & #5 'consistent'
 3. Add Financial Institutions to Broad Market Potential application areas
- 2 motions proposed to address #1 & #2 above

Economic Feasibility

- Known cost factors, reliable data
 - Reasonable cost for performance
 - Consideration of installation costs
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- The cost factors for Ethernet components and systems are well known. The proposed project may introduce new cost factors which can be quantified.
 - Representations from component and equipment suppliers and their customers indicate that Ethernet at 100 Gb/s will offer better value and lower cost than rival technologies available for early adopters.
 - Customers will be able to use the SMF and OM3 fiber defined and installed in accordance with existing standards.
 - Installation costs for new fiber runs based on established standards are well known and reasonable.
 - Network design, installation and maintenance costs are minimized by preserving network architecture, management, and software.
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Motion: Modify the 2nd Economic Feasibility response to change ‘rival technologies’ to ‘alternate approaches or technologies’

New response would be:

Representations from component and equipment suppliers and their customers indicate that Ethernet at 100 Gb/s will offer better value and lower cost than alternate approaches or technologies available for early adopters.

Broad Market Potential

- **Broad sets of applications**
 - **Multiple vendors and numerous users**
 - **Balanced cost (LAN versus attached stations)**
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- Rapid growth of network and internet traffic has placed high demand on the existing infrastructure motivating the development of higher performance links. Quantitative presentations have been made to the IEEE 802.3 HSSG indicating **significant market requirements** for 100 Gb/s Ethernet across a wide range of applications.
 - **Could clarify what the group means by ‘significant market requirements’**
 - **Received input from several individuals to change to ‘significant market need’**
- 100 Gb/s IEEE 802.3 provides a solution for applications that have been demonstrated to need bandwidth beyond existing capabilities. Examples include: providing interconnect & aggregation capabilities in data centers, internet exchanges and service provider peering points; serving growth applications such as video on demand; and as an interconnect for high performance computing environments.
 - **Suggestion to add a reference to the use in Financial institutions**
 - **But we also have had historical input & references to other vertical segments (i.e. medical,...)**
- There has been wide attendance and participation across end users, equipment manufacturers and component suppliers. It is anticipated that there will be sufficient participation to effectively complete the standardization process.
- Prior experience scaling IEEE 802.3 across the range of 1 to 10000 Mb/s indicates that the cost distribution between routers, switches, and the infrastructure remains acceptably balanced. 100 Gb/s Ethernet should continue this trend in the intended higher end application spaces.
- Given the topologies of the networks and intended applications, the early deployment will be driven by key aggregation & high-bandwidth interconnect points. This is unlike the higher volume end system application typical for 10/100/1000 Mb/s Ethernet, and as such, the initial volumes for 100 Gb/s Ethernet are anticipated to be more modest than the lower speeds. This does not imply a reduction in the need or value of 100 Gb/s Ethernet to address the stated applications.

Broad Market Potential

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- Rapid growth of network and internet traffic has placed high demand on the existing infrastructure motivating the development of higher performance links. Quantitative presentations have been made to the IEEE 802.3 HSSG indicating significant market requirements for 100 Gb/s Ethernet across a wide range of applications.

Motion: Modify the 1st Broad Market Potential response to change ‘market requirements’ to ‘market need’

New response would be:

Rapid growth of network and internet traffic has placed high demand on the existing infrastructure motivating the development of higher performance links. Quantitative presentations have been made to the IEEE 802.3 HSSG indicating significant market need for 100 Gb/s Ethernet across a wide range of applications