HSSG Presentation Mapping to 5 Criteria Responses

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Introduction / Motivation

- A sanity check or summary compilation – what presentations into the HSSG were **relating to or addressing** the Draft 5 criteria responses
  - Help guide an individual to be able to assess the question - can we support the assertions in the draft responses?
  - Attempts to make no qualitative determination as to how well the response may/may-not be addressed
- Assumes 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
- Maybe also be useful in helping to begin to assemble the Tutorial material
- Compilation is an excel spreadsheet – see Jaeger_02_0307.xls

Approach Taken

- Did the compilation for the 3 most discussed criteria
  - Broad Market Potential
  - Technical Feasibility
  - Economic Feasibility
- Columns represent the respective <u>bullets</u> from the working draft criteria
  - E.g. 5 bullets in Broad Market Potential → labeled BMP1 – BMP5
  - Similar for TF and EF
- Rows were meant to capture all the presentations from the September '06, November '06 and January '07 HSSG meetings
  - Many were not relating to any criteria (Ad-hoc reports, Liaisons, 802.3 process, current non-PARA Objectives [40km, copper],…)
- Column heading pull-downs can help with some quick sort options for those curious few
  - E.g., Sort on 'Y', or '(Non-Blanks)',…

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Interpretations & Observations

- Interpretations:
  - Apologize in advance for the misclassification of anyone into the End User, Component, Equipment & University categories - no slight intended…
  - Quickly realized that there are two levels of interpretation involved here – first as to the intent/meaning of the Criteria response itself & secondly then overlaying a given presentation across the responses
- Observations:
  - There were a number of presentations where there was some uncertainty if they were related to a specific criteria response or not (these cells are highlighted in yellow)
  - Uncovered a couple of the criteria responses which were particularly at issue, or where some ambiguity was evident -
    - Shared the first-pass draft of this with a number of interested individuals and discussed the items a bit to get a broader opinion on these points
  - Specifically see the next two slides
  - **Key Take-away**: this process is **subjective** – and should be taken as such, re-enforcing that this is input for individual use

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EF2 Criteria Response

- Economic Feasibility response #2

  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.

  - Interpretation of 'rival technologies' – non-Ethernet or does nx10GE LAG, which is clearly an alternative approach used today, qualify?
  - There have been very few EF presentations wrt non-Ethernet technologies (i.e. Infiniband, 40G POS,…); but quite a few, especially for the MMF & SMF PHYs, which have rolled up comparisons to 10GE (as historically has been done)

  - Discussion point: "alternative technologies or approaches" may be a more suitable wording
    - EF2 locations marked ▨ Y ▨ were compiled under this interpretation

BMP1 vs. BMP5 Criteria Responses

- In discussing some of the yellow highlighted presentations, the discussion led to interpretation or conflict between the 1st BMP response and the last

#1 *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 <u>significant market requirements</u> for 100 Gb/s Ethernet across a wide range of applications.*

#5 *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.*

- A revisit of the "significant market requirements" phrase in BMP1 - being equivalent to significant 'need' or significant 'port count'
  - Discussion Point: BMP5 provides the guidance on this and we can make the two responses clearer/more consistent if we wish

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Summary

- An interesting exercise if nothing else…
- Suggest that we consider additional editing or word-smithing to a couple of responses to make them clearer
- <u>Other conclusions</u>: none;
  - it's an available tool for an individual to use to assess for themselves the criteria responses