

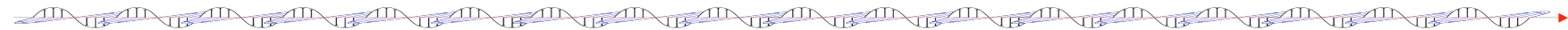
Straw Poll Analysis

IEEE 802.3 40 Gb/s and 100 Gb/s Fiber Optic Task Force

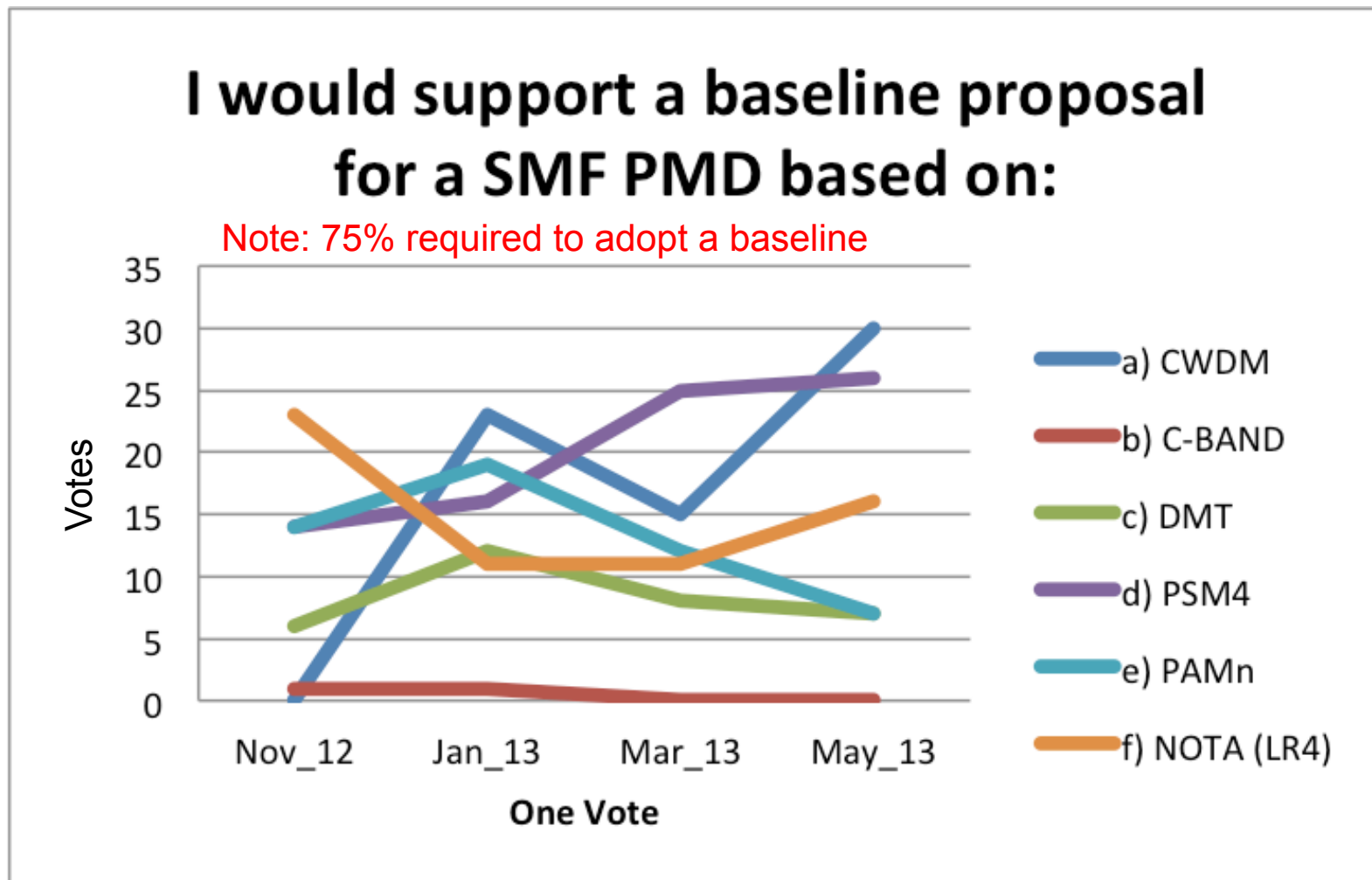
Dan Dove

Applied Micro

Victoria, BC Canada – 14, 15 May 2013



Straw Polling Data

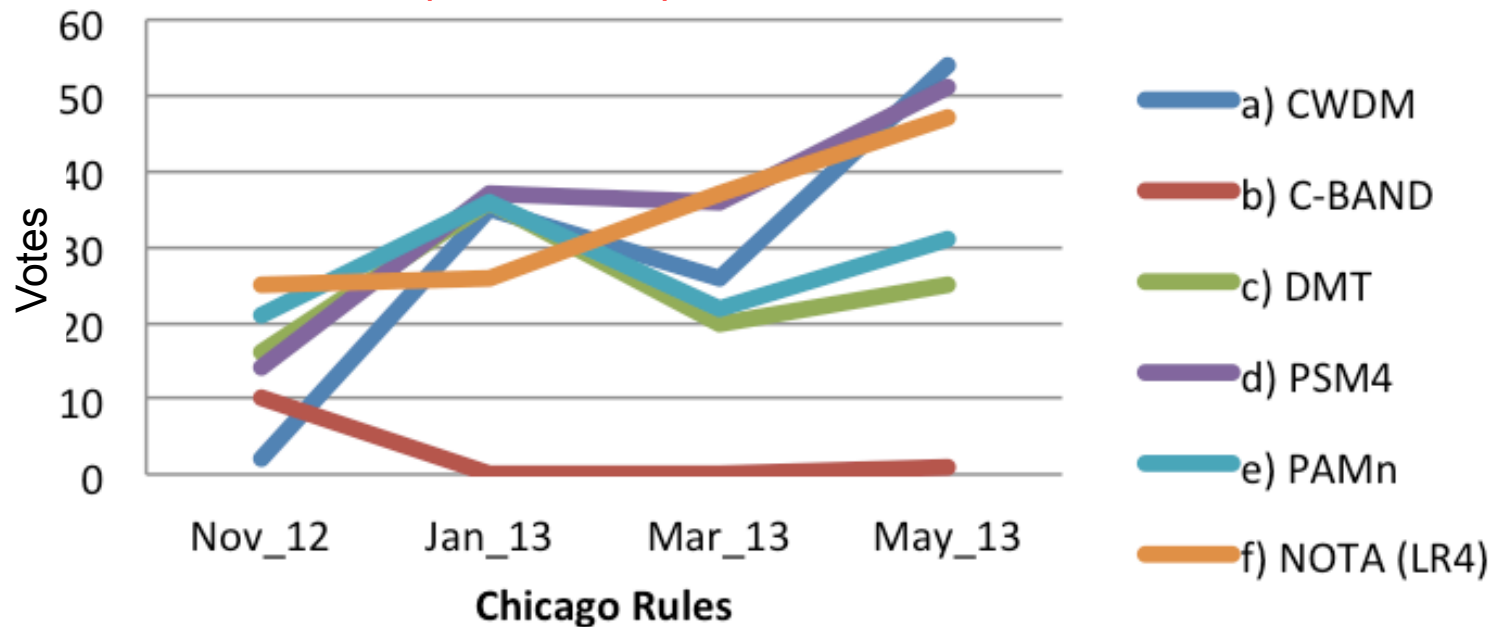


Note: Room counts Nov-89, Jan-97, Mar-98, May-97

Straw Polling Data

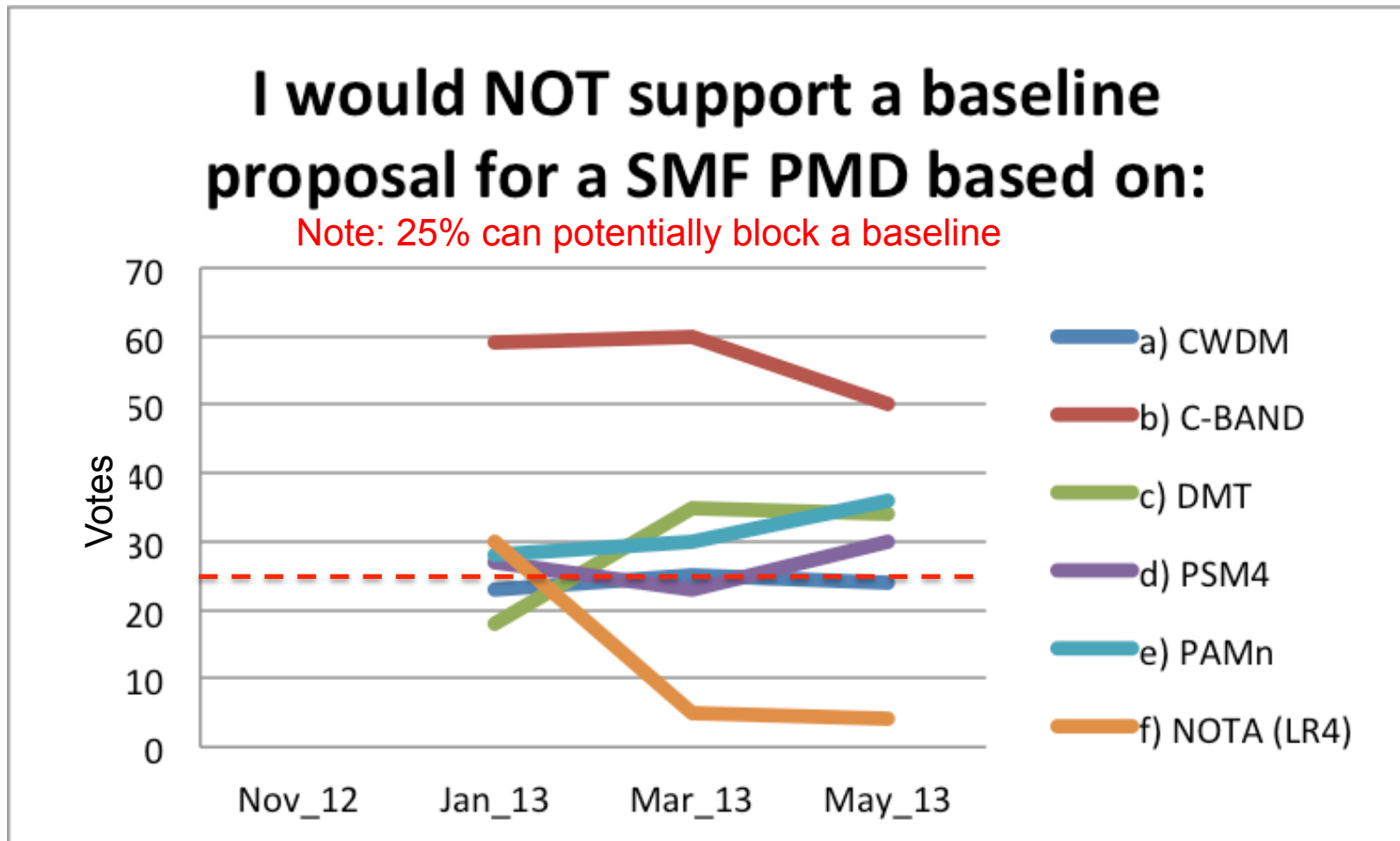
I would support a baseline proposal for a SMF PMD based on:

Note: 75% required to adopt a baseline



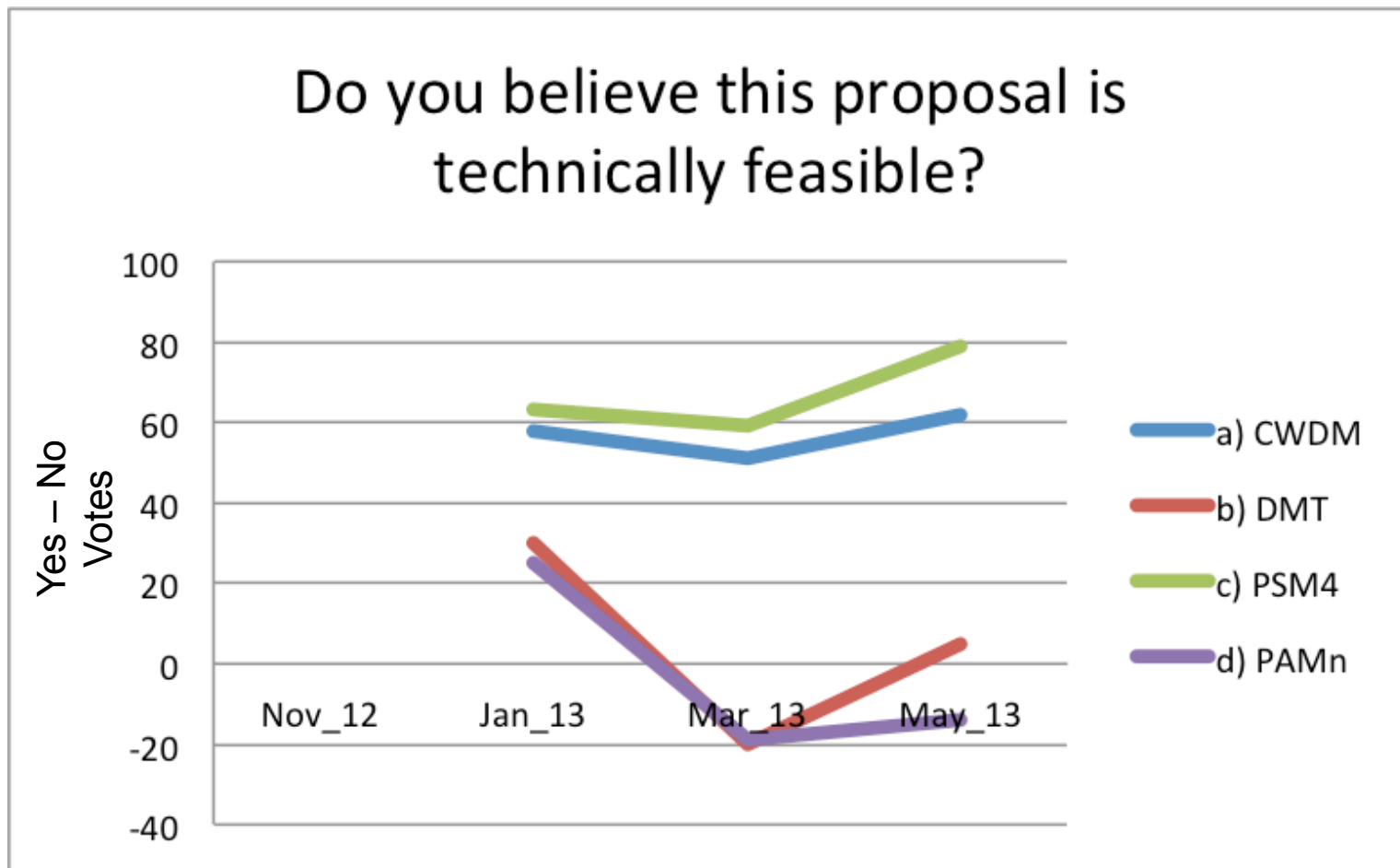
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Straw Polling Data

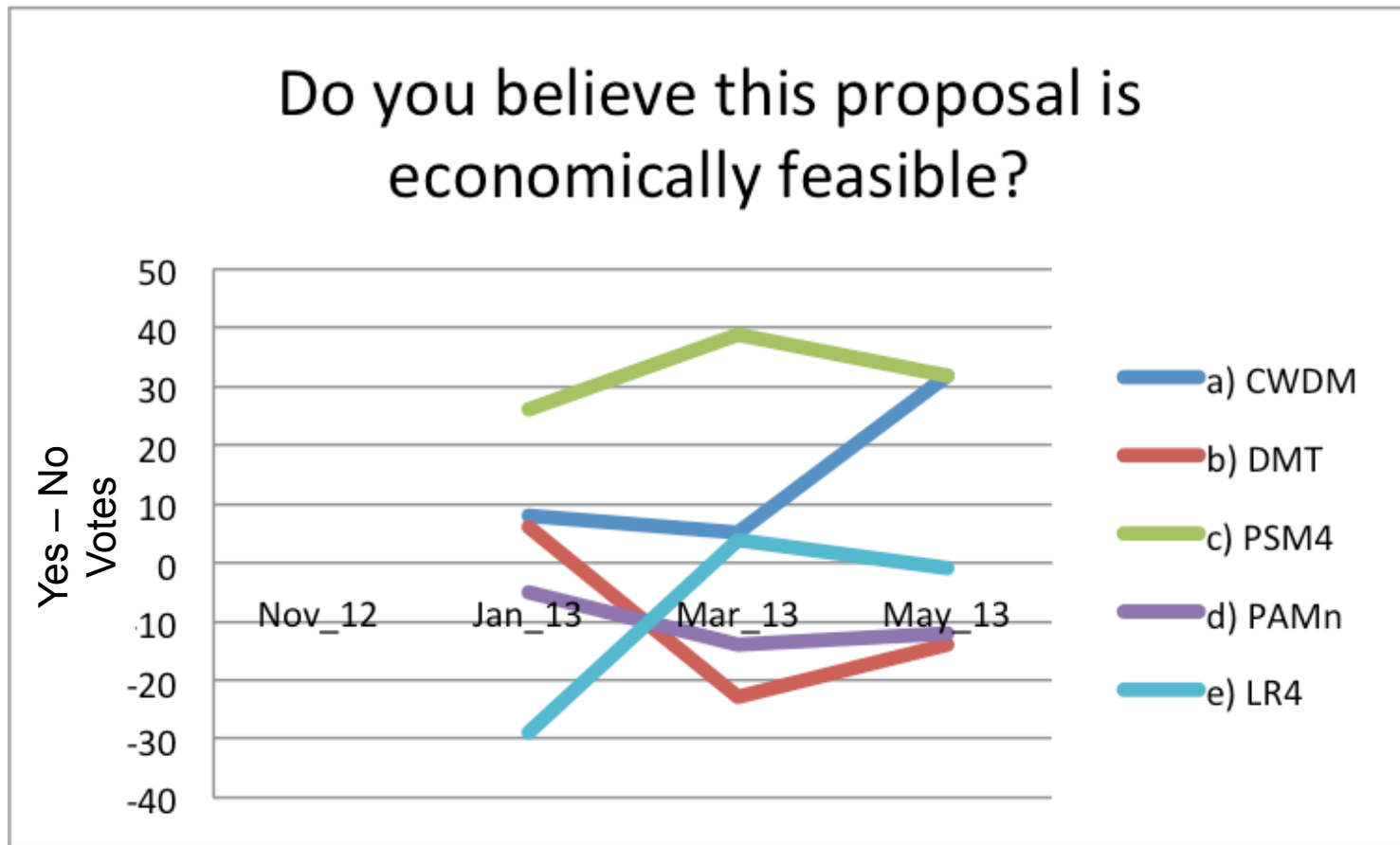


Note: Room counts Nov-89, Jan-97, Mar-98, May-97 (values above are very close to %)

Straw Polling Data



Straw Polling Data



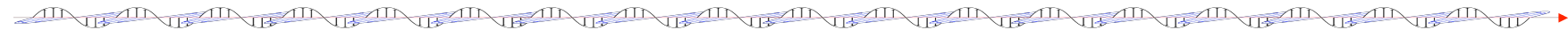
Straw Polling Data





Observations

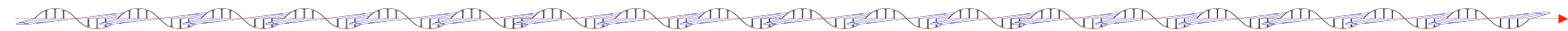
- Support
 - CWDM, PSM, LR4 trending up
 - PAMn, DMT trending down
 - C-Band flat at zero
 - Chicago Rules – Starting to see majority levels
- Not Support
 - LR4 solidly low (very good thing)
 - CWDM barely below 25% (not a bad thing)
 - PSM slightly above 25% (minor trending in the wrong direction)
- Technical Feasibility
 - PSM, CWDM are solid (LR4 not included as its field-proven)
 - PAM, DMT are struggling to demonstrate sufficient technical feasibility
- Economic Feasibility
 - PSM, CWDM are very positive
 - PAM, DMT are struggling to demonstrate sufficient economic feasibility
 - LR4 is pretty neutral
- Broad Market Potential
 - CWDM, LR4 are trending upward
 - PSM, PAM, DMT are struggling to demonstrate sufficient BMP

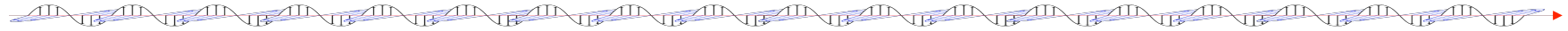




Key Questions

- Note: These are my reading of the data, everyone is prompted to analyze it themselves and draw their own conclusions. In addition, sharing that viewpoint and discussion may help to build consensus where its needed and achievable.
- PSM4 – Will customers be receptive or reluctant to adoption of parallel fiber links?
- CWDM – Will the cost/power/density of optics achieve levels necessary to differentiate it from LR4?
- LR4 – Will the inclusion of CAUI-4 allow sufficient cost/power/density improvements to meet market needs without an additional PMD?
- Can the the Higher Order Modulation alternatives (PAMn, DMT) demonstrate they are ready in time for this project?





Recommendation

- Our Task Force adopted schedule says that we must deliver D1.0 for Task Force review out of this meeting.
- In my opinion, we do not have sufficient consensus to adopt any SMF < 500 m solution today.
- Recommended path is to adopt D1.0 with appropriate modifications resulting from any successful motions today and begin TF review.
 - Use SMF ad hoc to:
 - Identify appropriate questions to drive consensus toward adoption
 - Address those questions, review text of potential clauses
 - Adopt any additional clause/text in July for inclusion to D1.1
 - Any adopted work must be ***extremely complete*** to avoid impacting future draft progress!
 - If insufficient consensus can be obtained by July, move forward without an additional SMF clause and allow the IEEE 802 process to resolve whether an additional 100GbE SMF PMD makes sense in a future project.

