P802.3dj TF Electrical Track Progress Update – Looking to the March Plenary

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Priorities – Phase 1: January 2024

- AUI C2M loss target and EQ parameter values
- CR/KR EQ architecture and EQ parameter values
- Reference EQ & COM features for all electrical interfaces/PHYs
  - Use MLSE or not?
  - Which MLSE approach/direction to take in COM?
  - Define floating taps?
  - Decide which interfaces to apply these to: CR, KR, C2M, C2C?
- Electrical link training (LT): concept, interface usage (CR, KR, C2M, C2C), commonality
- AUI C2M host & module output TX settings (“fixed” vs. “Adjustable”)

Priorities – Phase 2: March 2024

- Parameter values for CR/KR/AUI-C2M/AUI-C2C
- AUI C2M transmitter and receiver compliance
  - Methodologies
  - Parameter values
- Electrical link training details: pattern, format, bit definitions, etc.
  - Segment by segment solution for AUIs
- AUI specification and measurement method: BER, CER, FLR, FEC symbol error ratio, PAM4 decision error ratio, etc.
- CR/KR transmitter and receiver compliance and CA channel test methods

Efforts Between Now and March

- Update and verify COM with changes per adopted motions
- Channel Analysis with new COM v4.3/4.x
- Consensus building on Ref EQ parameter values for AUI C2M (to close the budget)
  - Need strong consensus proposal by March!!
- Consensus building on Ref EQ parameter values for CR and KR
  - Need strong consensus proposal by March!!
- PMD & PMA training details
- Evaluation of MLSE on channels and implementation penalty details
- AUI C2M compliance methodology direction (and initial baseline)

Summary

- We have many hard (and some easy) decisions to make next
- Per the adopted timeline , it is imperative that we continue adopting baselines at the March Plenary meeting to ensure continuation of the electrical interfaces and PHYs work within the P802.3dj Task Force (vs spin out)
- The P802.3dj Task Force leadership will be actively prioritizing contributions that close gaps or address baselines needed for D1.0
  - Contributions with changes or improvements to previously adopted motions would be deprioritized, if time is limited.

Backup