802.3ae Report

to the
802.3 Work Group

Albuquerque, New Mexico

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Interim Meeting in Dallas

Stated Goals

• **What to do with Hari?**
  - Executive decision that Hari fits within objectives for the group
  - Opportunity given to contest; none offered

• **Start down selecting PMD choices**
  - Held special PMD meeting; straw vote
  - Chair challenged all PMD vendors to work together off-line to consolidate proposals

• **Plan for choosing coding schemes**
  - Not addressed

• **Recommendation on 802.3 Letter to ITU**
  - Postponed to this meeting
Dallas Presentations -- New

- **WAN Data Reliability (Roy Bynum)**
  - Ethernet networks more reliable than Packet-Over-SONET (POS) networks
- **802.3 Letter to 11801 on Fiber Specs**
  - Affirm current back reflection specifications
- **UniPHY Proposal (Howard Frazier)**
  - Slightly slower WAN data rate
  - Some cost hit to optimized LAN PHY
- **High Speed PCB’s (Chad Morgan)**
- **Limits of FR-4 (Ed Sayre – invited talk)**
- **10kBASE-T feasibility (Vivek Telang)**
Dallas Presentations (1 of 3)

- WAN PHY frame delineation (David Martin)
  - Probability of false frame: $2 \times 10^{-30}$
  - Probability of rejecting false frame: 0.9995
- WAN PHY PCS Details (Norival Figueira)
- HARI architectural proposal (Paul Bottorff)
- MB810 Updates
  - Using MB810 with HARI (Dae Young Kim)
  - Decoder implementation (ChanGoo Lee)
  - Adding control codes to MB810 (Heyung Sub Lee)
  - Error detectability (Han Chul Do)
- Hari skew budget corrections (Joel Dedrick)
Dallas Presentations (2 of 3)

- **WAN PHY vs EOS (David Martin)**
  - WAN PHY not BellCore compliant
  - Less overhead; looser clock tolerance
- **64b/66b Code Analysis (Rick Walker)**
  - Hamming distance, scrambler, baseline wander, error rates
- **Update on Serial PMDs (Vipul Bhatt)**
  - Refinements by the SSIG; issues & work
- **Multilevel PMD (Rich Taborek)**
Dallas Presentations (3 of 3)

- 4 WWDM + PAM (Stefan Wurster)
- 8 Channel SW WWDM (Eric Grann)
- PAM-5 Simulations (Oscar Agazzi)
- Emerging 10 Gb applications (George Claseman)
Dallas Interim – Other

Initiated work on common **terminology** for WAN and LAN

- Refined between meetings
- To be “finished” and “voted in” this meeting

Presentation process
Reflector policy (and subsequent test)
Adopt schedule (postponed to this meeting)
Goals For This Week (1 of 2)

Organize:
- Chair,
- Vice Chair,
- Chief Editor,
- 2 Track Chairs (sub task force chairs)

First Split into 2 tracks
- PMD (PMA) and,
- “Everything else”

Adopt terminology

Review 802.3 letter to ITU and make proposal

Adopt schedule
Goals For The Week (2 of 2)

Close “Brainstorming Phase”
Start “Selection Phase” (March – July)

- **March:**
  - Survey membership for current “state of mind”
  - Reduce number of PMD proposals (7 or less?)

- **May:**
  - Stage for July final selection of proposals
  - Identify final candidates (e.g. coding schemes);
  - Consolidate proposals; identify clause structure

- **July:**
  - Adopt and refine baseline proposal
  - Plan 1st draft (September)
10 GEA Created

The 10 Gigabit Ethernet Alliance is formed and accepting memberships

- This is a marketing organization in support of the 802.3ae effort
- For information, contact: 10gea@expomarketing.com