802.3ae Report to the 802.3 Work Group

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IEEE 802.3ae 10 Gigabit Ethernet

18 Jan 2000

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

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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)

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Dallas Presentations (1 of 3)

• WAN PHY frame delineation (David Martin)

- Probability of false frame 2e-30
- Probabillity 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"

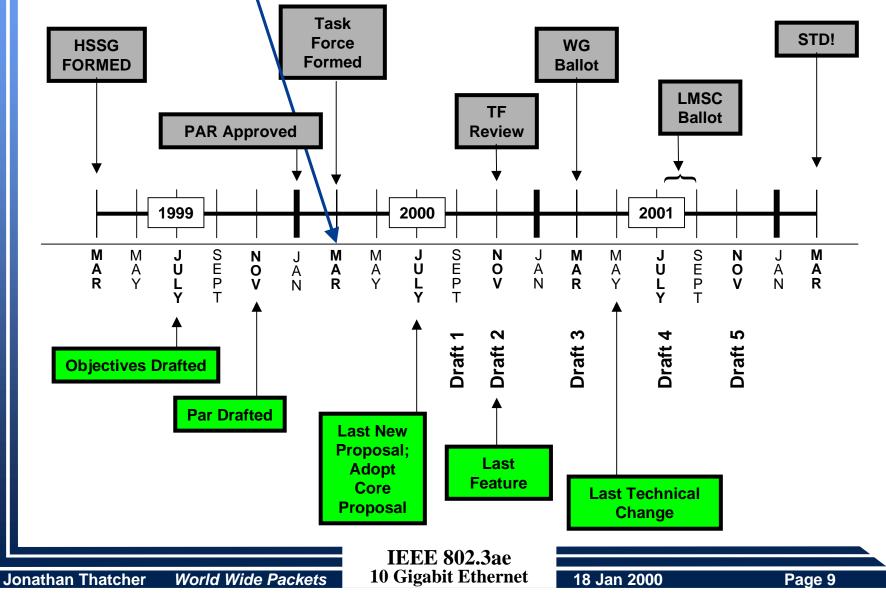
Adopt terminology Review 802.3 letter to ITU and and make

proposal

Adopt schedule

Long Term 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)

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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: <u>10gea@expomarketing.com</u>

