

PHY BASELINE PROPOSAL AD HOC MINUTES – Unapproved

14 January 2014

Submitted by Ad Hoc chair: George Zimmerman

Welcome – Second meeting.

From the minutes of the November Task Force Plenary meeting:

The Chair then chartered a PHY proposal ad hoc, chaired by George Zimmerman, with the following charter/objectives:

- Identify elements necessary to form a baseline proposal
 - o Signaling bandwidth (bounds)
 - o Modulation, EQ, coding, etc.

Participants are encouraged to review IEEE meeting guidelines available at the following URL - <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf>

Mr. Zimmerman then asked if there was anyone in attendance who was unfamiliar with the IEEE meeting guidelines, and hearing none, he waived reading of the slides.

The meeting was called to order at 9:10 am Pacific Time meeting start

1. Roll call, attendees were read from the meeting login and additional names/affiliations were taken by voice & email:

Brian Buckmeier – Bel Stewart Connector
Dave Jeskey - Sentinel
Harry Forbes - Nexans
Hugh Barrass – Cisco
Jan Kupec – RMM
Kenghua – HP
Masood Shariff - Commscope
Paul Vanderlaan – Berk Tek
Peter Wu – Marvell
Paul Wachtel - Panduit
Sterling Vaden – Optical Cable Corp.
Tom Souvignier – Broadcom
Manav Garg – Broadcom
German Feyh – Broadcom
Victor Renteria – Bel Stewart Connector
Wayne Larsen - Commscope
Will Bliss – Broadcom
Bill Woodruff - Broadcom
Chris DiMinico – MC Communications / Panduit
Martin Rossbach - Nexans
Dave Chalupsky - Intel
George Zimmerman – CME Consulting / Aquantia & Commscope
Jeffrey Seefried – Leviton

2. Reminder of IEEE patent policy

www.ieee802.org/3/patent.html

At 9:20 AM PST, the Chair read slides 0- 4 of the patent policy, and made the call for patents. There were no responses.

3. Housekeeping

Approval of Agenda: Move to approve the proposed agenda as shown and emailed:

M: Hugh Barrass

S: Chris Diminico

Approved by voice without opposition

Approval of draft minutes: Move to approve the draft minutes of the 5 December 2013 ad hoc meeting as posted, emailed and shown.

M: David Chalupsky

S: Chris Diminico

Approved by voice without opposition

4. New business for this ad hoc meeting:

New contributions with discussion:

TITLE: Channel SNR, 8in-3m-24m-3m-8in

PRESENTER: Chris DiMinico, MC Communications / Panduit

ABSTRACT: The presenter considers concatenated channel models presented to the 802.3bj Channel Modeling ad hoc and determines Salz SNR over the link, showing a range of baud rates over which adequate Salz SNR can be obtained with cancellation of internal cabling impairments. The presenter noted that background noise measurements are necessary to optimize the configurations for power and performance.

Discussion noted a correction to the footer of the slides, indicating "802.3bj Channel SNR", should be "bq". Discussion echoed importance of soliciting measurements of background noise within systems to allow optimization of PHY designs, including both wideband stationary and narrowband nonstationary (time varying) noise sources. Nonstationary sources may be important in baselining the FEC coding strategy. Participants echoed a desire not to rely on noise levels as low as -150dBm/Hz without validation by measurement.

Members of the Channel Modeling Ad Hoc (Pete Cibula & Brad Booth, chairs) have referred to measurements in the making – yet to be contributed. Contributions defining measurement methodology would also be appreciated. See action item below.

Mr. Diminico volunteered assistance, and noted that he will solicit UNH/IOL to help and assist in characterizing the background noise.

5. Closing Discussion

Review action items from this meeting

- Action item (to be forwarded to 802.3bj Channel Modelling ad hoc chairs):

o Please solicit contributions on:

- Measurement methodology for background noise in systems
- Measurement results of background noise in systems

- Including broadband, stationary, and nonstationary narrowband sources

Future presentations & contributions

- The chair noted that contributions on power analysis and refinements to the strawman presented at the 5 December meeting would be appreciated to move the PHY baselining forward.

Next steps/future meetings

- The chair noted that our next Task Force meeting face-to-face is in a week, and, at that time, if we have contributions, we may have another ad hoc meeting. Additionally, we will set the next ad hoc meeting date at the time of the Task Force meeting.
- The chair reiterated a call for contributions focusing on PHY baseline proposals, power analysis, and requirements.

Adjournment:

M: Wayne Larsen

S: Hugh Barrass

Approved by voice without opposition, at 10:01 Pacific time, 14 January 2014