Minutes P802.3by 25 Gb/s Ethernet Task Force ad-hoc meeting – February 25, 2015

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder (see http://www.ieee802.org/3/patent.html)
- Approval of draft minutes for February 18 2015
- P802.3by Task Force Update (tentative), Mark Nowell
- P802.3by D0.1 editorial update (tentative), Matt Brown
- "802.3by CR PHY designation issue", Mark Nowell
- "25G PHY types", Jeff Slavick
- "AN PHY AND FEC SELECTION", Eric Baden
- "25GE hi_ber ISSUES", Eric Baden

Presentations posted at: http://www.ieee802.org/3/by/public/adhoc/architecture/index.html

Meeting began at 8:03 a.m. Pacific.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/by/public/adhoc/architecture/agenda_022515_25GE_adhoc-v2.pdf

Matt Brown showed the links to the ad hoc page and the email reflector.

Matt Brown reviewed the Attendance information related to the ad hoc. He reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes.

Matt presented the proposed agenda. No one responded. The agenda was approved by the ad hoc.

Matt reminded participants of the IEEE patent policy. (see http://www.ieee802.org/3/patent.html) No one responded.

The February 18 meeting minutes were posted after the meeting. No comments were received. Matt Brown asked if there were objections to approving the minutes as posted. No one responded. The February 18 meeting minutes were approved by the ad hoc.

25GE Task Force update – Mark Nowell

- The P802.3by meeting Monday starts at 8:00 a.m. Please plan travel accordingly.
- There will be an overlap with the P802.3bs project on Tuesday. Mark will work with John D'Ambrosia to minimize the impact.
- Presentation requests due Friday. Presentation due Tuesday, 3 March.
- Presentations should be associated with a comment against the draft or address big ticket items.

P802.by D0.1 editorial update - Matt Brown

- No late comments were received.
- Received comments were posted on February 23, 2015. Responses are expected to be posted by March 3rd.
- Reviewed comment distribution.
- Reviewed the big ticket items which need consensus building and/or contributions prior to the meeting.
- No proposal yet for comment #129 "EEE signaling through FEC sublayer"

Presentation #1:

"802.3by CR PHY designation issue", Mark Nowell

See http://www.ieee802.org/3/by/public/adhoc/architecture/nowell_022515_25GE_adhoc.pdf

- PHY designation is proving to be difficult to resolve. Both options identified have issues.
- Reviewed two designation options and the associated pros/cons. Task Force needs to adopt one into the draft during the March Plenary meeting. Consensus building is necessary.
- Mark noted that KR-FEC in the presentation means Cl 74 BASE-R FEC.

Presentation #2:

"25G PHY Types", Jeff Slavick

See http://www.ieee802.org/3/by/public/adhoc/architecture/slavick_022515_25GE_adhoc.pdf

- Reviewed general use cases of the technology.
- Reviewed possible paths for the single PHY and multiple PHY choices.
- Reviewed PCS, FEC area cost and performance matrix on slide 11
- Discussed tradeoffs of PCS/FEC combinations on overall PHY or ASIC size.

Matt asked if there was objection to extending the meeting by 30 minutes. No one objected.

Presentation #3:

"AN PHY AND FEC SELECTION", Eric Baden

See http://www.ieee802.org/3/by/public/adhoc/architecture/baden_022515_25GE_adhoc_01.pdf

- Reviewed common goals derived from ad-hocs and offline discussions
- Reviewed the 3 PHY types: CR-L, CR-S, and CR-N
- Much discussion on multiple PHY types vs. one PHY type.

Presentation #4:

"25GE hi ber Issues", Eric Baden

See http://www.ieee802.org/3/by/public/adhoc/architecture/baden_022515_25GE_adhoc_02.pdf

- Reviewed definition of hi ber and what it indicates.
- Reviewed the effect of Clause 108 FEC.
- Impact of FEC needs to be considered.
- Comment on sending zeros to the PMD could be an issue with an AUI interface that is AC coupled.

Mark Nowell encouraged offline consensus building prior to the March Plenary meeting to facilitate decision making for Draft 1.0.

Next ad hoc meeting is March 4, 2015.

The Ad hoc meeting ended at 10:02 a.m. Pacific.

List of attendees (captured from Webex tool)

| Name | company |
|-------------------------|----------------------|
| Adee Ran | intel |
| Ali Ghiasi | Independent |
| Andre Szczepanek | inphi |
| Andy Zambell | ieee |
| anil | brocade |
| Brian Teipen | advaoptical |
| Carlo Tosetti | cisco |
| Chad Erven | semtech |
| Chris DiMinico | MC Communications |
| Chris Roth (Molex) | molex |
| Dan Cunningham (Arista) | arista |
| Dan Dove | Emulex |
| Daniel Koehler | morethanip |
| Dave Brown | semtech |
| David Malicoat | hp |
| David Ofelt | Juniper |
| Derek Cassidy | bt |
| Dino Pozzebon | pmcs |
| Don Cober (CoMira) | comira-inc |
| Duane Remein | huawei |
| Erdem Matoglu | amphenol-tcs |
| Eric Baden (Broadcom) | broadcom |
| Flavio Marques | furukawa.co |
| George Zimmerman | Aquantia & Commscope |
| Greg D Le Cheminant | keysight |
| Howard Frazier | broadcom |
| Ingvar Froroth | marvell |
| Jay Diepenbrock | loromamerica |
| Jeff H | ranovus |
| Jeff Slavick | avagotech |
| Jeffery Maki | juniper |

| Jing Fang | marvell |
|------------------------|------------------|
| Joel Goergen | cisco |
| John | vitesse |
| John D'Ambrosia | Dell |
| John Nelson | aristanetworks |
| Ken Van Orman | spirent |
| Kenneth Jackson | sei-device |
| Kent Lusted (Intel) | intel |
| Madhavi | barefootnetworks |
| Marc Dupuis | molex |
| Mark Gravel | hp |
| Mark Jones | xtera |
| Mark Nowell | cisco |
| martin white | caviumnetworks |
| Matt Brown | apm |
| Megha Shanbhag | te |
| Mike Dudek | qlogic |
| Mike Peng Li | altera |
| Nathan Tracy | te |
| Paul Brooks | jdsu |
| Paul Kolesar | commscope |
| Phil Sun | marvell |
| Pirooz Tooyserkani | cisco |
| R. Sambaraju | nexans |
| Randy k Rannow | not available |
| Rich Mellitz (Intel) | intel |
| Rick Rabinovich | alcatel-lucent |
| Rita Horner | synopsys |
| rob stone | broadcom |
| Scott Irwin | mosys |
| Scott Kipp | brocade |
| Scott Sommers | molex |
| Takeshi Nish | yeu |
| Thomas Brown | vitesse |
| Venu B (Marvell) | marvell |
| vineet | cisco |
| Vittal Balasubramanian | dell |
| Warren Meggitt | arista |
| Yasuo Hidaka | us.fujitsu |
| yong kin | broadcom |
| Yuri Vandyshev | cisco |
| · | |

| Zhongfeng Wang | broadcom |
|----------------|----------|
| Zvi Rechtman | mellanox |