# Minutes P802.3by 25 Gb/s Ethernet Task Force ad-hoc meeting – March 4, 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 25 2015
- P802.3by Task Force Update (tentative), Mark Nowell
- P802.3by D0.1 editorial update (tentative), Matt Brown
- "AN PHY AND FEC SELECTION", Eric Baden
- "2 Port types for 25GBASE-CR", Mike Dudek
- "The cost of using CWMs", Jeff Slavick
- "LPI signaling across clause 108 RS-FEC", Adee Ran

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\_030415\_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 <a href="http://www.ieee802.org/3/patent.html">http://www.ieee802.org/3/patent.html</a>) No one responded.

The February 25 meeting minutes were posted on March 3, 2015 due to a website issue. No comments were received. Matt Brown asked if there were objections to approving the minutes as posted. No one responded. The February 25 meeting minutes were approved by the ad hoc.

## 25GE Task Force update - Mark Nowell

- March Plenary meeting will start 9 March at 8 a.m.
- Task force will break for the IEEE 802.3 Work Group opening Plenary at 10:00 a.m.
- Focus will be on comment resolution and resolving the big ticket items.
- There will be an overlap with the P802.3bs project on Tuesday. Mark will work with John D'Ambrosia to minimize the impact.

 Please continue to build consensus offline to make most efficient use of the limited meeting time at the Plenary.

# P802.by D0.1 editorial update - Matt Brown

- The proposed comment responses were posted on March 2, 2015 to the Task Force website.
- Please review the proposed responses and prepare for discussion prior to the Task Force meeting at the Plenary.
- Please review the bucket (non-controversial) comments. Please notify the Editor-in-Chief if there is a comment to discuss in the TF meeting outside of the bucket motion.

#### Presentation #1:

"AN PHY AND FEC SELECTION", Eric Baden

See <a href="http://www.ieee802.org/3/by/public/adhoc/architecture/baden\_030415\_25GE\_adhoc.pdf">http://www.ieee802.org/3/by/public/adhoc/architecture/baden\_030415\_25GE\_adhoc.pdf</a>

- Reviewed proposed approach and the three PHY types.
- Reviewed rules and requirements in the proposal
- Received comments on the use of AN to force advertisement; it seems a departure from the intent
  of AN. Much discussion. Concern over the compliance point is the capability, not the advertisement
  of the PHY type. Recommend improved wording on slide 4.
- Reviewed HCD re-map proposal. Comment on the re-map behavior if both devices do not support it.
- Comment on the 5m cable reach is not implicitly covered by a compliant PHY with this proposal.

Matt Brown noted that the meeting is scheduled for 2 hours today to cover the full agenda. Matt asked if there were objections. No one responded.

#### Presentation #2:

"2 Port types for 25GBASE-CR", Mike Dudek

See http://www.ieee802.org/3/by/public/adhoc/architecture/dudek 030415 25GE adhoc-v2.pdf

- Reviewed proposal to create two port types and label the ports differently.
- Received comment that "CR-S" is a subset of the "CR-L" Could rename "CR-L" to "CR". Then CR-S could be considered a "server-optimized" implementation. Interoperates with CR. Much discussion.
- Author intends to give this presentation at the Plenary meeting next week.
- The proposal would not require a vendor to implement both port types.
- Reviewed the AN proposal and priority resolution options.

## Presentation #3:

"The cost of using CWMs", Jeff Slavick

See\_http://www.ieee802.org/3/by/public/adhoc/architecture/slavick\_030415\_25GE\_adhoc.pdf

- Reviewed the logic for Codeword Markers
- Reviewed proposal to change to scramble and test method for RS-FEC codeword delineation.
- Received guestions on scrambler need in the proposal when the PCS already has a scrambler.
- Received questions on the worst case codeword count for the search and test function at the  $\sim$ 25% CER.

## Presentation #4:

"LPI signaling across clause 108 RS-FEC", Adee Ran

See http://www.ieee802.org/3/by/public/adhoc/architecture/ran 030415 25GE adhoc.pdf

- Presentation addresses a big ticket item in Draft 0.1
- Reviewed basic operation for Clause 74 FEC EEE
- Reviewed EEE additions and changes in P802.3bj and P802.3bm
- Matt Brown asked if there would be any objection to considering this proposal at the Berlin meeting. Please work offline to build consensus and formulate a proposal.

Matt Brown thanked the presenters for their contributions. Please continue to build consensus offline.

Next ad hoc meeting will be announced at or after the Plenary meeting. No ad hoc meeting in the week after the plenary.

The Ad hoc meeting ended at 10:00 a.m. Pacific.

# List of attendees (captured from Webex tool)

| Name                    | company           |
|-------------------------|-------------------|
| Adee Ran                | intel             |
| Ali Ghiasi              | Independent       |
| Andre Szczepanek        | inphi             |
| anil                    | brocade           |
| Arthur Marris (Cadence) | cadence           |
| Brad                    | microsoft         |
| Brian Teipen            | advaoptical       |
| Carlo Tosetti (CISCO)   | cisco             |
| Chad Erven              | semtech           |
| Chris DiMinico          | MC Communications |
| Dale Murray             | lightcounting     |
| Dan Cunningham (Arista) | arista            |
| Dan Dove                | Emulex            |
| Daniel Koehler          | morethanip        |
| David Malicoat          | hp                |
| David Ofelt             | Juniper           |
| Derek Cassidy           | bt                |
| Don Cober (CoMira)      | comira-inc        |
| Erdem Matoglu           | amphenol-tcs      |
| Eric Baden (Broadcom)   | broadcom          |
| Flavio Marques          | furukawa.co       |
| Gary Nicholl            | cisco             |

| george zimmerman     | cmeconsulting.onmicrosoft |
|----------------------|---------------------------|
| Ghani Abbas          | ericsson                  |
| Gianpiero            | cisco                     |
| Greg D Le Cheminant  | keysight                  |
| Howard Frazier       | broadcom                  |
| Ingvar Froroth       | marvell .                 |
| Jacky Chang          | hp .                      |
| Jay Diepenbrock      | loromamerica              |
| Jeff H               | ranovus                   |
| Jeff Slavick         | avagotech                 |
| Jing Fang            | marvell                   |
| john                 | avagotech                 |
| John Nelson          | aristanetworks            |
| Juan-Carlos Calderon | cortina-systems           |
| Kapil Shrikhande     | dell                      |
| Ken Van Orman        | spirent                   |
| Kenneth Jackson      | sei-device                |
| Kent Lusted (Intel)  | intel                     |
| Madhavi              | barefootnetworks          |
| Marika Immonen       | ttmtech.co                |
| Mark Gravel          | hp                        |
| Mark Nowell          | Cisco                     |
| martin               | altera                    |
| martin white         | caviumnetworks            |
| Matt Brown           | apm                       |
| Megha Shanbhag       | te                        |
| Mike Andrewartha     | microsoft                 |
| Mike Dudek           | qlogic                    |
| Nathan Tracy         | te                        |
| Oded Wertheim        | mellanox                  |
| Paul Kolesar         | commscope                 |
| Peter Anslow         | ciena                     |
| Philip Sun           | marvell                   |
| Piers                | mellanox                  |
| Pirooz Tooyserkani   | cisco                     |
| Randy k Rannow       | n/a                       |
| Rich Mellitz (Intel) | intel                     |
| Rita Horner          | synopsys                  |
| rob stone            | broadcom                  |
| Scott Kipp           | brocade                   |
| Scott Sommers        | molex                     |
|                      | 1                         |

| Takeshi Nish           | yeu        |
|------------------------|------------|
| Thomas Brown           | vitesse    |
| Tom Palkert            | Molex      |
| ureddy                 | cisco      |
| Venu B (Marvell)       | marvell    |
| Vittal Balasubramanian | dell       |
| Yasuo Hidaka           | us.fujitsu |
| Yong Kim (Broadcom)    | broadcom   |
| Zvi Rechtman           | mellanox   |