

Approved Minutes
IEEE P802.3by 25 Gb/s Ethernet Task Force
Plenary Meeting
July 13-14, 2015
Kona, HI, USA
Prepared by Kent Lusted

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IEEE P802.3by 25 Gb/s Task Force Meeting – July 13, 2015:

Prepared by Kent Lusted

IEEE P802.3by 25 Gb/s Task Force meeting convened at 1:12 p.m., July 13, 2015, by Mark Nowell, IEEE P802.3by Task Force Chair.

Chair displayed the agenda slides:

http://www.ieee802.org/3/by/public/July15/agenda_3by_01_0715.pdf

Introductions were made.

Mark Nowell reviewed agenda in

http://www.ieee802.org/3/by/public/July15/agenda_3by_01_0715.pdf

Motion #1:

Move to approve the agenda:

- Moved by: John D'Ambrosia
- Second by: Thananya Baldwin
- Passed by voice without opposition

May 2015 plenary minutes were posted shortly after the meeting. No comments were received.

Motion #2:

Move to approve the May 2015 minutes:

- Moved by: Mike Dudek
- Second by: Paul Kolesar
- Passed by voice without opposition

Chair reminded participants to observe meeting decorum. Called for members of the press. No one responded. Photography and recording are not permitted.

Chair reviewed the reflector and web information. Chair reviewed the ground rules for the meeting.

Chair reviewed the attendance procedures.

Chair reviewed the IEEE structure.

Chair reviewed the Bylaws and Rules slides in --

http://www.ieee802.org/3/by/public/July15/agenda_3by_01_0715.pdf

IEEE Patent Policy: Chair reviewed the Patent related slides on the 4 slides contained in the agenda. Chair calls for potentially essential patents. No one responded. Chair read the Guidelines for IEEE WG meetings. No one responded.

Chair advised the WG attendees that:

- The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
- Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
- There may be Essential Patent Claims of which the IEEE is not aware. Additionally, the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.

No one responded.

Chair reviewed the IEEE 802.3 Standards Process and the progress of the Task Force to date.

Chair noted that Kent Lusted will deliver the P802.3by closing plenary report.

Chair noted that the Task Force will go through 2 Working Group ballot cycles prior to the November Plenary. Chair noted that there may be an additional interim meeting for this task force in October to enable an additional ballot cycle.

Liaisons and communications:

- Chair noted that the SFF committee provided a response to the informal communication sent after the May meeting. The response included a document, which was sent to the reflector. The SFF document is also available from the SFF website. Mike Dudek asked participants to check the SFF document to verify that the desired features were incorporated.
- John D'Ambrosia provided a verbal update on the Ethernet Alliance 25 Gb/s technology demonstration plugfest. Chair and John D'Ambrosia discussed that it would be desirable to bring the results of the plugfest to either the September interim or an architecture ad hoc.
- Steve Trowbridge suggested that Task Force generate a liaison letter to send the ITU-T a copy of Draft 2.0 to enable decision making within the ITU-T. The ITU-T liaison letter will require approval by the Working Group at the closing plenary.

Chair reviewed the adopted objectives in the agenda slides.

Chair reviewed a summary of the May interim meeting.

Chair reviewed the adopted timeline and the balloting cycle steps to reach Draft 3.0 for Sponsor Ballot. Chair noted that there may be an additional interim meeting for this task force in October to enable an additional ballot cycle. Dates and locations for the additional interim will be announced on reflector. Chair asked the participants if there were concerns. No one responded. Chair noted that the potential date of Oct 15-16, 2015.

Goals for the meeting:

- D1.1 Comment review and resolution
- Adopt closed comments and generate D2.0
- Big Ticket item (discussion only)
 - 3m copper cable w/o FEC feasibility
- Motions

Chair reviewed the Working Group balloting requirements. Chair noted that the July 2015 meeting webpage has a link to a Working Group ballot presentation from Wael Diab. See <http://www.ieee802.org/3/by/public/July15/index.html>

Chair reviewed the presentation schedule for the. All times listed are subject to change.

Chair announced a start time on Tuesday of 9:00 a.m.

Future Meetings:

- Sept 2015 Interim
 - Week of Sept 14th, 2015. Bonita Springs, Florida
- Under consideration – additional Interim
 - Around Oct 15th/16th
- November 2015 Plenary
 - Nov 8-13th, 2015. Dallas, Tx
- Jan 2016 Interim
 - Week of Jan 18th, 2016. Atlanta, GA
- March 2016 Plenary
 - Week of March 13th, 2016 – Macau, China

Anyone interested in hosting a meeting should contact the Chair or Steve Carlson.

Chair noted that the architecture ad hoc will continue to meet as necessary to facilitate discussion of the big ticket items (3m no FEC and OTN) on Draft 2.0. The ad hoc schedule will be sent to the email reflector.

25 Gb/s Ethernet Task Force Architecture Ad Hoc Report:

By: Matt Brown

See: http://www.ieee802.org/3/by/public/July15/brown_3by_01_0715.pdf

- No comments were made.

Chief Editor's Report:

By: Matt Brown

See: http://www.ieee802.org/3/by/public/July15/brown_3by_02_0715.pdf

- Matt Brown thanked the editorial team for their efforts to generate Draft 1.1. Matt recognized the editors (Adee Ran, Jonathan King, Arthur Marris, Chris Diminico) for their effort, experience, and commitment to make the draft successful!
- Matt noted that 4 comments were received.
- Matt noted that the editorial team will generate a preview draft after closing comments

Comment resolution began.

Approved responses for the 4 comments under consideration.

Comment resolution ended.

Motion #3: 2:08 p.m.

Move to generate Draft 2.0 from Draft 1.1 and closed comments

- M: Matt Brown
- S: Adee Ran
- Technical ($\geq 75\%$)
- Y: 64 , N: 0 , A: 1
- Result: Passed! 2:09 p.m.

Motion #4: 2:09 p.m.

Move to request that the IEEE 802.3 Working Group chair progress IEEE P802.3by Draft 2.0 to Working Group ballot. Draft 2.0 is Draft 1.1 (preview draft) plus the closed comments.

- M: Matt Brown
- S: Paul Kolesar
- Technical ($\geq 75\%$)
- Y: 68 , N: 0 , A: 0
- Result: passed 2:16 p.m.

Discussion on Motion#4: There was a question about doing this motion before the 3m no FEC cable discussion. Chair noted that the draft is technically complete. Chair noted that the remainder of the meeting will be used to hear technical contributions on the 3m no FEC cable for potential changes in Draft 2.0. The entire Draft 2.0 will be open for comment in the Working Group ballot.

John D'Ambrosia noted that, per David Law, that the contingent interim in October must be a face to face but can include a teleconference.

Chair thanked the editorial team for their hard work!

Presentation #1:

Title: 25 GE 3m NO FEC Consensus Building

By: Joel Goergen

See: http://www.ieee802.org/3/by/public/July15/goergen_3by_01_0715.pdf

- Joel Goergen noted that there is consensus among these authors that it is possible to support 3m no FEC on copper cables. Additional work would be necessary to develop a baseline proposal for adoption by the Task Force.
- Much discussion on cable AWG in SFP+ and QSFP+ breakout cable.

Break at 3:00 p.m. Resume at 3:21 p.m.

Presentation #2:

Title: The “WHY” Behind a 3m NO-FEC Copper Cable Solution

By: Joel Goergen

See: http://www.ieee802.org/3/by/public/July15/goergen_3by_02_0715.pdf

- Discussed the power impact of FEC.
- Discussed the latency impact of FEC.

Chair noted that if a change was made to support 3m no FEC, there should be consensus to do it. Chair recommended the continued use of ad hoc meetings to resolve the technical gaps as well as the impact to the end user and the ecosystem.

Chair noted that he intends to use straw poll #1 to determine if the Task Force wants more data on the technical options to achieve 3m no FEC operation. Chair noted that a “no” vote means that no more data is needed.

Chair noted that he intends to use straw poll #2 to determine if the Task Force wants to make the 3m no FEC operation change to the specification.

Straw Poll #1: 4:42 p.m.

I want more information on “3m copper cables without FEC” solution space.

- Yes: 39
- No: 9
- Abstain: 19

Straw Poll #2: 4:57 p.m.

I would support changing the 802.3by specification to include 3m operation of copper cables without FEC, assuming that a suitable solution can be found.

- Yes: 41
- No: 11
- Abstain: 19

Steve Trowbridge showed the proposed liaison letter to the ITU-T. Some changes were made. (For the final version, see http://www.ieee802.org/3/by/public/July15/trowbridge_3by_01_0715.pdf)

Motion #5: 5:13pm

Move that the Task Force approve the text in trowbridge_3by_01_0715.pdf with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ITU-T Question 11/15.

- M: Steve Trowbridge
- S: Brad Booth
- Technical ($\geq 75\%$)
- Y: 55 , N: 0 , A: 1
- Result: passed!

Attendance straw polls:

- I will attend the IEEE 25 Gb/s meetings at the September interim in Bonita Springs, FL, USA (week of Sept 14, 2015)
 - Y: 44 , Maybe: 7 , N: 8
- I will physically attend the IEEE 25 Gb/s October interim (Oct 15-16, 2015)
 - Y: 15 , Maybe: 21 , N: 23

Recess for the day at 5:22 p.m.

IEEE P802.3by 25 Gb/s Task Force Meeting – July 14 2015:

Prepared by Kent Lusted

IEEE P802.3by 25 Gb/s Task Force interim meeting convened at 9:03 a.m., July 14, 2015, by Mark Nowell, IEEE 25 Gb/s Ethernet Task Force Chair.

Chair displayed the agenda slides:

http://www.ieee802.org/3/by/public/July15/agenda_3by_01_0715.pdf

Patent policy: Chair displayed the patent policy related slides in the agenda (http://www.ieee802.org/3/by/public/July15/agenda_3by_01_0715.pdf). Chair asked if anyone is unfamiliar with the IEEE patent policy. No one responded. Chair called for potentially essential patents. No one responded.

Chair reminded participants to sign into the IEEE Attendance tool and sign the book.

Chair received a late presentation request from Nathan Tracy with cable analysis data from Megha Shanbag. Chair asked if there was objection to hearing the presentation. No objection from the task force.

Matt Brown reviewed D1.2 (Draft 1.1 with the closed comments). See

http://www.ieee802.org/3/by/private/8023by_D1p2.pdf Matt noted that after Working Group approval, there will be a few changes, such as: publication date, draft number, and front page matter to reflect the Working Group ballot phase.

Presentation #3:

Title: Cable Assembly Measurement Data

By: Nathan Tracy

See: http://www.ieee802.org/3/by/public/July15/tracy_3by_01_0715.pdf

- Discussed bundled cable diameter difference between QSFP-to-QSFP vs. the QSFP-SFP breakout cable.
- Discussed distribution of cable lengths shipping in the market.

Motion #6:

Move to Adjourn:

- Moved by: John D'Ambrosia
- Second by: Rich Mellitz
- Passed by voice vote without opposition

Meeting ended at 9:44 a.m.

Attendees

IEEE 25Gb/s Task Force, July 2015			13-Jul-15	14-Jul-15
Last Name	First Name	Affiliation	Monday	Tuesday
Ali	Hassan	Texas Instruments	X	
Andrewartha	Mike	Microsoft	X	X
Baldwin	Thananya	Ixia	X	X
Bliss	Will	Broadcom	X	
Booth	Brad	Microsoft	X	X
Bouda	Martin	Fujitsu		X
Brooks	Paul	JDSU		X
Brown	Matt	Applied Micro	X	X
Butter	Adrian	Global Foundries	X	X
Caggioni	Francesco	APM	X	X
chang	Jacky	HP	X	
Chang	Xin	Huawei	X	
Cheng	Weiyong	Coriant	X	
Cober	Donald	Comira	X	X
D'Ambrosia	John	Dell	X	X
Dawe	Piers	Mellanox	X	X
Deborde	William	Intel	X	X
Dillow	Daniel	FCI	X	X
DiMinico	Christopher	MC Communications/Panduit	X	
Dove	Dan	Dove Networking Solutions (DNS) & Emulex	X	X
Dudek	Mike	QLogic	X	X
Ewen	John	Global Foundries	X	X
Fife	James	eTopus Technology	X	
Filip	Jan	Maxim Integrated Products Inc.	X	
Ghiasi	Ali	Ghiasi Quantum		X
Goergen	Joel	Cisco	X	X
Gong	Zhigang	O-net	X	X
Gorshe	Steve	PMC Sierra	X	X
Gustlin	Mark	Xilinx	X	X
Hirai	Riu	Hitachi		X
Hiramoto	Kiyo	Oclaro	X	
Holden	Brian	Kandou Bus	X	X
Ishibe	Kazuhiko	Anristu	X	X
Kang	Vincent	GUC		X
Kareti	Upen Reddy	Cisco	X	X
Kawamoto	Takashi	Hitachi	X	X
Kawatsu	Yasuaki	Hitachi-Metals		X
Kilduff	Rick	JDSU		X
Kim	Yong	Broadcom	X	
Kipp	Scott	Brocade	X	X
Kojima	Keisuke	Mitsubishi Electric Res. Lab		X

IEEE 25Gb/s Task Force, July 2015			13-Jul-15	14-Jul-15
Last Name	First Name	Affiliation	Monday	Tuesday
Kolesar	Paul	CommScope	X	X
Lackner	Hans	QoSCom	X	
Lai	Angus	MACOM	X	X
Lapak	Jeff	UNH-IOL	X	X
Lee	Arthur	MediaTek Inc	X	X
Lewis	Dave	JDSU	X	
Li	Mike	Altera		X
Li	Shaohua	Brocade	X	X
Lillie	Andrew	Intel	X	X
Liu	Hai-Feng	Intel	X	
Lusted	Kent	Intel	X	X
Maki	Jeffery	Juniper Networks	X	X
Malicoat	David	HP	X	X
Malkiman	Yonatan	Mellanox	X	X
Martinez	Joel	Altera	X	X
Matoglu	Erdem	Amphenol	X	X
McDermott	Tom	Fujitsu	X	X
Mehta	Anil	Brocade		X
Mei	Richard	Commscope	X	
Mellitz	Richard	Intel	X	
Mooney	Paul	Spirent Communications	X	X
Muir	Ron	JAE	X	
Nowell	Mark	Cisco	X	X
Ofelt	David	Juniper Networks	X	
Ogura	Ichiro	Petra	X	
Palkert	Tom	Luxtera - Molex - MoSys	X	X
Pepeljugoski	Petar	IBM	X	
Pepper	Gerald	Ixia	X	X
Pondillo	Peter	Corning	X	X
Rabinovich	Rick	ALE	X	X
Ran	Adee	Intel	X	
Roth	Christopher	Molex	X	X
Skaar	Tom	Seagate	X	X
Sommers	Scott	Molex	X	X
Stassar	Peter	Huawei		X
Sun	Phil	Marvell Semiconductor	X	X
Swanson	Steve	Corning	X	X
Szczepanek	Andre	Inphi		X
Szeto	William	Xtera	X	X
Tailor	Bharat	Semtech Corp	X	
Takahata	Kiyoto	NTT		X
Tamura	Kohichi	Oclaro	X	

IEEE 25Gb/s Task Force, July 2015			13-Jul-15	14-Jul-15
Last Name	First Name	Affiliation	Monday	Tuesday
Tooyserkani	Pirooz	Cisco	X	X
Tracy	Nathan	TE Connectivity	X	X
Trowbridge	Steve	Alcatel-Lucent	X	X
Ulrichs	Ed	Source Photonics	X	X
Vaddineni	Manoj	JDS Uniphase	X	X
Vanderlaan	Paul	Nexans		X
Walker	Clint	Intel		X
Wertheim	Oded	Mellanox	X	X
White	Martin	Cavium	X	X
Xu	Yu	Huawei	X	X
Zambell	Andrew	FCI	X	X
Zhuang	Yan	Huawei	X	
Zivny	Pavel	Tektronix	X	X
Zortea	Tony	PMC Sierra	X	