

Unapproved Minutes
IEEE P802.3by 25 Gb/s Ethernet Task Force
Interim Meeting
September 16-18, 2015
Bonita Springs, FL, USA
Prepared by Kent Lusted

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IEEE P802.3by 25 Gb/s Task Force Meeting – September 16, 2015:

Prepared by Kent Lusted

IEEE P802.3by 25 Gb/s Task Force meeting convened at 1:05 p.m., September 16, 2015, by Mark Nowell, IEEE P802.3by Task Force Chair.

Chair displayed the agenda slides:

http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf

Introductions were made.

Mark Nowell reviewed agenda in

http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf

Motion #1:

Move to approve the agenda:

- Moved by: Mark Gustlin
- Second by: John D'Ambrosia
- Passed by voice without opposition

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

Motion #2:

Move to approve the July 2015 minutes:

- Moved by: Brad Booth
- Second by: Adele Ran
- 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/Sept15/agenda_3by_01a_0915.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 information on how to join the Sponsor Ballot pool will be given at a later date.

Liaisons and communications:

- Received a contribution from John D'Ambrosia on Ethernet Alliance 25 Gb/s technology demonstration plugfest

Chair reviewed the adopted objectives in the agenda slides.

Chair reviewed a summary of the July plenary meeting. Draft 2.0 met the ballot requirements for Working Group ballot.

Chair reviewed the adopted timeline on slide 24 and the trending schedule on slide 25.

Chair noted that there will be an additional interim on Oct 15, 2015. The purpose is to have another review cycle prior to the tentative request of Sponsor Ballot in November. The details of the interim were announced over the reflector on September 10, 2015. There was a request to offer teleconference participation. Chair summarized that the proposed interim does not meet the IEEE 802.3 rules as a half-day meeting.

Steve Trowbridge requested confirmation that the liaison communication to the ITU-T has been sent as he has not yet seen it. [It was later confirmed that the liaison had been sent earlier and received]

Goals for the meeting:

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

Chair reviewed the proposed schedule for the Draft 2.1 recirculation and Draft 2.2. See http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf

Chair reviewed the plans for the week: review the presentations today on 3m no FEC topic and make a decision after the afternoon break on Thursday. Chair reviewed the straw poll results on the 3m no FEC topic from the July plenary meeting.

Chair reviewed the process for going to Sponsor Ballot. See http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf David Law noted that the announcement to join Sponsor Ballot will go out on Oct 8th.

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

Chair noted that late presentations were received after the deadline: Andrewartha_03y_01_0915, dambrosia_03by_01_0915, Goergen_03by_01_0915. Chair asked if there was objection to hearing the late submissions. No one objected.

Chair received a late submission from Adee Ran. Chair asked if there was objection to hearing the late contribution from Adee Ran. There was objection from the floor. Adee Ran provided a brief summary of his presentation. Chair asked if there was objection to hearing Adee Ran's presentation with a 10 minute time restriction and then hold a discussion, with a possible motion to follow. No objection.

Chair noted that comments deemed non-controversial are listed in proposed comment "bucket" list. (See http://www.ieee802.org/3/by/public/Sept15/D2p0_bucket_comments.pdf). These comments will be considered in a "bucket" motion before lunch on Thursday. Please contact the Chief Editor to have a comment pulled from the list and considered in the Task Force meeting.

Chair noted that there is conflict with the Industry Connection Activity at 7pm. Chair noted that the Task Force may resume after the Industry Connection Activity meeting.

Future Meetings:

- Additional Interim
 - Oct 15th, Milpitas, CA
- 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.

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

By: Matt Brown

See: http://www.ieee802.org/3/by/public/Sept15/brown_3by_01_0915.pdf

Chief Editor's Report:

By: Matt Brown

See: http://www.ieee802.org/3/by/public/Sept15/brown_3by_02_0915.pdf

- Matt Brown thanked the editorial team for their efforts to generate Draft 2.0. Matt recognized the editors (Adee Ran, Jonathan King, Arthur Marris, Chris Diminico).

Matt Brown displayed the comments deemed non-controversial and “bucket” worthy. (See http://www.ieee802.org/3/by/public/Sept15/D2p0_bucket_comments.pdf) Chair intends to take a motion before lunch to approve the proposed responses in the bucket to enable the editorial team to start the work for Draft 2.0. Please contact the Chief Editor to have a comment pulled from the list and considered in the Task Force meeting.

Matt Brown reviewed the process for withdrawing a comment.

Presentation #1:

Title: Feasibility & Rationale for 3m no-FEC server-switch DAC

By: Mike Andrewartha

See: http://www.ieee802.org/3/by/public/Sept15/andrewartha_3by_01a_0915.pdf

- Author noted that the presentation was updated to '01a' with details on crosstalk effects and editorial changes.
- Clarifying questions were asked and answered.

John D'Ambrosia provided a brief overview of the Ethernet Alliance 25 Gb/s technology demonstration plugfest.

Presentation #2:

Title: 25Gb/s Technical Feasibility Results

By: Jeff Lapack and John D'Ambrosia

See: http://www.ieee802.org/3/by/public/Sept15/dambrosia_3by_01_0915.pdf

- Clarifying questions were asked and answered.

Break at 3:06 p.m. Resume at 3:21 p.m.

Continued Q&A on presentation #2.

Chair thanked Ethernet Alliance for making the data available to the Task Force.

Presentation #3:

Title: Ethernet Switch Latency

By: Tom Palkert

See: http://www.ieee802.org/3/by/public/Sept15/palkert_3by_01a_0915.pdf

- Clarifying questions were asked and answered.

- Much discussion on latency impacts and projections

Presentation #4:

Title: How to achieve 3m No FEC

By: Adee Ran

See: http://www.ieee802.org/3/by/public/Sept15/ran_3by_01a_0915.pdf

- Clarifying questions were asked and answered
- Much discussion on reasonable worst case conditions and user needs

Chair noted that the meeting is running behind schedule. The meeting may resume after the ICAID tonight.

Presentation #5:

Title: COM parameter proposal to achieve 3m No FEC

By: Tom Palkert

See: http://www.ieee802.org/3/by/public/Sept15/palkert_3by_02_0915.pdf

- Clarifying questions were asked and answered

Presentation #6:

Title: 3m No-FEC Proposal

By: Mike Dudek

See: http://www.ieee802.org/3/by/public/Sept15/dudek_3by_01a_0915.pdf

- Author has updated presentation '01a' with additional supports and editorial clarifications.
- Clarifying questions were asked and answered.

Chair noted that he intends to have a motion after the afternoon break on Thursday to capture the 3m no FEC decision.

Straw Poll #1:

To address the "3 m no FEC", I would support:

- A. one of the normative proposals for making component specs (TX, cable, RX) more strict, to ensure that any combination of compliant components supports 3 m no FEC.
- B. adding an informative (eg annex) to 802.3by, to suggest a method of achieving 3 m no FEC.
- C. neither of these options
- D. No opinion/don't care
- Chicago Rules
- A: 39 B: 30 C: 3 D: 9

Straw Poll #2:

To address the "3 m no FEC", I would support:

- A. one of the normative proposals for making component specs (TX, cable, RX) more strict, to ensure that any combination of compliant components supports 3 m no FEC.
- B. adding an informative (eg annex) to 802.3by, to suggest a method of achieving 3 m no FEC.
- C. neither of these options

- D. No opinion/don't care
- A: 37 B: 19 C: 0 D: 7

Chair asked for a show of hands from the participants that want to come back after the ICAID meeting. There was little response.

Comment resolution began.

Comment #191 was withdrawn by Adee Ran.

Chair announced a start time on Thursday of 7:50 a.m.

Chair intends to take a motion before lunch to approve the proposed responses in the bucket to enable the editorial team to start the work for Draft 2.0. (See http://www.ieee802.org/3/by/public/Sept15/D2p0_bucket_comments.pdf) Please contact the Chief Editor to have a comment pulled from the list and considered in the Task Force meeting.

Break for the day at 6:37 p.m.

IEEE P802.3by 25 Gb/s Task Force Meeting – September 17, 2015:

Prepared by Kent Lusted

IEEE P802.3by 25 Gb/s Task Force interim meeting convened at 7:55 a.m., September 17, 2015, by Mark Nowell, IEEE 25 Gb/s Ethernet Task Force Chair.

Chair displayed the agenda slides:

http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf

Patent policy: Chair displayed the patent policy related slides in the agenda (http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.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 noted that the OTN presentation will be after lunch break. Also noted that after the afternoon break, there will be discussion and motions on the 3m no FEC topic.

Chair intends to take a motion before lunch to approve the proposed responses in the bucket to enable the editorial team to start the work for Draft 2.0. (See http://www.ieee802.org/3/by/public/Sept15/D2p0_bucket_comments.pdf) Please contact the Chief Editor to have a comment pulled from the list and considered in the Task Force meeting.

Chair noted that the Task Force will break at 7pm for the Working Group meeting.

Comment resolution began at 8:00 a.m.

Chief Editor noted that comment #181 was pulled from the bucket.

Chair announced that a group will meet at 8:30 a.m. in the Driftwood conference room to discuss 3m no FEC.

Chief Editor asked if there was any objection to reopening comment #144. No one responded.

Chair intends to take a motion before lunch to approve the proposed responses in the bucket to enable the editorial team to start the work for Draft 2.0. (See http://www.ieee802.org/3/by/public/Sept15/D2p0_bucket_comments.pdf) Please contact the Chief Editor to have a comment pulled from the list and considered in the Task Force meeting.

Break at 9:45 a.m. Resume at 10:36 a.m.

Comment resolution continued.

Reviewed the response to comment #181 that was pulled from the bucket motion.

Discussion of motion #3:

- Chair asked if there were any other comments to pull from the bucket. No one responded.

Motion #3:

Move to accept the proposed responses to comments listed in D2p0_bucket_comments.pdf, except comment(s) #181.

- M: Matt Brown
- S: Chris Diminico
- Technical ($\geq 75\%$)
- Y: 31 N: 0 A: 2
- Results: passes 11:47 a.m.

Chair noted that the OTN presentation will be after lunch break. Chair noted that this afternoon there will be discussion and motions on the 3m no FEC topic.

Break for lunch at 11:51 a.m. Resume at 1:19 p.m.

Presentation #7:

Title: OTN Support

By: Steve Trowbridge

See: http://www.ieee802.org/3/by/public/Sept15/trowbridge_3by_01a_0915.pdf

- Clarifying questions were asked and answered
- Much discussion on the history, the proposed solution, and the various options.

Motion #4: 2:26 p.m.

Move to resolve P802.3by D2.0 comments 136, 137, 138, 139 and 190 according to the "Option 2" proposal in slides 11-13 of trowbridge_3by_01a_0915.pdf

- M: Steve Trowbridge
- S: Pete Anslow
- Technical ($\geq 75\%$)
- Y: 7 , N: 23 , A: 25
- Result: fails 2:36 p.m.

Chair received a late presentation that represents consensus building. Chair noted that goergen_3by_02_0915 has been posted to the website.

Break at 2:50 p.m. Resume at 3:35 p.m.

Presentation #8:

Title: Proposal addressing comments for 3m NO FEC

By: Joel Goergen

See: http://www.ieee802.org/3/by/public/Sept15/goergen_3by_02a_0915.pdf

- Updated presentation '02a' with technical changes. No objection.
- Clarifying questions were asked and answered.

Further modifications made to the proposal which were captured in goergen_3by_02b_0915

Motion #5 – 4:27 p.m.

- Move to adopt the changes in goergen_3by_02b_0915.pdf (slide 5) as the basis for resolving the 3m no FEC comments against P802.3by
- M: Mike Dudek

- S: Joel Goergen
- Technical ($\geq 75\%$)

There was discussion of motion #5.

Motion #6: 4:32 p.m.

Move to amend goergen_3by_02b_0915.pdf, line 4 value from 2.2dB to 2.6dB

- M: Adee Ran
- S: Rich Mellitz
- Technical ($\geq 75\%$)
- Y: 10 N: 28 A: 19
- Motion fails 4:41 p.m.

Back to motion #5

Motion #5 – 4:41 p.m.

- Move to adopt the changes in goergen_3by_02b_0915.pdf (slide 5) as the basis for resolving the 3m no FEC comments against P802.3by
- M: Mike Dudek
- S: Joel Goergen
- Technical ($\geq 75\%$)
- Y: 45 , N: 3 , A: 13
- Result: passes 4:54 p.m.

Comment resolution continues.

Chair noted that Goergen_3by_02b_0915 has been uploaded to the website.

Chief Editor asked if there was objection to addressing comment #241, which was a late comment. No objection.

Chair announced that the Task Force would break soon but will return after the Working Group meeting tonight.

Chief Editor noted that comment #154 proposed to remove the FEC bypass option and asked the participants to provide offline feedback to Mike Dudek.

Piers Dawe withdrew comment #199.

Adee Ran withdrew comment #193.

Chair announced that the Task Force will reconvene 15 minutes after the end of the Working Group meeting.

Break at 6:14 p.m. Resume at 9:10 p.m.

Chair announced a start time of 8:30 a.m. on Friday.

Adee Ran withdrew comment #192.

Break for the day at 10:49 p.m.

IEEE P802.3by 25 Gb/s Task Force Meeting – September 18, 2015:

Prepared by Kent Lusted

IEEE P802.3by 25 Gb/s Task Force interim meeting convened at 8:38 a.m., September 18, 2015, by Mark Nowell, IEEE 25 Gb/s Ethernet Task Force Chair.

Chair displayed the agenda slides:

http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.pdf

Patent policy: Chair displayed the patent policy related slides in the agenda (http://www.ieee802.org/3/by/public/Sept15/agenda_3by_01a_0915.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 noted that David Law is now tracking ballot responses and Working Group voting rights are contingent upon returning ballots.

Comment resolution resumed.

Presentation #9:

Title: Effect of bypassing error correction for RS-FEC

By: Mike Dudek

See: http://www.ieee802.org/3/by/public/Sept15/dudek_3bj_02_0915.pdf

There was a straw poll on comment #153. See comment database for details.

Break at 10:00 a.m. Resume at 10:25 a.m.

There was a straw poll on comment #147. See comment database for details.

Chair noted that there will be an additional interim on Oct 15, 2015. The purpose is to have another review cycle prior to the tentative request of Sponsor Ballot in November. The details of the interim were announced over the reflector on September 10, 2015. Please confirm attendance using the EventBrite link sent out in the meeting announcement email.

Motion #7: 11:14 a.m.

Move to:

- generate Draft 2.1 for Working Group recirculation from Draft 2.0 and closed comments.
- Change the term “host factor” to “form factor” in Table 110C-1
- M: Matt Brown
- S: Adele Ran
- Technical ($\geq 75\%$)
- Result: Passes by voice vote without opposition 11:15 a.m.

Attendance straw polls:

- I will attend the IEEE 25 Gb/s meeting at the October interim in Milpitas, CA, USA (Oct 15, 2015)
 - Y: 13, Maybe: 10, N: 14
- I will attend the IEEE 25 Gb/s meetings at the November plenary in Dallas, TX, USA (week of November 9, 2015)
 - Y: 33, Maybe: 4, N: 3
- I will attend the IEEE 25 Gb/s meetings at the January interim in Atlanta, GA, USA (week of January 18, 2016)
 - Y: 31 , Maybe: 7, N: 3

Motion #8:

Move to Adjourn:

- Moved by: Brad Booth
- Second by: Thananya Baldwin
- Passed by voice vote without opposition

Meeting ended at 11:19 a.m.

Attendees

IEEE 25Gb/s Task Force, Sept 2015			16-Sep-15	17-Sep-15	18-Sep-15
Last Name	First Name	Affiliation	Wednesday	Thursday	Friday
Andrewartha	Mike	Microsoft	x	x	x
Anslow	Pete	Ciena Corporation	x	x	
Baden	Eric	Broadcom	x	x	x
Baldwin	Thananya	Ixia	x	x	
Bietti	Ivan	Marvell Semiconductor	x		
Booth	Brad	Microsoft	x	x	
Bouda	Martin	Fujitsu	x		
Brooks	Paul	Viavi Solutions	x	x	
Brown	Matt	Applied Micro	x	x	x
Butter	Adrian	Global Foundries	x	x	x
Caggioni	Francesco	APM	x	x	
Calbone	Anthon	Seagate	x		
Carroll	Martin	Verizon	x	x	x
Chacon	Geoffrey	HP	x		
chang	Jacky	HP	x		
Chang	Xin	Huawei	x	x	
Chen	David	AOI	x		
Chuang	Keng Hua	HP	x	x	x
Dai	Eugene	Cox Comm.	x	x	
Dai	Yuxin	Cox Comm.	x	x	x
D'Ambrosia	John	Dell	x		
Dawe	Piers	Mellanox	x	x	
Dillow	Daniel	FCI	x	x	x
DiMinico	Christopher	MC Communications/Panduit		x	x
Dudek	Mike	QLogic	x	x	x
Estes	Dave	Spirent Communications	x	x	x
Ewen	John	Global Foundries	x	x	x
Ghiasi	Ali	Ghiasi Quantum	x		
Goergen	Joel	Cisco	x	x	
Gorshe	Steve	PMC Sierra	x	x	
Gustlin	Mark	Xilinx	x		
Healey	Adam	Avago Technologies	x	x	
Hidaka	Yasuo	Fujitsu Laboratories of America	x		
Horner	Rita	Synopsys	x		
Irwin	Scott	MoSys Inc.	x	x	
Jackson	Ken	Sumitomo	x	x	
Kareti	Upen Reddy	Cisco	x	x	
Kim	Yong	Broadcom	x		
Kipp	Scott	Brocade	x		

IEEE 25Gb/s Task Force, Sept 2015			16-Sep-15	17-Sep-15	18-Sep-15
Last Name	First Name	Affiliation	Wednesday	Thursday	Friday
Klempa	Mike	UNH-IOL	X		
Koehler	Daniel	More than IP	X	X	X
Kolesar	Paul	CommScope	X		
Lapak	Jeff	UNH-IOL	X	X	X
LeCheminant	Greg	Keysight Technologies	X		
Lewis	Dave	Lumentum	X		
Lusted	Kent	Intel	X	X	X
Maki	Jeffery	Juniper Networks	X	X	X
Malicoat	David	HP	X	X	
Marris	Arthur	Cadence	X	X	X
McDermott	Tom	Fujitsu	X	X	X
McDonough	John	NEC America	X	X	X
Mellitz	Richard	Intel	X		X
Mooney	Paul	Spirent Communications	X	X	
Moritake	Toshiyuki	JAE	X	X	
Muir	Ron	JAE	X	X	
Nadoliny	Jim	Samtech LTD	X		
Nakamoto	Edward	Spirent Communications		X	X
Nelson	John	Arista Networks	X	X	X
Nguyen	TheLinh	Finisar	X		
Nishimura	Takeshi	Yamaichi Electronics	X		
Nogales	Charlie	Emulex	X	X	
Nowell	Mark	Cisco	X	X	X
Ofelt	David	Juniper Networks	X		
Palkert	Tom	Luxtera - Molex - MoSys	X	X	
Pepper	Gerald	Ixia	X	X	
Ran	Adee	Intel	X	X	X
Roth	Christopher	Molex	X	X	X
Rotolo	Salvatore	ST Microelectronics	X	X	
Skaar	Tom	Seagate	X		
Slavick	Jeff	Avago Technologies	X	X	X
Sommers	Scott	Molex	X	X	X
Sparrowhawk	Bryan	Leviton			X
Stassar	Peter	Huawei		X	
Stone	Rob	Broadcom	X	X	
Sun	Phil	Marvell Semiconductor	X	X	X
Svensen	Justin	CIT	X		
Swanson	Steve	Corning	X		
Szczepanek	Andre	Inphi	X	X	
Szeto	William	Xtera		X	
Tamura	Kohichi	Oclaro	X		
Tracy	Nathan	TE Connectivity	X	X	

IEEE 25Gb/s Task Force, Sept 2015			16-Sep-15	17-Sep-15	18-Sep-15
Last Name	First Name	Affiliation	Wednesday	Thursday	Friday
Trowbridge	Steve	Alcatel-Lucent	X	X	
Ulrichs	Ed	Source Photonics	X		
Umeda	Daisuke	Sumitomo	X		
Valle	Stefano	ST Microelectronics	X		
Wang	Robert	Intel	X	X	
Wang	Tongtong	Huawei	X	X	
Wang	Xinyuan	Huawei	X	X	
Wertheim	Oded	Mellanox	X	X	X
Xu	Qing	Belden	X		
Xu	Yu	Huawei	X	X	
Zambell	Andrew	FCI	X	X	X
Zivny	Pavel	Tektronix	X		
Zortea	Tony	PMC Sierra	X		