P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – January 13, 2016

Prepared by Kent Lusted

Proposed Agenda:

- Approval of the Agenda
- IEEE patent policy reminder:
 - o 25G TF: http://www.ieee802.org/3/patent.html
 - o 50G & NGOATH:
 - https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf
- Approval of draft minutes for January 6, 2016
- P802.3by 25G Ad Hoc Matt Brown
 - o Task Force Update, Mark Nowell
 - o "Comment i-31: Single PMD w/ optional RS-FEC", Yasuo Hidaka
 - o "Single vs Dual PHY discussion for 25G-BASE-CR", Rob Stone
 - o Discussion on 25GBASE-CR/CR-S PHY Consolidation
 - o Discussion on proposed responses to Draft 3.0 comments
- 50GE & NGOATH Study Groups Ad Hoc Kent Lusted
 - Study Group Update, Mark Nowell
 - "Study Groups Procedural Progress", Mark Nowell
 - "Considerations on objections to inclusion of 200GbE SMF objectives into IEEE 802.3bs",
 Peter Stassar
 - o "OTN Support for 50GbE, next generation 100GbE, 200GbE", Steve Trowbridge

Presentations posted at: http://www.ieee802.org/3/50G/public/adhoc/archive/index.html or http://www.ieee802.org/3/50G/public/adhoc/archive/index.html

Meeting began at 8:02 a.m. Pacific.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/50G/public/adhoc/archive/agenda_011316_25GE_50GE_NGOATH_adhoc-v1.pdf

Kent Lusted reviewed the Attendance information related to the ad hoc. He reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. He reminded participants to mute their lines when not speaking and reviewed the steps to unmute.

Kent Lusted showed the links to the P802.3by ad hoc page and the email reflector. Kent Lusted showed the links to the 50G and NGOATH ad hoc page and the email reflector.

Kent presented the proposed agenda and asked if there was objection as written. Mark noted a potential late contribution on cables from Chris Roth. If there is time, Kent will ask participants to hear it. No additional feedback was received. The agenda was approved by the ad hoc.

There was a comment that the webex audio was not working well for several attendees. Mark Nowell agreed to resend the meeting information to the email reflector.

Kent reminded participants of the IEEE patent policy.

Ad hoc minutes

The January 6 meeting minutes for joint ad hoc were posted on the website. Kent Lusted asked if there were any objections to approving the posted minutes. No one responded. Minutes approved.

Kent Lusted passed the Ad hoc call chair to Matt Brown.

P802.3by 25G TF Agenda Items

Note: The link to the P802.3by 25G Task Force architecture ad hoc website is:

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

Matt Brown reviewed the agenda for the TF portion.

P802.3by Task Force Update, Mark Nowell

- The 25G Task Force January interim meeting is next week on Monday-Tuesday.
- The meeting focus is comment resolution. Big Ticket Items are RITT (RX Interference Tolerance Test) and single/dual PHY topics.
- Initial proposed comment responses were posted on 9 January 2016 to the website (see http://www.ieee802.org/3/by/public/comments/8023by_D30_comment_proposed_responses_by_clause.pdf). If no feedback is given during this ad hoc call, it will be consider the final proposed responses for Task Force disposition.

Matt Brown allocated 10 mins for each of the PHY presentations and asked participants to hold their comments until the end of both presentations.

P802.3by Presentation #1:

"Comment i-31: Single PMD w/ optional RS-FEC", Yasuo Hidaka

See: http://www.ieee802.org/3/by/public/adhoc/architecture/hidaka 011316 25GE adhoc.pdf

- Reviewed the proposed changes needed for a single PHY type.
- Discussed the implication of "software enforcement of RS-FEC".

P802.3by Presentation #2:

"Single vs Dual PHY discussion for 25G-BASE-CR", Rob Stone

See: http://www.ieee802.org/3/by/public/adhoc/architecture/stone_011316_25GE_adhoc.pdf

• Reviewed the case for retaining 2 PHY types.

Discussion:

- Discussed the logic case for decoding the Link Codeword bits between the 2 presentations
- Discussed that the single PHY proposal makes the case for optional RS-FEC. Yasuo clarified that his proposal has optional RS-FEC.
- Several people commented that a single PHY with an optional RS-FEC is considered 2 PHY types.
- Matt Brown thanked Yasuo for providing a long list of changes necessary for the draft in his presentation.

Discussion on initial proposed responses to Draft 3.0 comments:

- Last week, the preliminary proposed responses were posted to the Task Force website.
- Matt Brown noted that comment i-52 needs discussion.
- Matt Brown indicated that feedback had been received on several comments and thanked those that had provided feedback.
- Matt Brown indicated that several comments had been updated since the preliminary responses were posted.

- There was a request to provide a list of the differences in proposed responses between the posted version and the version shown in the ad hoc. Adee Ran agreed to provide the differences.
- Reviewed comment i-52. Matt noted that the comment was a BTI item last week, which upon clarification with the commenter that the IEEE 802.3 base Standard already addressed the comment, resulted in a withdrawal of comment and flip of vote to Approve.
- Matt asked if participants had specific comments that they wanted to review in the ad hoc. No one responded.
- Matt reviewed the proposed comment resolution agenda that will be posted to the website.

Note: The final proposed comments responses will include the text "[updated]" to indicate that they had been updated since posting the preliminary proposed responses.

Matt Brown passed the ad hoc call chair to Kent Lusted.

50G/100G/200G Study Groups Agenda Items

Note: The links to the two Study Group ad hoc websites are:

http://www.ieee802.org/3/50G/index.html 50Gb/s Ethernet Study Group

http://www.ieee802.org/3/NGOATH/index.html Next Generation 100 Gb/s & 200Gb/s Ethernet Study Group

Study Group Update, Mark Nowell:

- Joint Study Groups meeting next week on Wednesday thru Friday.
- Noted that there is a significant amount of Study Group work to complete in the interim.
- John D'Ambrosia noted that there will be a joint meeting on Friday morning with the P802.3bs Task Force.
- Noted that there is an 802.3 working group meeting on Thursday evening of the interim week.

50G & NGOATH SG Presentation #1:

"Study Group Objectives Discussion", Mark Nowell

See: http://www.ieee802.org/3/50G/public/adhoc/archive/nowell 010616 50GE NGOATH adhoc.pdf

- Reviewed the background of the current Study Groups and Scopes as defined by the chartering motions.
- Noted that there may be a need to recharter the Study Groups scope in the 802.3 Working Group
 meeting next Thursday evening based on discussion and straw polls on Wednesday and Thursday.
- Reviewed the assumptions on slide 5. Discussed the dependency of the Study Groups termination on the creation of a PAR.
- Discussed the potential path of adopting an objective in January and then refining the details of it before the March plenary meeting. David Law noted that this approach is not the preferred approach, but it has been done before.
- Reviewed the complexities to moving forward.
- Reviewed the approximate plan for the interim week. Mark noted that there are approx. >20
 different objective presentations to hear prior to making straw polls and adopting objectives.
- Reviewed the support for and arguments against adding 200G SMF objectives to P802.3bs. John D'Ambrosia noted that the synergy is industry focus on PAM4 optics in a single IEEE Task Force.
- Mark Nowell asked if there was strong opposition to starting the Task Forces in September instead
 of May 2016. There were comments that the 200G SMF work should be started before September
 to minimize impact to the P802.3bs project, if it goes into P802.3bs.

50G & NGOATH SG Presentation #2:

"Considerations on objections to inclusion of 200GbE SMF objectives into IEEE 802.3bs", Peter Stassar See http://www.ieee802.org/3/50G/public/adhoc/archive/stassar_011316_50GE_NGOATH_adhoc.pdf

- Reviewed the presentation.
- There was a comment about the handling of CDAUI-8 for 200G.
- Discussed the KP4 FEC considerations for 50G and 100G.

Kent Lusted noted that there is no ad hoc meeting next week. Mark Nowell and Kent Lusted will announce the post interim ad hoc calls soon over the reflector.

50G & NGOATH SG Presentation #3:

"OTN Support for 50GbE, next generation 100GbE, 200GbE", Steve Trowbridge

See

http://www.ieee802.org/3/50G/public/adhoc/archive/trowbridge_011316_50GE_NGOATH_adhoc.pdf

• Reviewed the presentation. No questions were asked

The ad hoc meeting ended at 9:58 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	company
Andrew Zambell	Amphenol-FCI
Adee Ran	intel
Adrian Butter	globalfoundries
Alexander Rysin	mellanox
Ali Ghiasi	gmail
Amrik Bains	
(Cisco)	cisco
Andre	
Szczepanek	inphi
Andy Zambell	Amphenol-FCI
Bharat Tailor	semtech
Chris Cole	finisar
chris diminico	n/a
Chris Roth	
(Molex)	molex
Dale Murray	lightcounting
Dan Dillow (AFCI)	fci
david chalupsky	
(intel)	intel
David Law	hpe
David Malicoat	hpe
Derek Cassidy	bt
Eric Baden	
(Broadcom)	broadcom
Fernando De	
Bernardinis	marvell
Gary Nicholl	cisco
Geoffrey Chacon	hpe
Jack Dawson	netronome
Jacky Chang	hpe
Jing Fang	marvell
John Castina	netronome
John DAmbrosia	Futurewei
John Dillard	microsemi
John Nelson	arista
jonathan king	finisar
Juan-Carlos	
Calderon	inphi

Kenneth Jackson	sei-device
kent lusted (intel)	intel
Kumaran	
Krishnasamy	broadcom
Marco	cisco
Mark Gustlin	xilinx
Mark Kimber	
(Semtech)	semtech
Mark Nowell	cisco
martin white	caviumnetworks
mbrown	apm
Megha Shanbhag	te
Mike	
Andrewartha	
(Microsoft)	microsoft
Mike Benson	
(Netronome)	netronome
Mike Dudek	qlogic
Mike Li	altera
Nathan Tracy	te
Oded Wertheim	mellanox
ofelt@juniper.net	Juniper
Paul Kolesar	commscope
Peter Anslow	ciena
Peter Stassar	huawei
Phil Sun	marvell
Piers	mellanox
Qian Zhang	cisco
Qing Xu	belden
rakesh sambaraju	nexans
Randy k Rannow	
(APIC)	APIC
Ray	cisco
Rich Mellitz	
(Intel)	intel
Rick Pimpinella	panduit
Rick Rabinovich	ixiacom
Rita Horner	synopsys
Rob Stone	broadcom
Ron Muir	jae

Ryan Latchman	macom
sam sambasivan	labs.att
Scott Kipp	brocade
Scott Sommers	molex
Silas Li	precise-itc
Stefano Valle	st
steve sekel	
(keysight)	keysight
Steve Trowbridge	alcatel-lucent
Ted Sprague	infinera
Tom Issenhuth	microsoft
Tom McDermott	us.fujitsu
Tom Palkert	visi
Tongtong Wang	huawei
upen	cisco
Vasu	broadcom
Venu B (Marvell)	marvell
Vipul Bhatt	
(Inphi)	inphi
Vittal	
Balasubramanian	dell
Wheling Cheng	ericsson
Yasuo Hidaka	us.fujitsu
Yong Kim	broadcom
Yuri Vandyshev	cisco
Zvi Rechtman	mellanox