P802.3by 25 Gb/s Ethernet Task Force and 50G/100G/200G Study Groups Joint Ad Hoc meeting – April 6, 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
 - 50GNGOATH:
 https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.pdf
- Approval of draft minutes for March 2, 2016
- P802.3by 25G Ad Hoc Kent Lusted
 - o Task Force update, Mark Nowell
- 50GNGOATH Study Groups Ad Hoc Kent Lusted
 - o Study Group Update, Mark Nowell
 - "Multi Lane PCS Proposal for 50G&NGOATH", Tongtong Wang
 - o "Supporting optional 50GAUI-2 in the objective", Ali Ghiasi
 - o "Backwards Compatibility Considerations for 100G", Rob Stone

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

Meeting began at 8:02 a.m. Pacific by Kent Lusted.

Meeting began with the agenda presentation:

http://www.ieee802.org/3/50G/public/adhoc/archive/agenda_040616_25GE_50GE_NGOATH_adhoc.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 25G 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. No one responded. The agenda was approved by the ad hoc.

Kent reminded participants of the IEEE patent policy.

Ad hoc minutes

The March 2nd meeting minutes for joint ad hoc were posted on the website. No one responded. Minutes approved.

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

Task Force Update – Mark Nowell:

- Second recirculation ballot is currently open and closes on April 15. If you did not join the
 Sponsor ballot group, but still would like to comment on the draft, it will save the task force
 officers significant effort if you would send your comments to Matt Brown for inclusion in the
 ballot by Tuesday 12th April 2016 23:59 AOE. Such comments will be identified in the comment
 field as coming from you, and like all comments from outside the ballot group will be nonbinding.
- No comments have been received to date.
- There is a planned out of cycle interim on April 20 in Ottawa, Canada. (see
 http://www.ieee802.org/3/interims/kanata_1_0416.html for details). Webex will be available.
 Please register for the meeting.

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

50G/NGOATH Next Steps, Mark Nowell:

See: http://www.ieee802.org/3/50G/public/adhoc/archive/nowell 040616 50GE NGOATH adhoc.pdf

- Remain as Study Group until just before the May interim.
- John D'Ambrosia noted that there is a 400G ad hoc call on 7 April to review the baselines needed to include 200G in the specification.
- The 200G SMF topics will transition to the P802.3bs Task Force and its associated ad hocs.
- Reviewed immediate focus topics.
- Contributions are needed for baseline proposals.

Kent Lusted allocated 20 minutes for each presentation and 5 minutes for Q&A.

50G & NGOATH SG Presentation #1:

"Multi Lane PCS Proposal for 50G & NGOATH", Tongtong Wang

See: http://www.ieee802.org/3/50G/public/Mar16/wang_50GE_NGOATH_01_0316.pdf

• Audio issue halted presentation.

There was a conference call audio issue with presentation #1. Presentation #2 was moved up in the agenda to allow for time to resolve the audio issue.

50G & NGOATH SG Presentation #2:

"Supporting optional 50GAUI-2 in the objective", Ali Ghiasi

- Discussed some of the possible 50 GbE implementations. The top configuration on slide 7 is the 100G-KR4 FEC.
- Author to send updated presentation with corrections to slide 7 baud rates.
- Discussed if there was a need to map the summary to potential objectives.
- There was a request to correct the summary bullet from "LAUI" to "50GAUI"

50G & NGOATH SG Presentation #1: (with fixed audio)

"Multi Lane PCS Proposal for 50G & NGOATH", Tongtong Wang

See: http://www.ieee802.org/3/50G/public/Mar16/wang_50GE_NGOATH_01_0316.pdf

- On slide 7, the 50GAUI-2 calculation assumes 25G serdes on both ends of the link.
- The CDAUI DER is 1E-5 in the latest draft P802.3bs v1.2 and the forthcoming draft v1.3.

50G & NGOATH SG Presentation #3:

"Backwards Compatibility Considerations for 100G", Rob Stone

See: http://www.ieee802.org/3/50G/public/Mar16/stone_50GE_NGOATH_01_0316.pdf

- Discussed the backward compatibility cases and implementation of the extender sub-layer in option B.
- On slide 5, the Greenfield Case 2 assumes bit muxing not FEC interleaving

The next ad hoc call is scheduled for 13 April 2016.

The ad hoc meeting ended at 9:50 a.m. Pacific.

List of attendees (captured from Webex tool)

Name	company
Adam Healey	broadcom
Alexey Frolov	aquantia
Ali Ghiasi	n/a
Andre Szczepanek	inphi
anil	brocade
Sayano	apichip
Arvind Srinivasan	oracle
Bipin D. Dama	cisco
Chris Cole	finisar
Chris Roth (Molex)	molex
Dale Murray - LightCounting	lightcounting
Dan	arista
dan dillow (fci)	fci
David Law	HPE
david malicoat	hpe
David Ofelt	juniper
Derek Cassidy	n/a
Eric Baden	broadcom
Fernando De Bernardinis	
(Marvell)	marvell
Frederick Tang	broadcom
Gary Nicholl	cisco
Geoffrey Chacon	hpe
Greg LeCheminant	keysight
Hyun	nvidia
Jacky Chang	hpe
James Fife	etopus
Jason Ellison	n/a
Jayanthi Natarajan	cisco
Jeff	credosemi
Jeffery Maki	juniper
JIM NADOLNY	samtec
Jing Fang	marvell
John	n/a
John Dillard	microsemi
John Ewen	globalfoundries
John Nelson	arista

Juan-Carlos Calderon	inphi
Justin Abbott	lumentum
Kapil Shrikhande	n/a
kent lusted (intel)	intel
Kumaran Krishnasamy	broadcom
Mark Gravel	hp
Mark Kimber (Semtech)	semtech
Mark Nowell	cisco
martin white	caviumnetworks
Matt Brown (APM)	apm
Megha Shanbhag	te
Mike Li	altera
Nathan Tracy	te
David Ofelt	gmail
Paul Kolesar	commscope
Paul Mooney	spirent
Peter Anslow	ciena
Peter Stassar	huawei
Phil Sun	credosemi
Phong Pham	usconec
Piers	mellanox
Qing Xu	belden
Raj Hegde	broadcom
rakesh Sambaraju (Berk-Tek)	nexans
rfarjad	aquantia
Rich Mellitz (Intel)	intel
Rick Pimpinella	panduit
Rick Rabinovich	ixiacom
Rita Horner	synopsys
Rob Stone	broadcom
Ron Muir	jae
sam sambasivan	labs.att
scott sommers	molex
Steve Swanson	corning
Steve Trowbridge	nokia
Tao Hu	qlogic
Ted Sprague	infinera
Tim Webster	cisco
Tom Issenhuth	microsoft

Tom McDermott	us.fujitsu
Tongtong Wang	huawei
Vittal Balasubramanian	dell
Wheling Cheng	ericsson
will bliss	broadcom
Xinyuan Wang	huawei
Yaniv Sabag	intel
Yasuo Hidaka	us.fujitsu
yizhaoping	huawei
Yong Kim (Broadcom LTD)	broadcom
Yuri Vandyshev	cisco
Zhenyu Liu	credosemi
Zvi Rechtman	mellanox