

IEEE 802 Plenary Meeting
 November 2013, Dallas, Texas - US
802.1 Meeting Minutes, 11-15 November 2013

Attendees

<i>Last Name</i>	<i>First Name</i>	<i>Middle Name</i>	<i>Affiliation</i>
Bohm	Mark		Microchip Technology, Inc.
Bottorff	Paul		Hewlett-Packard Development Company, L.P.
Chang	Xin		Huawei Technologies Co. Ltd
Cheng	Weiyang		Tellabs
Choi	Jin Seek		
Cline	David		Kollmorgen
Congdon	Paul		Tallac Networks
Crupnicoff	Diego		Mellanox Technologies
Cummings	Rodney		National Instruments Corporation
DeLaOlivaDelgado	Antonio		
Diamond	Patrick		Semtech Ltd
DIARRA	Aboubacar Kader		Robert Bosch GmbH
Edge	Bob		Consultant
Farkas	Janos		Ericsson
Finn	Norman		Cisco Systems, Inc. broadcom corporation, marvell semiconductor, siemens ag, hirschmann
Garner	Geoffrey		
Ghanwani	Anoop		Dell
Gravel	Mark		Hewlett-Packard Development Company, L.P.
Gray	Eric		Ericsson AB
Gunther	Craig		Harman International
Haddock	Stephen		Stephen Haddock Consulting, LLC
Handal	Jeffry		Louisiana State University
Hayakawa	Hitoshi		Hitachi, Ltd.
Hitt	Jeremy		Dell
Hussain	Rahil		ABB, Inc.
Jeffree	Anthony		HP, Broadcom
Jochim	Markus		General Motors Company
Johas Teener	Michael		Broadcom Corporation
Kaku	Shinkyō		Allied Telesis, Inc.
Kehrer	Stephan		Hirschmann Automation and Control, Inc.
Kerschbaum	Sven		Siemens AG
Khalil	Ahmad		TATA Communications
Kiessling	Marcel		Siemens AG

Kim	Yongbum	Broadcom Corporation
Klecka	Rudy	Cisco Systems, Inc.
Klein	Philippe	Broadcom Corporation
Lynch	Jeff	IBM
Mack-Crane	Thomas	Huawei Technologies Co. Ltd
Marks	Roger	Consensii LLC
Mason	Ralph	Microchip Technology, Inc.
McGaughey	Reid	Cisco Systems, Inc.
McIntosh	James	Vitesse Semiconductor Corporation
Messenger	John	ADVA Optical Networking Ltd.
Multanen	Eric	Intel Corporation
Nakano	Hiroki	Trans New Technology, Inc.
Pannell	Donald	Marvell Semiconductor, Inc.
Parsons	Glenn	Ericsson AB
Pelissier	Joseph	Cisco Systems, Inc.
Randall	Karen	NSA/IAD
Rouyer	Jessy	Alcatel-Lucent
Saltsidis	Panagiotis	Ericsson AB
Schell	Rick	Verizon
Seaman	Michael	Individual
Sexton	Daniel	General Electric Company (GE)
Sharma	Rakesh	IBM
		University of Duisburg-Essen and General Motors Company
Specht	Johannes	Intel Corporation
Stanton	Kevin	TTTech Computertechnik AG
Steiner	Wilfried	Broadcom Corporation
Thaler	Patricia	Cisco Systems, Inc.
Thubert	Pascal	ZTE Corporation
Ting	Ao	Alcatel-Lucent
Touve	Jeremy	Siemens AG
Tretter	Albert	Extreme Networks
Ultrino	George	ADVA Optical Networking
Waldo	Michael	National Instruments Corporation
Walter	Todd	ZTE Corporation
Wei	Yuehua	Cisco Systems, Inc.
Weis	Brian	IneoQuest
Welch	James	Innovasic
Woods	Jordon	InterDigital, Inc.
Zuniga	Juan	

Opening Plenary (Monday, 11 November, 2013)

The Chair (Tony Jeffree) presented the opening plenary slides. See Tony's opening plenary slides at:

<http://www.ieee802.org/1/files/public/minutes/2013-11-opening-plenary-slides.pdf>

General information is here:

<http://www.ieee802.org/1/files/public/minutes/802-1-general-info-v3.pdf>

The Chair reviewed general administrative information, including meeting “decorum” (or rules - including the policy on recording and/or reporting of meetings), hotel and meeting room security, 802.1 officers, eligible voters, web-site and access information, etc. See slides for details.

The Chair covered slides on IEEE-SA recommended policy statements to be reviewed at least once a day during meetings this week. These slides included:

- Instructions to WG (and TG) Chairs
- Participants, Patents and Duty to Inform
- Patent Related Links
- Call for Potentially Essential Patents
- Compliance with applicable laws, including anti-trust/competition
- TG Chairs were reminded of the need to review patent policy information daily

The Chair asked if there was anyone who was prepared to make any statement(s) with respect to any potentially essential patents.

There was no response to the call for patents.

The Chair went through a few slides relating to Administration issues

- Discussion of 802 Chair, 802.1 Chair and Vice Chair, and other officer elections
- The current Chair does not intend to stand for re-election

Max Riegel gave an update presentation on the OmniRAN EC Study Group activities.

<https://mentor.ieee.org/omniran/dcn/13/omniran-13-0090-00-ecsg-nov2013-opening-report-to-8021.pptx>

There were a number of questions about the presentation, including several relating to the PAR process associated with an EC Study Group (such as the one that Max chairs).

Comments on the Par needed to be provided by Tuesday evening (12 November, 2013).

Paul Nikolich made the point that the PAR will need to be “heartily” supported by IEEE 802.1 or the EC is unlikely to approve the PAR.

Mick Seaman raised an issue about whether or not there is a need to align the work that OmniRAN is initiating. Is an IEEE 802 solution required? Would we be potentially doing work that we should not do in IEEE 802?

Norm Finn asked who is working on the L3-handoff (which we can assume must take place when traveling far enough) from the IETF perspective. One of the Internet Area Working Group Chairs () provided a high level response to this based on what was discussed in the IETF meeting last week (3 through 8 November, 2013).

Pat Thaler asked for a more concrete statement of **Broad Market Appeal**.

Both Pat and Norm pointed out that this is not a project that can be “thrown over the wall” to be handled by IEEE 802.1. We would also need to have the people with the right background and knowledge attend the meetings to provide technology background, etc.

The Chair reviewed the schedule for future Interim meetings, which included:

- January, 2014 – Joint with wireless groups in Los Angeles, CA (US)
 - The meeting runs from Monday 21 January, through Friday 24 January
 - The 802.1 part of the meeting is Tuesday 22 through Friday 24 January
- May 2014 and 2015: John D’Ambrosia (Ethernet Alliance)
 - See slides for possible locations and other details
<http://ieee802.org/1/files/public/docs2013/admin-ea-offer-to-host-may2014-15-0713.pdf>
 - Offer is to host May meetings for both 2014 and 2015
 - Monday, May 12 through Friday, May 16 2014
 - Monday, May 11 through Friday, May 15 2015
- September (8-11) 2014: Ottawa, Glenn Parsons (Ericsson)
 - Brookstreet Hotel \$185 Canadian
 - Meeting fee \$300/\$500 Canadian
- January 2015 – TBD
 - Looking for offers

EC Report - See opening plenary slides for additional information and details.

- Tutorial on Tuesday on **Wireless SDN**:
<https://mentor.ieee.org/802-ec/dcn/13/ec-13-0055-00-00EC.pdf>
- Pat Thaler talked about a planned celebration meeting Monday evening (30 years of 802.3 and 40 years of Ethernet):
 - 7:00 to 9:00 PM
 - Keynote presentation by Bob Metcalfe
 - Panel discussion to follow
- The Chair pointed out that this causes the tutorial usually scheduled for Monday evening to be bumped to Tuesday.
- Tuesday 7:30 PM meeting to discuss 64-bit addressing issues related to 802.15.

- John Messenger and Pat Thaler had some comments about what may or may not be required to change (MIBs, Reserved Addresses)
- Others (Tony, Norm, etc.) pointed out that a lot of things are impacted (e.g. – BPDUs are broken)
- The Chair pointed out that we were getting perilously close to trying to solve the issue in the Plenary
- Max's OmniRAN status update presentation (see above)
- Changes to P&P
 - John Messenger asked for more information about 802.1 impact from this
 - 802.1 will need to be consulted in future PARs from other groups that may (or do) introduce incompatibility issues
- EC Workshop
- Future meetings
- Treasurer's report (details on slides)
- University outreach – 4 Registrations
- SA is re-organizing – unknown whether or not there will be an impact on 802.1
- 802 Task Force meeting Thursday (14 November), 10:00 AM
- EC meetings

Ethernet celebrations – organized by Pat Thaler and John D'Ambrosia

- See above

Proposed operations manual and PAR process changes

- 5C:
 - <https://mentor.ieee.org/802-ec/dcn/13/ec-13-0009-12-00EC-proposed-5c.pdf>
 - Comments needed to be sent to James Gilb by 5 PM on Tuesday, 12 November
- Other changes:
 - <https://mentor.ieee.org/802-ec/dcn/13/ec-13-0053-00-00EC-proposed-rule-change-for-november-2013.pdf>

Liaisons, etc.

- Joint meetings
 - Tuesday (all day) – Interworking/TSN & 802.15
 - Thursday 8:00 – 10:00 802.1 TG/802.11 – Bridging issues
- Incoming liaisons from ITU-T, MEF
- IEEE 802 JTC1 standing committee meetings
 - Tuesday, Wednesday and Thursday evening slots (PM1)
- Philippe Klein said that he would put together a draft liaison to IEEE 1905.1 (Converged Digital Home Network) to open discussions on their proposed new PAR (P1905.1a – in particular related to multi-hop in home networks)

802.1Q Revision/802.1D roll-up

- One final WG recirculation ballot to roll in minor editorial changes from the small number of comments that needed addressing
- Should then be ready for Sponsor ballot once the PAR modification is approved

802.1 PARs – 3

- 802 - Standard for Local and Metropolitan Area Networks: Overview and Architecture - PAR extension request
- 802.1AX-REV - PAR modification request
- 802.1Q-REV - PAR modification request

Other WG PARs - 5

- 802.3br - amendment: Interspersing Express Traffic
- 802.3bt - amendment: DTE Power via MDI over 4-Pair
- 802.3bu - amendment: 1-Pair Power over Data Lines
- 802.22 - Revision
- OmniRAN EC SG - Recommended Practice, Network Reference Model and Functional Description of IEEE 802 Access Network

PAR information is available at <http://grouper.ieee.org/groups/802/PARs.shtml>.

Task Group agendas:

- Steve Haddock presented the preliminary Interworking TG
 - The Interworking agenda is at:
<http://ieee802.org/1/files/public/docs2013/admin-interworking-agenda-1113-v1.pdf>
 - Since OmniRAN will need to be discussed in a joint 802.1 meeting, and there is time available from the Maintenance meeting, the Maintenance meeting on Tuesday morning will be from 8 to 8:30 AM and Tuesday's joint meeting will begin at 8:30 AM
- Mick Seamen discussed the meeting plans for the Security TG
 - Security Task Group meetings during this (November 2013) 802 plenary will be subsumed in the task group's ongoing liaison activities
 - In particular task group members will be attending the JTC1 SC6 ad hoc meetings, preparing the IEEE response to the comments received on the recent successful ISO ballots of 802.1X and 802.1AE.
 - Liaison with 802.15.9 is also ongoing and task group members will attend a joint meeting.
 - The task group is drafting PARs for
 - a P-384/SHA-384 addition as an option to 802.1AR Secure Device Identity (a first draft has already been posted with notification to the 802.1 email list)
 - an amendment to 802.1AE to cover two-port EDEs (Ethernet Data Encryptors) where it is desired to have the MACsec device not run other code (as presented during the York meeting).
 - Permission to proceed to further develop these PARs and pre-circulate will be sought at the closing 802.1 plenary.
 - If possible task group members will arrange additional time (accommodating TBD schedule conflicts) to discuss these subjects when attending the liaison meetings.
- Michael Johas-Teener presented the AVB agenda – the agenda is at:
https://docs.google.com/spreadsheet/pub?key=0AqXurc4m_PVsdHBMRDJLYXYtZ241MzRGaHJJa3NtOEE&output=html
- Pat Thaler discussed the meeting plans for the DCB TG

- There will be one meeting on Tuesday starting at 1:30
- Pat provided a list of the topics to be discussed:
 - P802.1Qcd comment resolution
 - New work discussion
 - link layer flow control for > 100 Gb/s
 - SDN/overlay considerations for DCB
- Glenn Parsons summarized the maintenance agenda for the week.

The Chair asked what time the TG meetings would begin this afternoon. TG meetings will commence at 2:00 PM

Meeting adjourned at 1:20 PM.

Task Group Minutes

Interworking minutes

Monday, 11 November

Meeting was called to order at 9:00 AM.

Stephen Haddock presented the preliminary agenda for the week.

Stephen Haddock presented patent policy slides. There was no response to the call for patents.

Stephen Haddock reviewed the pending and new received liaisons.

802.1AX-Rev DRNI: Panagiotis Saltsidis initiated comment resolution on the first Working Group ballot of 802.1AX-REV-d3.0 *Link Aggregation with Distributed Resilient Network Interconnect*.

- <http://www.ieee802.org/1/files/private/ax-rev-drafts/d3/802-1AX-REV-d3-0.pdf>
- <http://www.ieee802.org/1/files/private/ax-rev-drafts/d3/802-1AX-REV-d3-0-pdis-v1.pdf>

Adjourn at 10:30 AM for the 802.1 Opening Plenary.

Interworking Task Group called to order at 2:00pm.

Stephen Haddock presented patent policy slides. No response to the call for patents.

802.1Q-Rev: Tony Jeffree conducted comment resolution on the Working Group ballot of 802.1Q-REV-d1.3.

- <http://www.ieee802.org/1/files/private/q-rev-drafts/d1/IEEE802-1Q-REV-2013-d1-3.pdf>
- <http://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-REV-2013-d1-3-dis.pdf>

802.1AX-Rev DRNI: Panagiotis Saltsidis continued comment resolution on the first Working Group ballot of 802.1AX-REV-d3.0 *Link Aggregation with Distributed Resilient Network Interconnect*.

Adjourn at 6:00 PM.

Tuesday, 12 November

Joint Interworking/Time Sensitive Networking meeting was called to order at 9:30 AM.

802.1Qca PCR: Janos Farkas conducted comment resolution on the Task Group ballot of 802.Qca-d0.4 *Path Control and Reservation*. Presentations were given by Janos Farkas and Nigel Bragg:

- <http://ieee802.org/1/files/public/docs2013/ca-farkas-editor-report-1113-v01.pdf>
- <http://www.ieee802.org/1/files/private/ca-drafts/d0/802-1Qca-d0-4.pdf>
- <http://ieee802.org/1/files/private/ca-drafts/d0/802-1Qca-d0-4-pdis-v01.pdf>
- <http://ieee802.org/1/files/public/docs2013/ca-farkas-d0-4-operation-v01.pdf>
- <http://ieee802.org/1/files/public/docs2013/ca-nbragg-routing-structures-v02.pdf>

Break at 11:40 AM

Resume at 12:40 PM

802.1Qca PCR: Continued with a presentation from Rodney Cummings:
<http://www.ieee802.org/1/files/public/docs2013/new-tsn-cummings-explicit-routing-1113-v1.pdf>

Break at 1:40 PM for joint 802.1 and 802.15 meeting (see TSN minutes below).

Resume at 3:00 PM.

802.1Qca PCR: Continued presentations and comment resolution.

Adjourn at 6:00 PM.

Wednesday, 13 November

Interworking Task Group meeting was called to order at 9:00 AM.

Stephen Haddock presented patent policy slides. There was no response to the call for patents.

802.1AX-Rev DRNI: Panagiotis Saltsidis continued comment resolution on the first Working Group ballot of 802.1AX-REV-d3.0 *Link Aggregation with Distributed Resilient Network Interconnect*.

Break at 12:00 PM

Resume at 1:00 PM

802.1AX-Rev DRNI: Panagiotis Saltsidis continued comment resolution.

802.1Qca PCR: Janos Farkas continued comment resolution on the Task Group ballot of 802.Qca-d0.4 *Path Control and Reservation*.

Adjourn at 6:10 PM.

Thursday, 14 November

There was a joint meeting of 802.1 and 802.11 to discuss progress in 802.1Qbz and 802.11ak, from 8:00 AM to 10:00 AM. See TSN minutes below.

Interworking Task Group meeting was called to order at 10:15 AM.

Stephen Haddock presented patent policy slides. There was no response to the call for patents.

802.1Qca PCR: Janos Farkas continued comment resolution on the Task Group ballot of 802.Qca-d0.4 *Path Control and Reservation*.

Adjourn at 12:30 PM.

TSN Meeting Minutes

Monday, 11 November

Meeting started at 8:30 AM.

Michael Johas Teener presented Administration, Patent Policy, and Agenda. There was no response to the call for patents.

Geoffrey M. Garner presented 802.1ASbt/D0.2 (Presentation of Next Draft)

- <http://www.ieee802.org/1/files/private/asbt-drafts/d0/802-1ASbt-d0-2.pdf>

Geoffrey M. Garner presented 802.1ASbt Assumptions (Annex Z)

- <http://www.ieee802.org/1/files/private/asbt-drafts/d0/802-1ASbt-d0-2.pdf>

Adjourned at 10:30 for Opening Plenary.

Resumed at 2:00 PM.

Geoffrey M. Garner presented 802.1ASbt Assumptions (Annex Z)

- <http://www.ieee802.org/1/files/private/asbt-drafts/d0/802-1ASbt-d0-2.pdf>

Wilfried Steiner presented IEEE 802.1ASbt – Useful Synchronization Information for Fault-Tolerance

- <http://www.ieee802.org/1/files/public/docs2013/new-avb-wsteiner-8021ASbt-FT-QoS-1111-v01.pdf>

Tuesday, 12 November

Joint meeting with 802.1 TSN and 802.1 Interworking task group – see Interworking minutes above.

The 802.1 working group discussed the OmniRAN PAR

- <https://mentor.ieee.org/omniran/dcn/13/omniran-13-0086-00-ecsg-proposed-par-and-5c.docx>
- <http://www.ieee802.org/1/files/public/docs2013/new-omniran-thaler-par-comments-1113.xlsx>

Break for lunch at 11:40 AM.

Joint 802.1, 802.15 meeting started at 1:40 PM.

Clint Powell presented Overview of 802.15.4 and Need for Layer 2 Routing

- <https://mentor.ieee.org/802.15/dcn/13/15-13-0689-00-0010-tg10-l2r-and-802-15-4.pptx>
- <https://mentor.ieee.org/802.15/dcn/13/15-13-0688-00-0010-tg10-802-1-collaboration-points.pptx>

Thomas Kürner presented On the Scope of the IEEE 802.15 SG 100G

- <https://mentor.ieee.org/802.15/dcn/13/15-13-0635-01-0thz-on-the-scope-of-ieee-802-15-sg-100g.pdf>

Joint meeting ended, resumed TSN meeting at 2:40 PM.

Rodney Cummings presented TSN Explicit Route Installation: IS-IS or SRP

- <http://www.ieee802.org/1/files/public/docs2013/new-tsn-cummings-explicit-routing-1113-v1.pdf>

János Farkas presented P802.1Qca D0.4 Comment Review

- <http://www.ieee802.org/1/files/public/docs2013/ca-farkas-editor-report-1113-v01.pdf>

Meeting adjourned at 6:00 PM

Wednesday, 13 November

TSN meeting started at 8:30 AM.

Daniel Sexton presented Real World Architectures

- <http://www.ieee802.org/1/files/public/docs2013/new-tsn-dsexton-adoption-feedback-1113-v01.pdf>

Norman Finn presented Analysis of Frame Loss Rate for P802.1CB

- <http://www.ieee802.org/1/files/public/docs2013/cb-nfinn-packet-loss-ratio-10-13-v02.pdf>

Marcel Kießling presented CB Seamless Failover

- <http://www.ieee802.org/1/files/public/docs2013/cb-kiessling-How-to-separate-multiple-copies-of-one-stream-1113-v01.pdf>

Markus Jochim presented Ingress Policing

- <http://www.ieee802.org/1/files/public/docs2013/tsn-jochim-ingress-policing-1113-v2.pdf>

Aboubacar Diarra presented Layer 2 End-to-End Data Safety

- <http://www.ieee802.org/1/files/public/docs2013/new-tsn-diarra-ethernet-layer2-data-safety-1113-v01.pdf>

Rodney Cummings presented 802.1Qcc Configurable SR Classes

- <http://www.ieee802.org/1/files/public/docs2013/cc-cummings-configurable-sr-classes-1113-v1.pdf>

Geoffrey M. Garner presented Handling One-step on Receive in 802.1ASbt

- <http://www.ieee802.org/1/files/public/docs2013/as-garner-one-step-on-receive-1112.pdf>

Meeting adjourned at 6:00 PM.

Thursday, 14 November

Joint meeting of 802.1 and 802.11 to discuss progress in 802.1Qbz and 802.11ak.

Norm Finn presented Tag Stacking in Existing 802.11 Links

- <https://mentor.ieee.org/802.11/dcn/13/11-13-1453-00-00ak-tag-stacking-in-existing-802-11-links.pptx>

Kevin Stanton presented The Use of 802.11 Timing Measurement with P802.1ASbt in the Context of P802.11ak

- <http://www.ieee802.org/1/files/public/docs2013/ASbt-kbstanton-TimingMeasurements-status-1113-v01.pptx>

Joint meeting adjourned at 10:00 AM.

Resumed TSN meeting at 10:30 AM.

Don Pannell presented Assumption Update

- <http://www.ieee802.org/1/files/public/docs2013/avb-pannell-gen2-assumptions-1113-v17.pdf>

Johannes Specht presented UBS (Urgency-Based Shaper) - Characteristics and Performance

- <http://www.ieee802.org/1/files/public/docs2013/new-tsn-specht-ubs-perfchar-1113-v1.pdf>

DCB Meeting Minutes

Tuesday, 12 November

Meeting started at 1:30 PM.

Pat Thaler presented the patent policy slides, made a call for potentially essential patents (no response), walked through the IEEE meeting guidelines and agenda.

Eric Multanen, comment resolution on 802.1Qcd (application VLAN TLV)

- <http://www.ieee802.org/1/files/private/cd-drafts/d0/802-1Qcd-d0-1.pdf>
- <http://www.ieee802.org/1/files/private/cd-drafts/d0/802-1Qcd-d0-1-pdis-v01.pdf>

There was consensus to move to Working Group ballot.

Anoop Ghanwanti: High Speed Flow Control

<http://www.ieee802.org/1/files/public/docs2013/new-ghanwani-llfc-11-13-v01.pdf>

Discussed using a link by link credit rather than PFC.

Discussed backward compatibility with devices that support PFC.

Other suggestion is to use credit on new higher speed links and PFC on older links.

Committee seemed to agree that at some speed (probably 400G) support only credit,

- must support PFC below 400G if credit flow control is supported

Credit provides option to support lossless, though perhaps at less than full link bandwidth.

Start drafting PAR with, initial draft proposal for January meeting.

PAR drafting committee Anoop Ghanwanti co-ordinator,

- Eric Multanen, Jeff Lynch, Pat Thaler, Paul Bottorff

Presentations investigating potential solutions for compatibility, technical and economic feasibility are needed before requesting PAR approval.

Plan to request PAR approval at July 2014 plenary.

Rakesh Sharma

<http://www.ieee802.org/1/files/public/docs2013/Qbg-sharma-ovnet-dcb-1113-v01.pdf>

Proposes a project to extend EVB TLV and VDP TLVs to support Overlay Networks from NVO3.

Discussion indicates that it is pre-mature until IETF NVO3 decides what it wants.

DCB conference call on 6th of January 10-12 am to review stawman PAR, target July approval.

Credit proposals before PAR at January meeting.

Need supporting presentations for credit

- examples for Infiniband, example of credit size,
- examples for handling lost credits
- justifications for credit over PFC, buffer use, bandwidth reduction, etc

Adjourned at 5:30 PM.

Security Meeting Minutes

As indicated during the opening plenary meeting, there were no formal meetings scheduled for the Security Task Group and therefore there are no day-by-day minutes.

As communicated by the task group chair in the opening 802.1 Plenary, Security Task Group meetings during this (November 2013) 802 plenary were largely subsumed in the task group's ongoing liaison activities. In particular task group members attended the JTC1 SC6 ad hoc meetings, preparing the IEEE response to the comments received on the recent successful ISO ballots of 802.1X and 802.1AE. Task group members also attended an 802.15.9 and liaised with that group. Activities in those meetings are reported in the minutes of those meetings. Actions/outcomes for 802.1 and 802.1 members are summarized here.

Task group members attending the liaison meetings scheduled additional sessions to progress follow up actions and task group work in general.

Task Group working details:

Patent Policy

At each of the task group specific sessions the chair confirmed that all the attendees had seen the patent policy slides during the 802.1 opening plenary (there being no projector available to show the slides again) and issued the call for notification of essential patents. There were no responses at the time.

JTC1 SC6 ad hoc - Actions arising

Karen would take the lead in preparing the responses to the China and Swiss NB comments on the 802.1AE and 802.1X ballots.

Some comments should result in maintenance items.

Mick to liaise with Tony to update the 802.1 Overview for presentation to SC6 at their February meeting.

Liaise with IETF to clarify and update the status of identified RFCs.

Scrutinize P802.1Xbx references during the sponsor ballot process. Ensure that all references are really needed, informational references are moved to the Bibliography, RFC references are up to date, normative RFC references have an appropriate status (otherwise liaise with IETF).

Forward P802.1Xbx D1.2 for information as it would shortly enter Sponsor Ballot. (Motion passed in 802.1 plenary)

Forward 802.1AEbn and 802.1Aebw for adoption (Motion passed in 802.1 plenary).

P802.1Xbx

Agreed to make a motion to progress 802.1Xbx D1.2 to Sponsor Ballot.

P802.1ARce SHA-384 and P-384

Mick had produced and circulated a D0.1. The purpose of this draft was to identify issues related to completing the PAR - in particular making sure that we were clear as to what the addition of the option means for the existing choices and what expectations for conformance and interoperability should be stated.

Discussed 'signature algorithm' terminology - prime references use this term without further qualification to refer to all of the following:

- (a) general approaches - such as first hash and then use ECC
- (b) broad classes of methods - such as use a SHA hash then a P-nnn curve
- (c) specific identified procedures/algorithms - such as SHA-256 with P-256
- (d) the process including both the hash and the signing
- (e) the signing after the hash has been applied.

This makes it a little difficult to choose terminology to describe what it is that is option, and what a particular option is 'one of'. The best that we could come up with is 'identified signature algorithm'.

Agreed that the intent was that there be three identified signature algorithm choices, the existing choices:

- (a) SHA-256 with RSA-2048
- (b) SHA-256 with P-256, and the choice to be added by this amendment
- (c) SHA-384 with P-384.

Confirmed there is no interest in SHA-384 with any RSA key length as this would have to be quite long.

EDEs (Ethernet Data Encryption devices)

Following a brief discussion it was agreed that it would be appropriate to seek permission to develop a PAR for progression at the July 2014 plenary. Mick prepared an initial draft PAR and it was reviewed. (Motion passed in closing 802.1 plenary).

802.15.9

Following the joint meeting, we agreed that text needs to be drafted for inclusion in P802.15.9 to allow EAPOL frames (including MKA frames) to be carried by that standards reassembly mechanism.

One question was: how to ensure integrity of the MAC addresses of the frame. Current answer - prepend the 64-bit addresses referenced by whatever abbreviated addressing mechanism 802.15.9 is using to the frame user data (the EAPOL EtherType and following octets) and calculate the ICV over the whole.

Further discussion anticipated as 802.15.9 makes progress.

The results of Security Task Group work during the week are reflected in the motions made during the closing Plenary.

Maintenance Meeting Minutes

Are available at

<http://www.ieee802.org/1/files/public/maint/2013-11-maintenance.pdf>

Closing Plenary (Thursday, November 14, 2013)

Closing Plenary slides are available at:

<http://www.ieee802.org/1/files/public/minutes/2013-03-closing-plenary-slides.pdf>

The Chair (Tony Jeffree) led discussion of the following items:

- Material already covered in the opening plenary
 - Officers (no change)
 - New upload area: access via <http://ieee802.org/1/filenaming.html>
 - Voter status (see slides)
- New voters out of this week
- Patent policy and call for potentially essential patents – **no response**
- Additional Meeting Guidelines
- Reminder of Chair and Vice-Chair elections coming up in March
- Future Interim meetings
 - January, 2014:
 - Co-located with 802.11, January 21-24, Los Angeles, CA
 - Registration (<http://802world.org/apps/session/83/register>) and Hotel Reservations (https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=10736425)
 - May 2014:
 - Hosted by Ethernet Alliance (PoC: John D'Ambrosio), May 12-16
 - <http://ieee802.org/1/files/public/docs2013/admin-ea-offer-to-host-may2014-15-0713.pdf>
 - September 2014:
 - Ottawa, Canada, September 8-11
 - Hosted by Ericsson (PoC: Glenn Parsons)
 - Brookstreet Hotel \$185 CDN with golf tournament
 - Meeting fee \$300/\$500 CDN
 - January 2015:
 - Joint with Wireless groups (Atlanta)?
 - May 2015:
 - Hosted by Ethernet Alliance (PoC: John D'Ambrosio), May 11-15
 - <http://ieee802.org/1/files/public/docs2013/admin-ea-offer-to-host-may2014-15-0713.pdf>
- Proposed 5C/OM changes

- 5C:
<https://mentor.ieee.org/802-ec/dcn/13/ec-13-0009-12-00EC-proposed-5c.pdf>
- Comments to James Gilb by 5pm Tuesday; James will respond by Wednesday 5pm.
- Other OM, WG P&P and CG changes:
<https://mentor.ieee.org/802-ec/dcn/13/ec-13-0053-00-00EC-proposed-rule-change-for-november-2013.pdf>
- Plenary time pressure
 - Plenary weeks are becoming problematic – increasing pressure on TG time
 - Is it worth considering moving the closing Plenary to free up more time?
 - 5 PM Thursday?
 - Friday Morning?
- Project status (In)Sanity check – current workload review (see slides)
- 802 O&A completion plan (see slides)
- ONF NBI Effort (Ben Mack-Crane)
 - See slides 22, 23
 - Discussed in Interworking whether or not there was any interest:
 - Some interest in reviewing NBI proposals/drafts from ONF, or OpenFlow itself
 - Some interest in promoting 802.1 technologies to the industry
- Task Group reports were given for the following areas (see individual task group minutes and/or status from above for details):
 - Interworking – Steve Haddock provided a summary of this week’s work
 - Security – Tony reported that the sponsor ballot 802.1AEbw has closed
 - TSN – Michael Johas-Teener provided an update on AVB work
 - DCB – Pat reported that there was a small amount of E-Mail activity
 - Maintenance – Glenn Parsons reported progress made
 - O&A – Tony gave a brief status on O&A status

Motions

General 802.1

- Approve the minutes from July 2013 and September 2013 meetings
<http://www.ieee802.org/1/files/public/minutes/2013-07-minutes-v01.pdf>
<http://www.ieee802.org/1/files/public/minutes/2013-09-minutes-v01.pdf>

- Acclamation
- Hold pre-meeting(s) on Monday Morning at the March 2014 Plenary meeting
 - Acclamation
- 802.1 directs its chair to vote AGAINST approval for forwarding the OmniRAN PAR to NesCom.
 - For 4 Against 18 Abstain 14
 - Motion fails
- 802.1 wants the OmniRAN activity, if approved, to be part of the 802.1 Working Group
 - For 19 Against 0 Abstain 17
- OmniRAN Task Group straw poll
 - If OmniRAN is to be an 802.1 activity, we would prefer it to be:
 - A separate Task Group 11
 - Part of Interworking 11

Maintenance

- Authorize teleconference meeting of the maintenance task group on March 4th at 11 AM (Eastern US Time):
 - Acclamation
- 802.1 requests EC approval for forwarding P802.1AB-Cor2 PAR to NesCom
 - For 30 Against 0 Abstain 1
- 802.1 requests EC approval for forwarding P802.1Q-rev PAR modification to NesCom
 - For 33 Against 0 Abstain 0
- 802.1 requests EC conditional approval for initiating sponsor ballot on P802.1Q-rev
 - For 34 Against 0 Abstain 0
- 802.1 requests EC approval to forward P802.1Q-REV D2.0 to ISO/IEC JTC1 SC6, for information under the PSDO agreement, when it is forwarded to Sponsor ballot
 - For 29 Against 0 Abstain 2

Security

- 802.1 requests EC approval to submit P802.1Xbx D1.2 to Sponsor Ballot
 - For 23 Against 0 Abstain 11

- 802.1 authorizes the Security Task Group to hold teleconferences (subject to notice of at least 21 days to the 802.1 email exploder) to consider the proposed PAR for P802.1ARce – Secure Device Identity – Amendment: SHA-384 and P-384 Elliptic Curve.

The 802.1 Chair is authorized to pre-circulate the (possibly revised) PAR¹ for consideration at the March 2014 meeting

- For 27 Against 0 Abstain 6

¹Drafts previously circulated to the 802.1 email exploder, also at:

- <http://www.ieee802.org/1/files/public/docs2013/new-sec-arce-draft-par-5cs-0913-v01.txt>

- 802.1 authorizes the Security Task Group to hold teleconferences (subject to notice of at least 21 days to the 802.1 email exploder) to consider the proposed PAR for P802.1AEcg – MAC Security – Amendment: Ethernet Data Encryptions.

The 802.1 Chair is authorized to pre-circulate the (possibly revised) PAR¹ for consideration at the July 2014 meeting

- For 26 Against 0 Abstain 5

¹PAR based on discussion and presentation at the York, September 2013 meeting.

- <http://www.ieee802.org/1/files/public/docs2013/ae-seaman-edc-0713-v02.pdf>
- <http://www.ieee802.org/1/files/public/docs2013/ae-seaman-edc-ppt-0913-v01.pdf>

- 802.1 requests EC approval to forward IEEE 802.1AEbn and IEEE 802.1AEbw to ISO/IEC JTC1 SC6, for adoption under the PSDO agreement

- For 27 Against 0 Abstain 7

- 802.1 requests EC approval to forward P802.1Xbx D1.2 to ISO/IEC JTC1 SC6, for information under the PSDO agreement

- For 29 Against 0 Abstain 5

Interworking

- Authorize 1-hour teleconferences for 802.1Qbz/802.11ak coordination on 11/25, 12/9, and 1/6, and subsequent dates to be announced with at least 21 days notice, at 17:00 Eastern US time. Teleconference access details to be announced on the 802.1 reflector

- Acclamation

- 802.1 requests EC approval to forward 802.1Qbp to REVCOM

- For 25 Against 0 Abstain 8

- 802.1 authorizes the editor of P802.1AX-REV (Panos Saltsidis) to prepare a draft for Working Group recirculation balloting
 - For 32 Against 0 Abstain 0
- 802.1 authorizes the editor of P802.1AC-REV (John Messenger) to prepare a draft for Task Group balloting. The ballot will also be issued to 802.16
 - For 29 Against 0 Abstain 3
- 802.1 authorizes the editor of P802.1Qbz wired/wireless bridging (Norm Finn) to prepare a draft for Task Group balloting
 - For 32 Against 0 Abstain 2
- 802.1 authorizes the editor of P802.1Qca path control & reservation (Janos Farkas) to prepare a draft for Task Group balloting
 - For 31 Against 0 Abstain 3

TSN

- Continue weekly teleconference meetings weekly at 9 AM (US Pacific Time) Wednesday for TSN general topics. Access information will be sent to the 802.1 reflector immediately after the plenary.
 - Acclamation
- 802.1 authorizes the editor of P802.1Qbv (Tony Jeffree) to prepare a draft for Task Group balloting
 - For 28 Against 0 Abstain 1

DCB

- Authorize teleconference meeting of the DCB task group. The calls will be used to discuss possible new work
 - Monday, 6 January, 2014, 8-10 AM US Pacific Time
 - Up to 2 calls with proper notice between the January Interim meeting and the March Plenary at times and dates to be selected at the Interim meeting
 - Acclamation
- 802.1 authorizes the editor of P802.1Qcd (Eric Multanen) to prepare a draft for Working Group balloting
 - For 26 Against 0 Abstain 2

Overview and Architecture

- 802.1 requests EC approval for forwarding P802 PAR extension request to NesCom
 - For 23 Against 0 Abstain 2
- 802.1 grants approval to the Editor of P802, James Gilb, to conduct a conference call for comment resolution, Dec 4, 8:00 AM PST
 - Acclamation

Closing Plenary adjourned