# IEEE 802.1 Interim Meeting Los Angeles, CA, US

## **802.1 Meeting Minutes – 21-24 January 2014**

## **Attendees**

Allende	<b>C</b> 3		
	First	Middle	
Last Name	Name	Name	Affiliation
			Hewlett-Packard Development
Bottorff	Paul		Company, L.P.
Cummings	Rodney		National Instruments Corporation
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,
Garner	Geoffrey		Hirschmann
Ghanwani	Anoop		Dell
			Hewlett-Packard Development
Gravel	Mark		Company, L.P.
Gray	Eric		Ericsson AB
Gunther	Craig		Harman International
Haddock	Stephen		Stephen Haddock Consulting, LLC
Hussain	Rahil		ABB, Inc.
Jeffree	Anthony		HP, Broadcom
Johas			
Teener	Michael		Broadcom Corporation
Jones	Peter		Cisco Systems, Inc.
Kamble	Keshav		IBM
Kao	Yu-Hsiang		Broadcom Corporation
Kiessling	Marcel		Siemens AG
Klein	Philippe		Broadcom Corporation
Korhonen	Jouni		Broadcom Corporation
Lynch	Jeff		IBM
Mack-Crane	Thomas		Huawei Technologies Co. Ltd
McIntosh	James		Vitesse Semiconductor Corporation
Messenger	John		ADVA Optical Networking Ltd.
Multanen	Eric		Intel Corporation
			University of New Hampshire
Noseworthy	Bob		InterOperability Laboratory (UNH-IOL)

Pannell Donald Marvell Semiconductor, Inc.

Parsons Glenn Ericsson AB

Pelissier Joseph Cisco Systems, Inc.

Randall Karen NSA/IAD Riegel Maximilian NSN

Rodrigues Silvana Integrated Device Technology, Inc.

Rouyer Jessy Alcatel-Lucent Saltsidis Panagiotis Ericsson AB Seaman Michael Individual

Sexton Daniel General Electric Company (GE)

University of Duisburg-Essen and

Specht Johannes General Motors Company
Steiner Wilfried TTTech Computertechnik AG

Thaler Patricia Broadcom Corporation

Ting Ao ZTE Corporation
Touve Jeremy Alcatel-Lucent

Walter Todd National Instruments Corporation

Weis Brian Cisco Systems, Inc.

Woods Jordon Innovasic

## **Task Group Minutes**

## Interworking minutes

#### Tuesday, 21 January

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

Stephen Haddock presented the preliminary agenda for the week.

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

Stephen Haddock reviewed the pending liaisons.

**802.1AX-Rev DRNI:** Panagiotis Saltsidis initiated comment resolution on the Working Group recirculation ballot of 802.1AX-REV-d3.1 Link Aggregation with Distributed Resilient Network Interconnect.

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

Break at 12:00 PM.

Resume at 1:10 PM.

**802.1AX-Rev DRNI:** Panagiotis Saltsidis continued comment resolution on the Working Group recirculation ballot of 802.1AX-REV-d3.1 Link Aggregation with Distributed Resilient Network Interconnect.

**802.1Q-Rev:** Tony Jeffree conducted comment resolution on the Working Group ballot of 802.1Q-REV-d1.4.

- <a href="http://www.ieee802.org/1/files/private/q-rev-drafts/d1/IEEE802-1Q-REV-2013-d1-4.pdf">http://www.ieee802.org/1/files/private/q-rev-drafts/d1/IEEE802-1Q-REV-2013-d1-4.pdf</a>
- http://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-REV-2013-d1-4-dis.pdf

**Liaison:** Stephen Haddock led further discussion regarding possible responses to ls 076 from the ITU. Norm Finn and Panagiotis Saltsidis volunteered to prepare an initial draft response.

Adjourn at 5:15 PM.

## Wednesday, 22 January

#### [802.1 Maintenance meeting from 8:00 to 8:40 AM]

Michael Teener called the joint Interworking/Time-Sensitive-Networking meeting to order at 9:00 AM.

Michael Teener presented patent policy slides. No response to the call for patents.

**802.1Qca PCR:** Janos Farkas gave presentations on generalized SPB and maximally redundant trees:

- http://ieee802.org/1/files/public/docs2014/ca-farkas-generalized-spb-0114-v01.pdf
- http://ieee802.org/1/files/public/docs2014/ca-farkas-mrt-0114-v01.pdf

**802.1Qcc SRP:** Craig Gunther and Rodney Cummings gave presentations on why to create stream reservations on wireless and on explicit scheduling:

- http://www.ieee802.org/1/files/public/docs2014/at-cgunther-srp-for-802-11-0114-v01.pdf
- http://www.ieee802.org/1/files/public/docs2014/cc-cummings-explicit-scheduling-0114-v1.pdf

Break at 12:10 PM.

## [802.1 and 802.15 joint meeting from 1:30pm to 2:40pm]

Discussion about:

https://mentor.ieee.org/802.15/dcn/14/15-14-0048-02-0010-impact-of-low-power-networks-on-bridge-operation.doc

Resume 802.1 IWK/TSN joint meeting at 3:00 PM.

**802.1Qcc:** Rodney Cummings continued his presentation.

**802.1CB:** Norm Finn gave a presentation on layering in L2 and L3 networks.

- http://www.ieee802.org/1/files/public/docs2014/tsn-nfinn-L2-Data-Plane-0114-v02.pdf
- http://www.ieee802.org/1/files/public/docs2014/tsn-nfinn-L3-Data-Plane-0114-v01.pdf

Adjourn at 5:45 PM.

## Thursday, 23 January

## [802.1Qbz and 802.11ak joint meeting from 8:00 to 10:00 AM]

Interworking Task Group meeting called to order at 10:30am.

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

**Liaison:** Donald Eastlake gave a presentation summarizing the IETF liaison regarding TRILL OAM:

http://ieee802.org/1/files/public/docs2014/new-senevirathne-trill-oam-liaison-0114-v01.pptx

Break at 11:45 AM.

Resume at 1:00 PM.

**802.1AX-Rev DRNI:** Stephen Haddock gave a presentation on how RSTP could operate over a DRNI (v1 was presented; v2 has minor updates following the ensuing discussion):

- http://ieee802.org/1/files/public/docs2014/ax-rev-haddock-rstp-0114-v1.pdf
- http://ieee802.org/1/files/public/docs2014/ax-rev-haddock-rstp-0114-v2.pdf

**802.1Qca PCR:** Janos Farkas reviewed his presentation on maximally routed trees, and conducted comment resolution on the Task Group ballot of 802.Qca-d0.5 Path Control and Reservation.

- http://ieee802.org/1/files/public/docs2014/ca-farkas-editor-report-0114-v01.pdf
- http://ieee802.org/1/files/private/ca-drafts/d0/802-1Qca-d0-5-pdis-v01.pdf

Adjourn at 6:10 PM.

## Friday, 24 January

Joint IWK/TSN Task Group meeting called to order at 9:00 AM.

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

**802.1Qcb:** Marcel Kiessling gave a presentation on the sequence number relationships.

- http://www.ieee802.org/1/files/public/docs2014/cb-kiessling-Sequence-number-relationship-0113-v01.pdf
- **802.1Qca PCR:** Marcel Kiessling gave a presentation on the relationship of IS-IS PCR and MSRP. Janos Farkas completed comment resolution on the Task Group ballot of 802.Qca-d0.5 Path Control and Reservation.
  - <a href="http://www.ieee802.org/1/files/public/docs2014/ca-kiessling-ISIS-PCR-and-TSN-0114-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/ca-kiessling-ISIS-PCR-and-TSN-0114-v01.pdf</a>

**Liaison:** Norm Finn led a review of draft liaisons to the IETF regarding CFM code points and to the ITU-T regarding Multi-Domain Segment Protection. These will be handed over to Tony Jeffree for approval by email ballot or by motions at the March plenary meeting.

Adjourn at 12:30pm

### **TSN Minutes**

#### Tuesday, 21 January

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

Geoffrey M. Garner discussed 802.1ASbt Status and Assumptions.

Geoffrey M. Garner presented 802.1ASbt Minor Issues <a href="http://www.ieee802.org/1/files/public/docs2014/as-garner-new-802-1as-minor-issues-0114.pdf">http://www.ieee802.org/1/files/public/docs2014/as-garner-new-802-1as-minor-issues-0114.pdf</a>

Geoffrey M. Garner presented Handling One-step on Receive in 802.1ASbt (Updated) <a href="http://www.ieee802.org/1/files/public/docs2014/as-garner-one-step-on-receive-1113-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/as-garner-one-step-on-receive-1113-v01.pdf</a>

Geoffrey M. Garner presented 1588 High accuracy work update <a href="http://www.ieee802.org/1/files/public/docs2014/as-garner-1588-high-accuracy-work-update-0114.pdf">http://www.ieee802.org/1/files/public/docs2014/as-garner-1588-high-accuracy-work-update-0114.pdf</a>

## Wednesday, 22 January

Joint meeting with 802.1 TSN and 802.1 Interworking task group

János Farkas presented Generalized Shortest Path Bridging http://www.ieee802.org/1/files/public/docs2014/ca-farkas-generalized-spb-0114-v01.pdf

János Farkas presented Maximally Redundant Trees (MRT) for 802.1Qca <a href="http://www.ieee802.org/1/files/public/docs2014/ca-farkas-mrt-0114-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/ca-farkas-mrt-0114-v01.pdf</a>

Craig Gunther presented Easier SRP for 802.11 (802.1 Review) <a href="http://www.ieee802.org/1/files/public/docs2014/at-cgunther-srp-for-802-11-0114-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/at-cgunther-srp-for-802-11-0114-v01.pdf</a>

Rodney Cummings presented Qcc: Explicit Scheduling <a href="http://www.ieee802.org/1/files/public/docs2014/cc-cummings-explicit-scheduling-0114-v1.pdf">http://www.ieee802.org/1/files/public/docs2014/cc-cummings-explicit-scheduling-0114-v1.pdf</a>

Norman Finn presented TSN L2 Data Plane http://www.ieee802.org/1/files/public/docs2014/tsn-nfinn-L2-Data-Plane-0114-v02.pdf

Norman Finn presented TSN L3 Data Plane http://www.ieee802.org/1/files/public/docs2014/tsn-nfinn-L3-Data-Plane-0114-v01.pdf

### Thursday, 23 January

Joint meeting with 802.1 and 802.11 working groups started at 8:00 AM.

Norman Finn presented 802.1 / 802.11 Formal Interface <a href="http://www.ieee802.org/1/files/public/docs2014/ac-nfinn-11-14-0168-formal-interface-0114-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/ac-nfinn-11-14-0168-formal-interface-0114-v01.pdf</a>

Craig Gunther presented Easier SRP for 802.11 <a href="http://www.ieee802.org/1/files/public/docs2014/at-cgunther-srp-for-802-11-0114-v02.pdf">http://www.ieee802.org/1/files/public/docs2014/at-cgunther-srp-for-802-11-0114-v02.pdf</a>

Joint session ended at 10:00 AM.

TSN meeting started at 10 AM.

Rodney Cummings presented Qcc: More Streams <a href="http://www.ieee802.org/1/files/public/docs2014/cc-cummings-more-streams-0114-v1.pdf">http://www.ieee802.org/1/files/public/docs2014/cc-cummings-more-streams-0114-v1.pdf</a>

Tony Jeffree presented Qbv Status and Comment Review <a href="http://www.ieee802.org/1/files/private/bv-drafts/d1/802-1Qbv-D1-0-pdis-v1.pdf">http://www.ieee802.org/1/files/private/bv-drafts/d1/802-1Qbv-D1-0-pdis-v1.pdf</a>

Adjourned at 5:00 PM.

## Friday, 24 January

Meeting started at 9:00 AM.

János Farkas presented 802.1Qca Editor's Report http://www.ieee802.org/1/files/public/docs2014/ca-farkas-editor-report-0114-v01.pdf

Marcel Kießling presented Sequence Number Relationship <a href="http://www.ieee802.org/1/files/public/docs2014/cb-kiessling-Sequence-number-relationship-0113-v01.pdf">http://www.ieee802.org/1/files/public/docs2014/cb-kiessling-Sequence-number-relationship-0113-v01.pdf</a>

Tony Jeffree continued with Qbv Status and Comment Review <a href="http://www.ieee802.org/1/files/private/bv-drafts/d1/802-1Qbv-D1-0-pdis-v1.pdf">http://www.ieee802.org/1/files/private/bv-drafts/d1/802-1Qbv-D1-0-pdis-v1.pdf</a>

Meeting adjourned at 1:00 PM.

## **Security Minutes**

As discussed at the November 2013 meeting, the Task Group would continue to be involved in liaison activities through this interim and did not ask for a fixed room allocation as that would be a waste of resources.

Accordingly Task Group members rendezvoused each morning at registration to establish the day's liaison schedule and to discuss other task group business.

As a result, these meeting minutes are not organized on a day-by-day basis.

#### Patent Policy

The chair showed the patent policy slides and issued the call for notification of essential patents at the start of each day's meetings (Tuesday 9.00 a.m., Wednesday 9.00 a.m., Thursday 9.00 a.m.) There were no responses at this time. The patent policy slides can be found in the opening plenary slides of any recent meeting (pointer distributed to the 802.1 email list by the 802.1 WG chair) if attendees wished to study them further, and that notifications of essential patents can be made to either the TG or WG chair at any time.

#### JTC1 ad hoc

JTC1 ad hoc discussions were held 1.30 pm Tuesday, Wednesday, Thursday.

They are separately minuted. IEEE 802.1AR, AB, and AS have passed their ISO/IEC JTC1 FDIS ballots.

Karen Randall's previously prepared presentation that is our response to the comments received on the previously successful 802.1AE and 802.1X ballots has been posted on the 802.1 website (in the public docs directory).

Karen would lead the preparation of responses to SC6 on the FDIS ballot for .1AR and the pre-ballots for .1AEbn and .1AEbw. Tony Jeffree would prepare the responses to the FDIS ballots of .1AB and .1AS. (Karen will send him copies of the existing responses)

#### P802.15.9 liaison

Liaison discussions were held at 4.00 pm Tuesday and Wednesday. They are separately minuted by 802.15.9. Brian Weis contributed an Annex to the 15.9 draft on the use of .1X with 15.4 based on 802.1 task group discussion. Brian's contribution has been included in the 802.15.9 draft but is also posted on the 802.1 website.

### P802.1AEcg (EDE) Discussion

D0.1, prepared by Editor/Task Group Chair to facilitate the ongoing PAR development discussion and distributed just prior to the meeting, was discussed. One important issue was ensuring that the use of MACsec within standard bridges is not seen as being deprecated by the definition of EDEs, which are a special but limited case.

A further draft will be prepared shortly. The plan remains to further develop and precirculate the PAR for approval at the July 2014 plenary.

#### P802.1ARce Discussion

The Editor/Task Group Chair sought clarification on some aspects of terminology. The PAR scope should encompass their clarification. A draft was in progress, following the November discussion of D0.1.

References and other items noted at that meeting had been updated, a further draft will be issued within the next month so that we could check on any remaining issues that would bear on the inclusion of P-384/SHA-384.

It was agreed that this would occur too late for pre-circulation prior to the March 802 plenary, the plan is now to target the July plenary where task group members will be able to attend and answer questions/deal with comments received.

## Perpass Discussion

Pat Thaler had arranged for a perpass discussion in the upcoming IEEE/IETF leadership teleconference.

Karen and Mick would join that conference. Brian brought the group up to speed on the IETF discussion. It was likely that no special action would be required from us at this time - the focus is not specifically on encryption, although encryption is recognized as part of the solution space.

#### P802.1Xbx

The Sponsor Ballot was in progress. Teleconference times for ballot resolution (and potentially other task group discussion) were agreed, and have now been announced to the 802.1 email reflector.

#### Upcoming meetings

The Task Group would not meet during the March 2014 plenary or the May 2014 interim, but would continue discussion via teleconference supplemented by email.

The Task Group would meet during the July 2014 plenary in San Diego.

## DCB Minutes - No minutes as of yet