# IEEE 802 Plenary Meeting March 2015, Berlin, DE

# **802.1 Meeting Minutes, 9-12 March 2015**

# **Attendees**

		Middle	
Last Name	First Name	Name	Affiliation
Belopolsky	Yakov		Bel Fuse
Bjornstad	Steinar		TransPacket AS
Boiger	Christian		b-plus GmbH
Bragg	Nigel		ciena
Brandt	David		Rockwell Automation
Chen	David		NSN, Inc.
Chen	Feng		Siemens AG
Cockburn	Duncan		Xilinx
Cummings DeLaOlivaDelgad	Rodney		National Instruments Corporation
0	Antonio		Universidad Carlos III Madrid
Doerr	Laurin		Deggendorf University of Applied Sciences
Ellegaard	Lars		Vitesse Semiconductor Corporation
Fang	Yonggang		ZTE Corporation
Farkas	Janos		Ericsson
Finn	Norman		Cisco Systems, Inc.
_			Broadcom corporation, Marvell semiconductor, Siemens
Garner	Geoffrey		ag, Hirschmann
Gray	Eric W		Ericsson AB
Gunther	Craig		Harman International Industries, Incorporated
Haddock	Stephen		Stephen Haddock Consulting, LLC
Hantel	Mark		Rockwell Automation
Harkins 	Daniel		Aruba Networks, Inc.
Heise	Peter		Airbus Group
Holness	Marc		Ciena Corporation
Hsieh	Ching-T		Industrial Technology Research Institute (ITRI)
Huang	Lu		802
Jeffree	Anthony		HP, Broadcom
Jethanandani	Mahesh		Ciena Corporation
Johas Teener	Michael		Broadcom Corporation
Kehrer	Stephan		Hirschmann Automation and Control, Inc.
Kim	Yongbum		Broadcom Corporation

Klein Philippe Broadcom Corporation Korhonen Jouni Broadcom Corporation

Krieger Olaf Volkswagen AG

Kumari Warren Google

Li Yizhou Huawei Technologies Co. Ltd

Lohmeyer Joachim Siemens AG

Mangin Christophe Mitsubishi Electric R&D Centre Europe (MERCE)

Mardmoeller Christian Renesas Electronics Corporation

Marks Roger EthAirNet Associates

McIntosh James Vitesse Semiconductor Corporation
Messenger John ADVA Optical Networking Ltd.

Moldovansky Anatoly Rockwell Automation Nakano Hiroki Kyoto University

Oren Amit Broadcom Corporation
Pannell Donald R Marvell Semiconductor, Inc.

Parsons Glenn Ericsson AB

Pienciak Walter IEEE Standards Association (IEEE-SA)

Randall Karen NSA/IAD

Riegel Maximilian Nokia Networks

Romascanu Dan Avaya Inc.
Rouyer Jessy Alcatel-Lucent

Ruppert Markus ABB Corporate Research Center Germany

Ryytty Eero Nokia

Sato Atsushi Yokogawa Electric Corporation

Seaman Michael Individual Smith Graham DSP Group

Specht Johannes University of Duisburg-Essen and General Motors Company

Steiner Wilfried TTTech Computertechnik AG
Tabatabaee Vahid Broadcom Corporation

TabatabaeeVahidBroadcom CorporationThalerPatriciaBroadcom CorporationThornburgDavidCisco Systems, Inc.

Tretter Albert Siemens AG
Unbehagen Paul Avaya Inc.
Varga Balazs Ericsson AB
Venkatesan Ganesh Intel Corporation

Walter Todd National Instruments Corporation

WeberKarlBeckhoff, ZHAWWeisBrianCisco Systems, Inc.

Woods Jordon Innovasic

Zebralla Daniel Continental Automotive GmbH

Zinner Helge Robert Bosch GmbH

# Opening Plenary (Monday, 9 March, 2015)

The Chair (Glenn Parsons) presented the opening agenda slides. See the opening plenary slides at:

http://www.ieee802.org/1/files/public/minutes/2015-03-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), general 802.1 information (see link provided above), a reminder that contributions are expected to be uploaded before presentation, how to report meeting session attendance, hotel and meeting room security, and meeting logistics.

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 potentially essential patents.

The Chair further reviewed additional general administrative information, including 802.1 officers, a reminder of the duties of voting members, eligible voters, etc.

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

- May 19-22, 2015: Pittsburgh, PA John D'Ambrosia (Ethernet Alliance)
  - Corrected dates were explicitly pointed out
  - See slides for details http://ieee802.org/1/files/public/docs2014/admin-dambrosia-may15-meeting-1014-v1.pdf
- September 8-11, 2015: Santa Cruz, CA Michael Johas Teener (Broadcom)

- See slides for details http://www.ieee802.org/1/files/public/docs2014/admin-mjt-2015-09-interim-1114.pdf
- Dream Inn US \$215
- Early registration US \$500
- January 8-21, 2016 Atlanta, GA (802 sponsored Interim)
  - o Hyatt Regency, Atlanta US \$179
  - Early registration US \$ 500
- Spring 2016 Hosts?
- Fall 2016 Hosts?

#### Join Me

- IEEE-SA provided conference tool
- Each IEEE 802 WG has one account (ask Chair for password)
  - o http://join.me/802.1

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

- Public Review July implementation
- WG P&P Proposals (EC-14-87)
  - o Alignment with baseline
  - Potential issues: fiduciary duty, roster (member vs. participant), electronic
     + live meetings, 3/4 → 2/3 approval, no roll call votes, maximum abstention
     rate
- Get 802 Proposal
  - Asked from last plenary all standards work in progress have free access
  - o 6 year implementation plan proposed by IEEE-SA
  - New proposal(s) (for discussion during 802 TF)
- EC Standing Committees
  - Wireless Chairs standing committee (EC-15-15)
  - o JTC1 standaing committee (11-15-315): Andrew Myles as chair
  - ITU standing committee (EC-15-17): Glenn Parsons as chair
  - o IETF standing committee: Pat Thaler as chair
- Patent Policy
  - New revision will be in-force on March 15, 2015
- Future plenaries Report:
  - $\circ$  2018  $\rightarrow$  2020 venues in evaluation
- Treasurer's report (details on slide 21)

#### E-Mail ballots (see slide 22)

#### PARs:

- 802.1 PARs (3)
  - o 802c, Amendment: Local Media Access Control (MAC) Addressing
  - o 802.1Qci, Amendment: Per-Stream Filtering and Policing
  - 802.1Qcj, Amendment: Automatic Attachment to Provider Backbone Bridging (PBB) services
- Other WG PARS (5)

- Privacy Recommendation EC Study Group Privacy Considerations for IEEE 802 Technologies
- o 802.3bg, Amendment, PAR modification request
- o 802.3bz, Amendment: 2.5 Gb/s and 5 Gb/s
- 802.11ay, Amendment: Enhancements for Ultra High Throughput in and around the 60 GHz Band
- 802.15.3e, Amendment for High-rate Close Proximity Point-to-Point Communications
- Details available via http://grouper.ieee.org/groups/802/PARs.shtml

#### 802.24 TAG

- IEEE 802.24 approved a scope document for a new IEEE 802.24 TAG Task Group focused on Internet of things (IoT) vertical applications.
- The document was approved 7/0/0 by IEEE 802.24 and can be found at: https://mentor.ieee.org/802.24/dcn/15/24-15-0003-00-0000-iot-scope-form.docx
  - Comments accepted similar to PAR process by Tuesday
- Members of IEEE 802.24 will be seeking votes of support from IEEE 802 WGs during the week.
  - The 802.24 subgroup gets a motion in a minimum of 2 IEEE 802 WGs that expresses support for adding this application category.

#### Privacy EC SG

- Report from Juan-Carlos Zuniga (see link on slide 25)
- MAC address randomization trial (see link on slide 25)

#### Tutorials – Monday (ECC room 1)

- Tutorial #1 (6:00–7:30 pm): Real-time Ethernet on IEEE 802.3 Networks
  - Ludwig Winkel, Siemens
  - Michael J. Teener, Broadcom
  - Albert Tretter, Siemens
  - Stephan Kehrer, Hirschmann (Belden)
  - o Christian Boiger, HDU
  - o Pat Thaler, Broadcom
  - o Norm Finn, Cisco
  - David Brandt, Rockwell Automation
  - Helge Zinner, Bosch
- Tutorial #2 (7:30–9:00 pm): Introduction to P802.3bn EPON Protocol over Coax (EPoC)
  - Mark Laubach, Broadcom
  - Duane Remein, Huawei
- Tutorial #3 (9:00–10:30 pm): IEEE802.15.7r1 Expanding User Experiences
  - Richard Roberts , Intel Corporation
  - o Zhengyuan (Daniel) Xu, University of Science and Technology of China
  - Harald Burchardt, PureLiFi Ltd.
  - o Gang Chen, University of California Riverside

- Volker Jungnickel , Fraunhofer Heinrich Hertz Institute (as part of COST 1101 OPTICWISE)
- o Yeong Ming Jang, Kookmin University
- o Stefan Mangold, Disney Research

#### Liaisons within 802

- Joint meetings
  - Tues 9:00 18:00 Interworking/TSN (includes YANG in PM1)
  - Wed 10 CPRI cooperation
  - o Thurs 8-10 802.1 -802.11ak Bridging issues
  - o Thurs 10-12 802.1 -802.3br IET
- Privacy EC SG
  - Tuesday PM & Thursday AM
- IEEE 802 JTC1 standing committee meetings
  - Tuesday & Thursday PM1
- IEEE 802 ITU standing committee meeting
  - Wednesday, 7 AM
- IETF Standing Committee
  - Wednesday, 8 AM
- IEEE 802 task force Get 802
  - o Thursday, 10:30 AM

#### **Incoming Liaisons**

- Maintenance:
  - LS105 from ITU-T SG15 to IEEE 802.1 on ITU-T SG15 OTNT standardization work plan
  - o http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS105\_229P-AnnA-0414.zip
- Interworking:
  - MEF has sent a liaison to requesting comment on its "All Active UNI" project:
    - http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00226 AA-UNI-0215.docx
  - CEF has sent a liaison introducing its reference architecture for cloud services:
    - http://www.ieee802.org/1/files/public/docs2015/liaison-cef-01-liaison-0315.docx
  - ITU-T Q13/15 has sought further clarification on PTP over LAG: http://www.ieee802.org/1/files/public/docs2015/liaison-SG15-LS224\_PTPoLAG-0315.docx
- TSN:
  - CPRI has replied to our liaison, and has agreed to present to us on Wednesday morning:
  - http://www.ieee802.org/1/files/public/docs2015/liaison-CPRI answer to IEEE LS-0215.pdf
    1904.3 is notifying us of the start of their work:
  - http://www.ieee802.org/1/files/public/docs2015/liaison-anwg\_ols\_1904\_3\_roe-0215.pdf

Pat Thaler gave a short presentation on IETF-IEEE Coordination (see slide 29)

The Chair then announced that Dan Romascanu has been appointed as the CEF liaison

The Chair reviewed the current Working Group's work load (Sanity Check slide 31)

The Chair then talked about the need to promote the work that we are doing in IEEE 802.1 (slide 32)

#### Task Group agendas:

- Mick Seaman discussed the Security TG status and meeting plans (see slide 34)
- Steve Haddock presented the preliminary Interworking TG Agenda and project status (see slide 35)
- Michael Johas-Teener discussed the TSN TG agenda (see slide 36 at between 400 and 800 % zoom)
- Max Reigel provided the status and agenda for the OmniRAN TG (see slide 37)
- John Messenger provided the maintenance agenda for the week (see slide 38)
- Pat Thaler presented the DCB TG Agenda for Wednesday

There was no other business to discuss and the meeting was adjourned.

## **Task Group Minutes**

### **Security minutes**

#### **Agenda**

- 1) P802.1AEcg anticipate TG ballot after this meeting
- 2) P802.1ARce
- 3) YANG model for 802.1X, 2pm Monday
- 4) YANG model for AE discussion
- 5) 802.1AE XPN Cipher suites FIPS 140 discussion
- 6) P802.1AEcg and preemption
- 7) P802.15.9 ongoing participation and liaison
- 8) SC6 ballots on 802.1AEbn,bw responses
- 9) Privacy related issues

The Security TG met between Monday March 9 1:30pm through Thursday March 12 at 12:30pm. TG members attended liaison meetings as necessary and the time that the TG would reconvene was posted in the meeting room.

The chair showed the Patent Policy slides and issued a call for patents at the beginning of each day's session. There were no responses to the call at this time.

#### P802.1AEcg:

a new draft 0.4 was distributed prior to the meeting. The changes and TBDs were reviewed by the editor. Expect task group ballot after this meeting, to close before the May 2015 interim meeting.

#### P802.1ARce:

reviewed unresolved issues in draft 0.7 including references, PKI hierarchy requirements, certificate fields, validation and CRL issues, and conformance.

#### YANG model for 802.1X, 2pm Monday:

A proposed PAR for a YANG model for IEEE 802.1X was discussed. Ciena prepared a draft PAR/CSD. Further discussion is anticipated at the IEEE 802.1 interim in May 2015,

with a goal of preparing a PAR/CSD that it is ready for pre-circulation before the July 2015 Plenary.

#### YANG model for AE discussion

It was noted that another amendment would require a revision project for IEEE 802.1AE. It was decided to focus effort on the YANG model for IEEE 802.1X at this time.

#### 802.1AE XPN Ciphersuites FIPS 140 discussion: Discussion with Lily

Chen (NIST) occurred on Monday and Tuesday afternoon to clarify IV generation for the XPN ciphersuites defined in IEEE 802.1AEbw. It was asserted that the IV generation here is a variant of the deterministic option with a SALT XORed. In this way, the XPN IV generation should be conformant to FIPS 140-2.

#### P802.1AEcg and preemption

This was covered in the detailed discussion of the new draft of IEEE 802.1AEcg (see item 1 above).

#### P802.15.9 ongoing participation and liaison:

Brian attended the Ballot resolution sessions for the IEEE 802.1 security task group. Those meetings are minuted separately.

#### SC6 ballots on 802.1AEbn,bw responses:

draft responses to the comments received on the JTC1 PSDO ballots of IEEE 802.1AEbn and IEEE 802.1AEbw were agreed with some minor editorial tweaks. IEEE 802.1 voted to approve and forward the final responses at closing plenary. IEEE 802.1Xbx is currently in the 60 day pre-ballot in JTC1, closing 19 March 2015. Responses to any comments received will need to be generated and approved at a future meeting

#### Privacy related issues:

There was some discussion between members of the Privacy ECSG and IEEE 802.1 security TG on Tuesday March 10. Concerns from the TG included the scope and purpose, the deliverable (what is an activity?), what is meant by a privacy threat, etc. Given the significant comments and concerns received on the proposed PAR from across IEEE 802, it was agreed that the PAR would be withdrawn for EC approval at this time; it is planned to revise in time to resubmit (pre-circulate) before the next Plenary meeting in July 2015. The Privacy EC SG meetings are minuted separately.

Future teleconferences and meetings: teleconferences were scheduled for April 28, May 12, and June 23. The task group will meet at the May 2015 interim in Pittsburgh.

### **Interworking minutes**

### Monday, 9 March

Meeting was called to order at 2:00 PM.

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

#### 802.1Qca PCR:

Janos Farkas reviewed the status of the working group recirculation ballot of 802.Qcad1.4 Path Control and Reservation. There were three comments received from one commenter. All were out-of-scope of the recirculation and the commenter agreed to have them addressed during sponsor ballot.

http://www.ieee802.org/1/files/private/ca-drafts/d1/802-1Qca-d1-4-pdis-v01.pdf

#### Liaisons:

Stephen Haddock reviewed the new liaisons received. The ensuing discussion concluded that there was no response necessary for the MEF All-Active UNI and CEF architecture liaisons. Volunteers were solicited to draft a response to the PTPoLAG liaison.

- From MEF regarding All-Active UNI (UNI Resiliency)
   <a href="http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00226">http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00226</a> AA-UNI-0215.docx
- From MEF indicating the initiation of its work on YANG models:
   <a href="http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00227\_001\_YANGproject-0215.docx">http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00227\_001\_YANGproject-0215.docx</a>
- From CEF introducing its reference architecture for cloud services:
   <a href="http://www.ieee802.org/1/files/public/docs2015/liaison-cef-01-liaison-0315.docx">http://www.ieee802.org/1/files/public/docs2015/liaison-cef-01-liaison-0315.docx</a>
- ITU-T Q13/15 has sought further clarification on PTP over LAG:
   <a href="http://www.ieee802.org/1/files/public/docs2015/liaison-SG15-LS224">http://www.ieee802.org/1/files/public/docs2015/liaison-SG15-LS224</a> PTPoLAG-0315.docx

Adjourn at 3:30 PM.

### Tuesday, 10 March

Note: There are no recorded minutes from the Joint meeting of Interworking and TSN for this day. The following is constructed from the TSN Agenda for Tuesday, 10 March.

#### 802.1Qca status:

János Farkas presented

http://www.ieee802.org/1/files/private/ca-drafts/d1/802-1Qca-d1-4-pdis-v01.pdf

#### Stream Filtering and Policing for Industrial Control Applications:

Feng Chen presented

http://www.ieee802.org/1/files/public/docs2015/tsn-chen-goetz-stream-filtering-policing-0315-v01.pdf

#### **Qcc Specs for Cut-Through**

Rodney Cummings presented

http://www.ieee802.org/1/files/public/docs2015/cc-cummings-cut-through-specs-v1.pdf

# Local Addresses (802c and proposed LAAP) - allocated 90 minutes 802c PAR status

Stephen Haddock presented

http://www.ieee802.org/1/files/public/docs2015/lasg-mjt-802c-CSD-0115-v02.pdf http://www.ieee802.org/1/files/public/docs2015/lasg-marks-p802c-csd-comments.pdf

#### LAAP PAR comments

Roger Marks presented

http://www.ieee802.org/1/files/public/docs2015/lasg-marks-protocol-par-comments.pdf

**Local Address Management in IoT environments** (repeat from Sept 2014) Pat Thaler <a href="http://www.ieee802.org/1/files/public/docs2014/new-addresses-thaler-local-address-acquisition-0914-v1.pdf">http://www.ieee802.org/1/files/public/docs2014/new-addresses-thaler-local-address-acquisition-0914-v1.pdf</a>

#### Wednesday, 11 March

Interworking Task Group held a joint meeting with 802.11 for discussion of 802.11arc from 8:00 to 10:00 AM. No meeting minutes were provided for this meeting.

Interworking Task Group held a joint meeting with the Local Address Study Group (LASG) from 1:30 to 3:45 PM. The meeting notes for this joint meeting are included in the LASG Minutes below.

The Interworking meeting was called to order at 3:45 PM.

#### 802.1Qcj PAR and CSD:

Dan Romascanu led the discussion of the comments received on the 802.1Qcj PAR and CSD that was pre-circulated, and made appropriate modifications to the PAR and CSD:

http://ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-par-0315-v01.pdf http://ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx http://ieee802.org/1/files/public/docs2015/cj-haddock-consolidated-par-csd-comments-0315-v01.pptx

Interworking adjourned at 4:15 PM.

### Thursday, 12 March

Joint meeting of 802.1 and 802.11 called to order at 8:00 AM.

Donald Eastlake presented patent policy slides. There was no response to the call for patents.

Donald Eastlake will minute the joint meeting (no minutes received).

The joint meeting concluded at 10:00 AM, and the Interworking Task Group meeting resumed at 10:30 AM.

#### Liaisons:

Stephen Haddock led a session to draft responses to the liaisons from SG15 and MEF. These will be considered at the closing plenary.

Adjourn at 11:20AM.

### **LASG Meeting Minutes**

#### Monday, 9 March

Local Address Study Group called to order at 9:10 AM.

Stephen Haddock gave introductory remarks including presenting the patent policy. No response to the call for patents.

There were no presentations or proposals ready to be discussed, so the session was adjourned.

Adjourn at 9:30 AM.

### Tuesday, 10 March

Local Address Study Group was allocated a block of time from 10:30 to 12:00 in the joint 802.1 IWK/TSN session.

Stephen Haddock gave introductory remarks on the status of the PAR that was precirculated for consideration at the Executive Committee meeting at the end of the week. Comments from other "dot groups" are due by 6:30 on Tuesday and will be reviewed at 1:30pm on Wednesday in the room assigned for the 802.1 Interworking Task Group.

Roger Marks presented comments on the draft PAR for a Local Address Assignment Protocol that was presented by Michael Teener at the January interim: http://ieee802.org/1/files/public/docs2015/lasg-marks-protocol-par-comments.pdf

Pat Thaler reviewed her proposal for a Local Address Acquisition Protocol presented during the September 2014 802.1 interim meeting:

http://www.ieee802.org/1/files/public/docs2014/new-addresses-thaler-local-address-acquisition-0914-v1.pdf

Discussion of LASG topics concluded at 12:00 Noon.

### Wednesday, 11 March

Local Address Study Group called to order at 1:30pm.

Stephen Haddock gave introductory remarks including presenting the patent policy. No response to the call for patents.

Pat Thaler led the discussion of the comments received on the 802c PAR and CSD that was pre-circulated, and made appropriate modifications to the PAR and CSD:

http://ieee802.org/1/files/public/docs2015/lasg-haddock-consolidated-par-csd-comments-0315-v1.pdf http://ieee802.org/1/files/public/docs2015/new-addresses-thaler-local-address-par-v02.pdf http://ieee802.org/1/files/public/docs2015/lasg-mjt-802c-CSD-0315-v02.pdf

LASG adjourned at 3:45 PM.

### **TSN Meeting Minutes**

Note: There were no meeting minutes for TSN in the Berlin TSN meeting. The following is constructed from the TSN Agenda posted at: https://docs.google.com/spreadsheets/d/1G94ebbyKsBNPVFu\_OITRAMmjcvFdeIU0Dtx\_BZnC24Q/

### Monday, 9 March

0830-1100, TSN Pre-meeting

TSN meeting (time sync - AS-Rev/Corr2)

Administrivia (patent policy, agenda bashing, etc)

Proposed 802.1AS-REV weekly calls Michael Johas Teener

802.1AS-Rev/D0.9 Geoff Garner

http://www.ieee802.org/1/files/private/as-rev-drafts/d0/802-1AS-rev-d0-9.pdf

**1100-1300 IEEE 802.1 opening plenary** (see Opening Plenary meeting minutes above).

**1400-1700 TSN meeting** (time sync - ASRev/Corr2)

FTM Addition to 802.1AS Carlos Aldana

http://www.ieee802.org/1/files/public/docs2015/as-kbstanton-caldana-ftm-addition-to-1as-guiding-principles-and-proposal-0315-v10.pdf

# Requirements on forwarding of Sync Messages and on diagnostic for redundant sync Feng Chen

http://www.ieee802.org/1/files/public/docs2015/as-chen-goetz-industrial-requirments-sync-forward-0315-v01.pdf

To 1-Step or not to 1-Step Don Pannell

http://www.ieee802.org/1/files/public/docs2015/ASRev-pannell-To-1-step-or-not-0315-v1.pdf

More thoughts on one-step and "TC"s Michael Johas Teener

http://www.ieee802.org/1/files/public/docs2015/asrev-mjt-one-step-and-TCs-0315-v01.pdf

"sense of the room" vote, do we include one-step in 802.1AS draft 1.0? yes:13, no:0

#### IETF Detnet Architecture Norm Finn

https://datatracker.ietf.org/doc/draft-finn-detnet-architecture/

### Tuesday, 10 March

8:00 → 10:30 AM - *Joint meeting of Interworking/TSN* – See Interworking minutes above.

10:30 AM → 12:00 Noon – *Joint TSN/LASG/Interworking meeting* – See LASG minutes above.

1:00 → 3:00 PM - *Joint meeting 802.1/802.3* YANG Discussion

Possible PAR and Criteria for Standards Development for P802.1Qxx – IEEE 802.1 YANG Data Model

http://www.ieee802.org/1/files/public/docs2015/new-802-mahesh-yang-0315-v02.pdf

3:00 → 6:00 PM – *Joint Interworking/TSN* (Path Reservations, Time Sensitive Forwarding and Filtering)

#### **Thoughts on Security for TSN** Philippe Klein

http://www.ieee802.org/1/files/public/docs2015/tsn-phkl-sec-0315-v01.pdf

**Queuing Mechanism Interactions** Norm Finn

http://www.ieee802.org/1/files/public/docs2015/bv-nfinn-queue-interactions-0315-v2.pdf

**802.1Qcc D0.3 ballot comments** Rodney Cummings

http://www.ieee802.org/1/files/public/docs2015/cc-cummings-clause-99-in-MSRP-0315-v1.pdf http://www.ieee802.org/1/files/private/cc-drafts/d0/802-1Qcc-d0-3-pdis-v2.pdf

## Wednesday, 11 March

**8:00-11:00 AM, TSN** (CPRI / radio-over-ethernet requirements)

Zero packet-jitter priority and aggregation mechanisms Steinar Bjørnstad

http://www.ieee802.org/1/files/public/docs2015/tsn-SBjornstad-zero-packet-jitter-priority-and-aggregation-0315-v1.pdf

**CPRI Tutorial** Oliver Klein / Alcatel-Lucent

http://www.ieee802.org/1/files/public/docs2015/liaison-CPRI Tdoc 1124 presentation-0315.pdf

IEEE1904.3 update Jouni Korhonen

http://www.ieee802.org/1/files/public/docs2015/new-roe-jik-ieee1904dot3-0315-v00.pptx

TSN for Fronthaul János Farkas

http://www.ieee802.org/1/files/public/docs2015/new-farkas-tsn-for-fronthaul-0315-v01.pdf

TSN Fronthaul Considerations David Chen

http://www.ieee802.org/1/files/public/docs2015/TSN-chen-Fronthaul Considerations-0315.pdf

**11:00 AM** → **6:00 PM, TSN** (shapers, SRP improvements, more time sync)

802.1Qcc D0.3 ballot comments (cont) Rodney Cummings

http://www.ieee802.org/1/files/public/docs2015/cc-cummings-clause-99-in-MSRP-0315-v1.pdf http://www.ieee802.org/1/files/private/cc-drafts/d0/802-1Qcc-d0-3-pdis-v2.pdf

Dynamic Stream Reservation on BLCE's (.1Qcc) Franz Goetz

http://www.ieee802.org/1/files/public/docs2015/new-goetz-schmitt-dyn-registration-on-ISIS-PCR-0309-v01.pdf

P802.1Qbv ballot review Tony Jeffree

http://www.ieee802.org/1/files/private/bv-drafts/d2/802-1Qbv-d2-2.pdf http://www.ieee802.org/1/files/private/bv-drafts/d2/802-1Qbv-D2-1-dis.pdf

Qci PAR update Glenn Parsons, Norm Finn

http://www.ieee802.org/1/files/public/docs2015/new-nfinn-input-gates-csd-0115-v03.pdf http://www.ieee802.org/1/files/public/docs2015/new-nfinn-input-gates-par-0115-v05.pdf

P802.1Qbu ballot review Tony Jeffree

http://www.ieee802.org/1/files/private/bu-drafts/d1/802-1Qbu-d1-1.pdf http://ieee802.org/1/files/private/bu-drafts/d2/802-1Qbu-D2-1-pdis-v2.pdf

Thursday, 12 March

0800-1000, Joint 802.1/802.11

1000-1100, TSN

Update on IET (802.3br) Ludwig Winkle / Simens 30

**P802.1Qbu ballot review** (cont) Tony Jeffree http://www.ieee802.org/1/files/private/bu-drafts/d1/802-1Qbu-d1-1.pdf http://ieee802.org/1/files/private/bu-drafts/d2/802-1Qbu-D2-1-pdis-v2.pdf

*Update on 1588 Upkeep Item 89* (4 Octet Reserved) Rodney Cummings <a href="http://www.ieee802.org/1/files/public/docs2015/as-cummings-1588-upkeep-work-item-89-0315-v1.pdf">http://www.ieee802.org/1/files/public/docs2015/as-cummings-1588-upkeep-work-item-89-0315-v1.pdf</a>

**802.1CB D1.0 introduction** Norm Finn <a href="http://www.ieee802.org/1/files/public/docs2015/cb-nfinn-Draft-1-0-changes-0315-v01.pdf">http://www.ieee802.org/1/files/public/docs2015/cb-nfinn-Draft-1-0-changes-0315-v01.pdf</a>

1:00 → 5:00 PM, 802.1 Closing Plenary Meeting. (see Closing Plenary Meeting minutes below)

### **OmniRAN Meeting Minutes**

OmniRAN November meeting minutes are incorporated into these minutes by reference and are available at:

https://mentor.ieee.org/omniran/dcn/15/omniran-15-0022-00-00TG-mar-2015-ftf-minutes.docx

In addition, an amended meeting presentation is available at:

https://mentor.ieee.org/omniran/dcn/15/omniran-15-0011-03-00TG-mar-2015-f2f-meeting-slides.pptx

Current status of OmniRAN activities – including future meeting announcements, past meeting and conference call minutes – is available via a wiki located at:

https://mentor.ieee.org/omniran/bp/StartPage

### **DCB Meeting Minutes**

### Wednesday, 11 March

Meeting started at 9:00 AM.

Pat Thaler (DCB Chair) reviewed the patent policy as presented at the opening plenary on Monday. There was no response to the call for potentially essential patents.

There were three people in attendance.

Yizhou Li presented her slides on possible VDP extensions to address requirements originating in the IETF NVo3 working group (see WG charters at <a href="http://www.ietf.org">http://www.ietf.org</a>). The presentation is available at:

http://www.ieee802.org/1/files/public/docs2015/new-yizhou-vdp-extension-0315-v02.pdf

Suggestions were made as to what next steps might be. As all of the people at the DCB meeting will be in Dallas for the IETF meeting week after next, we decided to discuss options further there.

# **Maintenance Meeting Minutes**

There are no Maintenance meeting minutes for the March IEEE 802 Plenary meeting.

## Closing Plenary (Thursday, 12 March, 2015)

Closing Plenary slides are available at:

http://www.ieee802.org/1/files/public/minutes/2015-03-closing-plenary-slides.pdf

The Chair (Glenn Parsons) led discussion of the following items:

- Material already covered in the opening plenary
  - Policy presentation and call for potentially essential patents
    - no response
  - Upload information:
    - http://ieee802.org/1/filenaming.html
    - Please upload before your presentation
  - Staff Introduction
    - Kathryn Bennett Program Manager for 802.1
    - Michelle Turner Managing Editor
  - Officers (no change)
  - Website and password (no change)
  - Voter status (see slides)
    - New voters out of this week (see slide 11)
- Future Interim meetings no change from opening plenary
- Project status Sanity check current workload review
  - 23 current projects (including in-progress PARs)
  - See slide 14 for details
- 802 reports
  - EC Privacy SG
  - o IETF SC
  - JTC1 SC
  - o ITU SC
  - o 802 TF
- 802 Task Force
  - Indemnification of officers
  - o Public Review
    - Parallel to sponsor ballot opportunity to comment
    - July 6<sup>th</sup> implementation

- New System
  - Test bed for myBallot replacement
  - Staff will move comments between systems during transition
- o Get 802 Program
- myProject replacement
  - requirements in 2015
    - Voting epoll
    - Documents mentor
- Task Group reports were given for the following areas (see individual task group minutes and/or status from above for details):
  - Local Address Study Group
  - Interworking
  - o TSN
  - OmniRAN
  - Security
  - o DCB
  - Maintenance
- Pat Thaler gave a detailed presentation on activities in DCB for this meeting (see slides 18-22 of the closing plenary slides)
- The chair then opened the topic of Outgoing Liaisons
  - o MEF
    - All active UNI
    - YANG
  - o ITU-T Q13/15
  - o CPRI
  - o IEEE 1904.3

### **Motions**

### Administrative

802.1 approves the November 2014 and January 2015 minutes:

http://ieee802.org/1/files/public/minutes/2014-11-minutes.pdf http://ieee802.org/1/files/public/minutes/2015-01-minutes.pdf

Proposed: Gray Seconded: Messenger

### **Approved by Acclamation**

802.1 resolves to hold pre-meeting(s) on the Monday morning of the July 2015 plenary session for TSN and LASG

Proposed: Teener Second: Gray

Approved: by acclamation

# **Local Address SG**

802.1 requests EC approval to extend the 802.1 Local Address Study Group to

- Develop a PAR and CSD for a recommendation on Local Address usage
- Develop one or more PARs on protocols for local address acquisition

Proposed: Haddock	Second: Thaler
For29Against0	_ Abstain1
Approved	
EC proposed:	Second:
ForAgainstAbstain	1
	terim to draft a PAR and CSD (including 5-Criteria), for ran IEEE 802.1 project on protocols for local address
Proposed: Haddock	Second: Thaler
For29 Against 0 /	Abstain 2
Approved	

802.1 approves the CSD and requests EC approval to submit the P802c PAR to NesCom.
<ul> <li>http://ieee802.org/1/files/public/docs2015/new-addresses-thaler-local-address-par-v02.pdf</li> </ul>
<ul> <li>http://ieee802.org/1/files/public/docs2015/lasg-mjt-802c-CSD-0315-v02.pdf</li> </ul>
Proposed: Steve Haddock Second:Pat Thaler
For28Against0 Abstain1
Approved
EC proposed: Second:
EC proposed: Second:  ForAgainstAbstain
TOIAgainstAbstain
<u>Interworking</u>
Authorize 1-hour teleconferences for 802.1Qbz/802.11ak coordination on 4/6, 4/27 and 5/4, at 11:00 am Eastern US time. Teleconference access details to be announced on the 802.1 reflector.
Proposed: Haddock Second: Finn
Approved by acclamation
802.1 approves the CSD and requests EC approval to submit the P802.1Qcj Automatic Attachment to PBB Services PAR to NesCom.
• http://ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-par-0315-v01.pdf
• <a href="http://ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx">http://ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx</a>
Proposed: Steve Haddock Second: Dan Romascanu  For27 Against0 Abstain2
Approved

Second:

EC proposed:

For\_\_\_\_Against\_\_\_Abstain\_\_\_\_

### 802.1 confirms the 5C

•	http://www.ieee802.org	a/1/files/	public/docs2012/new-r	-p802-1Qca-draft-5c-09	12-v03.pd
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And requests EC approval to submit P802.1Qca Path Control & Reservation for S	ponsor
ballot.	

Proposed: Haddock Second: Farkas
For27Against0_Abstain1
Approved
EC proposed: Second:
ForAgainstAbstain
802.1 confirms the CSD:
• <a href="http://www.ieee802.org/1/files/public/docs2012/new-p802-1Qbz-draft-5c-0912.pdf">http://www.ieee802.org/1/files/public/docs2012/new-p802-1Qbz-draft-5c-0912.pdf</a>
And requests EC conditional approval to forward P802.1Qbz Enhancements to Bridging of 802.11 Media to sponsor ballot.
Proposed: Messenger Second: Finn
For26Against0_Abstain1
Approved
EC proposed: Parsons Second: Thaler
ForAgainstAbstain
802.1 authorizes the editor of P802.1AC-REV MAC Service Specification (John Messenger) to prepare a draft for further Working Group balloting. The ballot will also be issued to 802.16 and 802.11.
Proposed: Haddock Second: Messenger
For30Against_0Abstain0
Approved

802.1 authorizes the editor of P802.1CB Seamless Redundancy (Norm Finn) to prepare a draft for Task Group balloting.
Proposed: Haddock Second: Finn
For31Against_0Abstain0
Approved
802.1 approves the liaison response to ITU-T SG15 liaison LS224 on PTP over LAG.
http://www.ieee802.org/1/files/public/docs2015/liaison-response-SG15-L224-PTPoLAG-0315.docx
Proposed: Haddock Second: Garner
For28Against_0Abstain0
Approved
802.1 approves the liaison response to MEF on 802.1AX and all active UNI  • <a href="http://www.ieee802.org/1/files/public/docs2015/liaison-response-MEF-L00226-AA-UNI-0315-v1.docx">http://www.ieee802.org/1/files/public/docs2015/liaison-response-MEF-L00226-AA-UNI-0315-v1.docx</a> Proposed: Haddock Second: Gray
For29Against_0Abstain0
Approved
802.1 approves the liaison response to MEF on YANG
http://www.ieee802.org/1/files/public/docs2015/liaison-response-MEF-L00227-YANG-0315-v1.docx
Proposed: Haddock Second: Romascanu
For_30_Against_0_Abstain_0
Approved
802.1 authorizes the May 2015 interim to generate a PAR and CSD for pre-circulation to the EC for an amendment 802.1Qcl that will specify YANG modules.
Proposed: Michael Johas Teener Second: Steve Haddock
For_31Against_0Abstain0
Approved

802.1 authorizes virtual conferences for discussions on the proposed YANG module development including the PAR and CSD. Announcements on the time and connection details will be made at least 30 days in advance.

Proposed: Michael Johas Teener Second: Haddock

#### Approved by acclamation

### **TSN**

The TSN TG will have virtual conferences weekly at a to-be-determined time for 802.1AS-related topics. Access information will be announced via email at least 30 days in advance.

Proposed: Johas Teener Second: Garner

Approved by acclamation

The TSN TG will continue to have virtual conferences weekly at 9am US Pacific time on Wednesdays for general topics. Access information is available on the TSN web page.

Proposed: Johas Teener Second: Gunther

#### Approved by acclamation

802.1 approves the CSD and requests EC approval to submit the P802.1Qci Per-Stream Filtering and Policing PAR to NesCom.

- http://www.ieee802.org/1/files/public/docs2015/new-nfinn-input-gates-par-0115-v05.pdf
- <a href="http://www.ieee802.org/1/files/public/docs2015/new-nfinn-input-gates-csd-0115-v03.pdf">http://www.ieee802.org/1/files/public/docs2015/new-nfinn-input-gates-csd-0115-v03.pdf</a>

Proposed: Tony Jeffree	Second: Norm Finn	
For30Against0_	Abstain0	
Approved		
EC proposed:	Second:	
ForAgainstAbstail	n	

802.1 authorizes the editor of P802.1AS-REV (Geoff Garner) to prepare a draft for Task Group balloting.

Proposed: Michael Johas Teener Second: Geoff Garner
For_31Against0Abstain0
Approved
802.1 confirms the 5C:
<ul> <li>http://www.ieee802.org/1/files/public/docs2012/Qbv-pannell-draft-5C-0112-v03.pdf</li> </ul>
And requests EC conditional approval to forward P802.1Qbv Scheduled Traffic to sponsor ballot.
Proposed: Messenger Second: Jeffree
For 33 Against 0 Abstain 0
Approved
EC proposed: Parsons Second: Thaler
ForAgainstAbstain
802.1 authorizes the May 2015 interim to generate a PAR and CSD, for pre-circulation to the EC, for an 802.1CM project for a profile for Time-Sensitive Networking for Fronthaul.
Proposed: Michael Johas Teener Second: Janos Farkas
For 25 Against 0 Abstain 6
Approved
802.1 approves the liaison response to CPRI, 1904.3, MEF, ITU-R WP5, ITU-T Q13/15 on fronthaul.
_
http://ieee802.org/1/files/public/docs2015/liaison-fronthaul-0315-v4.pdf
Proposed: Messenger Second: Gray
For33Against_0Abstain0
Approved

802.1 approves the liaison response to IEEE 1904.3.

• http://www.ieee802.org/1/files/public/docs2015/liaison-response-ieee1904dot3-0315-v00.docx

Proposed: Korhonen Second: Gray		
For25Against_0Abstain_0		
Annroved		

### Security

As required to request/ authorize:

802.1 approval to develop a PAR for P802.1Xck – Port-based Access Control: YANG data model, based on the existing UML description of management operations and including MIB maintenance items, and approval to pre-circulate the proposed PAR prior to, and for 802.1 and 802.0 approval at, the July 2015 802 Plenary.

802.1 authorization to call Security Task group teleconferences to progress P802.1ARce, P802.1AEcg, PAR development and other task group matters arising.

Note: Motions for P802.1ARce and P802.1AEcg draft preparation and task group balloting have been passed previously.

802.1 authorizes the Security Task Group prepare a PAR for an amendment to IEEE Std 802.1X, P802.1Xck – Port-based Access Control: YANG data model.

The 802.1 Chair is authorized to pre-circulate the proposed PAR1 for consideration at the July 2015 meeting.

An initial draft is at:

http://www.ieee802.org/1/files/public/docs2015/new-8021x-mahesh-yang-0315-v01.pdf

Proposed: Seaman Second: Randall For\_\_27\_\_Against\_\_0\_Abstain\_0\_\_\_

Approved

802.1 authorizes the Security Task Group to hold teleconferences to progress P802.1AEcg, P802.1ARce, development of the proposed P802.1Xck PAR, and task group matters arising:

Dates/times to be announced subject to notice of at least 30 days to the 802.1 email exploder

Proposed: Seaman Second: Randall

Approved by acclamation

### **DCB**

802.1 authorizes the May 2015 interim to generate a PAR and CSD, for pre-circulation to the EC, for an 802.1Qcn amendment project for Edge Virtual Bridging VDP (Virtual Station Interface Discovery and Configuration Protocol) extensions.

Proposed: Pat Thaler Second: Yizhou Li

For\_\_26\_\_Against\_\_0\_\_Abstain\_\_2\_\_

Approved

### **OmniRAN**

Approve OmniRAN conference calls on:

- April 16th, 10:00 AM ET
- May 8th, 10:00 AM ET
- June 30th, 10:00 AM ET

Access information will be announced on the 802.1 mailing list

Moved: Max Riegel, Second: Juan Carlos Zuniga

Approved by acclamation

# **Maintenance**

Authorize Maintenance TG to hold teleconferences on 13th May and 7th July 2015 at 11am ET if necessary. Access information will be posted to the 802.1 reflector in advance.

Proposed: Messenger	Second: Gray	
Approved by acclamation	•	
,		
802.1 authorizes the editor of P80 submit it for working group ballot	02.1Q-Cor1 (Tony Jeffree) to prepare an initial draft and	
Proposed: Messenger	Second: Grav	
For28Against_0Abstain	·	
Approved	- <del></del>	
802.1 authorizes the editor of P80 submit it for task group balloting	02.1AB-rev (Tony Jeffree) to prepare an initial draft and	
Proposed: Messenger	Second: Gray	
For23Against_0Abstain	0	
Approved		
802.1 requests EC approval to forward 802.1AS-Cor2 to sponsor ballot.		
Proposed: Messenger	Second: Gray	
For 26 Against 0 Abstain 0		
Approved		
EC proposed: Parsons	Second: Thaler	
ForAgainstAbstain		
Note: There are no CSD for this n	naintenance project.	

802.1 requests EC approval to withdraw the PAR for P802.1ASbt.

PAR.

Note: This project has been replaced by the recently approved 802.1AS-Rev

Proposed: Messenger Second: Gray For 27 Against 0 Abstain 0 Approved EC proposed: Parsons Second: Thaler For\_\_\_\_Against\_\_\_Abstain\_\_\_\_ 802.1 requests EC approval to forward Std 802.1AX-2014 to ISO/IEC JTC1 SC6, for ballot under the PSDO agreement. Proposed: Messenger Second: Gray For 27 Against 0 Abstain 0 **Approved** EC proposed: Parsons Second: For\_\_\_\_Against\_\_\_Abstain\_\_\_\_ 802.1 requests EC approval to forward Std 802.1BA-2011 to ISO/IEC JTC1 SC6, for information under the PSDO agreement. Proposed: Messenger Second: Gray For\_\_27\_\_Against\_0\_\_Abstain\_0\_\_\_ Approved EC proposed: Parsons Second: Thaler For\_\_\_Against\_\_Abstain\_\_\_\_

Proposed: Messenger For_26Against_0Abstain_0 Approved		
EC proposed: Parsons Second:		
ForAgainstAbstain 802.1 requests EC approval to forward the comment responses contained on slides 8		
and 9 of http://www.ieee802.org/1 AEbnAEbw-0315-v01.pptx to JTC	lyfiles/public/docs2015/liaison-randall-SC6response- C1 SC6, under the PSDO agreement. These are ved on recent FDIS ballots of 802.1AEbn and	
Proposed: Messenger	Second: Gray	
For25Against0_Abstain1		
Approved		
EC proposed: Parsons ForAgainstAbstain	Second:	
Closing Plenary adjourned		

 $802.1\ requests\ EC$  approval to forward Std 802.1BR-2012 to ISO/IEC JTC1 SC6, for information under the PSDO.