

# 802.1 Plenary – March 2015

## Berlin, Germany

### Opening Agenda

Glenn Parsons – IEEE 802.1 WG Chair  
glenn.parsons@ericsson.com

# Decorum



- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (SASB Ops Manual 5.3.3.5)
- Photography or recording by permission only (SASB Ops Manual 5.3.3.4)
- Cell phone ringers off please

# General information on 802.1...

- See :

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

- Meeting contributions

- <http://ieee802.org/1/filenaming.html>

- Please upload BEFORE presentation

- Meeting information and attendance:

- Schedule: <http://802world.org/attendee>

- Attendance: <http://imat.ieee.org>

# Security issues

- **Please wear your badge** when in the meeting areas of the hotel
- This will help the hotel security staff to improve the general security of the meeting rooms
- **PCs HAVE BEEN STOLEN** at previous meetings – **DO NOT** assume that meeting areas are secure

# Berlin Logistics

- Guest rooms include: breakfast, internet + VAT
- Food & Beverage Daily
  - Foyer Estrel Hall and ECC Foyer 1
  - AM Coffee & Tea 10-11am
  - PM Coffee, Tea + desert from lunch 3-4pm
  - Lunch 11:30am-1:30pm (Mon-Thursday)
    - Water included with lunch (no sodas)
- Social Event – Stars In Concert in Festival Centre
  - F & B served 6:30-7:30pm (2 drinks per purchased ticket)
  - Showtime 7:30pm --Tickets \$30US per registered attendee
- Event updates
  - QR codes for schedule & space posted outside meeting rooms
  - Twitter @IEEE802

# Instructions for the WG Chair

**The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:**

- **Show slides #1 through #4 of this presentation**
- **Advise the WG attendees that:**
  - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
  - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
  - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- **Instruct the WG Secretary to record in the minutes of the relevant WG meeting:**
  - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
  - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
  - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 12 and 12a on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

# Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:
  - “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
    - “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims
  - “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

# Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

*<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>*

IEEE-SA Standards Board Operations Manual

*<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>*

Material about the patent policy is available at

*<http://standards.ieee.org/about/sasb/patcom/materials.html>*

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at [patcom@ieee.org](mailto:patcom@ieee.org) or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

This slide set is available at  
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>



# Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted

# Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
      - Technical considerations remain primary focus
  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
  - **Don't discuss the status or substance of ongoing or threatened litigation.**
  - **Don't be silent if inappropriate topics are discussed ... do formally object.**

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See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.

# Task Group Patent policy announcements

- TG Chairs please note:
  - At the start of each TG meeting, TG Chair needs to perform the Call for Patents as per the previous slides.
  - During the rest of the week, please announce each morning that the meeting is subject to the Patents Policy as read and displayed at the opening of the TG meeting. If there are any responses to the call, minute it.
  - Point attendees at the PatCom website for details of the policy:

<http://standards.ieee.org/board/pat/index.html>

and for the slide set:

<http://standards.ieee.org/board/pat/pat-slideset.ppt>

# 802.1 officers

## ■ Officers

- Chair: Glenn Parsons
- Vice Chair: John Messenger
- Recording Secretary: Eric Gray
- Security TG Chair: Mick Seaman
- Interworking TG Chair: Steve Haddock
- TSN TG Chair: Michael Johas Teener
- Data Center Bridging TG Chair: Pat Thaler
- OmniRAN TG Chair: Max Riegel
- Local Address SG Chair: Steve Haddock
- Maintenance of website: John Messenger
- Maintenance of Email exploder: Hal Keen

## ■ Website

- <http://www.ieee802.org/1/>

# Duties of voting members

- Active participation in the work of the WG, and in particular, active participation in WG ballots.
  - Active is 2 of last 3 ballots
- If you do not feel able to commit to doing that work, please reconsider whether it is appropriate to become a voter.
- In order for our work to progress, we are required to gain a 50% voter response rate in WG ballots

# The following are 802.1 voters:

Ao, Ting	Hitt, Jeremy	Romascanu, Dan
Boiger, Christian	Hussain, Rahil	Rouyer, Jessy
Bottorff, Paul	Jeffree, Anthony	Saltsidis, Panagiotis
Chen, David	Johas Teener, Michael	Sarikaya, Bechet
Chen, Feng	Jones, Peter	Seaman, Michael
Cheng, Weiying	Keen, Hal	Sexton, Daniel
Crupnicoff, Diego	Kiessling, Marcel	Specht, Johannes
Cummings, Rodney	Kim, Yongbum	Stanton, Kevin
Diamond, Patrick	Klein, Philippe	Steiner, Wilfried
Diarra, Aboubacar Kader	Korhonen, Jouni	Tabatabaee, Vahid
Farkas, Janos	Lynch, Jeff	Thaler, Patricia
Finn, Norman	Mack-Crane, Ben	Touve, Jeremy
Garner, Geoffrey	McIntosh, James	Weber, Karl
Ghanwani, Anoop	Messenger, John	Wei, Yuehua
Gravel, Mark	Multanen, Eric	Weis, Brian
Gray, Eric	Pannell, Donald	Woods, Jordon
Gunther, Craig	Parsons, Glenn	Zuniga, Juan-Carlos
Haddock, Stephen	Randall, Karen	
Hayakawa, Hitoshi	Riegel, Maximilian	

The following will become voting members when/if they show up here this week:

Pienciak, Walter

Ryu, Cheol

The following could become voting members if they email me indicating their intention to do so and if they show up here this week:

Bragg, Nigel

Edge, Bob

Estes, David

Kehrer, Stephan

Lin, Juitse

Noseworthy, Bob

Samii, Soheil

Sato, Atsushi

Unbehagen, Paul

Walter, Todd

Welch, James

Zinner, Helge



The following will lose voting member status for lack of qualifying attendance, unless they show up here this week:

Kim, Yongbum  
Stanton, Kevin  
Sarikaya, Behcet  
Lynch, Jeff  
Crupnicoff, Diego

Gravel, Mark  
Wei, Yuehua  
Ao, Ting  
Diamond, Patrick  
Hayakawa, Hitoshi

The following will lose voting member status for insufficient letter ballot return, unless they are active:

???

# Future interim meetings

- May 19-22, 2015
  - Pittsburgh, PA
  - John D'Ambrosia - Ethernet Alliance
    - <http://ieee802.org/1/files/public/docs2014/admin-dambrosia-may15-meeting-1014-v1.pdf>
  - Omni – US\$159
  - Meeting fee US\$350 (early)
- September 8-11, 2015
  - Santa Cruz, CA
  - Michael Johas Teener – Broadcom
    - <http://www.ieee802.org/1/files/public/docs2014/admin-mjt-2015-09-interim-1114.pdf>
  - Dream Inn – US\$215
  - Meeting fee US\$500
- January 18-21, 2016
  - 802-sponsored Interim - Atlanta, GA
  - Hyatt Regency Atlanta - US\$179
  - Early registration (US\$500)
- Spring & Fall 2016
  - Hosts?

# Join Me



- IEEE-SA provided web conferencing
- Each IEEE 802 WG has one account
  - <http://join.me/802.1>
  - Ask chair for password

# 802 EC report

- Public Review
  - July implementation
- WG P&P proposals – ([EC-14-87](#))
  - Alignment with baseline
  - Potential Issues: fiduciary duty, roster (member vs participant), electronic + live meetings,  $\frac{3}{4}$  ->  $\frac{2}{3}$  approval, no roll call votes, maximum abstention rate
- Get 802 proposal
  - Ask from last plenary – all standards and work in progress have free access
  - 6 year implementation plan proposed by IEEE-SA at last plenary
  - New proposal (for discussion during 802 TF)
- EC Standing Committees
  - Wireless Chairs standing committee (EC-15-15)
  - JTC1 standing committee (11-15-315): Andrew Myles as chair
  - ITU standing committee (EC-15-17): Glenn is chair.
  - IETF standing committee: Pat is chair.
- Patent Policy
  - New revision will be in force March 15, 2015
- Future Venues
  - 2018 – 2020 venues in evaluation
- Treasurers report
  - reserve at \$1M
  - January interim surplus - \$100k; March plenary loss - \$90k

# Email ballots (ePoll)

15-Jan-2015 liaison CPRI Motion: Forward the liaison response to CPRI cooperation.  
<http://www.ieee802.org/1/files/public/docs2015/liaison-cpri-response-0115-v01.pdf> 25-Jan-2015 27/0/2 Approve

Moved: David Chen Seconded: Janos Farkas

15-Jan-2015 liaison ITU-T Q13/15 Motion: Forward the liaison response to ITU-T Q13/15.  
<http://www.ieee802.org/1/files/public/docs2015/liaison-response-itu-t-ls206-0115-v01.pdf> 25-Jan-2015 25/0/3 Approve

Moved: Janos Farkas Seconded: Norm Finn

14-Jan-2015 SC6 Comment Motion: Forward the pre-ballot comment response on IEEE Std 802 to ISO/IEC JTC1 SC6.  
[http://www.ieee802.org/1/files/public/docs2015/liaison-parsons-SC6\\_response\\_Std802-0115.docx](http://www.ieee802.org/1/files/public/docs2015/liaison-parsons-SC6_response_Std802-0115.docx) 27-Jan-2015 25/0/3 Approve

Moved: Tony Jeffree Second: Geoff Garner

# PARs this week

- 802.1 PARs:
  - 802c, Amendment: Local Media Access Control (MAC) Addressing
  - 802.1Qci- Amendment, Per-Stream Filtering and Policing
  - 802.1Qcj- Amendment, Automatic Attachment to Provider Backbone Bridging (PBB) services
- Other WG PARs:
  - Privacy Recommendation EC Study Group - Privacy Considerations for IEEE 802 Technologies
  - 802.3bq- Amendment, PAR Modification Request
  - 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
- <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
- MAC address randomization [trial](#)

# 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)
  - Christian Boiger, HDU
  - Pat Thaler, Broadcom
  - 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
  - Zhengyuan (Daniel) Xu , University of Science and Technology of China
  - Harald Burchardt, PureLiFi Ltd.
  - Gang Chen, University of California - Riverside
  - Volker Jungnickel , Fraunhofer Heinrich Hertz Institute (as part of COST 1101 OPTICWISE)
  - Yeong Ming Jang, Kookmin University
  - Stefan Mangold, Disney Research

# Liaisons within 802

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

# Incoming Liaisons

## ■ Maintenance:

- LS105 from ITU-T SG15 to IEEE 802.1 on ITU-T SG15 OTNT standardization work plan

[http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS105\\_229P-AnnA-0414.zip](http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS105_229P-AnnA-0414.zip)

## ■ Interworking:

- MEF has sent a liaison requesting comment on its “All Active UNI” project:

[http://www.ieee802.org/1/files/public/docs2015/liaison-MEF-L00226\\_AA-UNI-0215.docx](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](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](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](http://www.ieee802.org/1/files/public/docs2015/liaison-anwg_ols_1904_3_roe-0215.pdf)

# IETF ( IAB & IESG) – IEEE 802 Coordination

- <https://www.iab.org/activities/joint-activities/iab-ieee-coordination/>
  - 13 current open items
  - Next potential meeting – Jan 2016
- Actions
  - 802.1 to nominate someone to work with Benoit Claise on shared item 27 (YANG models).
  - 802.1 to nominate someone to replace Ben Mack-Crane as the 802 contact point for shared item 19 (Common OAM proposal).

# CEF liaison

- Dan Romascanu

# Sanity check – current workload

<b>Project</b>	<b>Subject</b>	<b>Stage</b>	<b>Draft#</b>	<b>Next action</b>	<b>PAR ends</b>
802.1ASbt	Time synch enhancements	Editor's draft	D0.7	move to 802.1AS-revision	Dec '15
802.1Qbu	Frame preemption	TG ballot	D1.1	WG ballot	Dec '16
802.1Qbv	Scheduled traffic	WG ballot	D2.1	WG ballot	Dec '16
802.1Xbx	MKA extensions	RevCom	D1.6	publication	Dec '16
802.1Qbz	802.11 Bridging	WG ballot	D1.5	WG ballot	Dec '16
802.1Qca	SPB Path Control and Reservation	WG ballot	D1.1	WG ballot recirc	Dec '16
802.1CB	Frame Replication and Elimination	TG ballot	D0.5	TG ballot	Dec '17
802.1AC-REV	MAC service	WG ballot	D1.0	WG ballot	Dec '17
802.1Qcc	SRP enhancements & performance improvements	Editor's draft	D0.2	TG ballot	Dec '17
802.1Qcd	Application VLAN TLV	Sponsor ballot	D2.1	RevCom	Dec '17
802.1ARce	AR: SHA-384 and P-384 Elliptic Curve	Editor's draft	D0.5	TG ballot	Dec '18
802.1CF	Access network (OmniRAN)	PAR approved	-	Editor's draft	Dec '18
802.1AB Cor-2	Tech and ed corrections	Sponsor ballot	D1.1	RevCom	Dec '18
802.1AB-REV	Station and MAC Connectivity Discovery	PAR approved	-	Editor's draft	Dec '18
802.1AEcg	Ethernet data encryption devices	Editor's draft	D0.3	TG ballot	Dec '18
802.1Qch	Cyclic queueing and forwarding	PAR precirculation	-	NesCom	
802.1AS/Cor2	Tech and ed corrections	NesCom	-	WG ballot	
802.1ASrev	Time synch enhancements	PAR precirculation		NesCom	
802c	Local Address space	PAR development		PAR precirculation	
802.1Q/Cor1	Tech and ed corrections	PAR precirculation		NesCom	
802.1Qci	Per Stream Policing	PAR development		PAR precirculation	
802.1Qcj	Auto Attach to PBB	PAR development		PAR precirculation	

# Promotion

- We are doing a lot of good work
- Are we promoting this adequately to the industry?
- We can do more:
  - Leverage IEEE-SA marketing
    - IOT, Smart Car, Smart Cities, etc.
  - Issue press releases
    - Start of PAR, Final approval



# TG agendas

- Security TG
- Interworking TG
  - Local Address SG
- TSN TG
- OmniRAN TG
- Maintenance TG
- Data Center Bridging TG

# Security TG

1. P802.1AEcg - anticipate TG ballot after this meeting
2. P802.1ARce
3. Proposed Yang model for 802.1X
  - Mon 2 pm
4. Yang model for 802.1AE - discussion
5. 802.1AE XPN Ciphersuites FIPS 140 discussion
6. P802.1AEcg and preemption
7. P802.15.9 ongoing participation and liaison
8. SC6 ballots on 802.1AEbn,bw responses

# Interworking Task Group Agenda

Preliminary – Subject to change

	Mon 3/9/15	Tues 3/10/15	Wed 3/11/15	Thurs 3/12/15
Morning	<b>802.1 Opening Plenary</b>	<b>Maintenance (8:00-9:00)</b>  <b>Joint mtg: IW + TSN</b>  <b>LASG (10:30- )</b>	<b>Joint mtg: .1 + .11arc (8:00-10:00 802.1AC)</b>  <b>Qbz WWB D2.0 WG (Finn)</b>	<b>Joint mtg: .1 + .11ak (8:00-10:00)</b>  <b>New Work ( )</b>  <b>Liaisons</b>
Afternoon	<b>Qca PCR D1.4 WG (Farkas)</b>	<b>Joint mtg: IW + TSN (PM1: YANG)</b>	<b>LASG ( )</b>	<b>802.1 Closing Plenary</b>



# OmniRAN TG Agenda

- OmniRAN TG meeting schedule:
  - Monday: 1400-1800
  - Tuesday: 1330-1800
  - Wednesday: 1330-1800
  - Thursday: 1030-1230
- Agenda proposal:
  - SDN & NFV status update
  - P802.1CF contributions
    - Network reference model
    - Backhaul representation
    - Fronthaul representation
    - SDN Abstraction
    - Functional design and decomposition
  - Project planning
  - Publicity activities
  - Status report to IEEE 802 WGs

# Maintenance TG Agenda

- Patents and Guidelines
- Attendees
- Status
- New Maintenance items
  - 0158: SRP: Proposed changes to allow use of VLAN 1 – new
  - 0159: PortSyncSyncSend State Machine priority1 – solution ready in AS-Rev
- Existing Maintenance items – see following slides
  - SC6
  - 802.1Q-2014
  - 802.1AX
  - 802.1AS
  - 802.1AB
  - 802.1AC
  - Security
- SC6 status

# Data Center Bridging TG

- Wednesday
- a discussion on possible work to extend VDP for use as a control protocol by NVO3 (layer 3 Network Virtualization Overlays).

*Any other business?*