802.1 Plenary – July 2014 San Diego

Opening Agenda

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

802.1 chair

General information on 802.1 operation...

- See:

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

- Meeting contributions
  – Please upload BEFORE presentation
- Meeting information and attendance:
  – Accessible from local network only
  – http://imat.ieee.org

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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

802.1 officers etc

- 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
  - Maintenance of website: John Messenger
  - Maintenance of Email exploder: Hal Keen
- Website
  - http://www.ieee802.org/1/

The following are 802.1 voters:

Ao, Ting
Boiger, Christian
Bottorff, Paul
Cheng, Weiying
Crupnicoff, Diego
Cummings, Rodney
Diamond, Patrick
Diarra, Aboubacar Kader
Farkas, Janos
Finn, Norman
Fredette, Andre
Garner, Geoffrey
Ghanwani, Anoop
Goetz, Franz
Gravel, Mark
Gray, Eric
Grow, Robert
Gunther, Craig
Haddock, Stephen

Hayakawa, Hitoshi
Hitt, Jeremy
Hussain, Rahil
Jakovljevic, Mirko
Jeffree, Anthony
Jochim, Markus
Johas Teener, Michael
Keen, Hal
Kiessling, Marcel
Klein, Philippe
Lynch, Jeff
Mack-Crane, Ben
McIntosh, James
Messenger, John
Moldovansky, Anatoly
Multanen, Eric
Muyshondt, Henry

Pannell, Donald
Parsons, Glenn
Randall, Karen
Romascanu, Dan
Rouyer, Jessy
Saltsidis, Panagiotis
Schell, Rick
Seaman, Michael
Sexton, Daniel
Specht, Johannes
Stanton, Kevin
Steiner, Wilfried
Thaler, Patricia
Touve, Jeremy
Tretter, Albert
Weber, Karl
Wei, Yuehua
Woods, Jordon

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

Chen, David
Jones, Peter
Riegel, Maximilian
Weis, Brian
Zuniga, Juan-Carlos

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

Chen, Feng
Edge, Bob
Gorshe, Steven
Kim, Yongbum
Korhonen, Jouni
Sarikaya, Bechet
Mason, Ralph
Waldo, Michael
Walter, Todd

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.

(Optional to be shown) (Updated January 2012)

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 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

Slide #2 (Updated January 2012)

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.**

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.

Slide #4 (Updated January 2012)

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

Future interim meetings

- September 8th – 11th 2014: Ottawa, Glenn Parsons-Ericsson
  - Brookstreet Hotel $185 CDN
  - Meeting fee $350/$500 US
  - Registration & hotel booking will open this week
- January 11-15, 2015
  - 802-sponsored Interim, Atlanta
- May 12-15 2015: John D'Ambrosia - Ethernet Alliance
  - http://ieee802.org/1/files/public/docs2013/admin-ea-offer-to-host-may2014-15-0713.pdf
- Fall 2015
  - Hosts ?
- January 2016
  - 802-sponsored Interim, Atlanta

802 EC report

- In memoriam (Hugh Barass, Craig Harmon, Patrick Melet, Brian Misek)
- IEEE-SA Standards Board
  - Establishment of a Transportation SCC will be considered at the August SASB meeting
  - IEEE Internet Initiative
- Various rules – (EC-14-35)
  - New 802 P&P – June 2014 (e.g., clarifies loss of voting rights)
  - WG meetings are only face-to-face, individual experts are allowed
  - PAR review until 6:30pm
- Rescope of 802.24 TAG (24-24-16) – from Smart Grid to Vertical Applications
- Reaffirmation of 802.16 (16-14-48)
- EC Standing Committees
  - Creation of Wireless Chairs standing committee (EC-14-36)
  - JTC1 standing committee (EC-14-42): Andrew Myles as chair
  - ITU standing committee (EC-14-46): Glenn is chair.
  - IETF standing committee: Pat is Chair. IETF/IEEE coordination is going well
- Future plenaries report (EC-14-44)
  - Don't plan on more than 5 rooms in parallel. WGs less than 30 get only 1 room
  - For approval -- March 2016: San Antonio
- Treasurers report (EC-14-44)
  - Loss of $450K on last meeting, reserve down to $900k
  - Exec session to discuss confidential network services provision contract details
  - Get802 update…
- IEEE-SA Patent Policy revision

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Straw polls

- Do you support the get802 program?
  - Y: 45 N: 0 A: 0

- Would you support free open access to all 802 standards and work in progress?
  - Y: 48 N: 0 A: 1

Join Me

- IEEE-SA provided web conferencing
- Each IEEE 802 WG has one account
  - Ask chair for password

Tutorials

- **Monday, July 14, 2014**
  - Tutorial #1 (6:00–7:30 pm): Pervasive Surveillance of Internet
  - Tutorial #2 (7:30–9:00 pm): Spectrum Occupancy Sensing
  - Tutorial #3 (9:00–10:30 pm): NETCONF/YANG Tutorial for the IEEE 802

- **Tuesday, July 15, 2014**
  - (7:30–9:30 pm): Special 802.24 TAG meeting - Nuts and Bolts of Internet of Things

- **Wednesday, July 16, 2014**
  - (6:00–10:00 pm): "Emerging Applications" BoF Abstracts
    - Bar available for your drink ticket…

Liaisons within 802

- Joint meetings
  - Tues 10:30-11:30 802.1 TG/802.11 – MAC service issues
  - Tues 9:00 – 18:00 – Interworking/TSN
  - Tues 19:30 – 802.15.3 (100 Gigs PTP) discussion
  - Thurs 8-10 802.1 TG/802.11ak – Bridging issues
  - Tues 16-18 – OmniRAN/802.16 – Wireless SDN BOF
- IEEE 802 JTC1 standing committee meetings
  - Tuesday PM1 – 802.1 specific issues
  - Wednesday PM1
  - Thursday PM1
- IEEE 802 ITU standing committee
  - Wednesday AM1
- Any others?

Incoming Liaisons

- **OmniRAN:**
  - LS114 from ITU-T SG15 to IEEE 802.1 on SDN activity in SG15
  - http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS114_229P-AnnN-0414.DOCX

- **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

- **Interworking:**
  - LS119 from ITU-T SG15 to IEEE 802.1 on new work item on Generic Information Model for management of transport NE
  - http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS119_229P-AnnU-0414.DOCX
  - LS116 from ITU-T SG15 to IEEE 802.1 on Multi Domain Segment network Protection (reply to IEEE802.1-LS016)
  - http://www.ieee802.org/1/files/public/docs2014/liaison-ITUTSG15-LS116_229P-AnnP-0414.DOCX

- **Any others?**

PARs this week

- **802.1 PARs:**
  - 802.1ARce - Secure Device Identity, Amendment 1: Amendment 1: SHA-384 and P-384 Elliptic Curve
  - 802.1AEcg - Media Access Control (MAC) Security - Amendment: Ethernet Data Encryption devices
- **Other WG PARs:**
  - 802.3bv- amendment, 1000 Mb/s Operation Over Plastic Optical Fiber
  - 802.3bw - amendment, 1 Twisted Pair 100 Mb/s Ethernet
  - 802.11ah, Sub 1 GHz, PAR extension request
  - 802.11ai, Fast initial link setup, PAR extension request
  - 802.15.4, amendment enabling Spectrum Resource Measurement Capability
  - 802.22.3, Specifying Spectrum Occupancy Sensing (SOS) Measurement Devices and Means that Enable Coalescing the Results from Multiple Such Devices
- http://grouper.ieee.org/groups/802/PARs.shtml

802.1 meeting schedule

V3

IEEE 802 PLENARY SESSION
San Diego, California
July 13-18, 2014

802.1 tracks and times

Time	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
07:00-07:30						
07:30-08:00						
08:00-08:30		EC MTG / Trk 1: IWK / Trk 2: TSN	MTN TG / Trk 1: Joint IWK/TSN / Trk 2: OR / Trk 3: SEC	Trk 1: IWK / Trk 2: TSN / ITU SC	Trk 1: Joint IWK/TSN/802.11 / Trk3: OR	Break
08:30-09:00						
09:00-09:30						
09:30-10:00						
10:00-10:30		NEW MEMBERS ORIENTATION			Break	Break
10:30-11:00		Opening 802.1 Plenary	Break	Break	Trk 2: TSN / Trk 1: IWK / Trk3: OR	Break
11:00-11:30			Trk 1: Joint IWK/TSN/802.11 / Trk 2: OR / Trk 3: SEC	Trk 1: IWK / Trk 2: TSN		
11:30-12:00						
12:00-12:30						
12:30-13:00		Lunch	Lunch	Lunch	Lunch	Lunch
13:00-13:30						
13:30-14:00		Trk 1: IWK / Trk 2: TSN / Trk 3: OR / Trk 4: DCB	Trk 1: Joint IWK/ TSN / Trk 2: OR / Trk 3: DCB	Trk 1: IWK / Trk 2: TSN / Trk 3: SEC	Closing 802.1 Plenary	KEY:
14:00-14:30						IWK: Interworking
14:30-15:00						TSN: Time Sensitive Netw'k
15:00-15:30						MTN TG: Maintenance TG
15:30-16:00		Break	Break	Break		SEC: Security
16:00-16:30		Trk 1: IWK / Trk 2: TSN / Trk 3: OR / Trk 4: DCB	Trk 1: Joint IWK/TSN / Trk 2: OR / Trk 3: DCB	Trk 1: IWK / Trk 2: TSN / Trk 3: SEC		DCB: Data Center Bridging
16:30-17:00						OR: OmniRAN
17:00-17:30						
17:30-18:00						
18:00-18:30		Tutorial #1 - Surveillance	Break	Break	Break	
18:30-19:00			.1/.15 joint			
19:00-19:30						
19:30-20:00		Tutorial #2 - Spectrum			RAC	
20:00-20:30						
20:30-21:00						
21:00-21:30		Tutorial #3 - Netconf/Yang				
21:30-22:00						
22:00-22:30						

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TG agendas

- Security TG
- Interworking TG
- TSN TG
- Data Center Bridging TG
- OmniRAN TG
- Maintenance TG

Security TG

1. P802.1Xbx - Sponsor ballot complete, no outstanding Disapproves or comments on Sponsor ballot recirculation. Action: Request 802.1/802.0 permission to forward to RevCom for final approval as Standard.

2. P802.1AEcg - Draft PAR & CSD pre-circulated to 802.0 for other WG feedback. Action: Respond to feedback (if any), finalize propose text, request 802.1/802.0 permission to forward to Nescom.

3. P802.1ARce - Draft PAR & CSD pre-circulated to 802.0 for other WG feedback. Action: Respond to feedback (if any), finalize propose text, request 802.1/802.0 permission to forward to Nescom.

4. Discussion of IEEE 802.1X MKA implementation experience.

5. Liaison with IEEE P802.15.9 (Key Management Protocol transport for 802.15.4).

6. Participation in 802/JTC1 ad hoc (if scheduled at this meeting).

Interworking Task Group Agenda
Preliminary – Subject to change

	Mon 7/14/14	Tues 7/15/14	Wed 7/16/14	Thurs 7/17/14
Morning	**AX-Rev DRNI D4.1 SBr** (Saltsidis) **802.1 Opening Plenary**	**Maintenance (8:00-9:00)** **Joint mtg: IW + TSN** (Qca-d0.8: Farkas; Qcc:)	**Q-Rev D2.1 SBr** (Jeffree) **Qca PCR D0.8 TG** (Farkas)	**Joint mtg: .1 + .11** (Qbz WBB: Finn) **AC-Rev D1.0 WG** (Messenger) **Liaisons**
Afternoon	**Qca PCR D0.8 TG** (Farkas)	**Joint mtg: IW + TSN**	**AX-Rev DRNI D4.1 SBr** (Saltsidis) **Qca PCR D0.8 TG** (Farkas)	**802.1 Closing Plenary**

Interworking Task Group Projects

Project	Title	Editor	Draft	Ballot
802.1AX-Rev DRNI	Link Aggregation & Distributed Resilient Network Interconnect	Panagiotis Saltsidis	4.1	Sponsor Recirc
802.1Qbz	Wired – Wireless Bridging	Norm Finn	1.2	Task Group
802.1Qca	SPB Path Control and Reservation	Janos Farkas	0.8	Task Group
802.1Q-REV	VLAN Bridges	Tony Jeffree	2.1	Sponsor Recirc
802.1AC-REV	MAC Service Definition	John Messenger	1.0	Working Group

TSN TG

Mon 1400-1700 TSN meeting (time-sync - ASbt)			195
	Measurement of link delay asymmetry	Lu Huang / China Mobile	15
	Impact of New OUI Tier Structure on 1588 and 802.1AS	Geoff Garner / Broadcom, Hirschmann, Marvell, Siemens	120
	Industrial Requirements for Working Clock Synchronization	Feng Chen / Siemens AG	30
	Discussion of gPTP over Wireless 802.11 links	Kevin Stanton / Intel	30
Tue 0900-1800 Joint IWK/TSN (IS-IS-based path reservations, seamless redundancy, other fowarding improvements)			595
	Overview of text submitted with my comments on 802.1CB D0.3	Rodney Cummings / National Instruments	60
	P802.1Qca D0.8 comment resolution	János Farkas / Ericsson	60
	802.1Qca D0.8 tutorial	János Farkas / Ericsson	30
	802.1CB D0.3 Comment resolution	Norman Finn / Cisco Systems	240
	Working with IETF on TSN for L3	Norman Finn / Cisco Systems	30
	MAC Address Usage	Don Panell / Marvell	60
	Thoughts on network control and configuration at layer 3 for TSN	Jouni Korhonen / Broadcom	60
	Comment on 802.1AC	Jouni Korhonen and Phillipe Klein / Broadcom	10
	CB and TSN features	Marcel Kiessling / Siemens AG	45
Wed 0900-1800 TSN (shapers, SRP improvements, more time sync)			405
	P802.1Qbv ballot resolution	Tony Jeffree / Broadcom, Hewlett Packard	180
	P802.1Qbu progression	Tony Jeffree / Broadcom, Hewlett Packard	30
	CPRI FrontHaul requirements	Peter Ashwood-Smith / Huawei	15
	Joint 802.1 TSN and 802.3 IET ??	Ludwig Winkle / Siemens AG	30
	Why an additional Shaper	Marcel Kiessling / Siemens AG	45

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OmniRAN TG

- Schedule:
  - July 14th, 2014, 2pm - 6pm
    - Gaslamp B (2nd floor)
  - July 15th, 2014, 9am - 6pm
    - PM2 (4-6pm: Wireless SDN BoF together with 802.16)
    - Gaslamp CD (2nd floor)

- Meeting documents and individual contributions on mentor:
  https://mentor.ieee.org/omniran/documents

  - Please make use of OmniRAN pptx template for your contributions:
    https://mentor.ieee.org/omniran/dcn/14/omniran-14-0033-01-ecsg-omniran-pptx-template.potx

OmniRAN TG Agenda

- Approval of minutes
- Reports
- P802.1CF contributions
  - ToC
  - Network reference model
  - Functional design and decomposition
  - SDN Abstraction
- OmniRAN organizational issues
- ITU-T Liaison response
- Location of September 2014 interim meeting
- Conference calls until Nov 2014 session
- Status report to IEEE 802 WGs
- Motions to the 802.1 closing plenary
- AOB

Maintenance TG agenda

- Patents and Guidelines
- Status
- New Maintenance items
  - none
- Existing Maintenance items
  - TSN (.1AS) – 61
  - LLDP (.1AB) – 121, 127, 133
  - .1AC/.1Q – 125
  - .1AX-Rev – 126
  - 802.1AS – 135, 138
  - 802.1X – 136
  - 802.1Q – 137/139
- SC6 status
- Teleconference
  - September 2nd (if necessary) – motion in closing Plenary

Any other business?