

## Opening Plenary March 2022

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

### 802.1 plenary agenda

#### **Monday, March 7th opening**

- Copyright Policy
- Call for Patents
- Participant behavior
- Administrative
- Membership status
- Future Sessions
- 802 EC report
- Technical plenary
- Incoming Liaisons
- Promotion
- Sanity check current projects
- TG agendas
- Any other business

#### **Tuesday, March 15th closing**

- Copyright Policy
- Call for Patents
- Participant behavior
- Membership status
- WG Elections
- Future Sessions
- Sanity check current projects
- TG reports
- Outgoing Liaisons
- Motions for EC
- Motions for 802.1
- Any other business

### INSTRUCTIONS FOR CHAIRS OF STANDARDS DEVELOPMENT ACTIVITIES

At the beginning of each standards development meeting the chair or a designee is to:

- Show the following slides (or provide them beforehand)
- Advise the standards development group participants that:
- IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
- Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy;
- Instruct the Secretary to record in the minutes of the relevant meeting:
- That the foregoing information was provided and that the copyright slides were shown (or provided beforehand).
- Ask participants to register attendance in IMAT: <a href="https://imat.ieee.org">https://imat.ieee.org</a>





### **IEEE SA COPYRIGHT POLICY**

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

- Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
- Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
- For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.





#### **IEEE SA COPYRIGHT POLICY**

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
  - IEEE SA Copyright Policy, see
     Clause 7 of the IEEE SA Standards Board Bylaws
     <a href="https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7">https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7</a>
     Clause 6.1 of the IEEE SA Standards Board Operations Manual https://standards.ieee.org/about/policies/opman/sect6.html
- IEEE SA Copyright Permission
  - <a href="https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip">https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip</a>
- IEEE SA Copyright FAQs
  - http://standards.ieee.org/faqs/copyrights.html/
- IEEE SA Best Practices for IEEE Standards Development
  - http://standards.ieee.org/develop/policies/best\_practices\_for\_ieee\_standards\_development\_051215.pdf
- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
  - https://standards.ieee.org/about/policies/opman/sect6.html





### **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:
  - 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 IEEE is not aware. Additionally, neither 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 14 and 15 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 HAVE A DUTY TO INFORM THE IEEE

- Participants <u>shall</u> 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
- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed)
   of the identity of any other holders of potential Essential Patent Claims

### Early identification of holders of potential Essential Patent Claims is encouraged





### **WAYS TO INFORM IEEE**

- Cause an LOA to be submitted to the IEEE SA (patcom@ieee.org); 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
- Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair





#### OTHER GUIDELINES FOR IEEE WORKING GROUP 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 of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - Technical considerations remain the 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. Formally object to the discussion immediately.

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For more details, see IEEE SA Standards Board Operations Manual, clause 5.3.10 and Antitrust and Competition Policy: What You Need to Know at http://standards.ieee.org/develop/policies/antitrust.pdf





### PATENT-RELATED INFORMATION

The patent policy and the procedures used to execute that policy are documented in the:

- IEEE SA Standards Board 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 <a href="http://standards.ieee.org/about/sasb/patcom/materials.html">http://standards.ieee.org/about/sasb/patcom/materials.html</a>

If you have questions, contact the IEEE SA Standards Board Patent Committee Administrator at patcom@ieee.org





### Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
  - IEEE Code of Ethics
  - IEEE Code of Conduct
- The core principles of the IEEE Codes of Ethics & Conduct are to:
  - Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct
  - Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.
  - Avoid injuring others, their property, reputation, or employment by false or malicious action
- The most recent versions of these Codes are available at <a href="http://www.ieee.org/about/corporate/governance">http://www.ieee.org/about/corporate/governance</a>

### Participants in the IEEE-SA "individual process" shall act independently of others, including employers

- The <u>IEEE-SA Standards Board Bylaws</u> require that "participants in the IEEE standards development individual process shall act based on their qualifications and experience"
- This means participants:
  - Shall act & vote based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
  - Shall not act or vote based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
  - Shall not direct the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the "individual process", you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

### IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The <u>IEEE-SA Standards Board Bylaws</u> (clause 5.2.1.3) specifies that "the standards development process shall not be dominated by any single interest category, individual, or organization"
  - This means no participant may exercise "authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints" or "to hinder the progress of the standards development activity"
- This rule applies equally to those participating in a standards development project and to that project's leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project's IEEE-SA Program Manager

### **DECORUM**









- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.3 of SASB Operations Manual)
- Video/Audio recording by participants is prohibited (5.3.3.2 of SASB Operations Manual)
- Photography by permission only (5.3.3.2 of SASB Ops Manual)
- Cell phone ringers off please





### **ATTENDANCE**

### Please record your attendance in IMAT at <a href="https://imat.ieee.org">https://imat.ieee.org</a>

- This requires a free IEEE Account.
- Please create one only if you do not yet have an IEEE Account.

Schedule	7:00	8:00	9:00 10:	00 11	:00 12:00	13:00 1	4:00 15	:00 16:	00 17:	00 18	00 19	00 20	:00 21	00 22	00 23:	:00
TSN TG																

Please record your attendance for an active meeting (denoted by a yellow bar) by clicking on the yellow bar. Once your attendance has been recorded, the yellow bar changes to a green bar.

### The data from IMAT is used as the meeting participant list.

 Please promptly provide your affiliation to the minute taker if you are unable to record your attendance in IMAT.





### **ELECTRONIC MEETING GUIDELINES**

### Please mute yourself when you are not speaking

Please put yourself into the queue "at the mic" via the Chat, e.g.: "+q" / "-q"

### Please provide your information

- First and last names
- Affiliation, after your last name, e.g., in square brackets
- (may provide them in the Chat window)

### Changing your data in Webex Step 1

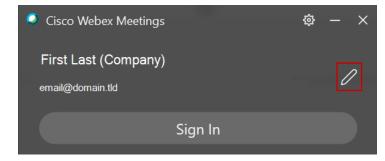
 Go to the "Display hidden icons" arrow in the Windows task bar



 Right-click on the Webex icon and select "Open Cisco Webex Meetings"

#### Step 2

 In the Webex Windows that opens, Click on the pencil icon\* next to your display information







### Subgroup announcements

- Subgroup Chairs (or designees) please note during this plenary session:
  - At the start of the first TG meeting, announce that the meeting is subject to the policies in "MEETING INTRODUCTION" <a href="http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf">http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf</a> made available beforehand (as announced in the opening plenary meeting); and
    - Make the Call for Potentially Essential Patents and minute any responses to it.
  - At the start of the first pre-PAR subgroup meeting, announce that the meeting is subject to the policies in "MEETING INTRODUCTION" <a href="http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf">http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf</a> made available beforehand (as announced in the opening plenary meeting).
  - After any recess, announce that the meeting remains subject to the policies as read and displayed in the opening plenary meeting.
  - At meeting start & after any recess, ask participants to record attendance in IMAT and, if unable to do so, to promptly provide their affiliation to the minute taker.
  - Direct participants to the IEEE SA website for additional details on the
    - IEEE Patent Policy (<a href="https://standards.ieee.org/content/ieee-standards/en/about/sasb/patcom/index.html">https://standards.ieee.org/content/ieee-standards/en/about/sasb/patcom/index.html</a>); and
    - IEEE SA Copyright Policy (<a href="https://standards.ieee.org/ipr/index.html">https://standards.ieee.org/ipr/index.html</a>)

### Plenary Registration Fee

- Attendance at any meeting held during or as part of the Mar 2022 Plenary Session requires registering and paying the appropriate fee
  - USD\$400 until Friday, January 28, 2022
  - USD\$600 thereafter until Friday, February 25, 2022
  - USD\$800 thereafter.
- Registration details <a href="http://802world.org/plenary/">http://802world.org/plenary/</a>

### **General Information**

- Meeting contributions
  - http://ieee802.org/1/filenaming.html
  - Please upload BEFORE presentation
- Minutes
  - https://1.ieee802.org/category/wg-minutes/
  - https://listserv.ieee.org/cgi-bin/wa?
     A1=ind21&L=STDS-802-1-MINUTES&O=A&H=0&D=0&T=1
     (sorted by chair/secretary)
- Schedule for all WGs
  - All 802.1 <a href="https://1.ieee802.org/wg-calendar/">https://1.ieee802.org/wg-calendar/</a>
  - All 802 <a href="http://www.ieee802.org/802tele\_calendar.html">http://www.ieee802.org/802tele\_calendar.html</a>
- Website
  - http://ieee802.org/1/

### Officers and Leadership

- Chair: Glenn Parsons
- Vice-Chair & Recording Secretary: Jessy Rouyer
- Executive Secretary: Stephan Kehrer
- Liaison Secretary: Karen Randall
- Maintenance TG Chair: Paul Congdon
- Security TG Chair: Mick Seaman
  - Security TG Vice-Chair: Karen Randall
- TSN TG Chair: János Farkas
  - TSN TG Vice-Chair: Craig Gunther
  - TSN TG Secretary: Christian Boiger
  - IEC/IEEE 60802 Joint Project Chair: Ludwig Winkel
  - IEC/IEEE 60802 Joint Project Secretary: Josef Dorr
  - IEEE P802.1DP/SAE AS6675 joint project co-Chairs: Abdul Jabbar & János Farkas
  - IEEE P802.1DP/SAE AS6675 joint project Secretary: Marina Gutiérrez
- NENDICA Chair: Roger Marks
- YANGsters Chair: Scott Mansfield
  - YANGsters Vice-Chair and Secretary: Stephan Kehrer
- Maintenance of Email exploder: Mark Hantel and Hal Keen
- Maintenance of website: Roger Marks

### 802.1 WG Process

- IEEE 802 Working Group Policies and Procedures
- Guidelines available on
  - WG voting membership
  - WG ballots
- "New work" process
  - Currently scheduled in TGs towards the end of session
    - There is limited time for such proposals
    - Does not allow for consensus building
  - Migration towards vetting all new work in Nendica
    - Strong proposals can be directed to the TG/WG to initiate a PAR
    - Proposals needing more consensus can be further developed

### Joint Development Procedures

- IEEE/IEC 60802 joint project
  - Guide to IEC/IEEE cooperation
  - IEC/IEEE cooperation on TSN rev 10

- IEEE P802.1DP/SAE AS6675 joint project
  - IEEE/SAE joint development agreement
  - IEEE/SAE cooperation on TSN rev 2

### **Affiliation**

- You must declare your affiliation(s) which includes employer(s)
  - Per <u>SASB Bylaws</u> 5.2.1.5 & <u>SASB OpsMan</u> 5.1.2.3
    - Also see <a href="https://standards.ieee.org/faqs/affiliation.html">https://standards.ieee.org/faqs/affiliation.html</a>
  - In meetings
    - In-person (and current plenary session) meeting registration system
    - myProject system for IMAT attendance, ePoll & myBallot
    - Electronic meeting participant list
    - First time you speak in a session
  - When balloting
    - 802.1 ballot email responses for TG & WG ballots
    - myProject system for SA ballot
- Please keep your affiliation\* and employer\*\* information up-to-date

(\*) After signing in in <u>myProject</u> > Manage Profile & Interests > Personal & Professional Info > Employer field (\*\*) After signing in at <a href="https://ieee.org">https://ieee.org</a> > Your Name > Professional and Education Information > "Your employment information" Edit > Employer

### Electronic ballots (ePolls)

- January ePoll
  - ePoll 67

- To progress work items outside an 802.1 plenary session, a series of 10-day electronic ballots using ePoll were conducted
  - https://mentor.ieee.org/802.1/polls

### Voting Membership

- Voting membership in 802.1 is a privilege that holds a responsibility to review drafts and vote on WG ballots (including ePolls)
- You must actively request to become a voting member and take on this responsibility
  - Email WG Chair and Recording Secretary
- Ongoing retention of 802.1 voting rights is predicated on active participation
  - Attendance and Working Group ballots (including ePolls)

### Responding to WG ballots

- To retain your voting membership, you must return 2 out of the last 3 WG ballot series (including ePolls).
- When you return your vote on a TG/WG ballot:
  - Do use the correct email list (<u>STDS-802-1-ballot@listserv.ieee.org</u>) and subject line, as specified in the email instructions (viewable on the <u>main 802.1 Email archive</u>).
    - If you do not, the automatic tools will not count your vote.
  - Do not simply "Reply" to the ballot announcement.
- When you lose your voting membership this way, you lose <u>all</u> your qualifying attendance credit.
  - If you want to become a voting member again, you have to notify the WG Chair and Recording Secretary that you wish to become a voting member again.

### The following are 802.1 voting members (79):

Ademaj, Astrit Arunarthi, Venkat Assmann, Ralf Belliardi, Rudy Boiger, Christian Bottorff, Paul Canchi, Radhakrishna Chen, Feng Choudhury, Abhijit Congdon, Paul Cummings, Rodney Dorr, Josef Elbakoury, Hesham Engelmann, Anna Enzinger, Thomas Farkas, Janos Fedyk, Donald Finn, Norman Garner, Geoffrey Gopal, Amrit

Gunther, Craig Gutierrez, Marina Haddock, Stephen Hantel, Mark Henry, Jerome Holness, Marc Hopf, Daniel Huh, Woojung Itaya, Satoko Ito, Yoshihiro Karl, Michael Kehrer, Stephan Kelsey, Randy Kiessling, Marcel Lai, Gavin Lawlis, James Lopes, Joao Lv, Lily Mangin, Christophe Mansfield, Scott

Mater, Olaf McCall, David McMillan, Larry Messenger, John Nakano, Hiroki Pannell, Donald R Parsons, Glenn Petre, Razvan Potts, Michael Proell, Dieter Randall, Karen Riegel, Maximilian Rodrigues, Silvana Rouyer, Jessy Sato, Atsushi Schewe, Frank Seaman, Michael Seewald, Maik Sivakolundu, Ramesh Zinner, Helge Specht, Johannes

Stanica, Marius Steindl, Guenter Sun, Liyang Traore, Karim Turner, Max Varga, Balazs Venkatesan, Ganesh Wang, Xinyuan Wang, Tongtong Weber, Karl Wessels, Leon Winkel, Ludwig Woods, Jordon Yamaura, Takahiro Yin, Yue Zeier, Uwe Zein, Nader Zhao, William

The following will <u>become</u> voting members when/if they attend this session:

Stamenic, Nemanja

The following could <u>become</u> voting members if they email me and the Recording Secretary indicating their intention to do so and if they attend this session:

Bierschenk, Jens Gravel, Mark Klamser, Oliver Markwart, Christian Yang, Chase The following will <u>lose</u> voting member status for lack of qualifying attendance, unless they attend this session:

Sun, Liyang

# The following could <u>lose</u> their voting membership at the end of this plenary session through lack of qualifying WG letter ballot voting:

Canchi, Radhakrishna
Engelmann, Anna
Gutierrez, Marina
Lawlis, James
Lopes, Joao
Lv, Lily
McMillan, Larry
Pannell, Donald R
Potts, Michael

Sato, Atsushi Sivakolundu, Ramesh Specht, Johannes Steindl, Guenter Sun, Liyang Venkatesan, Ganesh Yin, Yue

### 802.11 Reciprocal credit

- 802.1 voting members may get credit for attending any 802.11
- 802.1 voting members
   who are also 802.11
   voting members may get a
   popup in IMAT each time
   they register attendance
   to ask which group they
   are accumulating credit
   for this plenary session.
- 802.1 attendance credit will not be granted for a voting member who attended only 802.11 meetings.

### May 2022 interim

- Host withdrawal
  - Given uncertainty of pandemic and risk associated the host was withdrawn the hosting offer
- Electronic interim
  - Webex with no registration fee
- Date modification
  - To have equal times between sessions
  - Propose changing to May 9-13

ePoll did not meet quorum Motion required

### July 2022 plenary

- In-Person plenary
  - July 10-15, 2022 Montreal, QC, Canada
  - COVID go/no go decision date: April 2022
- Hybrid
  - Remote facilities will be provided (e.g., A/V connection from meeting room to Webex)
  - Logistics and rules under discussion
- Registration fee
  - Registration fee will incorporate extra hybrid AV costs
  - Same fee for all attendees (in-person or remote)

### September 2022 interim

- Previous Proposal
  - 12-16 Sept 2022: co-located 802.1/802.3 sessions
  - 17 Sept 2022 (Saturday): Joint ITU-IEEE workshop
  - 19-30 Sept. 2022: ITU-T SG15
- Host withdrawal
  - Insufficient meeting space given ITU HQ renovation and COVID restrictions
- Several options
  - Electronic interim
    - Same week –Sept 12-16
  - Possible hosting offer by General Electric and 802 Wireless
  - Details on next slides

Motion required

### September 2022 interim – GE offer

- General Electric (<u>proposal</u>)
- Registration fee
  - Typical in-person fee, not yet decided
- In-Person only
  - GE Research center, Albany, NY, USA
  - Hybrid or remote observers not supported
- Date
  - Sept 12-16, 2022

# September 2022 interim – 802 Wireless offer

- Wireless treasury hosting
- 802.1 is invited
- Registration fee
  - Typical in-person fee, not yet decided
- In-Person only
  - Hilton Waikoloa Hotel, Waikoloa, HI, USA
  - Hybrid or remote observers not supported
- Date
  - Sept 12-16, 2022

### Straw Polls

What is your preference for the September 2022 interim session?

- A Electronic 37
- B GE offer 26
- C 802.11 offer 15
- D no response 9

- A Electronic 48
- B GE offer 28
- C no response 12

## May 2023 interim

- Two host offers for May 2023
  - Offer by ABB
    - Date: May 15-19, 2023
  - Offer by 802.11
    - Wireless treasury hosting
    - 802.1 is invited
    - Date: May 15-19, 2023
- Details on next slides

## May 2023 interim – ABB offer

- ABB hosting (proposal)
- Registration fee
  - Typical in-person fee, not yet decided
- In-Person only
  - Radisson Blu Royal Hotel, Helsinki, Finland
  - Hybrid or remote observers not supported
- Date
  - May 15-19, 2023

# May 2023 interim – 802 Wireless offer

- Hosting to reduce March 2022 cancellation
  - Wireless treasury hosting
  - 802.1 is invited
- Registration fee
  - Typical in-person fee, not yet decided
- In-Person only
  - Hilton Orlando Lake Buena Vista, Orlando, FL, USA
  - Hybrid or remote observers not supported
- Date
  - May 15-19, 2023

### Interim sessions

- May 18-22, 2020
  - Pasadena, CA, USA hosted by Ethernet Alliance
- September 21-25, 2020
  - Stuttgart, DE hosted by Hirschmann
- January 2021
- May 3-7, 2021
  - Santa Fe, NM, USA hosted by Analog Devices
- September 20-24, 2021
  - Stuttgart, DE hosted by Hirschmann
- January 17-21, 2022
- May 23-27, 2022
  - Santa Fe, NM, USA hosted by Analog Devices
- September 2022 (proposals in Niskayuna, NY and Waikoloa, HI)
- January 2023
- May 2023 (proposals in Orlando, FL and Helsinki, Finland)

Changed to electronic due to COVID-19

## Plenary sessions

- March 15-20, 2020 Atlanta, GA, USA
  - Hilton Atlanta
- July 12-17, 2020 Montreal, QC, Canada
  - Sheraton Montreal
- November 8-13, 2020 Bangkok, Thailand
  - Bangkok Marriott Marquis Queen's Park
- March 14-19, 2021 Denver, CO, USA
  - Hyatt Regency Denver
- July 11-16, 2021 Madrid, Spain
  - Marriott Madrid Auditorium
- November 14-19, 2021 Vancouver, BC, Canada
  - Hyatt Regency Vancouver
- March 13-18, 2022 Orlando, FL, USA
  - Hilton Orlando Lake Buena Vista
- July 10-15, 2022 Montreal, QC, Canada
  - Sheraton Le Centre Montreal
- November 13-18, 2022 Bangkok, Thailand
  - Marriott Marquis Queen's Park

Cancelled or changed to electronic due to COVID-19

### Future sessions decision dates

- Plenary sessions
  - July 10-15, 2022 Montreal, QC, Canada
    - Latest possible decision date: April 2022
- Interim sessions

## LMSC schedule EC/WG/TAG meetings for the plenary

March 2022	3	4	7	8	9	10	11	15	16	17	18
	Th	Fr	Mo	Tu	We	Th	Fr	Tu	We	Th	Fr
v1.1		802 Orientation 10-11am		802 P							
802 EC		Opening Plenary 3-5pm		802/JTC1 SC 4-6pm	Public Visibility SC 3-4pm			802 Restructuring ad hoc 1-2 pm	802/ITUSC 4-5pm	Chairs Open Office 8-9am	Closing Plenary 1-5pm
802.01	802 Technical Plenary 9-11am		opening WG plenary 9-10am	802.1 WG Session			closing WG plenary 9-noon				
802.03			opening WG plenary 9-11am		mid session WG plenary 9-11am 802.3 WG Session				closing WG plenary 10-noon		
802.11			opening WG plenary 9-11am	802.11 WG Session WG plans			closing WG plenary 9am-noon				
802.15				opening WG plenary 9-11am 802.15 WG Session			closing WG plenary 9-11				
802.18						802.18 TAG opening 3-4pm				802.18 TAG closing 3-4 pm	
802.19			<b>802.19 WG</b> Plenary 4-6pm								
802.24					802.24 TAG Plenary 3-5pm						

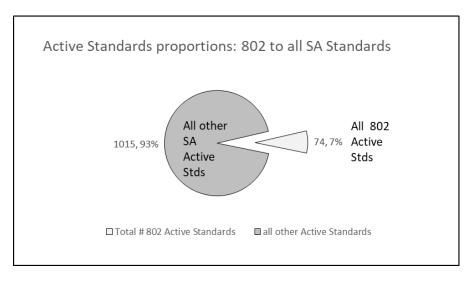
# 802 EC report – Plenary Session #129 Electronic plenary session #6

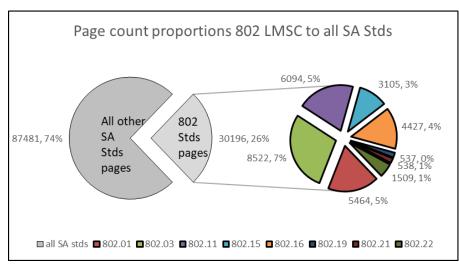
- IEEE Technical Activities (TAB) special projects
  - Funding available for special projects to encourage new standards participation
- Hybrid meetings ad hocs
  - Mixed Mode Best Practices (GeorgeZ) draft (EC-21-203)
  - Future Meeting Vision (AndrewM) long term vision for effective 802 sessions
- 802 Task Force
  - No update on tools project (document management and attendance replacement of Mentor/IMAT)
- 802 Rules update (<u>EC-22-58</u>)
  - Ballot responses clarified to count per series
  - Draft sharing within 802 is now prohibited without a cover page, alternatives sought
- Future Venues (EC-22-02)
  - Orlando Mar 2022 Venue cancelled and \$250k penalty paid
  - Montreal July 2022 registration opening soon discount for hybrid meeting setup
  - Future venues (2026 and beyond) on hold
- Treasurer (EC-22-56)
  - 2021 surplus of \$40k, reserves now \$700k (\$500k cash, \$200k committed)
  - 2022 surplus projected at \$200k to restore reserves to ~\$1M

## IEEE SA Staff supporting IEEE 802

- Jodi Haasz IEEE 802 lead
- Christian Orlando IEEE 802.1 program manager
- Michelle Turner Editor
- Catherine Berger Editor

## 802 Analytics





## IEEE 802 program status

- IEEE 802 Publication Report (DCN ec-22-0042-00-00SA) https://mentor.ieee.org/802-ec/dcn/22/ec-22-0042-00-00SA-ieee-802-publication-report-march-2022.pdf
- IEEE 802 EC Solutions\_Report (DCN ec-22-0040-00-00SA) https://mentor.ieee.org/802-ec/dcn/22/ec-22-0040-00-00SA-ieee-802-ec-solutions-report-march-2022.pdf
- IEEE 802 Active Standards Report (DNC ec-22-0033-00-00SA) <a href="https://mentor.ieee.org/802-ec/dcn/22/ec-22-0033-00-00SA-ieee-802-active-standards-report-as-of-15-february-2022.pdf">https://mentor.ieee.org/802-ec/dcn/22/ec-22-0033-00-00SA-ieee-802-active-standards-report-as-of-15-february-2022.pdf</a>
- IEEE 802 Active PAR Report (DCN ec-22-0041-00-00SA) https://mentor.ieee.org/802-ec/dcn/22/ec-22-0041-00-00SA-ieee-802-active-par-report-24-february-2022.pdf

### March 2022 802 LMSC Elections

IEEE 802 LMSC Elections to be conducted at the March 2022 plenary session

- 802 Working Group and Technical Advisory Groups to hold elections for Chair and Vice-Chair positions
- 802 Executive Committee Elections/Confirmations
  - 802 LMSC Chair to be elected by non-appointed EC voting members
  - 802 LMSC Appointed position candidates to be confirmed by EC voting members
  - 802 LMSC WG/TAG Chair and Vice-Chair position candidates to be confirmed by EC voting members
  - Non-voting 802 LMSC position candidates to be confirmed by EC voting members
- Glenn Parsons & Jessy Rouyer will stand for 802.1 Chair & Vice-Chair re-election

# 802 Chair and Appointed Officer Candidates

- Paul Nikolich is standing for re-election as Chair of 802 LMSC
- If Nikolich is re-elected, he plans to fill the 802 Appointed Officer positions as follows:
  - First Vice-Chair James Gilb, Second Vice-Chair Roger Marks,
  - Recording Secretary John D'Ambrosia, Executive Secretary Jon Rosdahl and
  - Treasurer George Zimmerman.
- Nikolich also plans to appoint the following individuals to fill the nonvoting positions of 802:
  - Member Emeritus Treasurer Advisor Clint Chaplin,
  - 802 Member Emeritus-Advisor Geoff Thompson and
  - Hibernating Working Group Chairs:
  - 802.16 Roger Marks, 802.21 Subir Das and 802.22 Apurva Mody.

March 2022 IEEE 802 LMSC Executive Committee election process

### 802.1 WG elections

- 802.1 process for chair and vice-chair
  - Nominations are open until the start of the closing 802.1 plenary meeting on March 15<sup>th</sup>. The election will be during the March 15<sup>th</sup> closing plenary meeting.
  - If there are multiple nominees for a post, then a secret ballot election will take place in which only 802.1 voters participate and in which each voter casts a single vote for their preferred candidate. To win the election, a majority of voters present is required. If a majority is not achieved, then the candidate with the least number of votes is eliminated and the vote re-taken.
  - A motion to approve the winning candidate (in the case of an election)
    or the single nominee (in the event that there is only one candidate for
    the post) will then be made and voted upon by 802.1 voting members.

## Straw polls for closing plenary

- 1. When do you expect the next in-person 802.1 session will be?
  - July 2022Sept 2022
  - Nov 2022 2023 or later
- 2. If the 2022 July Plenary Session is held in Montreal, Canada as an in-person only session, will you attend?
  - Yes/No
- 3. If the 2022 July Plenary Session is held in Montreal, Canada as a mixed-mode session, will you attend:
  - Attend In-person
  - Attend Virtually (remotely)
  - Will not attend plenary

#### **Public Review**

- Since July 2015, all eligible projects where a SA ballot is initiated also have a Public Review period initiated simultaneously.
  - https://publicreview.standards.ieee.org
  - For process questions see <u>FAQ</u>
- Status
  - No comments yet
  - No current public review

#### 802.1 PARs this session

- P802-Rev Standard -Overview and Architecture
  - <u>PAR</u>
- P802.1Qdt Amendment: Priority-based Flow Control Enhancements
  - PAR and CSD
- P802.1DU Standard for Cut-Through Forwarding Bridges and Bridged Networks
  - PAR and CSD

- Special session process
  - Pre-circulation of PARs
    - due Feb 4
  - Maintenance TG prepares802.1 comments
    - due Mar 9
  - 802.1 response to other
     WG comments
    - due Mar 16
  - EC approval
    - Mar 18

#### Other 802 PARs this session

- P802.3dg Amendment: Physical Layer Specifications and Management Parameters for 100Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of Conductors — <u>PAR</u> and <u>CSD</u>
  - Draft 802.1 comments
- P802.3cz Amendment: Physical Layer Specifications and Management Parameters for multi-gigabit optical Ethernet using graded index glass optical fiber for application in the automotive environment – <u>PAR</u> modification and <u>CSD</u> modifications
- P802.3dh Amendment: Physical Layer Specifications and Management Parameters for multi-gigabit optical Ethernet using graded index plastic optical fiber for application in the automotive environment – <u>PAR</u> and <u>CSD</u>
- P802.11bb Amendment: Light Communication PAR modification and CSD
- P802.15ma Standard for High Data Rate Wireless Multi-Media Networks -Revision to IEEE Standard 802.15.3-2016 – PAR and CSD
  - Draft 802.1 comments

## **Technical Plenary**

- The <u>802 Technical Plenary</u> is a vehicle for addressing specific **technical** problems across all 802.
- Series around sessions to initially provide wider awareness for the revision of IEEE Std 802
- Logistics
  - Three meetings Dec 2, 2021; Jan 13 & Mar 3, 2022
  - Subsequent meetings before interim or plenary sessions

#### Liaison Resources

- IEEE 802.1 Liaison Page
  - https://1.ieee802.org/liaisons/
  - links to the Liaison Table (updated for each session) and Liaison Templates
- Updated IEEE 802 SA Liaison List for IEEE 802.1
  - https://ieee-sa.imeetcentral.com/802liaisondb/FrontPage
- IEEE Draft Sharing page is maintained by IEEE SA.
  - Must confirm organizations outside IEEE SA are on the list before sharing a draft.

## **Incoming Liaisons**

- Liaison from IEEE 1588: LS on inclusive terminology [Maintenance]
- Liaison from **IEEE 802.3**: <u>Liaison</u> re: status of IEEE P802.3cx Task Force (with draft 2.2) [Maintenance]
- Liaisons from January 2022
  - WBA: <u>LS Statement</u> re: WBA Industrial IoT Deliverable enabling Wi-Fi determinism in an IOT world (new whitepaper draft) [TSN]
  - ITU-T SG15: LS 353 Info on final approval process for revised Recs [TSN]
  - ITU-T SG15: LS 352 Meetings for info and data modeling coord [YANG]
  - ITU-T SG15: LS 351 OTNT Std Work Plan Issue 30 [Maintenance]
     response anticipated in July 2022
  - ITU-T Joint Coord Activ: LS to update IMT2020 roadmap [Maintenance]
     response anticipated in March 2022
  - ISO/IEC JTC1/SC6: IEEE 802.1X FDIS ballot comments [Maintenance]
     response review anticipated in March 2022

#### **IETF** coordination

- <u>LMSC IETF SC</u> no meeting this plenary
- IAB/IESG/IEEE 802 coordination Feb 24
  - Item 5. Enabling use of Local Addresses for virtualization and IoT
  - Item 25. Layer 2/Layer 3 Interaction for Time-Sensitive Traffic
    - TSN and DetNet well coordinated with joint participation
  - Item 27. Development of YANG models in the IEEE 802
    - Includes P802f
  - Item 33. Capability Discovery
    - Includes P802.1ABdh (LLDPv2)
  - Item 34. Reliable and Available Wireless (RAW)
  - Item 35. MAC Address Device Identification for Network and Application Services
    - Includes P802.1AEdk

#### Promotion



- IEEE SA marketing collateral
  - TSN automotive, TSN industrial
  - TSN logo
- Issue press releases, call for participation or blog posts
  - 802.1CM / Emerging Technology Award <u>Beyond Standards</u>
  - TSN feature topic <u>IEEE Communications Standards Magazine</u>
- Tutorial
  - TSN tutorial proposed for development and release in 2022
  - TSN webinars
    - 802.1 Sept 16, TSN toolset Dec 2, 802.1AS Feb 24, profiles mid-2022
- Industry Events
  - TSN/A 29-30 September 2021 and 28-29 September 2022
  - IEEE-SA Ethernet & IP Automotive Technology Day 3-4 Nov 2021
- Government Event
  - WSIS Forum 2022 May-June 2022

## 802.1 Public Visibility Messaging

#### Coordinating with IEEE 802 Public Visibility Standing Committee

- Chair: John D'Ambrosia
- 802.1 coordinator: Roger Marks
- Status Twitter, LinkedIn followers up

#### Maintaining web page

- https://1.ieee802.org/visibility/
- tracking topics and status
- drafting tweets for John D'Ambrosia
- new topics welcome

### IEEE SA contributors collection

 Service for standards contributors to submit and have archived contributions for standards with a document id and referable web link for reference use

https://standardscollection.ieee.org/



#### **IEEE Awards**

- Emerging Technology Award for the initiation, advancement or progression of a new technology through the IEEE SA open consensus process
- <u>Lifetime Achievement Award</u> for significant technical contributions to a standards committee for their IEEE field of interest
- <u>Standards Committee Award</u> for outstanding contributions to Corporate Standards Development
- <u>Standards Medallion</u> for major contribution to the development of standards
- <u>Corporate Award</u> for the provision of outstanding leadership and contribution to the IEEE SA.
  - IEEE SA nomination deadline 31 July

## Nominate a colleague!

- Computer Society Hans Karlsson
   Standards Award In recognition of outstanding skills and dedication to diplomacy, team facilitation and joint achievement, in the development or promotion of standards in the computer industry
  - Nomination deadline 1 October
- <u>IEEE Charles Proteus Steinmetz award</u>
   For exceptional contributions to the development and/or advancement of standards
  - Nomination deadline 15 January
- IEEE Alexander Graham Bell Award For exceptional contributions to
  communications and network
  sciences and engineering.
  - Nomination deadline 15 January

#### **IEEE SA Standards Medallion**

#### 2021

- Geoffrey Garner
   For contributions to and education about the standardization of timing and synchronization for telecommunications networks
- Marc Holness
   For pioneering contributions and leadership to describe and implement data modeling using YANG in IEEE 802®





#### WG Chair Awards

Offered to leadership, editors and significant contributors after publication

- IEEE Std 802.1ABcu-2021
  - Editor: Scott Mansfield
  - Certificates: Stephan Kehrer, Paul Congdon
- IEEE Std 802.1ABdh-2021
  - Editor: Stephen Haddock
  - Certificates: Paul Bottorff
- IEEE Std 802.1AS-2020/Cor 1-2021
  - Editor: Geoffrey Garner
  - Certificates: Craig Gunther, Rodney
     Cummings, Dr. Karl Weber, Silvana
     Rodrigues, Max Turner

- 802.1ACct-2021
  - Editor: James Gilb
- 802.1BA-2021
  - Editor David McCall
- IEEE Std 802.1CBcv-2021
  - Editor: Stephan Kehrer
  - Certificates: Scott Mansfield, Norm
     Finn, Don Fedyk, Christophe Mangin,
     Markus Seehofer
- IEEE Std 802.1CBdb-2021
  - Editor: Christophe Mangin
  - Certificates: Scott Mansfield, Norm Finn, Isao Tarui, Stephan Kehrer, Craig Gunther, Balázs Varga, Don Fedyk, Ralf Assmann, Johannes Specht, Paul Congdon

## Sanity check – current workload

Project	Short Title	Last Motion	Current Stage	Draft#	Next action	PAR ends
802.1Qcj	Auto Attach to PBB	PAR extension	WG ballot	D1.3	WG ballot	Dec '23
802.1CQ	Multicast and Local Address Protocol	TG Ballot	TG Ballot	D0.7	TG Ballot	Dec '22
802.1ACct	support for 802.15.3	RevCom	Published - Dec 17	D2.0		Dec '21
802.1ABcu	LLDP YANG	RevCom	Approved - Dec 8	D2.3	Publication	Dec '21
802.1CBcv	FRER YANG & MIB	RevCom	Published - Feb 18	D2.1		Dec '22
802.1Qcw	TSN (Qbu, Qbv, Qci) YANG	PAR Extension	WG ballot	D1.3	WG ballot	Dec '23
802.1Qcz	Congestion Isolation	SA Ballot	SA Ballot	D2.1	SA Ballot	Dec '22
60802 (DA)	TSN Profile for Industrial Automation	TG Ballot	TG Ballot	D1.3	TG ballot	Dec '22
802.1CBdb	FRER (CBcv) extensions	RevCom	Approved - Dec 8	D2.1	Publication	Dec '22
802.1DC	QOS provision by network systems	WG Ballot	TG Ballot	D1.2	WG Ballot	Dec '22
802.1Qdd	Resource Allocation Protocol	TG Ballot	TG Ballot	D0.5	TG ballot	Dec '22
802.1DF	TSN Profile for Service Provider Networks	TG ballot	TG ballot	D0.1	TG ballot	Dec '23
802.1DG	TSN Profile for Automotive Networks	TG Ballot	TG Ballot	D1.3	TG ballot	Dec '23
802.1ABdh	LLDPv2	RevCom	Approved - Dec 8	D2.1	Publication	Dec '23
802.1Qdj	TSN Configuration Enhancements	TG ballot	TG ballot	D0.2	TG ballot	Dec '23
802.1AEdk	MAC Privacy protection	TG Ballot	TG ballot	D1.2	WG ballot	Dec '23
802f	EtherType YANG	WG Ballot	WG Ballot	D1.0	WG Ballot	Dec '23
802.1ASdm	Hot standby	TG Ballot	TG Ballot	D0.3	TG Ballot	Dec '24
802.1Q-REV	Bridges and Bridged Networks	SA Ballot	SA Ballot	D1.0	SA Ballot	Dec '24
802.1ASdn	Time Synch YANG	TG Ballot	PAR approved		Editor's draft	Dec '24
802.1DP	TSN Profile for Aerospace	TG Ballot	PAR approved		Editor's draft	Dec '24
802.1BA-rev	AVB Systems	RevCom	Published - Dec 12	D2.0		Dec '24
802.1AS/cor1	Timing and Synchronization corrigendum	RevCom	Approved - Dec 8	D4.0	Publication	Dec '24
802.1Qdq	Tspec	TG Ballot	PAR approved	D0.1	TG Ballot	Dec '25
802.1ASdr	Inclusive Language	TG Ballot	PAR approved		Editor's draft	Dec '25
802.1ASds	half-duplex support	PAR Approval	PAR approved		TG Ballot	Dec '26
802.1Qdt	PFC MACsec	PAR Development	PAR Development		NesCom NesCom	
802.1DU	Cut-through forwarding	PAR Development	PAR Development		NesCom NesCom	
802.1Qdv	Pulsed Queues	PAR Development	PAR Development		PAR Development	
802-rev	O&A	PAR Development	PAR Development		NesCom	

### 802.1Q revisions and amendments

#### 802.1Q-2021

#### incorporating

- IEEE Std 802.1Qcc-2018
- IEEE Std 802.1Qcp-2018
- IEEE Std 802.1Qcy-2019
- IEEE Std 802.1Qcx-2020
- IEEE Std 802.1Qcr-2020

P802.1Qcz

SA ballot

P802.1Qcj

WG ballot

P802.1Qcw

WG ballot

P802.1Qdd

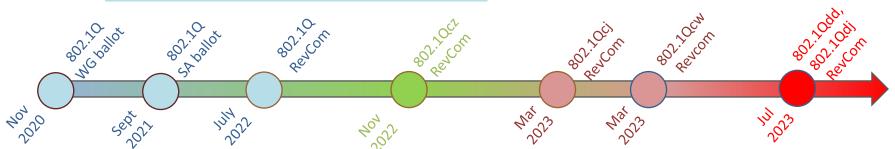
TG ballot

P802.1Qdj

TG ballot



Locked on May 7, 2021 Amendments blocked until approval



## Nendica status report

Excerpt from the Purpose of the approved **ICAID** 

- Document emerging requirements and directions for IEEE 802 networks
- Encouraged topics include enhancements of IEEE 802 communication networks and vertical networks
- Topics concerning higher-layer applications related to new standards development in the IEEE 802.1
   Working Group are also specifically expected and encouraged

#### **ICA Overview**

- IEEE 802 "Network Enhancements for the Next Decade" Industry Connections Activity (ICA)
  - ICA: Industry Connections Activity
  - Authorized by IEEE SA
    - Through "Industry Connections Committee (ICCom)"
    - via an "Industry Connections Activity Initiation Document (ICAID)", parallel to a PAR
    - "Industry Connections activities provide an efficient environment for building consensus and developing many different types of shared results. Such activities may complement, supplement, or be precursors of IEEE Standards projects, but they do not themselves develop IEEE standards."

## Nendica History

- Outgrowth of a recommendation of IEEE 802 5G
   Standing Committee of 2016
  - Seeking "an external view into general 802 access network" to "support many 802 MACs and PHYs"
  - that view evolved during ICAID development

#### ICAID

- March 2017 March 2019: original ICAID IC17-001-01
- March 2019 March 2021: renewed ICAID IC17-001-02
- Sept 2021 Sept 2022: renewed ICAID IC17-001-03

### Nendica "Motivation and Goal"

- The goal of this activity is to document emerging requirements and directions for IEEE 802 networks, identify commonalities, gaps, and trends not currently addressed by IEEE 802 standards and projects, and facilitate building industry consensus towards proposals to initiate new standards development efforts. Encouraged topics include enhancements of IEEE 802 communication networks and vertical networks as well as enhanced cooperative functionality among existing IEEE standards in support of network integration. Topics concerning higher-layer applications related to new standards development in the IEEE 802.1 Working Group are also specifically expected and encouraged. Findings related to existing IEEE 802 standards and projects are forwarded to the responsible working groups for further considerations.
  - https://standards.ieee.org/content/dam/ieeestandards/standards/web/governance/iccom/IC17-001-IE.pdf

## Nendica Overview

- Web site
  - https://1.ieee802.org/802-nendica/
- Voting
  - organized under 802.1 WG
  - no members; anyone attending may vote on all motions
- Document storage –mentor
  - https://mentor.ieee.org/802.1/documents?is\_group=ICne
- Mailing List
  - STDS-802-NEND@LISTSERV.IEEE.ORG
- Organization
  - Work Items to develop Nendica Reports for publication
  - Study Items for less formal activity, or for proposing a Work Item
  - Vetting activities

## **Published Nendica Reports**

- IEEE 802 Nendica Report: The Lossless Network for Data Centers (ISBN 978-1-5044-5102-4)
  - Editor: Paul Congdon
  - Published 2018-08-17
- IEEE 802 Nendica Report: Flexible Factory IoT Use Cases and Communication Requirements for Wired and Wireless Bridged Networks (ISBN 978-1-5044-6229-7)
  - Editor: Nader Zein
  - Published 2020-04-17
- *IEEE 802 Nendica Report: Intelligent Lossless Data Center Networks* (ISBN 978-1-5044-7741-3)
  - Editor: Liang Guo and Paul Congdon
  - Published 2021-06-22

## Nendica Meetings

- Have been meeting Thursdays (09:00-11:00 ET)
- Authorized to add ad hocs if necessary

Date	Attendance
2021-11-18	19
2021-12-02	17
2021-12-09	19
2021-12-16	18
2021-12-23	11
2022-01-06*	8

Date	Attendance
2022-01-20	30
2022-01-27	19
2022-02-03	21
2022-02-10	22
2022-02-17	15
2022-02-24	15

<sup>\*16:00</sup> ET

## Nendica Activity

- Study Item: "Evolved Link Layer Architecture [ELLA]"
  - https://1.ieee802.org/nendica-ella/
  - Initiated 22 July 2021
- Study Item: "Cut-Through Forwarding in Bridges and Bridged Networks"
  - <a href="https://1.ieee802.org/nendica-ctf/">https://1.ieee802.org/nendica-ctf/</a>
  - Initiated March 2021
- Vetting Topics
  - ICAID renewal proposal says "Topics concerning higher-layer applications related to new standards development in the IEEE 802.1 Working Group are also specifically expected and encouraged."
  - on July 20, 2021, the IEEE 802.1 WG Chair notified the 802.1 WG Opening Plenary Meeting of
    - "Migration towards vetting all new work in Nendica"
    - "Strong proposals can be directed to the TG/WG to initiate a PAR; Proposals needing more consensus can be further developed."
  - Completed topics:
    - PFC headroom (led to PAR P802.1Qdt for March consideration)
    - Pulsed Queuing: vetted and transitioned to TSN
  - Recent topics reported below.

#### **ELLA**

- Support IEEE 802 activities toward the revision of IEEE Std 802
- Decided to pursue two PAR directions:

#### 1. Maintenance Revision

- Draft ELLA Report finalized 2022-01-27
- Report and Proposed PAR content passed to Technical Plenary & Maintenance TG
- PAR forwarded to 802 EC & NesCom
- Anticipating project authorization in March (Maintenance TG)

#### 2. Comprehensive amendment(s)

- Expect to extend ELLA Report by May 2022
- Recommend that Maintenance TG brings a motion at 802.1 Closing Plenary (March 2022):
  - 802.1 authorizes pre-circulation to the July IEEE 802 Plenary Session of one or more PARs/CSDs to amend IEEE Std 802, as reviewed in the Maintenance Task Group, based a Nendica report on the topic and considering information from the 802 Technical Plenary.

### **CTF**

- Study Item: "Cut-Through Forwarding in Bridges and Bridged Networks"
- Tentative goals
  - Develop IEEE 802 Plenary tutorial on Cut-Through Forwarding (CTF)
  - Identify and analyze relevant technical elements in IEEE Std 802.3
  - Discuss administrative and technical aspects of potential lower layer modelling across
     IEEE 802.3 and IEEE 802.1 with support for CTF
  - Discuss contributions with input for PAR&CSD of a potential IEEE 802.1 project for standardizing CTF (standalone standard):
    - With support for *IEEE 802.3 compatible real implementations*
    - Incorporate lower layer model with support for CTF, if such a model becomes available during such a project.
- Consensus-building report (September 2021)
  - Nendica consensus is that further discussion should be brought to the 802.1 WG or a Task Group.
- Led to PAR P802.1DU for March consideration
- Study Item remains on weekly agenda, 0 minutes allocated
- Has been following up to make video of July tutorial widely available
  - https://1.ieee802.org/july-2021-plenary-session-electronic/

## Recent Vetting Topics

- Low Latency Ethernet
  - 1-21-0072-00 (Huajie Bao, 2021-11-17)
- Open, Softwarized, Data-Driven 802 Networks
  - 1-21-0078-02 (Francesco Restuccia, 2021-12-21)
  - 1-21-0078-03 (Francesco Restuccia, 2022-01-06)
  - 1-21-0078-04 (Francesco Restuccia, 2022-02-10)
- Source Flow Control
  - See following slide

## **Vetting Topic: Source Flow Control**

#### Contributions

- 1-21-0055-00 (JK Lee, 2021-09-15)
- 1-21-0061-00 (Lily Lv, 2021-10-12)
- 1-21-0067-00 (Lily Lv, 2021-11-04)
- 1-21-0068-01 (Paul Congdon, 2021-11-11)
- 1-21-0077-00 (Lily Lv, 2021-12-13)
- 1-21-0079-00 (Paul Congdon, 2021-12-22)
- 1-22-0001-00 (Paul Congdon, 2022-01-19)
- 1-22-0001-01 (Paul Congdon, 2022-01-27)
- 1-22-0005-00 (Paul Bottorff, 2022-02-18)

#### Goals/Objectives

- Remotely invoke Flow Control at the Source (Server Attachment) in data center
- Proposed amendment to 802.1Q
- Leverage mechanisms from Congestion Isolation
- Introduced to TSN Jan 2022
  - https://ieee802.org/1/files/public/docs2022/new-congdon-SFC-overview-0122-v01.pdf
- Nendica consensus is that further discussion of this topic should proceed to the 802.1 TSN Task Group for PAR/CSD development.

# 802.1 plenary session electronic meeting schedule

														Daylight saving in the USA									
								UTO							EDT	Monday		Tuesday	PDT	CET	JST		
							Sta									Mai	r 14	Mar 15	Start	start	start		
	Standard time											13:00	09:00				06:00	14:00	22:00				
EST	EST	Monday	Tues	sday	Wedn	esday	Thur	Thursday		day	PST	CET	JST	13:30	00.00		TSN		00:00	44.20	00.00		
Start	End	Mar 7	Ma	r 8	Ma	r 9	Mai	r 10	Mar 11		Start	start	start	13.30	09:30	TSN		Closing	06:30	14.30	22.30		
09:00	09:30										06:00	15:00	23:00	14:00	10:00		60802	plenary	07:00	15:00	23:00		
09:30	10:00	Opening	TSN		TSN	TSN	TSN	Nendica	TSN	TSN	06:30	15:30	23:30	14:30	10:30			meeting	07:30	15:30	23:30		
	10:30		P802.1DG		15N	60802	ISN	Nendica	ISN	60802	07:00	16:00	00:00	15:00	11:00		802.1 /		08:00	16:00	00:00		
10:30	11:00				1						07:30	16:30	00:30	15:30	11:30		802.15 Joint		08:30	16:30	00:30		
11:00	11:30										08:00	17:00	01:00	16:00	12:00				09:00	17:00	01:00		
11:30	12:00			Coounity	TSN			Caarreiter		Caarmitar	08:30	17:30	01:30	16:30	12:30	TSN			09:30	17:30	01:30		
12:00	12:30	TSN	TSN	Security			TSN	Security	TSN	Security	09:00	18:00	02:00	17:00	13:00	ISN			10:00	18:00	02:00		
12:30	13:00	60802	60802		P802.1DP /		60802		ISN		09:30	18:30	02:30	17:30	13:30				10:30	18:30	02:30		
13:00	13:30				AS6675		1				10:00	19:00	03:00	18:00	14:00				11:00	19:00	03:00		
13:30	14:00	802.1									10:30	19:30	03:30	18:30	14:30				11:30	19:30	03:30		
14:00	14:30	orientation									11:00	20:00	04:00	19:00	15:00	TSN	Mainte-		12:00	20:00	04:00		
14:30	15:00		Mainte-		TON		TSN	VANCatara	Mainte-		11:30	20:30	04:30	19:30	15:30	ISN	nance		12:30	20:30	04:30		
	15:30	TSN	nance		TSN		P802.1DG	YANGsters	nance		12:00	21:00	05:00	20:00	16:00				13:00				
	16:00	ISN									12:30	21:30	05:30	20:30									
	16:30										13:00	22:00	06:00	21:00									

# 802.1 Leadership meetings

- Every Thursday 11:00 ET
  - Since February 2020 to manage current shift to electronic sessions
- Editors' meetings
  - 11:00 ET Thursday after each session (Mar 17<sup>th</sup>)
  - Sharing of best practices by editors
- Additional leadership Mar 15<sup>th</sup> 12:30 ET
  - Prepare PAR responses, EC consent agenda for Mar 18<sup>th</sup> EC meeting

# **Logistics Orientation**

• Mar 7<sup>th</sup> 13:30 ET

- Agenda
  - WG structure
  - Participants
  - Documents
  - Schedules & Attendance
  - Agendas & Minutes
  - Voting



**Practice Voting** 

# Subgroup agendas

- Maintenance TG
- Security TG
- TSN TG
- <u>Nendica</u> Network Enhancements for the Next Decade Industry Connections Activity
- YANGsters

# Maintenance TG meeting agenda

#### Tuesday –

Review of motions - Paul Congdon

- 802 PARs Under Consideration Paul Congdon
  - 802.3dg –<u>draft response</u>
  - 802.3cz draft response
  - IEEE P802.3dh draft response
  - 802.15.6ma draft response
- P802.1ASdr Editor's update Silvana Rodrigues
- SC6 Status Karen Randall
- Liaisons Karen Randall
  - IEEE 1588: <u>Liaison Statement on inclusive terminology</u>
  - IEEE 802.3: Liaison from IEEE 802.3 re: status of IEEE P802.3cx Task Force and Draft IEEE P802.3cx D2.2
  - ITU-T SG15: LS351: OTNT Standardization Work Plan Issue 30
  - ITU-T Joint Coordination Activity (JCA): LS on Invitation to update the information in the IMT2020 roadmap
  - SC6 ballot comment responses
    - FDIS ballot comments on IEEE 802.1X-2020 (SC6 N17643)
- P802.1Q-Rev/D1.0 Comment Resolution Mick Seaman
- Any Other Business

#### Friday

- P802-Rev PAR Comment Response Roger Marks
- P802.1Q-Rev/D1.0 Comment Resolution Mick Seaman
- Existing Maintenance Items
  - 0242: IEEE Std 802.1Qcp-2018: Collected issues on data consistency and others
  - 0248: Managed objects for ECP in 802.1Q-2018
  - 0311: 802.1Q: Resolution of stream filters with wildcard stream handle specification
  - 0314: network media and PHY
  - 0324: Use of Tick in List Execute state machine (802.1Q) Max Turner
  - 0325: AVB latency calculation
  - 0330: Incorrect definition of BucketEmptyTime in IEEE Std 802.1Qcr-2020
  - 0333: Wildcard support for tsnCpeNullDownDestMac
- Any Other Business

Online Detailed Agenda

## Agenda – Security

- 1. Meeting introduction
- 2. <u>Approval of agenda</u>
- 3. <u>P802.1AEdk MACsec Privacy Protection</u>
  - Draft development
  - Tuesday 8 Mar 11:00-13:00, Thursday 10 Mar 11:00-13:00, Friday 11 Mar 11:00-13:00 [Eastern Time]
- 4. IEEE Std 802.1AE MAC Security Maintenance items
  - Identification of items for maintenance
- 5. <u>Liaisons</u>
  - As and if required, potential future liaisons
- 6. Any Other Business (A.O.B)
- 7. Future meetings/teleconferences

# IEEE 802.1 TSN TG Agenda

IEEE 802 Plenary, March 7-15, 2022

													Daylight Saving in North America							
												UTC Start	EDT Start	Monday Mar 14		Tuesday Mar 15		CET Start	JST Start	
Standard Time												13:00	9:00		TSN -		6:00	14:00	22:00	
EST Start	EST End	Monday Mar 7	Tuesday Mar 8	Wednesday Mar 9		Thursday Mar 10	Frid Ma	day r 11	PST Start	CET Start		13:30	9:30	<b>TSN</b> P802.1DF,	60802 qPTP, &		6:30	14:30	22:30	
9:00	9:30		TSN - P802.1DG		TSN -		TSN	TSN -	6:00	15:00	23:00	14:00	10:00	CQF enh. boundary. comment resolution	boundary. comment	Closing plenary	7:00	15:00	23:00	
9:30	10:00	Opening	individual AVB	<b>TSN</b> P802.1DC, P802.1Qdq	IEC/IEEE	<b>TSN</b> P802.1ASdm	P802.1Qdt PAR & CSD, P802.1Qdq	Data sheet,	6:30	15:30	23:30	14:30	10:30				7:30	15:30	12:30	
10:00	10:30	plenary	profile, TG ballot comment						7:00	16:00	12:00	15:00	11:00			8:00	16:00	0:00		
10:30	11:00		resolution						7:30	16:30	12:30	15:30	11:30	jo	int		8:30	16:30	0:30	
11:00	11:30	recess	recess	rec	ess	recess re		ess	8:00 17:00 1:00		16:00	12:00		SN		9:00	17:00	1:00		
11:30	12:00	TSN - IEC/IEEE	TON JEC/JEEF			TON JEG/JEEF			8:30	17:30	1:30	16:30	12:30	SFC, P802.1ASdn,			9:30	17:30	1:30	
12:00	12:30		TSN - IEC/IEEE 60802	TSN - P802.1DP Contributions		TSN - IEC/IEEE 60802	TSN P802.1DC PAR & CSD,		9:00	18:00	2:00	17:00	13:00	P802.1ASds, P802.1Qdd.			10:00	18:00	2:00	
12:30	13:00	Status updates, Use of 802.1AR	Time Sync Accuracy over 100 Hops	Contri	outions	Time sync simulation results	outgoing liaisons		9:30	18:30	2:30	17:30	13:30				10:30	18:30	2:30	
13:00	13:30		over 100 Hops			results			10:00	19:00	3:00	18:00	14:00	recess			11:00	19:00	3:00	
13:30	14:00	802.1		rec	ess	recess			10:30 19:30 3:30		18:30	14:30	O TSN - tentative slot			11:30	19:30	3:30		
14:00	14:30	orientation							11:00	20:00	4:00	19:00	15:00	Policing, overflow, P802.1ASdm,			12:00	20:00	4:00	
14:30	15:00			<b>TSN</b> P802.1Qdj		TSN - P802.1DG TG ballot comment			11:30	20:30	4:30	19:30	15:30				12:30	20:30	4:30	
	15:30	incoming comm. & liaisons,				resolution				21:00							13:00	21:00	5:00	
	16:00	motions,								21:30		20:30								
16:00	16:30	P802.1ASdm							13:00	22:00	6:00	21:00								

- TSN TG agenda details are available at: <a href="https://1.ieee802.org/2022-03-plenary-tsn-agenda/">https://1.ieee802.org/2022-03-plenary-tsn-agenda/</a> (see also the <a href="mailto:802.1">802.1</a> WG schedule)
- Note that the TSN TG agenda may change, e.g., depending on progress

# Nendica Meeting - March 10

- Nendica Status Report, March 2022
  - https://mentor.ieee.org/802.1/dcn/22/1-22-0004-03.pdf
- Agenda
  - https://1.ieee802.org/802-nendica-agenda-2022-03-10/
- ELLA Study Item
  - Update Draft ELLA Report on Amendment of IEEE Std 802
  - Contributions as received
  - Finalize motion per draft:
    - 802.1 authorizes pre-circulation to the July IEEE 802 Plenary Session of one or more PARs/CSDs to amend IEEE Std 802, as reviewed in the Maintenance Task Group, based on a Nendica report on the topic and considering information from the 802 Technical Plenary.
- Vetting topics
  - Contributions as received

# YANGsters Status March 2022 802.1 Plenary Session

- YANGsters site
  - https://1.ieee802.org/yangsters/
- YANGsters agendas
  - Introduction to YANGsters
    - https://1.ieee802.org/yangsters/
    - https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/
  - Status
    - QRev update
    - CBcv/CBdb update
    - ABcu update
    - IEEE 1588 YANG update
  - Liaisons
  - Review of discussions since last plenary
    - Revision and Git Process
  - Review of YANG issues from recent ballots
  - Next Calls
  - Any Other Business

# Any other business?