IEEE 802.1 Working Group
November 14-18, 2022 Plenary Session
Bangkok, Thailand (Mixed Mode)
Session Minutes

The Working Group (WG) Chair, Glenn Parsons, presided and had requested that subgroup Chairs in remote attendance had on-site individuals acting on their behalf as needed to help conduct proceedings with both local and remote participants.

The Recording Secretary, Jessy Rouyer, wrote and/or edited the minutes in part based on input from subgroup Chairs and their Secretaries.

Note that, throughout this document, minuted/recorded inputs from any attendee can not/shall not be assumed to represent a position of their employer or affiliated organization. Discussion points captured do not necessarily reflect the views of the presenter, discussion leader or minute taker, and do not imply consensus unless that is explicitly minuted. The content of draft standards is determined by the ballot process; other formal decisions are the subject of Working Group motions.

1 Attendance and affiliation

The table in this section reflects the attendance (denoted by the ● symbol) and affiliation of attendees in all 802.1 WG and subgroup meetings held in this session. Also see section 4.

The session columns, in chronological order (left to right), are:

1. TSN, Mon Nov 14, 2022, 08:00-10:00 ICT
2. Opening Plenary, Mon Nov 14, 2022, 10:30-12:30 ICT
3. TSN, Mon Nov 14, 2022, 13:30-18:00 ICT
4. 802.1 TSN - IEC/IEEE 60802 Time Sync Ad Hoc, Mon Nov 14, 2022, 13:30-18:00 ICT
5. Maintenance P802-REVc, Tue Nov 15, 2022, 08:00-9:00 ICT
6. Maintenance, Tue Nov 15, 2022, 09:00-10:00 ICT
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8. 802.1 TSN - IEC/IEEE 60802 Time Sync Ad Hoc, Tue Nov 15, 2022, 10:30-12:30 ICT
9. YANGsters, Tue Nov 15, 2022, 13:30-14:30 ICT
10. TSN, Tue Nov 15, 2022, 14:30-15:30 ICT
11. TSN - IEC/IEEE 60802, Tue Nov 15, 2022, 16:00-18:00 ICT
12. 802.1/802.15 Joint, Tue Nov 15, 2022, 18:30-19:30 ICT
13. Nendica, Tue Nov 15, 2022, 19:30-21:30 ICT
14. TSN - P802.1DP/AS6675, Wed Nov 16, 2022, 08:00-10:00 ICT
15. TSN, Wed Nov 16, 2022, 10:30-12:30 ICT
16. TSN - IEC/IEEE 60802, Wed Nov 16, 2022, 10:30-12:30 ICT
17. TSN, Wed Nov 16, 2022, 13:30-18:00 ICT
18. TSN - IEC/IEEE 60802, Wed Nov 16, 2022, 13:30-18:00 ICT
19. Maintenance, Thu Nov 17, 2022, 08:00-10:00 ICT
20. Nendica, Thu Nov 17, 2022, 08:00-10:00 ICT
21. TSN - IEC/IEEE 60802, Thu Nov 17, 2022, 10:30-12:30 ICT
22. TSN, Thu Nov 17, 2022, 10:30-12:30 ICT
23. Closing Plenary, Thu Nov 17, 2022, 13:30-18:00 ICT
24. TSN - IEC/IEEE 60802, Fri Nov 18, 2022, 08:00-12:30 ICT
25. TSN - IEC/IEEE 60802, Fri Nov 18, 2022, 13:30-18:00 ICT

Last name	First name	Affiliation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Akizuki	Katsuyuki	NEC Communication Systems, Ltd.	●	●	●			●	●		●	●	●			●	●				●	●		●	●		
Alagarsamy	Srividhya	Broadcom*		●																							
Alexandris	Konstantinos	Huawei Technologies Duesseldorf GmbH		●	●						●	●	●		●			●	●	●			●	●	●		●
Arunarthi	Venkat	Broadcom Corporation								●																	
Assmann	Ralf	Marvell Semiconductor, Inc.	●	●	●	●		●	●	●	●	●	●		●		●	●	●	●		●	●	●	●	●	●
Bao	Huajie	Huawei Technologies Co., Ltd	●	●	●	●		●	●		●	●	●		●	●	●	●	●		●		●	●	●	●	●
Belliardi	Rudy	Schneider Electric	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

IEEE 802.1 November 14-18, 2022 Plenary Session (Bangkok, Thailand (Mixed Mode))

Last name	First name	Affiliation	TSN, Mon Nov 14, 08:00-10:00	Opening Plenary, Mon Nov 14, 10:30-12:30	TSN, Mon Nov 14, 13:30-18:00	60802 Time Sync Ad Hoc, Mon Nov 14, 13:30-18:00	Maintenance P802-REVc, Tue Nov 15, 08:00-9:00	Maintenance, Tue Nov 15, 09:00-10:00	TSN - P802.1DG, Tue Nov 15, 10:30-12:30	60802 Time Sync Ad Hoc, Tue Nov 15, 10:30-12:30	YANGsters, Tue Nov 15, 13:30-14:30	TSN, Tue Nov 15, 14:30-15:30	60802, Tue Nov 15, 16:00-18:00	802.1/802.15 Joint, Tue Nov 15, 18:30-19:30	Nendica, Tue Nov 15, 19:30-21:30	TSN - P802.1DP/AS6675, Wed Nov 16, 08:00-10:00	TSN, Wed Nov 16, 10:30-12:30	60802, Wed Nov 16, 10:30-12:30	TSN, Wed Nov 16, 13:30-18:00	60802, Wed Nov 16, 13:30-18:00	Maintenance, Thu Nov 17, 08:00-10:00	Nendica, Thu Nov 17, 08:00-10:00	60802, Thu Nov 17, 10:30-12:30	TSN, Thu Nov 17, 10:30-12:30	Closing Plenary, Thu Nov 17, 13:30-18:00	60802, Fri Nov 18, 08:00-12:30	60802, Fri Nov 18, 13:30-18:00
Beruto	Piergiorgio	Canova Tech S.r.l.																							●		
Bierschenk	Jens	Robert Bosch GmbH	●	●	●			●		●	●		●	●	●			●							●	●	●
Blendin	Jeremias	Intel Corporation	●	●	●		●			●	●	●	●	●	●		●		●	●					●	●	
Bluschke	Andreas	Self*		●																							
Boiger	Christian	Infineon Technologies	●	●	●		●	●	●	●	●	●	●		●	●	●		●		●			●	●	●	●
Bottorff	Paul	Hewlett-Packard Development Company, L.P.	●	●	●		●	●		●		●	●		●	●	●		●			●		●	●		
Brillhart	Theodore	Fluke Corporation																							●		
Canchi	Radhakrishna	Kyocera International Inc	●	●		●		●	●		●	●	●	●	●		●		●	●		●		●	●		
Chang	Chen-Yi	MediaTek			●	●		●																			
Chen	Feng	Siemens AG	●	●	●			●			●	●			●		●		●			●		●	●	●	●
Chng	Shi Baw	BAWMAN LLC																								●	●
Choudhury	Abhijit	Broadcom Corporation						●			●			●			●										
Coelho	Rodrigo	Siemens AG	●	●	●				●			●			●	●	●	●		●	●	●				●	●
Congdon	Paul	Congdon Consulting, LLC; Huawei Technologies Co., Ltd; Tallac Networks, Inc	●	●	●		●	●	●		●	●	●	●	●		●		●		●				●	●	
Cummings	Rodney	National Instruments Corporation	●	●	●			●			●	●			●	●			●			●	●	●	●		
Demassieux	Valérie	Rockwell Automation & IEC SC65C Secretary																									●
Dorr	Josef	Siemens AG	●	●	●		●	●	●	●	●	●		●			●	●	●		●			●	●	●	●
Du	Zongpeng	China Mobile Limited	●	●	●			●	●	●			●	●	●						●						
Engelmann	Anna	Volkswagen AG	●	●	●		●	●		●	●	●		●	●	●						●	●	●	●		
Fang	David	Huawei*																			●						
Farkas	Janos	Ericsson AB	●	●	●		●		●		●	●	●	●	●	●		●			●	●	●	●	●	●	●
Fedyk	Donald	LabN Consulting, L.L.C.	●	●	●	●	●	●	●		●	●			●	●	●			●				●			
Fellhauer	Felix	Robert Bosch GmbH	●					●																			
Finn	Norman	Huawei Technologies Co., Ltd	●	●	●		●	●	●		●	●	●	●	●	●		●		●	●	●		●	●		
Garner	Geoffrey	Huawei Technologies Co., Ltd	●	●	●	●		●	●	●		●			●	●		●	●	●		●	●	●	●	●	●
Gilb	James	GA-ASI, USD, Gilb Consulting, Inc.															●										
Gopal	Amrit	Ford Motor Company		●	●		●	●		●	●	●			●	●								●			
Goto	Hideki	Toyota Motor Corporation						●																		●	●
Gubow	Martin	Keysight Technologies	●		●																				●		
Gunther	Craig	LabN Consulting, L.L.C.	●	●			●	●	●				●			●			●			●		●	●	●	
Gutierrez	Marina	L-Acoustics; RealTime-at-Work (RTaW)		●	●						●	●			●	●		●		●					●		
Hamilton	Mark	Ruckus Wireless					●	●																			
Han	Ruibo	China Mobile Communications Corporation (CMCC)	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hantel	Mark	Rockwell Automation	●	●	●	●			●	●	●	●		●	●		●		●		●	●		●	●	●	●
He	Xiang	Huawei Technologies Co., Ltd												●													
Hernandez	Marco	National Institute of Information and Communications Technology (NICT)					●						●				●						●				

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Hogenmüller	Thomas	BOSCH*		•	•			•																			
Holness	Marc	Ciena Corporation																			•						
Hoshino	Masayuki	Continental Automotive	•		•																	•		•		•	
Hu	Mark Zhuomin	Aptiv		•				•																			
Ito	Yoshihiro	Nagoya Institute of Technology	•	•	•		•	•		•	•	•	•		•	•				•			•	•			
Jabbar	Abdul	General Electric Company (GE)	•	•	•										•		•										
Jenkins	Michael	NSA-CCSS	•	•	•		•																				
Kabra	Lokesh	Synopsys, Inc.	•					•	•	•	•	•	•		•		•									•	•
Karl	Michael	Marvell Semiconductor, Inc.	•	•	•		•	•	•	•	•	•	•	•	•	•		•		•		•		•	•	•	•
Kehrer	Stephan	Hirschmann Automation and Control, Inc.	•	•	•		•	•	•	•	•	•	•	•	•	•	•		•					•	•	•	•
Kiessling	Marcel	Beckhoff Automation	•	•	•		•	•	•	•	•	•	•		•	•		•		•		•		•	•	•	•
Kuo	George Chih-Chun	Mediatek*																			•	•					
Lai	Gavin	Moxa Inc.	•	•	•	•	•	•	•	•	•		•				•	•				•	•	•	•	•	•
Lennartsson	Kent	Kvaser AB																									•
Levy	Joseph	InterDigital, Inc.				•																					
Li	Yizhou	Huawei Technologies Co., Ltd	•		•		•		•	•	•	•	•	•	•		•			•		•		•	•	•	•
Liu	Peng	Huawei Technologies Co., Ltd	•																								
Lopes	Joao	Qualcomm Incorporated	•	•		•		•	•		•	•	•		•		•	•		•		•	•	•	•	•	•
Lv	Lily	Huawei Technologies Co., Ltd	•	•	•		•	•		•	•	•		•	•	•		•			•		•	•	•	•	•
Mangin	Christophe	Mitsubishi Electric Corporation	•	•	•	•		•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	
Mansfield	Scott	Telefon AB LM Ericsson								•															•	•	
Marks	Roger	EthAirNet Associates; Huawei		•			•						•				•			•							
McCall	David	Intel	•	•	•	•			•	•	•	•			•		•			•		•		•	•	•	
McMillan	Larry	Western Digital Corporation		•		•	•	•		•	•	•	•				•		•							•	•
Mittelberger	Martin	Siemens AG	•	•	•			•	•	•	•			•	•	•			•		•		•	•	•	
Nakano	Hiroki	CAHI Corporation; Kyoto University; National Institute of Information and Communications Technology (NICT)	•	•	•		•	•	•		•	•	•		•	•	•		•					•	•	•	
Nikolich	Paul	self employed/various				•																					
Nomura	Takumi	Honda R&D	•	•	•						•	•		•	•		•		•				•	•			
Obradovic	Dragan	Siemens AG	•	•		•			•			•			•		•		•					•		•	
Opsasnick	Eugene	Broadcom, Inc.											•														
Orlando	Christian	IEEE STAFF	•	•	•		•	•	•			•			•		•			•		•		•	•	•	•
Parkholm	Ulf	Ericsson AB							•		•	•		•												•	•
Parsons	Glenn	Ericsson AB		•		•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Paul	Michael	Analog Devices																						•			
Proell	Dieter	Siemens AG	•	•	•	•		•		•	•	•	•	•	•			•		•		•		•	•	•	•
Randall	Karen	INDEPENDENT; Tallac Networks, Inc	•	•	•		•	•	•		•	•		•		•			•	•				•			
Rasal	Abuzafor	Aptiv		•	•			•					•														
Regev	Alon	Keysight Technologies	•																					•			

Column legend (left to right):
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Riegel	Maximilian	Nokia																			•					•	
Rodine	Craig	Sandia*																							•	•	
Rodrigues	Silvana	Huawei Technologies Co., Ltd	•	•	•	•	•	•			•	•			•	•		•	•	•			•	•	•	•	•
Rouyer	Jessy	Nokia		•	•		•	•	•		•	•	•	•	•	•		•			•						•
Ryoo	Jeong	Electronics and Telecommunications Research Institute (ETRI)																•									
Sato	Atsushi	Yokogawa Electric Corporation	•	•	•			•		•	•	•			•	•	•	•	•			•	•	•	•	•	
Seewald	Maik	Cisco Systems, Inc.	•	•	•			•		•	•	•	•	•			•	•			•		•			•	
SEVER	Fatih	ASELSAN				•											•		•							•	•
Shah	Anup	Mentor Graphics	•																								
Shuang	Chen	Huawei*																•									
Sivakolundu	Ramesh	Cisco Systems, Inc.			•		•	•		•	•	•	•	•	•	•		•			•		•	•			
Song	Jiajia	Mitsubishi Electric Corporation	•		•													•						•	•	•	
Specht	Johannes	Analog Devices, Inc.; Mitsubishi Electric Corporation; Phoenix Contact GmbH & Co. KG; PROFIBUS Nutzerorganisation e.V.; Self; Self Employed; Siemens AG; Texas Instruments, Inc.	•	•	•			•		•	•	•	•	•		•			•			•	•				
Stanica	Marius	ABB AB		•	•	•			•		•	•		•			•	•	•			•	•	•			•
Steindl	Guenter	Siemens AG	•	•	•	•		•	•	•	•	•		•			•	•	•			•		•	•	•	
Stewart	Heath	Analog Devices Inc.																						•			
Suraci	Frank	U.S. Department of Homeland Security		•																							
Thakur	Anubhav	NIO		•																							
traore	karim	Microchip/Microsemi Corporation	•	•	•					•	•		•	•	•	•	•	•	•			•	•	•			
Tse	Richard	Microchip Technology, Inc.	•			•							•				•	•									
Turner	Max	Ethernovia	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•		•	•	•	•	•	
Varga	Balazs	Ericsson AB		•	•				•	•	•	•	•	•		•	•	•	•			•	•	•	•	•	
Wang	Jing	China Mobile Limited	•	•	•			•	•		•	•		•	•	•	•	•									•
Wang	Tongtong	Huawei Technologies Co., Ltd	•	•	•					•	•	•	•	•			•						•	•	•	•	
Weber	Karl	Beckhoff Automation	•		•	•	•	•		•		•	•		•		•		•	•		•	•			
Wendt	Matthias	signify												•													
Winkel	Ludwig	PNO e.V.	•	•	•			•						•			•				•			•	•	•	
Withey	James	Fluke																							•		
Woods	Jordon	Analog Devices Inc.				•	•	•	•		•	•		•	•	•	•	•	•	•		•	•				
Xu	Dayin	Rockwell Automation											•									•					
Yamaura	Takahiro	TOSHIBA Corporation	•	•	•		•	•		•	•		•	•		•		•							•	•	•
YU	Yi	Rockwell Automation	•	•	•	•	•		•	•	•	•	•	•		•	•	•	•	•		•	•	•	•	•	
Zein	Nader	NEC Europe (NLE)	•	•	•			•		•	•	•	•		•		•						•				
Zhuang	Guanhua	Huawei Technologies Co., Ltd																•									
Zimmerman	George	CME Consulting/APL Group, Cisco, CommScope, Marvell, OnSemi, SenTekSe LLC																							•		

(*) Last name, first name and affiliation possibly incorrect as derived from Webex access information or otherwise, and not provided in IMAT.

2 802.1 Officers and Leadership

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

3 Opening Plenary Meeting

See section 1 for attendance and affiliation information.

Call to order Nov 14, 2022 at 10:32 ICT by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented "Opening Plenary November 2022" finalized as http://www.ieee802.org/1/files/public/minutes/2022-11-opening-plenary-slides.pdf.

During this presentation, the Chair:
- Introduced the agendas on slide 2 that were tacitly approved.
- Provided electronic meeting guidelines (slide 3) and mixed mode guidelines (slides 4-6).
- Presented slide 7 thereby providing the following information:
  - o 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;
  - o 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.
- Showed IEEE SA Copyright Policy slides 8 and 9.
- Showed slides 10 through 14 (reproducing slides 0 through 4 of the IEEE SA PatCom Patent Slides for Standards Development Meetings, separately available at http://standards.ieee.org/about/sasb/patcom/materials.html).
  The Chair:
  - o Presented information on these slides including:
    - ▪ Instructions for the WG Chair;
    - ▪ Participants have a duty to inform the IEEE;
    - ▪ Ways to inform IEEE;

- Other guidelines for IEEE Working Group meetings; and
- Patent-related information.
  - Advised 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.
  - Made the "Call for Potentially Essential Patents", i.e. 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.
    - There were no responses to the call.
- Presented slides 15 through 17 reproducing the IEEE SA slides 1 through 3 approved by SASB in June 2019 regarding IEEE Codes of Ethics and Conduct, participation in the "individual process", and dominance, thereby conveying that:
  - Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct;
  - Participants in the IEEE-SA "individual process" shall act independently of others, including employers; and
  - IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints.
- Made subgroup announcements (slide 18) thereby reminding subgroup Chairs of their obligation to:
  - Remind participant at the start of the first subgroup meeting that the meeting is subject to the policies in "MEETING INTRODUCTION" presentations made available beforehand (as announced in the opening plenary meeting) and, in the case of a Task Group (TG), to make the "Call for Potentially Essential Patents" and minute any responses to it;
  - After any recess, announce that the meeting remains subject to the policies as read and displayed in the opening plenary meeting; and
  - At meeting start and 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.
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 19).
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 20).
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 21).
- Shared information about on-site security measures due to collocated Asia-Pacific Economic Cooperation 2022 (slide 22) and about food logistics (slide 23).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website, including a new requirement for meeting contributions to be uploaded 24 hours before presentation (slide 24).
- Introduced 802.1 officers and leadership (slide 25).
- Discussed 802.1 WG Process (slide 26) including the "New work" process as previously introduced and leveraging Nendica towards vetting all new 802.1 work.

- Provided an update on current joint development procedures (slide 27).
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 28), electronic ballots (ePolls) conducted between sessions (slide 29), requesting and retaining voting membership (slide 30), and responding to WG ballot series (including ePolls) as well as regarding the consequences of not responding to WG ballot series (including ePolls) (slide 31).
- Reviewed the list of 802.1 voters (slide 32), including information about individuals who may gain (slides 33 and 34), will lose (slide 35), may lose (slide 36) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 37).
- Introduced information about the Jan 2023 interim session (slide 38).
  - The Executive Summary provided a summary of the IEEE 802 wireless group offer for that session.
- Introduced information about the May 2023 interim session (slide 39).
  - The Executive Summary and Marius Stanica provided a summary of the ABB offer for that session.
- Had the Executive Secretary review the schedule for future interim sessions (slide 40):
  - January 15-20, 2023
    - Baltimore, MD, USA hosted by the IEEE 802 Wireless group
  - May 15-19, 2023
    - Helsinki, Finland hosted by ABB (with provisions to support mixed mode)
  - September 2023
    - Option for in-person session is currently evaluated. More information will be provided when it is available.
  - 2024
    - Hosts are welcome
- Had the Executive Secretary review the schedule for future plenary sessions (slide 41):
  - November 13-18, 2022 – Bangkok, Thailand
    - Marriott Marquis Queen's Park
  - March 12-17, 2023 – Atlanta, GA, USA
    - Hilton Atlanta
  - July 9-14, 2023 – Berlin, Germany
    - Estrel Berlin
  - November 12-17, 2023 – Honolulu, HI, USA
    - Hawaiian Village
  - March 10-15, 2024 – Denver, CO, USA
    - Hyatt Regency Denver at Colorado Convention Center
  - July 14-19, 2024 – Montreal, QC, Canada
    - Sheraton Le Centre Montreal
  - November 10-15, 2024 – Vancouver, BC, Canada
    - Hyatt Regency
  - March 9-14, 2025 – Atlanta, GA, USA
    - Hilton Atlanta
- Conducted the following straw polls regarding future interim sessions (slide 42):
  - 1. If the 2023 January Interim Session is held at the Hilton in Baltimore, Maryland, as a mixed-mode session, will you attend:
    - Attend In-person   21
    - Attend Virtually (remotely)   25
    - Will not attend plenary   2
    - No response   12

- 2. If the 2023 May Interim Session is held at the Radisson Blu in Helsinki, Finland as a mixed-mode session, will you attend:
  - Attend In-person 30
  - Attend Virtually (remotely) 15
  - Will not attend interim 3
  - No response 12
- Conducted the following straw polls regarding this or future plenary sessions (slide 43):
  - 1. If you will attend one of the three meetings on Friday, Nov 19 2022 (802 EC Closing Plenary, the 802.11 Closing Plenary or the 802.1 " IEC/IEEE 60802" meeting) will you participate (eat/drink) :
    - With breakfast? 25
    - with the AM Break? 25
    - with lunch? 26
    - with the PM Break? 23
  - 2. If the 2023 March Plenary Session is held at the Hilton Atlanta in Georgia, USA as an in-person only session, will you attend?
    - Yes 32
    - No 17
    - Did not respond 13
  - 3. If the 2023 March Plenary Session is held at the Hilton Atlanta in Georgia, USA as a mixed-mode session, will you attend:
    - Attend In-person 25
    - Attend Virtually (remotely) 24
    - Will not attend plenary 0
    - Did not respond 13
- Previewed the straw poll regarding this plenary session to be conducted during the 802.1 closing plenary meeting (slide 44):
  - 1. Would you like to come back to this venue?
    - Yes/No
  - 2. Did you go to the social?
    - Yes/No
  - 3. Did you like the social?
    - Yes/No
- Provided pointers to the LMSC schedule of EC/WG/TAG meetings to be held during this plenary session (slide 45).
- Reported the following items out of the 802 Executive Committee (EC) plenary session #131 (slide 46):
  - March 2024 – Paul Nikolich will not run for IEEE 802 chair
    - The 802 chair also appoints several EC positions
    - Anyone can be nominated.   Interested? Contact Paul.
  - IEEE Technical Activities Board – Committee on Standards
  - Near term and Future meetings ad hoc
    - Near term sunsetted, future meetings divided
  - 802 Rules update (EC-22-236)
    - PAR archiving, student attendance, affiliations
  - Venues (EC-22-203)
    - November 2022 – 390 in-person, 530 remote attendees
    - Future in person venues contracted into 2027, contracting to resume in 2023
  - Treasurer (EC-22-224)
    - 2022 surplus projected at $400k to restore reserves to over $1M
  - Standards Media distribution – March 2023

- Introduced IEEE SA staff supporting IEEE 802 (slide 47):
  - Jodi Haasz – IEEE 802 lead
  - Christian Orlando – IEEE 802.1 program manager
  - Christy Bahn – IEEE 802 senior program manager
  - Ron Hotchkiss – IEEE SA program manager (remote)
  - Mike Kipness – IEEE SA program manager (remote)
- Provided IEEE 802 program status pointers (slide 48).
- Mentioned the following notable items (slide 49):
  - 802.1 3rd in standards downloads with 17k
  - 802.1Q-2022 publication expected Dec 20th
  - 802.1BR-2012
    - 261 downloads in last year
    - Status changes to "inactive reserved" at end of year (implemented in March 2023)
    - Do we actively withdraw?
      - Maintenance PAR for withdrawal – Nov 2022
      - SA Ballot
      - RevCom – Mar 2023
        - Changes status to "inactive withdrawn"
        - Adds watermark "Withdrawn Standard"
    - **Disposition:** No clear direction, a straw poll may help determine a way forward.
- Conducted the following straw poll (slide 50):
  - Do we create a PAR to actively withdraw 802.1BR-2012?
    - Yes   20
    - No   21
    - Did not vote   22
- Provided information about public review (slide 51).
- Pointed out that 802.1 has no PAR up for vote or finalization during this IEEE 802 plenary session (slide 52) unlike other 802 WGs whose corresponding PARs, PAR Modification and CSDs are listed on slide 53.
- Introduced the three tutorials to be held at this plenary session (slide 54).
- Had the Liaison Secretary present liaison resources (slide 55), the set of newly and previously-received incoming liaisons to be handled by specific subgroups as listed on slide 56, as well as the status of outgoing liaisons, either sent since the previous plenary session or to be completed (slide 57).
- Summarized IETF coordination items (slide 58) and had the Maintenance TG Chair summarize item 5.
- Provided information about meetings to be held with other 802 WGs during this plenary session (slide 59, where the "conformance section" is that of IEC/IEEE P60802).
- Discussed promotion of the work of the WG (slide 60).
- Had János Farkas give a few highlights of the 2022 TSN/A Conference (slide 61).
- Noted the IEEE-SA Ethernet & IP – Automotive Technology Day held 9-10 Nov 2022 (slide 62).
- Provided statistics for the TSN webinars held so far (slide 63).
- Discussed 802.1 public visibility messaging (slide 64).
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 65).
- Showed the 802.1 plenary session electronic meeting schedule for this session, which was tacitly approved (slide 66).
- Listed 802.1 leadership and editors' meetings (slide 67).

- Reminded the Working Group of the logistics orientation information available https://1.ieee802.org/orientation/ and of the possibility to practice the web-based voting tool to be used at the 802.1 closing plenary meeting (slide 68).
- Requested that subgroup agendas be presented (slide 69):
    o The Maintenance TG Chair presented the agenda on slide 70.
    o The Security TG is not meeting at this plenary session.
    o The TSN TG Chair, IEC/IEEE 60802 Joint Project Chair, TSN TG Vice-Chair, and Abdul Jabbar as IEEE P802.1DP/SAE AS6675 joint project co-Chair presented the agenda on slide 71
    o The Nendica Chair presented the agenda on slide 72.
    o The YANGsters Vice-Chair presented the agenda on slide 73.
- Called for Any Other Business (slide 74).
    o No further business was discussed in this meeting.

12:46 ICT recess

4   802.1/802.15 Joint Meeting

Between this session and the preceding session, the following 802.1/802.15 joint meetings were held whose minutes are incorporated to these session minutes by reference as follows:
- None

See section 1 for 802.1 attendance and affiliation information and 802.15 session minutes for 802.15 attendance and affiliation information.

Call to order Nov 15, 2022 at 18:30 ICT by Glenn Parsons, IEEE 802.1 Chair, who presided. Jessy Rouyer, IEEE 802.1 Recording Secretary, wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction and other administrative items.
    1.1.   Meeting Introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
    The 802.1 Chair showed slides 1-8 of this presentation implicitly advising that the following, provided beforehand, applies:
    - 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.
    - 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.
    The 802.1 Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the meeting.

1.2. Attendance. The 802.1 Chair asked all participants to record their attendance using either the 802.1 IMAT https://imat.ieee.org/802.1/attendance-log?d=01/19/2022&p=3740500005&t=28800043 or the 802.15 IMAT https://imat.ieee.org/sp7200043/attendance-log?p=3888500005&t=47600043.

1.3. Approval of agenda. The 802.1 and 802.15 Chair presented the agenda at https://1.ieee802.org/2022-11-plenary-joint-1-15-agenda/.

Disposition: The agenda was reviewed, and agreed (informally, none dissenting) as reflected by these minutes.

2. 802.15.4.

2.1. Architecture overview update. Phil Beecher presented "802.15.4 Architecture Overview" https://mentor.ieee.org/802.15/dcn/22/15-22-0491-02-0mag-802-15-4-architecture-overview.pptx.

Discussion:

- 802.15.4 and 802.15.9 relationship w.r.t. support of EtherTypes and 802.1X: 802.15.9 makes use of MSAPs; 802.15.4.e added TLV type options allowing 802.15.9 to operate on the frame.
- Relationship with standard 802. Next step is describing interaction with the 802.1AC MAC service interface: only necessary to support bridging features like TSN. Is that desired for 802.15.4?
  - 802.15.13 gives greater consideration to supporting TSN than 802.15.4, and would need to present.
  - 802.15.4 could move to something similar to 802.15.6 to fit the architecture.
- Convergence function between MSAPs may be needed in 802.1AC to support bridging features like TSN. Previously discussed were mapping between 48 and 64 bit addresses (which would be the reason for no 802.1AC convergence function for 802.15.4) and options for translation. An 802.1AC convergence function is missing but may not be necessary for 802.15.4 but is needed for other 802.15 MACs.
  - 802.15.4 may never be appropriate for TSN. Regarding general bridging, most implementations are using 6LoWPAN, IPv6 and layer 3 routing, meeting market needs.
- 802.15.13 does not leverage 802.15.9. A Jan 2023 presentation on 802.15.13, following the template in the discussed presentation, and towards a description of the 802.1AC convergence function towards the MSAP would help.
- Bridging protocols depend on reliable multicast, which 802.15 typically does not have. A lot of TSN assumes point-to-point paths where QoS matters, and is much more adaptable than 802.15. The parts of bridging that do not work in 802.15 could be avoided.
  - Wireless is orders of magnitude different than wired in terms of reliability. Underlying assumptions matter a lot.
  - There is a need, as done with 802.11, to show the benefits of TSN to 802.15. TSN and wireless medium need to work better together.
- 802.15.13 is approaching the end of balloting.

Disposition: Agreed (informally, none dissenting) to continue discussion first on 802.15.13 then on e.g. 802.15.16, using the template in this presentation on 802.15.4 with elaboration on 802.1AC support if TSN support is needed.

3. Next meeting. Agreed (informally, none dissenting) to next meet per the disposition of agenda item 2, for an hour, after 18:00 ET on Tuesday of the Jan 2023 interim session.
4. Any other Business. No other business was discussed in this meeting.

19:11 ICT adjournment

4 Maintenance Task Group

Between this session and the preceding session, the IEEE 802.1 Maintenance Task Group (TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Maintenance TG meeting held 2022-10-11 11:00 – 12:52 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1d378a7a.22&S=
- Minutes of the Maintenance TG meeting held 2022-11-01 11:06 – 12:40 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;3920a0e5.22&S=

See section 1 for attendance and affiliation information.

Call to order Nov 15, 2022 at 8:00 ICT by Paul Congdon, IEEE 802.1 Maintenance TG Chair (TG Chair), who presided and wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
   The TG Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The TG Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session thereby providing 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: there were no responses to these Calls prior to the end of the session.
   The TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The TG chair presented the agenda in https://1.ieee802.org/september-2022-interim-session-electronic-maintenance-tg-agenda/
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. P802-REVc Balloting Process. Glenn Parsons, 802.1 WG chair, presented "P802-REVc Project Logistics" https://www.ieee802.org/1/files/public/docs2022/802-rev-congdon-process-1122-v01.pdf.
   Disposition: For information. The following comments were made and requested to be noted in the minutes:
   - Geoff Thompson: Believes the proposed process for WG balloting of the Overview and Architecture creates a disadvantage for other Working Groups because the chair is provided with a single vote for the entire Working Group whereas members of the 802.1 WG are provided individual votes. It was noted that while all comments will be considered and processed, the actual voting is inequitable. Geoff

also pointed out that the entire document is open for comment and believes now is the time to make architectural changes on the entire document rather than trying to restrict the scope of comments to the rollup and waiting for a subsequent amendment for more significant changes. That is contrary to IEEE P&P. It was noted that time is of the essence because historically 802 Revisions take a long time, and the standard may expire during the process. Geoff suggested that if an ongoing active revision project is in place, the standards association likely would not withdraw the standard. It was pointed out that while this was the practice in the past, it is unknown whether this policy will persist.

- Joseph Levy: Notes that we have not made process towards reaching consensus on the scope of changes for IEEE Std 802 and believes focusing now on the roll-up only is the best approach.

4. P802-REVc comment resolution. James Gilb, P802-REVc editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/802-REVc-drafts/d0/P802-REVc-d0.2.pdf.
Disposition: Comments 1 through 10 were addressed. Partial **Disposition:** https://www.ieee802.org/1/files/private/802-REVc-drafts/d0/802-REVc-d0-2-comments-02.pdf.

9:03 ICT recess

Call to order Nov 15, 2022 at 9:06 ICT by Paul Congdon, IEEE 802.1 Maintenance TG Chair (TG Chair), who presided and wrote the minutes.

The Maintenance TG Chair announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

5. Existing project status. Paul Congdon presented "Existing project status" in "Maintenance Task Group Electronic Meetings" https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-1122-2-v01.pdf.
Disposition: For information. Post-meeting, Norman Finn volunteered to perform the editing of P802.1CS/Cor1.

6. Review Motions. The TG chair presented, "Maintenance Motion Summary" https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-1122-2-v01.pdf.
Disposition: For information. Motions for P802-REVc electronic meetings and authorizing P802.1ASdr WG ballots were added.

7. SC6 Status. Karen Randall, 802.1 Liaison Secretary, presented "ISO/IEC JTC1 SC6 STATUS November 2022" slides in "Maintenance Task Group Electronic Meeting" https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-1122-2-v01.pdf.
Disposition: For information.

6. Liaison Activity. Karen Randall, 802.1 Liaison Secretary, led a discussion on liaison activity since the July 2022 plenary session including:
- Incoming
  - LS15 - Response on LS on OTNT Standardization Work Plan Issue 30 (& Issue 31 OTNT SWP) https://www.ieee802.org/1/files/public/docs2022/liaision-SG15-LS15-ReplytoOTNTSWP30-1122.zip

- Outgoing
  - Response to invitation to update the information in the IMT2020 roadmap in https://www.ieee802.org/1/files/private/liaison-drafting/liaison-itu-t-JCA-RoadmapIMT2020Response-1122.pdf.
  - Draft response to comment on IEEE 802.1AS-2020/Cor-1 (SC6 N17841 and N17877) https://www.ieee802.org/1/files/private/liaison-drafting/liaison-draftSC6CommentResponse1ASCor1-1122.pdf.

Disposition: For information. Drafted the following responses:
- https://www.ieee802.org/1/files/docs2022/liaison-itu-t-JCA-RoadmapIMT2020Response-1122.pdf
- https://www.ieee802.org/1/files/docs2022/liaison-SC6CommentResponse1ASCor1-1122.pdf

7. 802 PARs Under Consideration. The TG chair led the discussion of the 802 PARs under consideration https://www.ieee802.org/PARs.shtml and reviewed the drafting of the comments.
   Disposition: The drafted responses were reviewed and updated as follows:
   - https://www.ieee802.org/1/files/public/docs2022/admin-PAR-CSD-comments-802-3-1122-v01.pdf
   - https://www.ieee802.org/1/files/public/docs2022/admin-PAR-CSD-comments-802-11-1122-v02.pdf

10:10 ICT recess

Call to order Nov 17, 2022 at 8:01 ICT by Paul Congdon, IEEE 802.1 Maintenance TG Chair (TG Chair), who presided and wrote the minutes.

The Maintenance TG Chair announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

8. P802.1ASdr comment resolution. Silvana Rodrigues, P802.1ASdr editor, presented "802.1ASdr-D0.1 Editor's Report Proposed Comment Resolution for TG Ballot Version 2" https://www.ieee802.org/1/files/public/docs2022/dr-Rodrigues-d0-1-tg-ballot-report-1022-v01.pdf and led the resolution of comments received on https://www.ieee802.org/1/files/private/dr-drafts/d0/802.1ASdr-d0-1.pdf using https://www.ieee802.org/1/files/private/dr-drafts/d0/802.1ASdr-d0-1-pdis-v00.pdf.
   Disposition: All technical comments were reviewed and resolved. It was announced that responses to editorial comments are in the proposed disposition and that a one-week review window will be announced on the email reflector after which a final disposition will be posted. Updated proposed **Disposition:** https://www.ieee802.org/1/files/private/dr-drafts/d0/802.1ASdr-d0-1-pdis-v01.pdf.
9. Document Vehicle Status. Paul Congdon presented "Document Vehicle Status" in "Maintenance Task Group Electronic Meeting" https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-1122-2-v02.pdf.
   Disposition: For information. P802.1Qdj status was updated.
10. Review of IETF draft-eastlake-rfc7042bis-09. Paul Congdon led the review of "IANA Considerations and IETF Protocol and Documentation Usage for IEEE 802 Parameters" https://datatracker.ietf.org/doc/draft-eastlake-rfc7042bis/09/.

Disposition: For information. The TG chair is to solicit additional reviewers and send an email to the main 802.1 email list announcing the review process. Comments will be collected and consolidated at the Jan 2023 interim session and a future ePoll will be run to send the comments as a liaison to the IETF. A statement that the normative reference for the background material comes from IEEE Std 802 was discussed. It was also agreed to check that text has not been explicitly taken from the document.

11. New Maintenance requests: Paul Congdon led the discussion of new maintenance requests:
    - 0348: ieee8021LrpTcMIB OID duplicate assignment – Mick Seaman
    - 0349: ieee8021LrpMIB OID duplicate assignment – Mick Seaman
    - 0350: error in MPDelayReq state machine – Marina Gutierrez
    - 0351: 802.1CS-2020 YANG is not attached and does not validate – Paul Congdon

    Disposition: Details for discussion on all items are logged in the IEEE 802.1 maintenance database at https://www.802-1.org/home where items progressed at the meeting can be reviewed by selecting 'Meetings'.

12. Any Other Business. No other business was discussed in this session.

13. Future meetings. The next meeting of the Maintenance TG is proposed for Nov 30, 2022 at 11:00 ET to continue P802-REVc comment resolution. Other future meetings of the Maintenance TG are to be announced on the 802.1 subgroup agendas and minutes list.

10:09 ICT adjournment

5 Security Task Group

Between this session and the preceding session, the IEEE 802.1 Security Task Group (Security TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the Security TG meeting held 2022-11-01 13:02 - 14:50 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;cc132c38.22&S=
- Minutes of the Security TG meeting held 2022-10-28 11:00 - 13:01 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d8f61aa5.22&S=

The Security TG did not meet at this session.

6 Time-Sensitive Networking Task Group

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on generic TSN topics whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the TSN TG meeting held 2022-10-03, 11:00 - 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;47a12173.23&S=
- Minutes of the TSN TG meeting held 2022-10-07, 09:00 - 11:05 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;a7a80347.23&S=
- Minutes of the TSN TG meeting held 2022-10-10, 11:00 - 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;57bdc691.23&S=
- Minutes of the TSN TG meeting held 2022-10-12, 09:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;725f70ac.23&S=
- Minutes of the TSN TG meeting held 2022-10-17, 11:00 - 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;e5e68fb6.23&S=
- Minutes of the TSN TG meeting held 2022-10-18, 11:00 - 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;594ffacf.23&S=
- Minutes of the TSN TG meeting held 2022-10-21, 09:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4c0b869a.23&S=
- Minutes of the TSN TG meeting held 2022-10-24, 11:00 - 13:11 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bfe74dc2.23&S=
- Minutes of the TSN TG meeting held 2022-10-25, 11:00 - 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;f7110123.23&S=
- Minutes of the TSN TG meeting held 2022-10-31, 11:00 - 12:25 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;8544655b.23&S=
- Minutes of the TSN TG meeting held 2022-11-07, 11:00 - 13:10 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;af94740a.23&S=

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on P802.1DG whose minutes are incorporated to these session minutes by reference as follows:
- None

See section 1 for attendance and affiliation information.

Minutes of the IEC/IEEE 60802 Joint Project electronic meetings are in section 7.1.

Minutes of the IEEE P802.1DP/SAE AS 6675 joint project electronic meeting are in section 7.2.

Call to order Nov 14, 2022 8:10 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.

The Chair showed this presentation advising that the following, provided beforehand, applies:

- 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.
- 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.

The Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session thereby providing 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: there were no responses to these Calls prior to the end of the session.

The Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.

2. Approval of agenda. The Chair presented the agenda in https://1.ieee802.org/2022-11-plenary-tsn-agenda/.
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. Rodney Cummings presented "Usage of IEEE 1588 Announce message for non-BMCA networks" https://www.ieee802.org/1/files/public/docs2022/new-cummings-announce-non-bmca-1122-v01.pdf.
   Disposition: Presentation discussed.
4. Geoffrey Garner, P802.1ASdm Editor, presented "P802.1ASdm-Rev/D0.7 Editor's Report - Proposed Comment Resolution for TG Ballot - Version 8" https://www.ieee802.org/1/files/public/docs2022/dm-garner-d0-7-tg-ballot-editors-report-0922-v08.pdf and led the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-7.pdf.
   Disposition: Partial comment resolution; see agenda item 12.

10:00 ICT recess

Call to order Nov 14, 2022 13:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

5. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.

6. Liaisons and communication. Karen Randall presented and led the discussion of:
    - IEEE 1914 liaison to ITU-T JCA-IMT2020 in response to request on 5G-related activity update (copy for information) liaison-IEEE1914-response_on_JCA-IMT2020request-1022.pdf;
    - Liaison from LNI 4.0: Request access to IEEE 802.1 draft standards https://www.ieee802.org/1/files/public/docs2022/liaison-LNI40-accessto8021drafts-1122.pdf;
    - ITU-T SG15 LS19 on IM/DM Coordination (with virtual meeting dates/logistics) https://www.ieee802.org/1/files/public/docs2022/liaision-SG15-LS19-IMDMmodellingcoord-1122.pdf;
    - ITU-T SG15 LS15 - Response on LS on OTNT Standardization Work Plan Issue 30 (& Issue 31 OTNT SWP) **Error! Hyperlink reference not valid.**https://www.ieee802.org/1/files/public/docs2022/liaision-SG15-LS15-ReplytoOTNTSWP30-1122.zip; and
    - ITU-T Joint Coordination Activity (JCA)-IMT2020 LS on Invitation to update the information in the IMT2020 roadmap (Nov 21, 2022 liaison) https://www.ieee802.org/1/files/public/docs2022/liaison-itu-t-JCA-RoadmapIMT2020-dec22.pdf.
    Disposition: Further discussion needed.
7. Paul Congdon, P802.1Qcz editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/cz-drafts/d2/802-1Qcz-d2-3.pdf.
    Disposition: Comment resolution concluded as documented in https://www.ieee802.org/1/files/private/cz-drafts/d2/802-1Qcz-d2-3-dis-v01.pdf.
8. Abdul Jabbar presented "Credit Based Shaper Configuration YANG Model Proposal" https://www.ieee802.org/1/files/public/docs2022/dp-markham-CBS-YANG-Model-1122-v01.pdf.
    Disposition: Presentation discussed. Further discussion needed.
9. Rodrigo Ferreira Coelho presented "YANG Module Augmentation for Talker/Listener Configuration" https://www.ieee802.org/1/files/public/docs2022/new-coelho-talkers-and-listeners-config-1122-v01.pdf.
    Disposition: Presentation discussed. Further discussion needed.

15:40 - 16:00 ICT recess

10. Konstantinos Alexandris, Lihao Chen and Tongtong Wang presented "Reworking on the extensions of UNI traffic specification and status for flexible scheduling in RAP" https://www.ieee802.org/1/files/public/docs2022/dd-alexandris-reworking-extensions-TSN-UNI-RAP-1122.pdf.
    Disposition: Presentation discussed. Further discussion needed.
11. Silvana Rodrigues and Jingfei Lv presented "P802.1ASds Consideration about PTP over 10BASE-T1S" https://www.ieee802.org/1/files/public/docs2022/ds-Rodrigues-Lv-10BASE-T1S-time-sync-1122-v00.pdf.
    Disposition: Presentation discussed. Further discussion needed.
12. Geoffrey Garner, P802.1ASdm Editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-7.pdf.
    Disposition: Comments resolution concluded by resolving comments 2, 89, 87, 88, 90, 92 in-session and comment 93 post-session, as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-7-dis-v09.pdf.

17:56 ICT recess

Call to order Nov 15, 2022 10:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

13. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.
14. Takumi Nomura presented "The Suggestion from JASPAR How to coexist between AUTOSAR and IEEE" https://www.ieee802.org/1/files/public/docs2022/dg-Nomura-JASPAR-Use-Cases-1122-v06.pdf.
    Disposition: Presentation discussed. Further discussion needed.
15. Jens Bierschenk presented "Short Ethernet Frames - Automotive Use Case" https://www.ieee802.org/1/files/public/docs2022/dg-Bierschenk-ShortEthernetFramesAutomotiveUseCase-1122-v03.pdf.
    Disposition: Presentation discussed. Further discussion needed.

12:30 ICT recess

Call to order Nov 15, 2022 14:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

16. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.
17. Johannes Specht presented "Cut-Through Forwarding (CTF) - Updates since September 2022" https://www.ieee802.org/1/files/public/docs2022/new-specht-ctfstatus-1122-v01.pdf.
    Disposition: Presentation discussed. Further discussion needed.

15:30 ICT recess

Call to order Nov 16, 2022 10:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

18. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.
19. Marc Holness, P802f editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/802-f-drafts/d1/802f-d1-4.pdf.
    Disposition: Comment resolution concluded by resolving comments 1,2,3,4,5,6,7 and 8 as documented in https://www.ieee802.org/1/files/private/802-f-drafts/d1/802f-d1-4-dis-v01.pdf.
20. Liaisons and communication. Karen Randall presented and led the review of:
    - Liaison response to ITU-T SG13 LS on work items related to deterministic networking in ITU-T SG13 https://www.ieee802.org/1/files/public/docs2022/liaison-ITU-T-SG13-LS8-determcommunics-0722.zip; and

- Liaison response to liaison from LNI 4.0: Request access to IEEE 802.1 draft standards https://www.ieee802.org/1/files/public/docs2022/liaison-LNI40-accessto8021drafts-1122.pdf.

    Disposition: Updated liaison response to LNI 4.0 finalized as https://www.ieee802.org/1/files/public/docs2022/liaison-response-LNI40-accessto8021drafts-1122.pdf (current IEEE P802.1Qcw, IEEE P802.1Qdd, and IEEE P802.1CQ drafts to be sent as requested).

21. Norman Finn, P802.1DC editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/dc-drafts/d1/802-1DC-d1-4.pdf.

    Disposition: Comment resolution concluded by resolving comments 1,2 and 3 as documented in https://www.ieee802.org/1/files/private/dc-drafts/d1/802-1DC-d1-4-dis.pdf.

22. Lily Lv presented "P802.1Qdt Status Update and New Proposal Discussion" https://www.ieee802.org/1/files/public/docs2022/dt-lv-headroom-measurement-discussion-1122-v1.pdf .

    Disposition: Presentation discussed. Further discussion needed.

12:30 ICT recess

Call to order Nov 16, 2022 13:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

23. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.

24. Norman Finn presented "Annex to IEEE P802.1Qdv, Enhancements to Cyclic Queuing and Forwarding (ECQF)" https://www.ieee802.org/1/files/public/docs2022/dv-finn-ECQF-annex-1122-v01.pdf.

    Disposition: Presentation discussed. Further discussion needed.

25. Yizhou Li presented "Further Details on Cycle Identification" https://www.ieee802.org/1/files/public/docs2022/dv-yizhou-cycle-identification-details-1122-v02.pdf.

    Disposition: Presentation discussed. Further discussion needed.

26. Hiroki Nakano, P802.1Qdq editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/dq-drafts/d0/802-1Qdq-d0-2.pdf.

    - 15:30 - 16:00 ET recess

    Disposition: Proposed disposition in https://www.ieee802.org/1/files/private/dq-drafts/d0/802-1Qdq-d0-2-pdis-v00.pdf to be updated post-session.

27. Norman Finn and Johannes Specht presented "Proposed P802.1DU PAR Cut-Through Forwarding Bridges and Bridged Networks" https://www.ieee802.org/1/files/public/docs2022/du-cut-through-summary-1122-v02.pdf.

    Disposition: Presentation discussed and updated as https://www.ieee802.org/1/files/public/docs2022/du-cut-through-summary-1122-v03.pdf.

28. The Chair led the continued discussion of "Credit Based Shaper Configuration YANG Model Proposal" https://www.ieee802.org/1/files/public/docs2022/dp-markham-CBS-YANG-Model-1122-v01.pdf; see agenda item 8.

    Disposition: Presentation discussed. Further discussion needed.

18:30 ICT recess

Call to order Nov 17, 2022 10:30 ICT by János Farkas, IEEE 802.1 TSN TG Chair (Chair), who presided. Johannes Specht, IEEE 802.1 TSN TG Secretary (Secretary), wrote the minutes.

29. The Chair announced that this meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the Secretary.
30. Craig Rodine presented "Overview of IEEE 802 opportunities in AFV [Alternative Fuel Vehicle] (EV and H 2 V) Fueling" https://www.ieee802.org/1/files/public/docs2022/new-Rodine-AFV-fueling-edge-oppty-1122-v01.pdf.
    Disposition: Presentation discussed. Further discussion needed.
31. Paul Congdon presented an individual contribution suggesting text for P802.1Qdw https://www.ieee802.org/1/files/public/docs2022/dw-congdon-individual-text-1122-v01.pdf.
    Disposition: Presentation discussed. Further discussion needed.
32. The Chair led a generic discussion on time synchronization projects and proposals.
    Disposition: Discussed. Further discussion needed.

12:30 ICT adjournment

7.1   IEC/IEEE 60802 Joint Project

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-09-19 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;49090034.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-09-23 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d8b8c710.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-10-10 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1f3fa802.22&S=

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project Time Sync ad hoc (Time Sync ad hoc) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEC/IEEE 60802 Joint Project Time Sync Ad Hoc meeting held 2022-10-24 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;b5b90a75.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project Time Sync Ad Hoc meeting held 2022-10-28 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;fe6ee47b.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project Time Sync Ad Hoc meeting held 2022-10-31 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;f79a76f2.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project Time Sync Ad Hoc meeting held 2022-11-04 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;f78f6876.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project Time Sync Ad Hoc meeting held 2022-11-07 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d56edabd.22&S=

See section 1 for attendance and affiliation information.

Call to order Nov 14, 2022 at 13:30 ICT by David McCall, IEC/IEEE Time Sync ad hoc Chair (Time Sync Chair), who presided and wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
    The Time Sync Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
    The Time Sync Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session thereby providing 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: there were no responses to these Calls prior to the end of the session.
    The Time Sync Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The Time Sync Chair presented the agenda in https://1.ieee802.org/2022-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802_Time_Sync_Ad_Hoc.
    Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. Collection of topics to be worked on. The ad hoc prepared a list of the various topics that could be covered during the ad hoc meetings and time sync topic slots of the IEC/IEEE 60802 Joint Project meetings. The following list was developed:
    *   Paper from 2007 on using Sync messages for Reduction Ratio (Geoffrey Garner)
    *   Using Sync messages for Reduction Ratio (Dragan Obradovic)
    *   Update on the Monte Carlo analysis
    *   Optimization of tracking Neighbor Rate Ratio vs. measuring Neighbor Rate Ratio
    *   Sending t1out timestamp info in TLV after Sync message to calculate Neighbor Rate Ratio
    *   Normative / Informative time sync statements in IEC/IEEE 60802
    *   Latency variation of PHYs and impact on Time Sync (Günter Steindl)
    *   Importance of Residence Time
    *   Timeline for a contribution and what to present on Friday Nov 18, 2022.
    Disposition: Agreed (informally, none dissenting) to discuss the first four, in order, and then decide whether there is agreement on an overall direction for a Time Sync contribution to the next IEC/IEEE 60802 (60802) draft (which could be presented to the IEC/IEEE 60802 Joint Project).
4. Paper from 2007 on using Sync messages for Reduction Ratio. Geoffrey Garner presented "Effect of a Frequency Perturbation in a Chain of Syntonized Transparent Clocks" https://www.ieee802.org/1/files/public/docs2007/as-garner-protocol-synton-chain-freq-offset-accum-vgs-0307.pdf.
    There was a lot of discussion of the "gain peaking" finding from the contribution, which overlapped with the next contribution.
    Disposition: Agreed (informally, none dissenting) to progress to the next contribution before continuing the discussion.

5. Using Sync messages for Reduction Ratio. Dragan Obradovic presented "ClockSlave PI Controller: Definition and Implementation" https://www.ieee802.org/1/files/public/docs2022/60802-Obradovic-ClockSlave-1022-v02.pdf.

15:30 ICT recess

Call to order Nov 15, 2022 at 11:15 ICT by David McCall, IEC/IEEE Time Sync ad hoc Chair (Time Sync Chair), who presided and wrote the minutes.

6. Meeting introduction and other administrative items. The Time Sync Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
7. Update on the Monte Carlo analysis. David McCall presented "60802 Time Sync Contribution Discussion" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Time-Sync-Contribution-Discussion-17-Nov-1122-v2.pdf.
   Discussion: Slide 13 should neither be taken to mean that "older" sync messages do not need to traverse the entire chain (they do), only that for the most recent message only the earlier steps in older messages impact the error calculation, nor should it be taken to mean that no Rate Ratio estimate is available at the last, Xth, node until at least X+1 messages have been sent, although until that point some Rate Ratios are implicitly assumed to be zero, which may increase the error.
8. What to present Friday Nov 18, 2022. What to present during the Nov 18, 2022 IEC/IEEE 60802 Joint Project afternoon meeting was discussed.
   Disposition: Agreed (informally, none dissenting) to present: overall update on progress; main methods that are expected to deliver on the goal of 1μs time sync accuracy over 100 hops; if possible, simulations to illustrate how close (or not) we are to achieving the goal.

12:30 ICT recess

Call to order Nov 15, 2022 at 16:00 ICT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided with János Farkas, IEEE 802.1 TSN TG Chair (TSN TG Chair). Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

9. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
   The 60802 Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The 60802 Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session thereby providing 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: there were no responses to these Calls prior to the end of the session.
   The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
   The 60802 Chair explained that the IEC/IEEE 60802 Joint Project also follows the usual IEC patent https://www.iec.ch/members_experts/tools/patents/patent_policy.htm and copyright

https://www.iec.ch/standardsdev/resources/draftingpublications/overview/rules_requirements/copyright.htm policies.

The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

10. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2022-11-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802.

    Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.

11. Update on the IEC 61802 conformity assessment project. David McCall provided an update. The TIACC Steering Committee has started work. Technical work is expected to start in December 2022. Participation in TIACC is possible via the participating organizations (https://www.tiacc.net/).

    Disposition: For information.

12. Editor's report. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor), presented "Editor's Report 60802 Draft 1.4" https://www.ieee802.org/1/files/public/docs2022/60802-woods-D2-0-update-1122-v01.pdf.

    Disposition: For information.

13. P802.3cx update. Silvana Rodrigues provided an update. P802.3cx is in SA ballot. Publication is expected for 2023.

    Disposition: For information.

14. Time Sync Ad Hoc update. David McCall presented "60802 Update on Time Sync" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Update-On-Time-Sync-Status-15-Nov-1122-v2.pdf.

    Disposition: Updated Monte Carlo simulation results with implemented options are expected as a next step.

18:00 ICT recess

Call to order Nov 16, 2022 at 11:30 ICT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided. Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

15. Meeting introduction and other administrative items. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 9 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

16. 802.3 profile in 60802. Ludwig Winkel presented "Contribution to IEC/IEEE 60802 concerning profiling of IEEE 802.3" https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-Winkel-Ref8023-1122-v01.pdf

    Disposition: Agreed (informally, non-dissenting) to include this textual contribution into the next 60802 draft.

17. IEC/IEEE 60802 Optional Feature FQTSS or CBS. Josef Dorr presented "IEC/IEEE 60802 Optional Feature FQTSS or CBS?" https://www.ieee802.org/1/files/public/docs2022/60802-Dorr-FQTSS-1122-v01.pdf

    Disposition: The 60802 Editor is to provide text based on the presented contribution for inclusion into the next 60802 draft. This text is expected to be presented in an inter-session IEC/IEEE 60802 Joint Project meeting.

18. IEC 62443 required network services. Günter Steindl presented "IEC 62443 required network services" https://www.ieee802.org/1/files/public/docs2022/60802-steindl-IEC62443-1122-v01.pdf.

Disposition: For information.
19. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

12:30 – 13:30 ICT recess

20. TSN Communication between a Control System and a set of dependable Devices. Marcel Kiessling presented "TSN Communication between a Control System and a set of dependable Devices" https://www.ieee802.org/1/files/public/docs2022/60802-Kiessling-dependentDevices-1122-v00.pdf
Disposition: More discussion is needed.

15:30 – 16:00 ICT recess

21. Update of the 60802 timeline. The 60802 Chair drafted together with the participants "IEC/IEEE 60802 timeline update rev 6, 2022-11-16" https://www.ieee802.org/1/files/public/docs2022/60802-Winkel-timeline-1122-v6.pdf showing the timeline for future 60802 drafts until the IEEE 802.1 interim session in May 2023.
Disposition: For information. The 60802 timeline is expected to be reinspected at the IEEE 802.1 interim session in Jan 2023.

17:00 ICT recess

Call to order Nov 17, 2022 at 10:30 ICT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided. Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

22. Meeting introduction and other administrative items. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 9 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
23. Time Sync. David McCall presented and led the discussion on "60802 Time Sync Contribution Discussion" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Time-Sync-Contribution-Discussion-17-Nov-1122-v2.pdf.
Disposition: This presentation is to be continued during the Friday Nov 18, 2022 meeting of the IEC/IEEE 60802 Joint Project.

12:05 ICT recess

Call to order Nov 18, 2022 at 08:00 ICT by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided together with János Farkas, IEEE 802.1 TSN TG Chair (TSN TG Chair). Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

24. Meeting introduction and other administrative items. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 9 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
25. How to Configure Timesync for IEC/IEEE 60802. Martin Mittelberger presented "How to Configure Timesync for IEC/IEEE 60802?" https://www.ieee802.org/1/files/public/docs2022/60802-Mittelberger-Timesync-Configuration-1122-v01.pdf.

Disposition: More discussion is needed. Discussion should be continued with the help of an instance data file example.

26. P802.1ASdm topic. Geoffrey Garner presented a proposed resolution of comment 92 on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-7.pdf.
    - Discussion started.
    - 10:00 – 10:30 ICT recess
    - Discussion continued. A response to the comment was worked out.

    Disposition: The proposed disposition is documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-7-dis-v09.pdf.

27. Results of the Time Sync Ad Hoc.
    David McCall continued the presentation of "60802 Time Sync Contribution Discussion" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Time-Sync-Contribution-Discussion-17-Nov-1122-v2.pdf.
    - Discussion started.
    - 12:40 – 13:40 ICT recess
    - Discussion continued.

    Günter Steindl presented "MAC and PHY delay variation" https://www.ieee802.org/1/files/public/docs2022/60802-steindl-Sync-Error-PHY-1122-v01.pdf.
    - Dragan Obradovic presented "Error Propagation in RR Calculation using Sync Messages" https://www.ieee802.org/1/files/public/docs2022/60802-Obradovic-RR-calculation-with-Sync-Messages-1122-v2.pdf.

    Disposition: More discussion is needed.

28. Update of the 60802 timeline.
    - Some organizational topics of the IEC/IEEE 60802 Joint Project were discussed with Valérie Demassieux, Secretary, IEC SC65C.
    - The 60802 Chair proposed:
    - To use the weekly meetings on Mondays for IEC/IEEE 60802 Joint Project topics and the weekly meetings on Fridays for Time Sync ad hoc topics; and
    - To cancel the weekly meetings from Nov 21, 2022 through Nov 25, 2022 and from Dec 19, 2022 through Jan 6, 2023.

    This proposal was agreed (informally, none dissenting).
    The 60802 Editor presented "60802 Ballot History and Project Update" https://www.ieee802.org/1/files/public/docs2022/60802-woods-ballot-history-and-update-1122-v02.pdf.

29. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

17:15 ICT adjournment

7.2 IEEE P802.1DP/SAE AS6675 joint project

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on P802.1DP/SAE AS 6675 whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2022-10-12 https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;2b3a74a0.23&S=
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2022-11-09 https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d6bb817f.23&S=

See section 1 for attendance and affiliation information.

Call to order November 16, 2022 at 8:00 ICT by János Farkas, IEEE 802.1 TSN TG Chair. Abdul Jabbar and János Farkas, IEEE P802.1DP/SAE AS6675 joint project co-Chairs, presided. Marina Gutiérrez, IEEE P802.1DP/SAE AS6675 Secretary, wrote the minutes.

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
   János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
   János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, explained that the IEEE P802.1DP/SAE AS6675 Joint Project also follows the usual SAE IP and copyright https://www.sae.org/about/legal-policies/intellectual-property policies.
2. Approval of agenda. János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, presented the agenda in https://1.ieee802.org/2022-11-plenary-tsn-agenda/#TSN_8211_P8021DPAS6675.
   Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
3. Abdul Jabbar, IEEE P802.1DP/SAE AS6675 editor, presented an update on the IEEE/SAE cooperation on TSN https://www.ieee802.org/1/files/public/docs2022/dp-IEEE-SAE-JWG-1122-v00.pdf.
   Disposition: For information only.
4. Richard Tse presented "Proposal on Fault Tolerant Time Propagation" https://www.ieee802.org/1/files/public/docs2022/dp-tse-donnelly-fault-tolerant-time-prop-1122-v06.pdf.
   Disposition: Presentation was discussed. More discussion is needed.

10:13 ICT recess

7 Nendica

Between this session and the preceding session, the IEEE 802 "Network Enhancements for the Next Decade" Industry Connections Activity (Nendica) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the Nendica meeting held 2022-09-22 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;2db896ca.22
- Minutes of the Nendica meeting held 2022-10-06 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;18d9f24.22
- Minutes of the Nendica meeting held 2022-10-13 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;a7e3618f.22
- Minutes of the Nendica meeting held 2022-10-20 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;8bc1170a.22
- Minutes of the Nendica meeting held 2022-10-27 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4b54b5bd.22
- Minutes of the Nendica meeting held 2022-11-03 11:00-13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;2d2d0529.22

- Minutes of the Nendica meeting held 2022-11-10 11:00-13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;52f3d418.22

See section 1 for attendance and affiliation information.

Call to order November 15, 2022 19:35 ICT by Jessy Rouyer, who presided as acting Chair. Roger Marks wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction and other administrative items. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" "http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf". The Nendica Chair showed this presentation advising that the following applies:
    - 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 the Nendica meeting, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.
   The acting Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The acting Chair presented the draft agenda and indicated that an additional document 802.1-22-0048 had been submitted. The draft agenda was accordingly modified.
   Disposition: The agenda was reviewed and agreed (informally, none dissenting) as https://1.ieee802.org/802-nendica-agenda-2022-11-15/.
3. CTF Study Item.
   Johannes Specht presented "CTF – Nendica Slides November 15th" (Rev. 1) https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2022&is_dcn=0048, noting that he had discussed this earlier with the 802.1 TSN Task Group.
   Roger Marks presented up to Slide 9 of "Generic Serial Convergence Function (GSCF)" (Rev. 5) https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2022&is_dcn=0040.
   Johannes Specht presented aspects of "Technical Descriptions for Cut-Through Forwarding in Bridges" (Rev. 12) https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2022&is_dcn=0042.
   Figure 4.1 was discussed at length. Figures 8.1 and 6.1 were discussed, and section 9.2 was noted. There was discussion regarding a possible summary presentation to the 802.3 WG closing plenary meeting of this session. Compatibility with the 802.3 MAC, though without cut-through support, was noted as a proposed requirement to emphasize.
4. Future Meetings. The acting Chair noted that the draft agenda of the Nendica meeting of Nov 17, 2022 08:00-10:00 ICT https://1.ieee802.org/802-nendica-agenda-2022-11-17 is available. It was noted that Nendica agenda includes "status and report of meeting of 2022-11-15" under "CTF Study Item."
5. Any Other Business. No other business was discussed by Nendica in this meeting.

21:30 ET recess

8 YANGsters

Between this session and the preceding session, YANGsters held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the YANGsters meeting held 2022-10-04 10:00 –11:04 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;a77b6b7e.22&S=
- Minutes of the YANGsters meeting held 2022-10-18 10:00 –10:47 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;35214fd8.22&S=
- Minutes of the YANGsters meeting held 2022-11-01 10:00 –11:05 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5679fd2e.22&S=

See section 1 for attendance and affiliation information.

Call to order Nov 15, 2022, at 13:30 ICT by Stephan Kehrer, YANGsters Vice-Chair, acting locally for remote Scott Mansfield, YANGsters Chair, who presided. Stephan Kehrer, YANGsters Secretary, wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf.
   The YANGsters Vice-Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The YANGsters Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The YANGsters Chair presented the agenda in https://1.ieee802.org/november-2022-plenary-session-bangkok-thailand-yangsters-agenda/.
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. Introduction to YANGsters. The YANGsters Chair introduced YANGsters by presenting
   - https://1.ieee802.org/yangsters/, and
   - https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/.
   Disposition: For information.
4. Status QRev update. The YANGsters Chair provided a summary of the topic.
   - P802.1Q-Rev is getting finalized for publication. Publication is expected by the end of December 2022.
   Disposition: For information.
5. Status Qcz update. The YANGsters Chair provided a summary of the topic.
   - The YANG modules in P802.1Qcz had to be updated with new YANG modules from P802.1Q-Rev.
   - P802.1Qcz is expected to start SA recirculation ballot within the next few days.
   Disposition: For information.
6. Status Qcw update. The YANGsters Chair provided a summary of the topic.
   - The YANG modules in P802.1Qcw have to be updated with new YANG modules from P802.1Q-Rev.
   - A WG recirculation ballot is required after the YANG modules have been updated.
   Disposition: For information.

7. Status AEdk update. The YANGsters Chair provided a summary of the topic.
   - P802.1AEdk is planning to start SA recirculation balloting soon.
   - There were no comments on the P802.1AEdk YANG modules in the last SA ballot.

   Disposition: For information.
8. Status ASdn update. The YANGsters Chair provided a summary of the topic.
   - The last P802.1ASdn TG ballot received 6 comments. The requested changes were easy to resolve.
   - A motion to move to WG ballot is planned for the 802.1 closing plenary meeting.
   - The SA ballot on P1588e is planned to be starting soon. Review from YANGsters participants is encouraged.

   Disposition: For information.
9. Status 802.1DC.
   - P802.1DC has completed TG balloting.
   - WG balloting is anticipated next.
   - Review of the YANG modules by YANGsters participants is encouraged during WG balloting.
     - Review is especially encouraged of the part of the YANG module that had to be copied in from the P802.1Q-REV YANG.

   Disposition: For information.
10. Review yang status spreadsheet. The YANGsters Chair presented the topic and provided an update on the status of ongoing projects that contain YANG.
    Disposition: For information.
11. Git Tutorial and Suggestion. The YANGsters Chair presented "git use in IEEE 802.1" https://www.ieee802.org/1/files/public/docs2022/yangsters-smansfield-git-examples-1122-v03.pdf and led the discussion.
    Disposition: Agreed (informally, none dissenting) that moving forward with the suggested approach of having a dedicated IEEE 802 clone for working on YANG is the preferred way to go.
12. Plan for Friday – support of YANG Profiles. The YANGsters Chair presented the topic and led the discussion.
    - Presentation on how to configure time sync using YANG is planned during the IEC/IEEE 60802 Joint Project meeting on Friday, Nov 18, 2022 8:00 ICT.
    - YANG guidance may be requested on a related new PAR on the Credit-Based Shaper.

    Disposition: For information.
13. Request for next calls. A motion is planned for the 802.1 closing plenary meeting to request the continuation of the bi-weekly YANGsters electronic meetings. YANGsters' next electronic meeting is Nov 29, 2022.
    - Information on YANGsters electronic meetings can be found at https://1.ieee802.org/yangsters/yangsters-call-information/.
13. Any Other Business.
    - P802.1CS was brought up.
      - The original version of P802.1CS YANG modules did not validate.
      - This needs to be fixed and uploaded to https://github.com/YangModels/yang/tree/main/standard/ieee/published/802.1
      - The YANG modules need to be uploaded to https://1.ieee802.org/yang-modules/ first in the version that was originally published, and then with the fixed version.

14:29 ICT adjournment

9 Closing Plenary Meeting

See section 1 for attendance and affiliation information.

Call to order Nov 17, 2022 at 13:30 ICT by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented "Closing Plenary November 2022" finalized as https://www.ieee802.org/1/files/public/minutes/2022-11-closing-plenary-slides.pdf.

During this presentation, the Chair:
- Introduced the agenda on slide 2 that was tacitly approved.
- Announced that this closing plenary meeting remains subject to the IEEE SA Copyright Policies (slides 3 to 5), IEEE Patent Policy (slides 6 to 10) and IEEE SA Participation policies (slides 11 to 13) made available beforehand (as announced in the opening plenary meeting – see section 3) and made the "Call for Potentially Essential Patents", i.e. 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.
    o There were no responses to the call.
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 14), and called for any members of the press (i.e., anyone reporting publicly on this meeting) who have not already announced themselves to announce their presence.
    o There were no responses to the call.
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 15).
- Provided electronic (slide 16) and mixed mode meeting guidelines and related information (slide 17 to 19).
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 20).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 21).
- Recognized 802.1 officers and leadership (slide 22) and the editors of current projects (slide 23).
- Reminded participants and 802.1 voting members of obligations regarding 802.1 voting membership and how voting membership may be requested and retained (slide 24).
- Reminded 802.1 voting members of their obligations regarding responding to WG letter ballot series (WG ballots + E-Polls) as well as regarding the consequences of not responding to WG letter ballot series (slide 25).
- Reviewed the list of 802.1 voting members (slide 26), including information about individuals who gained (slide 27), may gain (slide 28), may lose (slide 29), or will lose (slide 30) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 31).
- Introduced information about the Jan 2023 interim session (slide 32) and May interim session (slide 33).
    o The 802 and 802.1 Executive Secretaries provided updates for the Jan 2023 interim session. 802.11 may be able to host 802.1 in Sep 2024 in Waikoloa, HI, USA and in May 2024 in Warsaw, Poland.

- Showed the schedule for future interim sessions (slide 34) and plenary sessions (slide 35), which remained unchanged from the opening plenary meeting.
- Conducted the following straw polls regarding future interim sessions (slide 36):
    - 1. Would you like to come back to this venue?
        - Yes   28
        - No   7
        - Did not respond   19
    - 2. Did you go to the social?
        - Yes   19
        - No   9
        - Did not respond   27
    - 3. Did you like the social?
        - Yes   14
        - No   3
        - Did not respond   39
- Summarized liaison resources (slide 37) and the set of new and previously-received (slide 38) incoming liaisons, and led the final review of draft liaison responses prepared and reviewed in 802.1 subgroups during this plenary session (slide 39).
- Discussed promotion of the work of the WG (slide 40).
    - It was observed that the TSN for automotive and TSN for industrial automation flyers cite different end-to-end synchronized times as maintained by 802.1AS (+/- 500 nsec and +/- 1 µsec, respectively), and suggestion was made that the text should be clarified to avoid implying that 802.1AS can only support a given worst case while the intent is that it depends on the application. Such clarification could be made in the next revisions of these flyers.
- Showed the schedule of 802.1 meetings at this plenary session (slide 41) and the list of upcoming 802.1 leadership meetings (slide 42).
- Requested that the subgroup Chairs provide reports on the activities of their subgroups during this plenary session (slide 43) (see individual subgroup minutes above for details):
    - The Maintenance TG Chair presented the report on slides 44-46.
    - The TSN TG Chair and IEC/IEEE 60802 Joint Project Chair presented the report on slide 47.
    - Jessy Rouyer presented for the Nendica chair the report on slides 48-50.
        - Norman Finn provided an update on the presentation to the 802.3 closing plenary meeting of "Proposed P802.1DU PAR Cut-Through Forwarding Bridges and Bridged Networks" https://www.ieee802.org/1/files/public/docs2022/du-cut-through-summary-1122-v04.pdf.
    - The YANGsters Chair and Vice-Chairs presented the YANGsters report on slide 51.
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 52).
- Pointed out the 802 PARs, CSDs, PAR modifications (slide 53) that are up for vote or finalization during this IEEE 802 plenary session.
    - The Maintenance TG Chair provided an update on how other 802 WGs responded to 802.1 comments.
- Summarized the various types of IEEE Awards and encouraged nominations (slide 54).
- Displayed and congratulated the recipients of:
    - The IEEE SA Standards Medallion awards presented to Paul Congdon this year and to other 802.1 participants in previous years (slide 55); and

- o The IEEE SA Lifetime Achievement awards presented to Norman Finn this year and to other 802.1 participants in previous years (slide 56).
- Provided guidance on using DirectVoteLive to vote on motions (slide 57).
  - o 14:57 - 16:00 ICT recess
- Showed the 802.1 consent agenda items for the LMSC closing plenary meeting (slides 58-60).
- Conducted votes on the following motions (slides 61-95) that all passed unless indicated otherwise. (Supporting information is available in "Closing Plenary November 2022" finalized as https://www.ieee802.org/1/files/public/minutes/2022-11-closing-plenary-slides.pdf.)

Motions for 802 EC
Consent Agenda
Drafts to SA Ballot

- o Motion
  - ▪ Conditionally approve sending P802f D2.0 to Standards Association ballot
  - ▪ Confirm the CSD for P802f in https://mentor.ieee.org/802-ec/dcn/19/ec-19-0217-00-ACSD-p802f.pdf
  - ▪ P802f D1.4 had 100% approval at the end of the last WG ballot
  - ▪ In the WG, Proposed: Jessy Rouyer   Second: János Farkas
    - o Sending draft (y/n/a): 43, 0, 1
    - o CSD (y/n/a): 42, 0 , 1
- o Motion
  - ▪ Approve sending P802.1Qcj D2.0 to Standards Association ballot
  - ▪ Confirm the CSD for P802.1Qcj in http://www.ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx
  - ▪ P802.1Qcj D1.7 had 100% approval at the end of the last WG ballot
  - ▪ In the WG, Proposed: Paul Bottorff   Second: János Farkas
    - o Sending draft (y/n/a): 43, 1, 3
    - o CSD (y/n/a): 42, 0, 5
- o Motion
  - ▪ Approve sending P802.1Qcw D2.0 to Standards Association ballot
  - ▪ Confirm the CSD for P802.1Qcw in https://ieee802.org/1/files/public/docs2017/cw-draft-CSD-0517-v02.pdf
  - ▪ P802.1Qcw D1.5 had 100% approval at the end of the last WG ballot
  - ▪ In the WG, Proposed: Marina Gutiérrez
    Second: János Farkas
    - o Sending draft (y/n/a): 42, 1, 1
    - o CSD (y/n/a): 42, 0, 2

Motions for 802 EC
Consent Agenda
Drafts to RevCom

- o Motion
    - Conditionally approve sending P802.1Qcz to RevCom
    - Approve CSD documentation in https://mentor.ieee.org/802-ec/dcn/18/ec-18-0160-00-ACSD-802-1qcz.pdf
    - P802.1Qcz D2.3 had 100% approval at the end of the last SA ballot
    - In the WG, Proposed: Paul Congdon   Second: János Farkas
        - o Sending draft (y/n/a): 45, 2, 2
        - o CSD (y/n/a): 44, 0, 5

Motions for 802 EC
Consent Agenda
Liaisons and external communications (ME)

- o Motion
    - Approve liaison of the following comment responses to ISO/IEC JTC1/SC6 under the PSDO agreement:
    - IEEE 802.1AS-2020/Cor-1
        - o https://www.ieee802.org/1/files/public/docs2022/liaison-SC6CommentResponse1ASCor1-1122.pdf
    - In the WG, Proposed: Paul Congdon   Second: Karen Randall
        - o Sending draft (y/n/a): 46, 0, 3
- o Motion
    - Approve submission of the following draft(s) to ISO/IEC JTC1/SC6 for information under the PSDO agreement, once the SA Ballot starts
        - o P802.1Qcj
    - In the WG, Proposed: Paul Congdon   Second: Karen Randall
        - o Sending draft (y/n/a): 41, 0, 4
- o Motion
    - Approve https://www.ieee802.org/1/files/public/docs2022/liaison-itu-t-JCA-RoadmapIMT2020Response-1122.pdf as communication to ITU-T JCA IMT-2020: regarding Invitation to update the information in the IMT 2020 roadmap, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - This approval is under LMSC OM "Procedure for public statements to government bodies"
    - In the WG, Proposed: Paul Congdon   Second: Karen Randall
        - o Sending draft (y/n/a): 45, 0, 2

Motions for 802 EC
Consent Agenda
Liaisons and external communications (II)

- o Motion
    - Approve https://www.ieee802.org/1/files/public/docs2022/liaison-response-LNI40-accessto8021drafts-1122.pdf as communication to LNI 4.0, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - Proposed: János Farkas
    - Second: Ludwig Winkel
        - o In the WG (y/n/a): 43, 0, 5

Administrative
WG Motions

- o Motion
  - ▪ 802.1 approves the July 2022 (plenary) and September 2022 (interim) session minutes:
    - o https://www.ieee802.org/1/files/public/minutes/2022-07-minutes.pdf
    - o https://www.ieee802.org/1/files/public/minutes/2022-09-minutes.pdf
  - ▪ Proposed: Jessy Rouyer
  - ▪ Seconded: János Farkas
  - ▪ Approved by Acclamation
- o Motion
  - ▪ 802.1 authorizes the noted subgroups to hold the meetings in the following future meetings table with announcement requirement, agenda and access information as indicated
  - ▪ Proposed: Jessy Rouyer
  - ▪ Seconded: János Farkas
  - ▪ In the WG (y/n/a): 45, 1, 1

Future meetings table

Subgroup	Topic	Date	Time	Recurrence	Date annoucements (days prior)	Agenda	Agenda	Access Information
YANGsters	per agenda	Tue 2022/12/06	10:00 - 11:00 ET	every two weeks	motion	5 days	802.1 Minutes email list	https://1.ieee802.org/yangsters/yangsters-call-information/
Maintenance TG	address TG matters and progress resolution of items in https://1.ieee802.org/maintenance/database/	as announced			10 days	10 days	802.1 Minutes email list	https://1.ieee802.org/category/maintenance-tg-agenda/
Maintenance TG	P802REVc	as announced			10 days	10 days	802.1 Minutes email list 802 Architecture list	https://1.ieee802.org/category/maintenance-tg-agenda/
Security TG	progress P802.1AEdk, P802.1Qdt and TG matters arising	as announced			10 days	10 days	802.1 Minutes email list	https://1.ieee802.org/security/security-task-group-agenda/
TSN TG	per agenda	Mon 2023/03/13	8:00 - 10:00 ET	none	motion	14 days	https://1.ieee802.org/category/tsn-tg-agenda/	https://1.ieee802.org/meetings/
TSN TG	progress IEC/IEEE 60802 Joint Project and other TSN TG work	Fri 2023/03/17	8:00 - 17:00 ET	none	motion	14 days	https://1.ieee802.org/category/tsn-tg-agenda/	https://1.ieee802.org/meetings/
TSN TG	per agenda	Mon 2022/11/21	11:00 - 13:00 ET	weekly	motion	5 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	progress TG projects and TG matters arising	as announced			10 days	10 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	progress IEC/IEEE 60802 Joint Project work with IEC 65C/WG18	Mon 2022/11/21	9:00 - 11:00 ET	weekly	motion	5 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	progress IEC/IEEE 60802 Joint Project work with IEC 65C/WG18	Fri 2022/11/25	9:00 - 11:00 ET	weekly	motion	5 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	progress P802.1DG	Tue 2022/11/29	9:00 - 11:00 ET	every two weeks	motion	5 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	progress P802.1DP / SAE AS6675 Joint Project work with SAE AS6675	Wed 2022/12/07	10:00 - 12:00 ET	every two weeks	motion	5 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
TSN TG	discuss common TSN for converged networks	Wed 2023/02/22	9:00 - 11:00 ET	none	motion	10 days	802.1 Minutes email list	http://www.ieee802.org/1/tsn
Nendica	per agenda	Thu 2022/12/01	9:00 - 11:00 ET	weekly	motion	5 days	802.1 Minutes email list	https://1.ieee802.org/802-nendica/
Nendica	per agenda	as announced			10 days	10 days	802.1 Minutes email list	https://1.ieee802.org/802-nendica/

YANGsters
WG Motions

**Maintenance TG
WG Motions**

- o Motion
  - ▪ 802.1 authorizes the January 2023 interim session to generate for pre-circulation to the EC a P802.1CS-2020/Cor1 PAR modification to incorporate additional maintenance requests.
  - ▪ Proposed: Paul Congdon
  - ▪ Second: Stephan Kehrer
    - o In the WG (y/n/a): 45, 0, 2
- o Motion
  - ▪ 802.1 authorizes Silvana Rodrigues, the Editor of P802.1ASdr, Standard for Local and metropolitan area networks - Timing and Synchronization for Time-Sensitive Applications Amendment: Inclusive Terminology, to prepare drafts for and conduct Working Group balloting.
  - ▪ In the WG, Proposed: Paul Congdon
  - ▪ Second: János Farkas
    - o In the WG (y/n/a): 45, 2, 1
- o Motion
  - ▪ 802.1 authorizes Norman Finn, the Editor of P802.1CS-2020/Cor1, Standard for Local and Metropolitan Area Networks--Link-local Registration Protocol - Corrigendum 1 Corrections, to prepare drafts for and conduct Working Group balloting.
  - ▪ In the WG, Proposed: Paul Congdon
  - ▪ Second: Jessy Rouyer
    - o In the WG (y/n/a): 47, 0, 0

**Security TG
WG Motions**

**TSN TG
WG Motions**

- o Motion
  - ▪ 802.1 authorizes Norman Finn, the Editor of P802.1DC Standard for Local and Metropolitan Area Networks: Quality of Service Provision by Network Systems to prepare drafts for and conduct Working Group balloting.
  - ▪ Proposed: János Farkas
  - ▪ Second: Johannes Specht
  - ▪ In the WG (y/n/a): 42, 5, 2
- o Motion
  - ▪ 802.1 authorizes Geoffrey Garner, the Editor of P802.1ASdm Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications – Amendment: Hot Standby to prepare drafts for and conduct Working Group balloting.
  - ▪ Proposed: János Farkas
  - ▪ Second: Nader Zein
  - ▪ In the WG (y/n/a): 41, 5, 3

- o Motion
  - 802.1 authorizes Rodney Cummings, the Editor of P802.1ASdn Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications – Amendment: YANG to prepare drafts for and conduct Working Group balloting.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - In the WG (y/n/a): 41, 1, 5
- o Motion
  - 802.1 authorizes the TSN TG to draft PAR and CSD modifications of the P802.1Qdt Priority Flow Control Enhancements project to relax the requirement for using the Precision Time Protocol (PTP) at the January 2023 interim session for pre-circulation to the EC.
  - Proposed: Paul Congdon
  - Second: János Farkas
  - In the WG (y/n/a): 36, 4, 7
- o Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the January 2023 interim session for pre-circulation to the EC for an amendment to IEEE 802.1Q on YANG for the Credit Based Shaper.
  - Proposed: Jessy Rouyer
  - Second: Günter Steindl
  - In the WG (y/n/a): 38, 2, 7
- o Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the January 2023 interim session for pre-circulation to the EC for an IEEE 802.1 standard on Cut-Through Forwarding.
  - Proposed: Johannes Specht
  - Second: Paul Congdon
  - In the WG (y/n/a): 34, 3, 9
- o Motion
  - 802.1 authorizes the TSN TG to modify the PAR and CSD of the P802.1ASdm Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications – Amendment: Hot Standby at the January 2023 interim session for pre-circulation to the EC.
  - Proposed: Ludwig Winkel
  - Second: Günter Steindl
  - In the WG (y/n/a): 38, 1, 8
- Called for Any Other Business (slide 95)
  - o The Chair thanked participants who attended in person for it greatly facilitated the resolution of difficult issues. He also thanked remote participants for attending at potentially inconvenient hours.
  - o No further business was discussed in this meeting.

16:45 ICT adjournment

10 Next Session

Jan 16-20, 2023 mixed mode interim session in Baltimore, MD, USA.