Approved IEEE P802.3cx Improved PTP Timestamping Accuracy (ITSA) Task Force Meeting Minutes

January 12, 2022, Virtual Meeting

- Minutes prepared by Silvana Rodrigues and Steve Gorshe

Agenda and General Information Presentation by Steve Gorshe, ITSA Task Force Chair

- Steve Gorshe, meeting and task force chair, begins presenting the Agenda and General Information slides
- Since this was a virtual meeting, the attendees were not asked to introduce themselves with their affiliations. Instead, the Chair asked them to identify their affiliation in their WebEx user names or in the chat window.
- **Agenda** – Chair presents the agenda for the meeting and asked if anyone had comments, additions or objections for the meeting agenda per slide 2 of the following presentation: Agenda and General Information.
- **Task Force Decorum** - Chair reviewed slide and noted that there should be no recording or photography without permission. The slide included the information prohibiting recording and the requirement for anyone from the press to announce themselves. None responded.
- **Goals for Meeting** – Chair presented the goals with no comment from attendees
- **Big Ticket Items** – Chair presented the Big-Ticket items aligned to goals with no comments from attendees
- **Reflector and Web** – Chair presented the Task Force reflector and web information. All in attendance were invited to subscribe for Task Force communications and updates.
- **Task Force Private Area** – Chair reminded members of the Task Force Private Area, presented the URL to that private area and presented both the Username and Password to gain access to the URL. Chair also noted that the general IEEE 802.3 Username and Password can be used to access the URL.
- **Ground Rules** – Chair review the meeting ground rules based on IEEE 802.3 Rules.
- **Attendance** – Attendees were reminded of the IEEE 802.3 attendance procedures and asked to follow the link to those procedure for further information. IMAT tool was used for this meeting, and the Chair provided the password at the meeting.
- **IEEE Structure and Important Bylaws & Rules** – Chair reviewed the IEEE SA structure including a review of how 802.3 WG and the Task Force is located within the structure. The important bylaws and rules were pointed out for all to refer as needed or of interest.
- **IEEE 's Patent Policy and IEEE WG Meeting Guidelines (Slides 12-16 or IEEE SA Slides 0-4)** – All 5 IEEE SA slides were presented with the Chair highlighting that
  1. IEEE's patent policy is described in Clause 6 of the IEEE SA Standards Board Bylaws where they can be referred to and that the IEEE SA Standards Board Patent Committee Administrator may be contacted with further questions
  2. Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged
  3. 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.

4. Participants have a duty to inform the IEEE of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents

- The Chair 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 this standard.
  - No such claims were bought to the Chair's attention.
- **IEEE Copyright Policy (slides 17-19)** – The chair also reminded attendees of the IEEE copyright policy.
- **Participation in IEEE 802 Meetings (slides 20-22)** – Chair reviewed the slides
- **Overview of IEEE 802.3 Standard Process (5 slides)** – Chair reviewed the standards process slides. Chair highlighted that the ITSA group had completed the Study Group Phase and moved into the Task Force Review Phase on slide 2 of 5 of the Process slides.
- **Liaisons and Communications** – Chair noted that there is one incoming liaison from ITU-T, and one proposed outgoing liaison to IEEE 802.1Q for this meeting.
- **Action Items** – There were none to review for this meeting.
- **Task Force Approved Project Documents** – Task Force project documents remain unchanged and links to the documents were provided. Chair noted that the links to the PAR and CSD have been updated to point to the official approved documents rather than the drafts that had been approved.
- **Task Force Objectives** – Chair restated the adopted Task Force objectives.
- **Task Force Timelines (slides 32) –** Chair reviewed and proposed to update the timelines (see motion #4).
- **Agenda (Slide 33) –** Chair presents the agenda for the day
- Chair asked for the Task Force to approve the agenda.
- The agenda was approved by acclamation.

- Previous Meeting Minutes - Meeting minutes held on November 24, 2021 (Task Force interim virtual call) are here:
  https://www.ieee802.org/3/cx/public/nov21int/Unconfirmed_Meeting_Minutes_ITSA_802d3cx_1121_2.pdf
- Chair asked if any attendee had any comment regarding the November 10, 2021 Meeting Minutes. None were received
- Chair put forward the following motion:

Motion #1: Approve the meeting minutes of November 24, 2021:

https://www.ieee802.org/3/cx/public/nov21int/Unconfirmed_Meeting_Minutes_ITSA_802d3cx_1121_2.pdf
- Requires >50% (Procedural)
- Moved by: David Law   Seconded by: Marek Hajduczenia
- PASSES with no objections received

- Approved meeting minutes from November 24, 2021 are officially here: https://www.ieee802.org/3/cx/public/nov21int/Approved_Meeting_Minutes_ITSA_802d3cx_1121_2.pdf

- **Presentations** – In addition to this presentation (Agenda and General Information), there are other presentations are on the agenda to be reviewed. Chair introduced the agenda items and introduced the draft liaison to IEEE 802.1Q.

Liaisons

Presentation #1 –Incoming liaison from ITU-T SG15 Q13 on P802.3cx status

- https://www.ieee802.org/3/minutes/jan22/incoming/SG15-LS349_Redacted.pdf
- Silvana Rodrigues presented the liaison
- It was noted that the function described in the liaison would be outside the P802.3cx project scope, but that it appears P802.3cx provides the necessary raw information.
- There was a suggestion to use MIBs as defined in Clause 30.
- A concern was raised that if this information is reported via MIB, then the remote port will not receive the information from the other port. If a TLV is defined, then the information can be transmitted to the other port.
- It was stated that LLDP protocol can be used to send the management information from one point to another.
- A liaison reply to ITU-T will be sent out from the March meeting.

Presentation #2 –Draft outgoing liaison to IEEE 802.1Q on P802.3cx status

- https://www.ieee802.org/3/cx/public/jan22/gorshe_3cx_01_0122.pdf
- Chair presented the draft liaison to IEEE 802.1Q on P802.3cx status
- There were discussions about the need for IEEE 802.1Q to have more detailed information about the work done by P802.3cx. They have interest in 802.3cx to have a better understanding about the timing considerations used by 802.3cx, and the minimum variation of the delays. They are not interested in time synchronization itself, but they are interested in scheduling.
- The Chair mentioned that Annex 90A provides considerations on timestamping accuracy, and that could be useful.
- Chair asked if there is any proposed change to the draft liaison. None was received.
- Chair put forward the following motion:

Motion #2: To send liaison to IEEE 802.1Q with P802.3cx status and attach D2.2

- Requires >50% (Procedural)
- Moved by: David Law   Seconded by: Steve Carlson
  - PASSES with no objections received

P802.3cx Comment Resolution

- Chair mentioned that the next presentation is related to an open comment from the previous ballot, and asked the authors to present it.

Presentation #3 – Replacement objective for P802.3cx, Steve Carlson (HSD/Bosch/Ethernova) and Natalie Wienckowski (GM)

- https://www.ieee802.org/3/cx/public/jan22/carlson_3cx_01.pdf
- This presentation proposes to replace the 802.3cx objectives.
- Chair put forward the following motion:

Motion #3: To adopt the updated P802.3cx proposed objective from https://www.ieee802.org/3/cx/public/jan22/carlson_3cx_01.pdf ***slide 3***

- Requires >75% (Technical)
- Moved by: Marek Hajduczenia   Seconded by: Steve Carlson
- PASSES with no objections received

Presentation #4 – Review of comments on draft D2.1, Marek Hajduczenia (Chief Editor), Charter Communications

- The editor started the comment resolution per https://www.ieee802.org/3/cx/public/jan22/802d3cx_D2_1_proposed.pdf
- The editor created a "bucket list" for editorial comments where the response was clear.
- The proposed resolutions for comments 353 and 354 were to delete clause 30.13.1.7 and Table 30-6 respectively. There were concerns about deleting those, as the management objects will be deleted, and by deleting them, there is no way to indicate whether or not we have the new functionality. Clause 30 is important, as it can be used to give information at the system level, this can be used by the TLV discussed by the ITU-T liaison. Clause 40 gives information of the PHY, and it is important to have information at the system level. Also Clause 30 is used to generate MIBs.
- The resolution of comments 353 and 354 were deferred to the next meeting.
- For comment 251 there were concerns about the proposed resolution. It was stated that Clause 82.2.6 uses the wording "multiple PCS lanes", we may use similar terminology. The resolution of comment 251 was deferred to the next meeting.
- The resolution of comment 263 was deferred to the next meeting
- The comment status at the end of this meeting were posted after the meeting here: https://www.ieee802.org/3/cx/public/jan22/802d3cx_D2_1_WIP.pdf and the next interim to continue comment resolution is scheduled for January 25, 2022.

Timeline

Motion #4: To adopt the update the P802.3cx time line from page 32 of [*agenda_3cx_a_0122*](#)***.***
- Requires >50% (Procedural)
- Moved by : Marek Hajduczenia   Seconded by: Xiang He

PASSES with no objections received

Note that the P802.3cx project timeline can be found from a link on the P802.3cx home page. The updated version can be found at: https://www.ieee802.org/3/cx/P802d3cx_timeline_updated_1-2022.pdf

FUTURE MEETINGS
- The next IEEE 802.3 interim meeting is scheduled to be in January 25, and it will be virtual.

New Business
- There was no new business

Adjourn
- TF Chair announced that the meeting had reached the end of its scheduled time and put forward the following motion:

Motion #5: To adjourn the meeting.
- Requires >50% (Procedural)
- Moved by : David Law   Seconded by: Xiang He
- PASSES with no objections received

Attendance

IEEE 802.3cx Improving PTP Timestamping Accuracy TF Virtual Task Force, January 12, 2022				Jan. 12th				
By choosing to attend and sign in to this meeting, you acknowledge and agree that your personal data will be documented for IEEE standards development purposes to comply with policies and procedures, legal and accreditation requirements, and evaluation of patent claims by patent offices. See Front Page for additional information.								
Last Name	First Name	Employer	Affiliations	Wed.				
Akin	Sami	VW AG	VW AG	x				
Armstrong	Greg	Renesas	Renesas	x				
Baggett	Tim	Microchip	Microchip	x				
Bordogna	Mark	Intel	Intel	x				
Carlson	Steve	High-Speed Design	High-Speed Design	x				
Carty	Clark	Cisco	Cisco	x				
Congdon	Paul	Tallac	Tallac	x				
De Andrea	John	II-VI/Finisar	II-VI/Finisar	x				
Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum	x				
Gorshe	Steve	Microchip	Microchip	x				
Graba	Jim	Broadcom	Broadcom	x				
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs	x				
Gubow	Marty	Keysight	Keysight	x				
Hajduczenia	Marek	Charter	Charter	x				
He	Xiang	Huawei	Huawei	x				
Huber	Tom	Nokia	Nokia	x				
Kabra	Lokesh	Synopsis	Synopsis	x				
Laubach	Mark	Independent	Independent	x				
Law	David	HPE	HPE	x				
Lv	Jingfei	Huawei	Huawei	x				
McCellan	Bret	Cadence	Cadence	x				
McKeown	Shane	Calnex	Calnex	x				
McMillan	Larry	Western Digital	Western Digital	x				
Mueller	Thomas	Rosenberger	Rosenberger	x				

Nering	Ray	Cisco	Cisco	x					
Nicholl	Gary	Cisco	Cisco	x					
Nicholl	Shawn	Xilinx	Xilinx	x					
Ofelt	David	Juniper Networks	Juniper	x					
Reinhard	Michael	SEI Automotive	SEI Automotive	x					
Rodrigues	Silvana	Huawei	Huawei	x					
Sambasivan	Sam	AT&T	AT&T	x					
Seaman	Mick	Independent	Independent	x					
Sivakolundu	Ramesh	Cisco	Cisco	x					
Souvignier	Tom	Broadcom	Broadcom	x					
Tse	Richard	Microchip	Microchip	x					
Wienckowski	Natalie	GM	GM	x					
Zimmerman	George	CME Consulting/ADI, APL Group, Cisco, Commscope, Marvell, Sentekse	CME Consulting/ADI, APL Group, Cisco, Commscope, Marvell, Sentekse	x					