

Approved IEEE 802.3cx Improved PTP Timestamping Accuracy (ITSA) Task Force Meeting Minutes

March 10, 2021, 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.
- **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: https://www.ieee802.org/3/cx/public/march21/agenda_a_3cx_0321.pdf
- Chair put forward motions for the Task Force to approve the agenda:

Motion #1: Approve the agenda of the current meeting:

- Requires >50% (Procedural)
- Moved by: Mark Bordogna Seconded by: Steve Guendert
- PASSES with no objections received
Meeting agenda posted here:
https://www.ieee802.org/3/cx/public/march21/agenda_a_3cx_0321.pdf
- **Task Force Decorum** - Chair reviewed slide and noted that there should be no recording or photography without permission. Chair asked if anyone was attending from the press including those who would run a public blog on this meeting – none responded.
- **Goals for Meeting** – Chair presented the goals with no comment from attendees
- Chair stated that Dino Pozzebon has not been able to attend 802.3cx meetings due to other commitments, and therefore he has decided to step down from the secretary position. The Chair thanked Dino for his service and his help to get the Study Group and Task Force launched.
- The Chair announced Silvana Rodrigues as the potential secretary for the 802.3cx Task Force. He asked if there was anyone against the nomination and asked for attendees to send him a private chat if there was any concern. No concerns were raised, and therefore Silvana Rodrigues was appointed as the secretary of the 802.3cx Task Force.
- **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, no password was needed.
 - **IEEE Structure and Important Bylaws & Rules** – Chair review 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 is needed or of interest.
 - **IEEE 's Patent Policy and IEEE WG Meeting Guidelines (Slides 12-17 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 brought to the chair's attention.
 - **Participation in IEEE 802 Meetings** – Chair review the slide
 - **Overview of IEEE802.3 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 Proposal Selection Phase on slide 2of5 of the Process slides.
 - **Liaisons and Communications** – Chair noted that a liaison to ITU-T Q13/15 will be considered at this meeting.
 - **Action Items** – There were none to review for this meeting.
 - **Task Force Approved Project Documents** – Task Force project documents remain unchanged and were links to the documents were provided.
 - **Task Force Objectives** – Chair restated the adopted Task Force objectives.
 - **Task Force Timelines** – Chair presented the timeline.
- Previous Meeting Minutes** - The chair mentioned that a comment had been received regarding the meeting minutes from previous meetings, the meeting minutes were updated. Meeting minutes held on January 19, 2021 (virtual call) are here:
https://www.ieee802.org/3/cx/public/jan21/Unconfirmed_Meeting_Minutes_ITSA_802d3cx_0121-r1.pdf

Chair asked if any attendee had any other comment regarding the January 19, 2021 Meeting Minutes. None were received

- Chair put forward motions for the Task Force to approve the previous meeting minutes.

Motion #2: Approve the meeting minutes of January 19, 2021:

https://www.ieee802.org/3/cx/public/jan21/Unconfirmed_Meeting_Minutes_ITSA_802d3cx_0121-r1.pdf

- Requires >50% (Procedural)
- Moved by: Clark Carty Seconded by: Mark Bordogna
- PASSES with no objections received

Approved meeting minutes from January 19, 2021 are officially here:

https://www.ieee802.org/3/cx/public/jan21/Approved_Meeting_Minutes_ITSA_802d3cx_0121.pdf

- **Presentations** – In addition to this presentation ([Agenda and General Information](#)), other presentations are on the agenda to be reviewed. Chair introduced the presentations for the day and started the presentation agenda item.

Presentation #1 - Updated Annex Proposal for 802.3cx, Richard Tse, Microchip

- https://www.ieee802.org/3/cx/public/march21/tse_3cx_01_0321.pdf
- It proposed an informative Annex to clarify the 802.3cx specifications
- It addresses feedback given on the initial proposal presented at the January 19, 2021 meeting.
- There was a comment received in the last meeting regarding FEC. Richard Tse clarified it in slide 4 and asked if there were further comments on this topic, there was none.
- On slide 5, Richard Tse proposed to have some general statement regarding the AM/CWM and corresponding idle insertion/removal. Ulf Parkholm questioned if the general statement could be avoided. Richard Tse suggested to first review the proposed text and then decide if that is enough.
- Jingfei Lv stated that he does not see a section to address rate adaptation.
- Richard Tse responded that rate adaptation is not in the PHY, it is in the MAC layer.
- Xiang He mentioned that rate adaptation for 200G and 400G is the PCS layer, it is not in the MAC layer.
- Richard Tse replied that in that case, there is a need to expand the annex to include that.
- Ulf Parkholm stated that in the draft D0.4 the wording for insertion/deletion is very general.
- Richard Tse replied that if it is general, then it is good. We may need to expand the annex to include idle, insertion and rate adaptation.

Presentation #2 - Proposed Draft P802.3cx Informative Annex, Richard Tse, Microchip

- https://www.ieee802.org/3/cx/public/march21/tse_3cx_02_0321.pdf

- Ulf Parkholm questioned whether or not there is a need to add classes C and D of ITU-T G.8273.2 and G.8273.3. Specifically to mention cTE, dTE and max TE components.
 - After some discussions, there was general agreement that it is not necessary to add the clock classes C and D of G.8273.2 and G.8273.3 in the Annex
 - Xiang He – It is good to state what high accuracy means
 - Richard Tse – This is a generic description to help the reader to understand the clauses we updated in 802.3cx.
 - Xiang He – Regarding Table XX-1, for 200G and 400G, the mismatch for PCS lane distribution is the same as the FEC, there is no difference between the two.
 - Richard Tse – Both the PCS and the FEC lanes are in the transmit path.
 - Steve Gorshe – The intent of the draft is to show how the annex should be. We can handle the details by the Task Force review.
 - Xiang He – I can bring the comment offline. For 200G and 400G, it goes directly to the PCS layer. In Table XX-1, the PCS lane distribution for 200G and 400G may need to be revised.
 - Ulf Parkholm – In clause XX.2 should it also include the constant PHY delays?
 - Richard Tse – It is the variable delays that cause the issue, not the constant delays
 - There were no comments on clauses XX.2, XX.4 and XX.5
 - For Clauses XX.5.1 and XX.5.2, Marek Hajduczenia questioned if Richard has any drawing to go with the calculation.
 - Richard Tse replied that he does not have a drawing, but he could add one. A figure (from the normative text) can be used to illustrate the different points used in the calculation.
 - Xiang He – Regarding the Tx_num_blk_change would it keep adding or it would be reset to zero? It could be periodic.
 - Richard Tse – It will only change when there is an idle insertion.
 - Jingfei Lv – In clause XX.5.2, maybe it is better to use T2 instead of T1, as T1 was used in the transmit side. Also use PDD1 in the transmit and PDD2 in the receive.
 - Richard Tse – I agree
 - Jingfei Lv – In clause XX.5.3, regarding the bullet on low-pass filter, Transparent Clock does not have a low-pass filter, also 802.1AS does not have a low-pass filter.
 - Richard Tse – The text was changed to state that a low-pass filter might be present.
 - There were no comments on clauses XX.6 and XX.7
- Chair asked if there is any comment considering this as an overall proposal. No comments were received.
- The Chair put forward the following straw poll:

Straw poll #1: For the annex text and figure proposals of tse 3cx 02a [as modified during the discussion], I favor:

- A. Adopting the proposal as the baseline for the annex
- B. Adopting just the proposed annex outline, and postponing the baseline content decisions until the next meeting in order to allow more time for review comments and proposals
- C. Adopting the proposed outline and making per-section decisions regarding adopting the baseline text at this meeting
- D. Postponing all decisions until the next meeting

E. Abstain

- The chair did not count the straw poll numbers, since the results clearly favored Option B.
- Based on the poll results, Chair put forward the following motion:

Motion #3: To adopt the outline of tse 3cx 02a as baseline for P802.3cx annex

- Requires >50% (Procedural)
- Moved by : Marek Hajduczenia Seconded by: Mark Bordogna
- PASSES with no objections received

- Richard Tse – What is the next steps?
- Marek Hajduczenia - I would like to have more time to review. Also, as a general guideline, it is good to upload the material ahead of time to allow members to review the contributions before the meeting.
- Chair acknowledged that it is a good practice to upload the contribution with enough time before the meeting.
- Chair stated that while we are not ready for task ballot for D0.4, he encouraged attendees to review and submit comments to the editor

Presentation #3 - IEEE 802.3 to ITU-T SG15 Q13 on P802.3cx status, Steve Gorshe, Microchip

- https://www.ieee802.org/3/cx/public/march21/gorshe_3cx_01_0321.pdf
- There were editorial comments that the Chair fixed during the meeting. It was suggested to add a timeline in the liaison. A link to the project page was added.
- Steve Trowbridge – The timeline shows D1.0 in March, which is not happening. We may want to update the timeline for the next meeting.
- The Chair stated that we are doing reviews along the way, so it should still be fine for D2.0 draft to be ready in July.
- Steve Trowbridge – if you move D1.0 you do not need to move D2.0. But it does seem that it is a short time between now and July.
- The Chair added in the liaison that timeline is subject to updates.
- The Chair stated that the timeline may be revised before the next meeting.
- The Chair put forward the following motion:

Motion #4: To approve the draft liaison from IEEE 802.3 to ITU-T SG15 Q13 on the P802.3cx status contained in gorshe 3cx 01a 0321

- Requires >50% (Procedural)
- Moved by: Marek Hajduczenia Seconded by: Steve Trowbridge
- PASSES with no objections received

Comments Resolution – Review of D0.4 comments, Marek Hajduczenia, Charter

- The editor reviewed comments 11 and 12. They were both accepted without any comments.
- Jingfei Lv – I have sent comments for D0.4 draft , but I received an email error message.

- The editor stated that he always acknowledges the receipt of the comments. If you send comments and do not receive an acknowledgement, then the email has not been received. The Editor asked for attendees to send comments to both his email addresses: mxhajduczenia@gmail.com; marek.hajduczenia@charter.com. Editor later confirmed that he just received the comments when sent to his gmail account.
- The Chair stated that we should be ready to make some decisions at the next meeting and asked if there was any new business.
- The editor asked the chair to make a motion to allow him to generate a new draft
- The Chair put forward the following motion:

Motion #5: To authorize the editor to produce D0.5 on the basis of D0.4 and closed comments and the adopted annex outline from tse 3cx 02a

- Requires >50% (Procedural)
- Moved by: Marek Hajduczenia Seconded by: Mark Bordogna
- PASSES with no objections received

FUTURE MEETINGS

- There is not a firm date for next IEEE 802.3 meeting, but it will be in May and most likely it will be a virtual meeting.

New Business

- There was no new business

Adjourn

- TF Chair proposed adjourning the meeting with the agenda having been completed.
- The Chair put forward the following motion:

Motion #7: Adjourn the meeting

- Moved by : Marek Hajduczenia Seconded by: Mark Bordogna
- Requires >50% approval
- PASSES with no objections received

Attendance

IEEE 802.3cx Improving PTP Timestamping Accuracy Task Force IEEE 802.3cx Virtual Plenary Series meeting, March 2021				Day 1 March 10				
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.				
de Koos	Andras	Microchip	Microchip	x				
Powell	Bill	Nokia	Independent	x				
Carty	Clark	Cisco	Cisco	x				
Ofelt	David	Juniper Networks	Juniper	x				
Fan	Dawei	Huawei	Huawei	x				
Wong	Denny	Xilinx	Xilinx	x				
Maniloff	Eric	Ciena	Ciena	x				
Nicholl	Gary	Cisco	Cisco	x				
Chacon	Geoffrey	MorethanIP	MorethanIP	x				
Lv	Jingfei	Huawei	Huawei	x				
Liu	Karen	Lightwave Logic	Lightwave Logic	x				
Kabra	Lokesh	Synopsis	Synopsis	x				
Hajduczenia	Marek	Charter	Charter	x				
Bordogna	Mark	Intel	Intel	x				
Dror	Nitzan	Marvell	Marvell	x				
Pham	Phong	Charter	Charter	x				
Nering	Ray	Cisco	Cisco	x				
Tse	Richard	Microchip	Microchip	x				
Wang	Roy	HPE	HPE	x				
McKeown	Shane	Calnex	Calnex	x				
Nicholl	Shawn	Xilinx	Xilinx	x				
Agarwal	Shubham	Cadence	Cadence	x				
Rodrigues	Silvana	Huawei	Huawei	x				

Ramesh	Sridar	Maxlinear	Maxlinear	x				
Gorshe	Steve	Microchip	Microchip	x				
Guendert	Steve	IBM	IBM	x				
Trowbridge	Steve	Nokia	Nokia	x				
Masuda	Takeo	OITDA/PETRA	OITDA/PETRA	x				
Sprague	Ted	Infinera	Infinera	x				
Huber	Tom	Nokia	Nokia	x				
Parkholm	Ulf	Ericsson	Ericsson	x				
He	Xiang	Huawei	Huawei	x				