IEEE 802.3 Ethernet Working Group
EC REVIEW DRAFT Liaison Communication

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To:	Stefano Ruffini	Rapporteur Q13/15, ITU-T stefano.ruffini@ericsson.com
	Silvana Rodrigues	Associate Rapporteur Q13/15, ITU-T silvana.rodrigues@huawei.com
CC:	Konstantinos Karachalios	Secretary, IEEE-SA Standards Board Secretary, IEEE-SA Board of Governors sasecretary@ieee.org
	Paul Nikolich	Chair, IEEE 802 LMSC p.nikolich@ieee.org
	Adam Healey	Vice-chair, IEEE 802.3 Ethernet Working Group adam.healey@broadcom.com
	Jon Lewis	Secretary, IEEE 802.3 Ethernet Working Group jon.lewis@dell.com
	Steve Gorshe	Chair, IEEE P802.3cx Task Force steve.gorshe@microchip.com
	Steve Trowbridge	Chair, ITU-T Study Group 15 steve.trowbridge@nokia.com
From:	David Law	Chair, IEEE 802.3 Ethernet Working Group dlaw@hpe.com

Subject: Status of IEEE P802.3cx Improved PTP Timestamping Accuracy Task Force

Approval: Agreed to at IEEE 802.3 plenary teleconference meeting, 18th March 2021

Dear Mr Ruffini,

The IEEE P802.3cx Improving PTP Timestamping Accuracy Task Force has identified four aspects of some recently adopted Ethernet PHYs that could potentially limit the accuracy of transporting PTP timestamps. These aspects can be summarized as:

1. The impact of Idle insertion and removal associated with Alignment Marker / Code Word Marker removal and insertion
2. The impact of different implementations for distributing information across multiple PCS lanes at the transmitter and recovering the information at the receiver
3. Discrepancy between the timestamp reference points specified by IEEE Std 1588 / IEEE Std 802.1AS and IEEE Std 802.3-2018.
4. Transmitter skew not associated with media delays

[1] This document solely represents the views of the IEEE 802.3 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

IEEE P802.3cx has adopted solutions with associated baseline text for each of these and is working on an informative annex to provide guidance to users. Once the baseline text for the annex is adopted, IEEE P802.3cx will move into the Task Force review phase. When draft IEEE P802.3cx moves from Task Force review to the Working Group ballot phase, the Task Force plans to provide a copy of the draft for information to Q13/15. Links to the project scope, objectives and adopted timeline can be found at <https://www.ieee802.org/3/cx/index.html>. Note that the timeline is subject to updates.

Sincerely,

David Law

Chair, IEEE 802.3 Ethernet Working Group