Title:	Liaison response to LS 208 on request for feedback on work items related to deterministic networking in SG13
From:	IEEE 802.1 Working Group[1]
For:	Action
Contacts:	Glenn Parsons, Chair, IEEE 802.1, glenn.parsons@ericsson.com
	Jessy Rouyer, Vice-Chair, IEEE 802.1, jessy.rouyer@nokia.com
	János Farkas, Chair, IEEE 802.1 TSN Task Group, janos.farkas@ericsson.com
	David McCall, Vice-Chair, IEEE 802.1 TSN Task Group, david.mccall@intel.com
	James P. K. Gilb, Chair, IEEE 802, gilb_ieee@tuta.com
	Karen Randall, Liaison Secretary, IEEE 802.1, karen@randall-consulting.com
	Jodi Haasz, Senior Manager, IEEE SA Operational Program Management, j.haasz@ieee.org
To:	ITU-T Study Group 13, tsbsg13@itu.int
	Taesang Choi, choits@etri.re.kr
	Guosheng Zhu, zhugs@rayton-networks.com
Cc:	Scott Mansfield, Liaison Rapporteur ITU-T SG13 for IEEE 802.1, scott.mansfield@ericsson.com
	IETF DetNet WG, detnet@ietf.org,
	Lou Berger, Co-Chair, IETF DetNet Working Group, lberger@labn.net,
	János Farkas, Co-Chair, IETF DetNet Working Group, janos.farkas@ericsson.com,
	John Scudder, Area Director, IETF Routing Area, jgs@juniper.net,
	ITU-T Study Group 12, tsbsg12@itu.int
Date:	November 15, 2024

Dear Colleagues,

The IEEE 802.1 Working Group would like to thank ITU-T Study Group 13 for the information provided in liaison statement 208 https://www.ieee802.org/1/files/public/docs2024/liaision-itu-t-SG13-LS208-DetermNetwrking-0824.pdf on request for feedback on work items related to deterministic networking in SG13.

As a reminder, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) (and its ancestor, the IEEE 802.1 Audio Video Bridging (AVB) TG) was formed several years ago to provide solutions for use cases requiring time and/or mission critical data communications, i.e., deterministic communications. The solutions the IEEE 802.1 TSN TG is actively developing and has already developed (i.e., the tools of the TSN toolset) address various aspects required for deterministic data communications and provides solutions for the requirements of various use cases. Furthermore, the use cases are expanding.

The most prominent use cases are addressed by dedicated profile specifications developed in joint effort with experts of the area of the given use case. We have published the following profile specifications:

- IEEE Std 802.1BA-2021 "Audio Video Bridging (AVB) Systems"
- IEEE Std 802.1CM-2018 "Time-Sensitive Networking for Fronthaul", as amended by IEEE Std 802.1CMde-2020 "Enhancements to Fronthaul Profiles to Support New Fronthaul Interface, Synchronization, and Syntonization Standards"

---

[1] This document solely represents the views of the IEEE 802.1 Working Group, and does not necessarily represent a position of IEEE, or the IEEE Standards Association, or IEEE 802.

We are working on the following profile specifications and plan to complete them in 2025:

- [IEC/IEEE 60802](#) "Time-Sensitive Networking Profile for Industrial Automation"
- [IEEE P802.1DG](#) "Time-Sensitive Networking Profile for Automotive In-Vehicle Ethernet Communications"
- [IEEE P802.1DP / SAE AS6675](#) "Time-Sensitive Networking for Aerospace Onboard Ethernet Communications"

The published standards for the various TSN tools are listed at: https://1.ieee802.org/tsn/#TSN_Standards and the TSN tools under development are available at: https://1.ieee802.org/tsn/#Ongoing_TSN_Projects. A visual summary of the TSN toolset and profiles is available at: https://www.ieee802.org/1/files/public/docs2024/admin-tsn-summary-1124-v01.pdf. TSN tools are applicable at any scale and for various network segments. They are tools that were developed for and are not limited to any particular network. The TSN toolset can be used in various use cases that do not have dedicated profile specifications.

The IEEE 802.1 TSN TG collaborates with the IETF Deterministic Networking (DetNet) WG on a common architecture to provide deterministic data communications over Layer 2 and Layer 3 networks. In addition, the IEEE 802.1 WG collaborates with the IEEE 802.11 WG, the IEEE 802.15 WG, and 3GPP to provide deterministic data communications over networks that include wireline and wireless technologies as well.

Given the above, we think the items that you are working on and the scope of ITU-T Y.Det-qos-intwk-wan overlaps with the scope of the IEEE 802.1 TSN TG.

If you identify gaps in the requirements the IEEE 802.1 TSN TG addresses, then we invite you to contribute this information to the IEEE 802.1 TSN TG. Furthermore, if the TSN tools need to be extended to address missing requirements, we would welcome your contributions to develop our TSN technology further to address needs and requirements as they arise.

Note that the IEEE 802 work is open and contribution driven. Participation is on an individual basis and technical discussion can be conducted based on individual contributions. The TSN Task Group holds regular electronic meetings: details are available at https://1.ieee802.org/wg-calendar.

Respectfully submitted,
Glenn Parsons
Chair, IEEE 802.1 Working Group