

Title: **Liaison response on synchronization requirements**  
From: **IEEE 802.1**  
For: Information  
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Dear Colleagues,

Thank you for your liaison [SG15–LS187](#).

We would like to inform you that the IEEE 802.1 P802.1CMde project (*Enhancements to Fronthaul Profiles to Support New Fronthaul Interface, Synchronization, and Syntonization Standards*) has initiated a Standards Association ballot on draft 2.0 which is accessible via the project's web page: <https://1.ieee802.org/tsn/802-1cmde/> and will be made available to you separately. We would be grateful for your comments on the draft. Ballot comment resolution will be conducted during the January 2020 IEEE 802.1 Interim session, and potentially on one or more of the weekly calls of the TSN Task Group.

One of the goals of the updates in subclause 6.4 in P802.1CMde is to clarify the synchronization requirements. Please refer to subclause 6.4 in P802.1CMde/D2.0 for the applicable time synchronization requirements and for the time error budget for the various use cases. Please note that “shall” is used for mandatory and “may” for optional conformance statements in IEEE 802.1 standards. Conformance requirements terminology is described in the beginning of the conformance clause, which is often Clause 5 as in IEEE Std 802.1CM. Clause 6 provides a brief description of fronthaul and collects the requirements of fronthaul; therefore, Clause 6 is informative. For example, subclauses 6.4.1.1 *Category A* and 6.4.1.2 *Category B* provide examples on how time error budget can be calculated depending on the time error of the eRE/RE. The fronthaul requirements have been contributed by CPRI Cooperation. The requirements are on the fronthaul bridged network, they are informative, not normative. IEEE 802.1CM does not include any mandatory or optional conformance statements for a network or for the time error budget of an eRE/RE. The normative part of IEEE Std 802.1CM is on devices (i.e., bridges and end stations) and it is summarized in Clause 5 Conformance and Annex A *PCS proforma—Time-sensitive networking for Fronthaul Profiles*, where PCS stands for Profile Conformance Statement. The conformance statements are elaborated in Clauses 7, 8, and 9 with sentences that include “shall” or “may”. We would be grateful for your comments on P802.1CMde/D2.0 if further clarifications to the standard are needed.

IEEE 802.1 meets again January 20-24, 2020 in Geneva, Switzerland, and March 16-20, 2020 in Atlanta, GA, USA. IEEE 802.1 face-to-face meeting details are available at: <http://www.ieee802.org/1/meetings>. The details on TSN TG calls are available at <https://1.ieee802.org/tsn-calls>.

Respectfully submitted,  
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Chair, IEEE 802.1 Working Group