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IEEE Standard for
Local and metropolitan area networks—

Time-Sensitive Networking for Fronthaul

Amendment 1: Enhancements to Fronthaul Profiles to Support New Fronthaul Interface, Synchronization, and Syntonization Standards

IEEE Computer Society

Developed by the
LAN/MAN Standards Committee

IEEE Std 802.1CMde™-2020
(Amendment to IEEE Std 802.1CM™-2018)

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Approved 4 June 2020

IEEE SA Standards Board

Abstract: Enhancements to fronthaul profiles are defined in this amendment to IEEE Std 802.1CM™-2018 in order to address new developments in fronthaul interface standards and in related synchronization and syntonization standards.

Keywords: amendment, bridged network, CPRI, eCPRI, F1, fronthaul, IEEE 802®, IEEE 802.1™, IEEE 802.1CM™, IEEE 802.1CMde™, synchronization, time-sensitive networking, TSN, Virtual Local Area Network, VLAN, VLAN Bridge

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Maximilian Rie[illegible]
Jessy Rouyer
Atsushi Sato
Frank Schewe
Michael Seaman
Maik Seewald
Johannes Speic[illegible]
Marius Stanica
Guenter Ste[illegible]ndl
Xinyuan Wa[illegible]
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Ha[illegible] Wa[illegible]
[illegible]rl [illegible]ber
Bri[illegible] Weis
[illegible]dwig Winkel
Jordon Woods
Takahiro Yamaura
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The following members of the individual balloting committee voted on this amendment. Balloters may have voted for approval, disapproval, or abstention.

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Introduction

This introduction is not part of IEEE Std 802.1CMde-2020, IEEE Standard for local and metropolitan area networks—Time-Sensitive Networking for Fronthaul—Amendment 1: Enhancements to Fronthaul Profiles to Support New Fronthaul Interface, Synchronization, and Syntonization Standards.

This amendment to IEEE Std 802.1CM-2018 defines enhancements to fronthaul profiles in order to address new developments in fronthaul interface standards and in related synchronization and syntonization standards.

The standard contains state-of-the-art material. The area covered by this standard is undergoing evolution. Revisions are anticipated within the next few years to clarify existing material, to correct possible errors, and to incorporate new related material. Information on the current revision state of this and other IEEE 802® standards may be obtained from

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Amendment 1: Enhancements to Fronthaul Profiles to Support New Fronthaul Interface, Synchronization, and Syntonization Standards

The amendment is based on IEEE Std 802.1CM-2018.

NOTE—The editing instructions contained in this amendment define how to merge the material contained therein into the existing base standard and its amendments to form the comprehensive standard.

The editing instructions are shown in ***bold italic***. Four editing instructions are used: change, delete, insert, and replace. ***Change*** is used to make corrections in existing text or tables. The editing instruction specifies the location of the change and describes what is being changed by using ~~strikethrough~~ (to remove old material) and underscore (to add new material). ***Delete*** removes existing material. ***Insert*** adds new material without disturbing the existing material. Deletions and insertions may require renumbering. If so, renumbering instructions are given in the editing instruction. ***Replace*** is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one. Editing instructions, change markings, and this NOTE will not be carried over into future editions because the changes will be incorporated into the base standard.[1]

1. Overview

1.3 Introduction

Change the dashed list of the second paragraph in 1.3 as shown (text of footnote 3 remains unchanged):

- Virtual Local Area Network (VLAN) Bridge specification in IEEE Std 802.1Q™.[3]
- MAC service specifications in IEEE Std 802.1AC™.
- MAC/PHY technology specifications in IEEE Std 802.3™.
- Interspersing express traffic specification in IEEE Std 802.3~~br~~™.
- Frame preemption specification in IEEE Std 802.1Q.
- Time synchronization and Precision Time Protocol (PTP) specifications in IEEE Std 1588™.
- Telecom profile specification in ITU-T G.8275.1, which is based on IEEE Std 1588.
- Synchronous Ethernet specification in ITU-T G.8261, G.8262, G.8262.1, and G.8264.

[1] Notes in text, tables, and figures of a standard are given for information only and do not contain requirements needed to implement this standard.