

P802.1CM

Submitter Email: janos.farkas@ericsson.com

Type of Project: New IEEE Standard

PAR Request Date: 16-Apr-2015

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for a New IEEE Standard

1.1 Project Number: P802.1CM

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Time-Sensitive Networking for Fronthaul

3.1 Working Group: Higher Layer LAN Protocols Working Group (C/LM/WG802.1)

Contact Information for Working Group Chair

Name: Glenn Parsons

Email Address: gparsons@ieee.org

Phone: 613-963-8141

Contact Information for Working Group Vice-Chair

Name: John Messenger

Email Address: jmessenger@advaoptical.com

Phone: +441904699309

3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

Contact Information for Sponsor Chair

Name: Paul Nikolich

Email Address: p.nikolich@ieee.org

Phone: 857.205.0050

Contact Information for Standards Representative

Name: James Gilb

Email Address: gilb@ieee.org

Phone: 858-229-4822

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 07/2018

4.3 Projected Completion Date for Submittal to RevCom: 05/2019

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

5.2 Scope: This standard defines profiles that select features, options, configurations, defaults, protocols and procedures of bridges, stations and LANs that are necessary to build networks that are capable of transporting fronthaul streams, which are time sensitive.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes

If yes please explain: This standard may make use of the specifications that are under development in:

P802.3br - Interspersing Express Traffic

P802.1Qbu - Frame Preemption

P802.1Qbv - Enhancements for Scheduled Traffic

5.4 Purpose: The purpose of this standard is to enable the transport of time sensitive fronthaul streams in Ethernet bridged networks.

5.5 Need for the Project: A mobile operator's radio equipment and radio equipment controller are often separated and the connection between them has very stringent requirements. This fronthaul connection is not provided by a bridged network today. In an IEEE 802.1 bridged network potentially carrying other categories of traffic, specific configurations of various IEEE 802 standards (e.g. P802.1Qbu, P802.1Qbv, P802.3br) are needed to meet the requirements of the fronthaul streams. Therefore, the use and the configurations of functions defined in the IEEE 802 standards have to be specified by standard profiles for bridged fronthaul networks.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment, such as bridge and NIC suppliers and vendors, network operators, testers, and users.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): 5.2: The transport link between the radio equipment and the radio equipment controller is referred to as fronthaul. A fronthaul network is a bridged network providing the fronthaul.

7.2: This is not joint development, however, this work will be done in collaboration with Common Public Radio Interface (CPRI(TM)) Cooperation (<http://www.cpri.info/>).