

P802.1xx

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Type of Project: New IEEE Standard

PAR Request Date: 15-Aug-2018

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for a New IEEE Standard

1.1 Project Number: P802.1xx

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Time-Sensitive Networking Profile for Service Provider Networks

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

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

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4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 07/2021

4.3 Projected Completion Date for Submittal to RevCom: 05/2022

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 local and metropolitan area networks that are necessary to build networks that provide Time-Sensitive Networking (TSN) quality of service features for shared service provider networks.

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: IEEE P802.1Qcr – Asynchronous traffic shaping

5.4 Purpose: This standard provides guidance for designers and implementers of service provider networks, to be shared by some number of applications, who need the TSN Quality of Service (QoS) features offered by IEEE Std 802.1Q bridges, including dependable bandwidth and latency promise, but whose network links have a very high bandwidth-latency product.

5.5 Need for the Project: 5G transport networks will have an order of magnitude more cells than present networks, making it essential for multiple carriers (applications/users) to share a physical infrastructure. This sharing is sometimes called “network slicing”. QoS partitioning between applications or customers will enable high-value services that have stringent bandwidth and latency requirements, to efficiently share the network with best-effort services.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment, such as bridge and network interface (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):

5G – Fifth generation

IEEE Std 802.1Q – IEEE Standard for Local and Metropolitan Area Networks—Bridges and Bridged Networks

IEEE P802.1Qcr – Amendment: Asynchronous Traffic Shaping