

P802.1Qc? Seamless Availability for Time Sensitive Traffic

Draft PAR v1

PAR

- **2.1 Title:**
 - **Standard for Local and Metropolitan Area Networks --- Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks - Amendment: Seamless Availability for Time Sensitive Traffic**
- **4.2 Expected Date of Submission for Initial Sponsor Ballot:**
 - **11/2014**
- **4.3 Projected Completion Date for Submittal to RevCom:**
 - **10/2015**
- **5.1 Approximate number of people expected to work on the project:**
 - **25**

PAR - Scope

- **5.2 Scope:**

- This amendment specifies procedures, managed objects and protocol extensions for bridges and end stations that enable seamless availability and network segment protection for time sensitive traffic. This includes definitions of:
 - Mechanisms to create duplicate frames for redundant transmission.
 - Protocol extensions to identify duplicate frames.
 - Mechanisms to eliminate duplicate frames.

PAR - Purpose

- **5.3 Is the completion of this document contingent upon the completion of another document:**
No
- **5.4 Purpose:** This document will not include a purpose clause.

PAR - Need

- **5.5 Need:**

- There is a need for simultaneous redundant transmission of time sensitive traffic. Therefore it is necessary to create and eliminate duplicate frames. This can be done in end stations and bridges.

- **5.6 Stakeholders for the Standard:**

- Developers, providers, and users of networking services and equipment for Industrial Automation, In-vehicle networking, Professional AV and other systems requiring high availability for time sensitive traffic, including networking IC developers, bridge and NIC vendors, and users.

PAR

- **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?: Yes**

If Yes please explain: IEC 62439-3, Parallel Redundancy Protocol (PRP) and High availability Seamless Redundancy (HSR)

Explain: IEC 62439-3 defines high-availability mechanisms in automation networks. Unlike IEC 62439-3 this amendment specifies seamless availability for time sensitive traffic with controlled paths and reservation in order to guarantee determinism.

and answer the following

Sponsor Organization: IEC

Project/Standard Number: 62439-3

Project/Standard Title: Parallel Redundancy Protocol (PRP) and High availability Seamless Redundancy (HSR)

- **7.2 Joint Development**

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