P802.1Qc? Seamless Availability for Time Sensitive Traffic

Draft PAR v1
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
• **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.
• 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