P802.1Qc? Frame Replication and Elimination for Reliability

Draft PAR v3

PAR

- **2.1 Title:**
  - **Standard for Local and Metropolitan Area Networks --- Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks - Amendment: Frame Replication and Elimination for Reliability**

- **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 protocols for bridges and end stations that provide:
    - Identification and replication of frames, for redundant transmission.
    - Identification of duplicate frames.
    - Elimination of 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 are no other 802-compatible solutions providing fault tolerance without failover. To achieve this, 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 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, which is restricted to ring topologies, this amendment will work on all LAN topologies.

  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