P802.1DG

Time-Sensitive Networking Profile for Automotive In-Vehicle Ethernet Communications

Resolution of Comments on
Project Authorization Request (PAR) and
Criteria for Standards Development (CSD)

2018-11-14

802.11 Comments

- Comment:
  PAR 8.1 – A list of the cited standards should be included here

- Response:
  Additional Explanatory Notes are not required as the full titles are already cited in 5.3 where the standards were referenced. There are no other abbreviated references to the standards in the PAR

802.11 Comments

- Comment:
PAR 5.2 –TSN is identified, but not "security standards". Would it make sense to identify which security standards are being used?

- Response:
Yes, adjusted as follows

- The change to 5.2 is:
"This standard specifies …… based on IEEE 802.1 Time-Sensitive Networking (TSN) standards and IEEE 802.1 Security standards"

802.11 Comments

- Comment:
  PAR 5.4 – The use of "guidance" seems odd for this being a standard instead of a Guide. Suggested change: "guidance" to "profiles" (which makes it consistent with the scope statement.)

- Response:
    The change to 5.4 is:
  "This standard provides profiles for designers and implementers ……."

802.11 Comments

- Comment:
  PAR 5.5 – Suggest to change "guidelines" to "standardization"

- Response:
  The change to 5.5 is:
  ".... Thus there is a need for standardization of the selection and use of IEEE 802 standards and features in order to be able to deploy secure highly reliable converged networks."

802.11 Comments

- Comment:
  CSD –
  - No comments

802.3 Comments

- Comment:
PAR 5.2 – Scope – The scope of the project being applicable to "deterministic latency…Ethernet networks" is ambiguous and clarity is needed. Time Sensitive Networking (TSN) has been applicable to full-duplex, point-to-point Ethernet links. The suite of Ethernet port types targeted for automotive application (standardized and under development) though are not all full-duplex, point-to-point. Will the project change the scope of TSN to the full range of IEEE Std 802.3 Ethernet automotive PHYs? If not, what are the generic PHY requirements or specific Ethernet PHY types relevant to the standard?

- Clarify by stating that that CSMA/CD (half-duplex) is out of scope for this project.

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- Response:
No, the project will not change the scopes of the IEEE 802.1 TSN Standards.

The PHY requirements are addressed by this change to 8.1:

"Support for 802.3 half-duplex media is dependent on the media being deterministic"

802.3 Comments

- Comment:
  PAR 5.3 – Contingencies – There is no reason to mention published standards, they are irrelevant to the question. Grammar could be improved for the two cited documents: "This project will utilize specifications in P802.1AS-Rev Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications and P802.1Qcr Draft Standard for Local and Metropolitan Area Networks - Bridges and Bridged Networks Amendment: Asynchronous Traffic Shaping.

- Response:
  Accept

The change to 5.3 is:
"This project will utilize the following specifications:

- P802.1AS-Rev Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications

- P802.1Qcr Draft Standard for Local and Metropolitan Area Networks - Bridges and Bridged Networks Amendment: Asynchronous Traffic Shaping"

802.3 Comments

- Comment:
PAR 5.3 – Contingencies – Will current automotive related Std IEEE 802.3 amendments be contingencies (e.g., P802.3cg and P802.3ch)? If so, please list them, if no contingency for these projects, no change is required.

- Response:
No

802.3 Comments

- Comment:
PAR 5.4 – Purpose – Change -- '... of IEEE 802.3 Ethernet networks that support the entire range of in-vehicle applications ...' to read ---- '... of full-duplex IEEE 802.3 Ethernet networks that support in-vehicle applications ...'

Response:

Instead of limiting the purpose to full-duplex, this is addressed by the following change to 8.1:

"Support for 802.3 half-duplex media is dependent on the media being deterministic"

802.3 Comments

- Comment:
  CSD –
  - No comments