Editor's Report
60802 Draft 0.4

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Editor’s caveat

- The editor views his primary role as building consensus regarding the profile content. The adaptation of the profile contribution to the draft is offered in that spirit and is intended to prompt discussion.

Outline

Changes since D0.3

- Sections 1-3 - Largely Boilerplate, no change
- Section 4 - Overview of TSN in Industrial Automation
  - Largely based upon Dorr contribution (http://www.ieee802.org/1/files/public/docs2018/60802-Dorr-ProfileContribution-0918-v02.pdf)
  - Further contributions welcome
- Section 5 Conformance.
  - Based upon structure of 802.1BA (AVB Profile) and 802.1CM
- Section 6 - Required Functions for an Industrial network.
  - Largely based upon Dorr contribution

Changes since D0.3 - continued

- Sections 7 – Overview of the Profiles (no content yet)
- Annex A - PCS proforma
  - Added description of the PCS proforma and instructions for completing.
  - Based upon 802.1BA (AVB Profile) and 802.1CM
- Annex Z – added gaps identified at the Oslo Interim Meeting.
- Bibliography – No change.

Section 5

- What's included from the profile contribution
  - Effectively nothing. Instead, the section is based upon the approach taken in 802.1BA (AVB Profile) and 802.1CM wherein adherence to the PCS proforma is required.
  - Reasoning: The conformance section of the contribution largely outlines test methodology and set-up which, in the editors opinion, falls outside the scope of the PAR.

Section 6

- What's included from the contribution:
  - Required Functions for an Industrial Network
  - PHY and MAC selection
  - IEEE 802.1 selection (including network access)
  - General
  - Bridge selections
  - Bridge delay requirements
  - Clock synchronization selection
  - General Requirements for Synchronization
  - IEEE 802.1AB selection
  - Management selection
  - General
  - Protocols
  - Security selection
- What's not included:
  - Quantities
  - Structure of the profile contribution
  - PHY and MAC delay requirements
  - Bridge FDB requirements
  - Bridge resource requirements

Section 6 – (cont)

- Editor's reasoning for what's included:
  - Editor is warming to the idea of a standards-based view of required features.
  - Conformance criteria will still reside in section 5 and Appendix A (PCS Proforma)
- Editor's reasoning for what's not included:
  - In general, what's included or not included is a reflection of the editors perception of where consensus does or does not exist. Obviously, this needs to be vetted both by discussion and by the balloting process.
- Next steps:
  - The standards-based view of required features needs to be vetted. For instance, the contribution refers to feature in IEEE802.1Q clauses 1-4. The first normantive language in .1Q appears in clause 5.
  - A serious discussion to achieve consensus on the "not included" requirements.

Quantities

- Contributor’s proposal:
  - Move this clause to normative annex A;
  - Define the relevant normative parameters there;
  - Giving quantities is mandatory for conformance;
  - Define the required quantities for a limited set of different classes (optional);
  - Allow “wildcard” numbers for the defined parameters.
  - Align terminology (talker/producer, network diameter)

- How do we achieve consensus?
  - Is the proposal a reasonable compromise/approach?

PHY and MAC delay requirements

- Editor’s proposal:
  - Agree upon a set of Bridge delay requirements.

- How do we achieve consensus?
  - Is the proposal a reasonable compromise/approach?

Bridge FDB and resource requirements

- Editor’s proposal:
  - None

- How do we achieve consensus?
  - It is the editor’s perception that concerns exist regarding the implementation specific nature of these requirements.
  - Nonetheless, the concern that adequate resources be available for bridges in industrial applications is understandable.
  - Can we find a way that achieves the same ends without forcing manufacturers into a specific implementation
  - Contributions welcome

Thank you