Proposal for comparison process Next steps

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Motivation

- Participants in IEEE 802.3 dm are currently working on competing technical proposals.
- During the May 1st interim, we proposed the creation of a comparison document to support those having to make a choice in the IEEE 802.3 WG but not involved in the IEEE 802.3dm TF.

https://www.ieee802.org/3/dm/public/050125/veloso_matheus_dm_01_comparison_20250501.pdf

- The intention with the comparison document is
 - to clarify where there are agreements and disagreements
 - to make the disagreements understandable.
- This presentation details the proposal with tasks, timeline and outlook on the anticipated final document.

Timeline

- May interim 12.-16.5. → creation of a comparison adhoc/gathering interest/informal conversations
- 6 weeks in between (meetings at least once per week)
 - Selection of criteria, clustering of criteria in groups, potential units for rating, description
 - General, qualitative differences between the approaches
 - Criteria fulfillment and perspective on criteria
 - Bringing the results in a form to present
- Draft versions published for 802.3 WG latest June 30, target date also for comparison document
- July plenary 28.-31.7.

Proposal to be made by Kirsten and Gumersindo, can be shared on the reflector following the interim

Discussion of criteria in a certain order, based on proposals

Main challenges

- Find the right level of complexity
- Be able to agree to disagree
- Finish a meaningful document in time
- To not get lost in politics

Basic idea for summary

	Prop. 1, opinion of proponents of prop. 1	Prop. 1, opinion of proponents of prop. 2	Prop. 2, opinion of proponents of prop. 2	Prop. 2, opinion of proponents of prop. 1	Position on criticality of criteria by proponents of prop. 1	Position on criticality of criteria by proponents of prop. 2
Criteria 1						
Criteria 2						

- The goal is to show where there are agreements and disagreements.
- It is NOT the goal to agree on everything.

Proposed structure of comparison document

- Contributor list
- Motivation (1 Slide)
- Very brief overview on main items where the proposals differ (1 Slide, e.g. reference to drafts)
- Principle differences between TDD/FDD (ACT) (3 Slides, tbd)
- Overview on comparison criteria (1 Slide)
- Fulfillment per criteria (2 Slide per criteria, including references)
- Summary (2 Slides)

Proposal for high-level criteria cluster

- 1. PHY and transceiver complexity
 - a) "Camera side"
 - b) "ECU side"

2. Performance

- a) EMC (emissions/immunity)
- b) Latency
- c) Cable reach (min/max)

3. Relative system costs

- a) Power over circuitry
- b) Crystal
- c) Bi-directional use of ports

4. Other

- a) Migration path for industry
- b) Reuse and synergies
- c) Inter-standard competition
- d) Eco-system
- e) Path towards higher data rates
- f) Compatibility with TSN

Next steps

- To be discussed in this interim meeting.
 - Adhoc or informal conversations.
 - Start in the week of May 19 (CW21).
 - E.g. Wednesdays 15:00 CET 17:00 CET (6:00 PST, 22:00 JMT)
 - Please let us know if you would like to join/contribute
 - Results to be presented in respective interim around June 30
- Next steps
 - Send out proposal on criteria list and collect feedback
 - Collect feedback on general description (proposals basics and technical principles)
 - Collect proposals for criteria fulfillment (contributions needed)
 - Bring results into the comparison document

Thank You!