

CORNING

IEEE Best Practices

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Motivation

- I want IEEE 802.3cz to be successful
 - A quality standard on time
 - That meets our objectives
 - That meets the CSDs
- How do we get there?
 - We need a diverse set of contributions
 - That address all aspects of the standard
 - All leading to a baseline draft that can enter the ballot process
- This contribution “borrows” information from multiple contributions in other successful projects
- Our Chair has covered some of the topics included here but they are repeated here for emphasis

How to get to a standard

- Now that the Task Force has been formed, the steps that have to be completed are:
 - Adopt baselines needed to fulfill the objectives
 - Create initial draft version (D1.0)
 - Task Force review (D1.x)
 - Working Group ballot (D2.x)
 - Sponsor ballot (D3.x)
 - Final approvals & publication
- Baselines must
 - Address objectives
 - Be supported by technical contributions

The Process

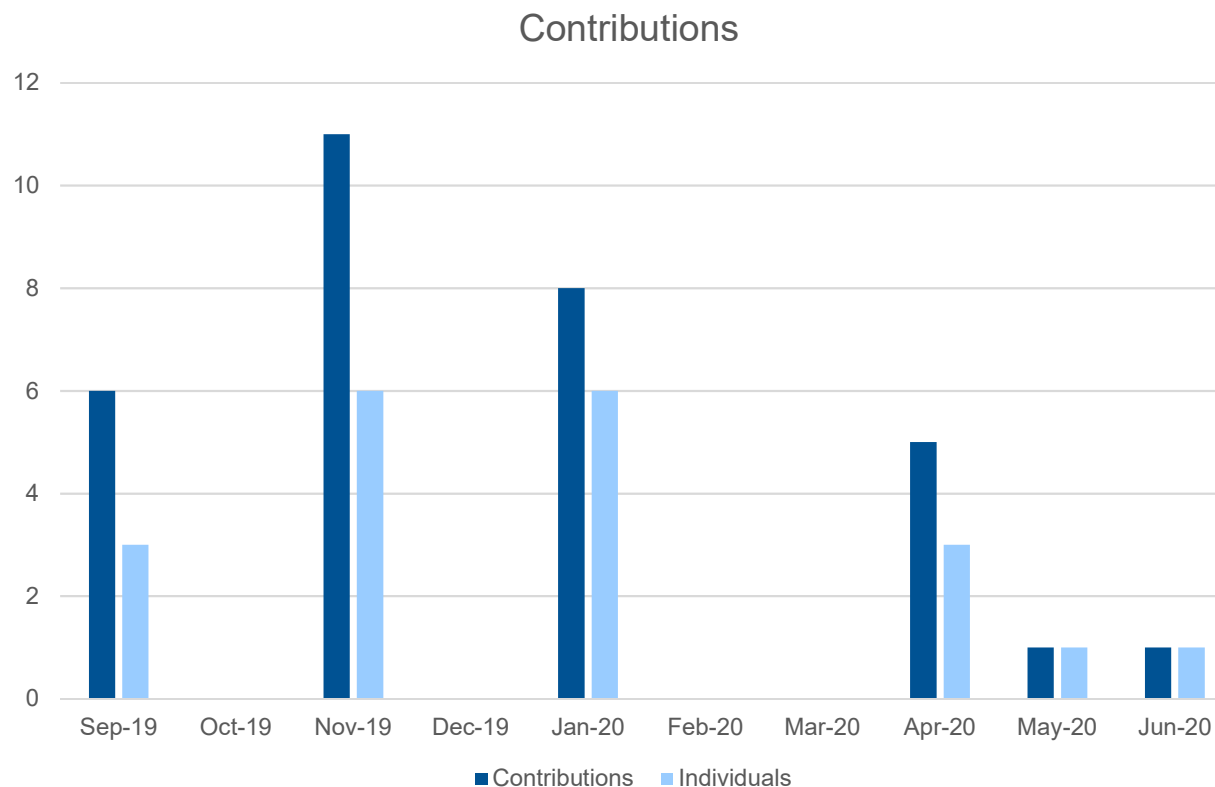
- Before the TF review is started on D1.0, we need to prepare an initial, unofficial version of the draft , D0.x
 - May contain primary outline information to stimulate technical discussion and contributions
 - May contain material from other existing clauses with similar scope and coverage, to give a starting point for development of project-specific text
 - Generally could be technically incomplete (and sometimes – technically incorrect)
- Draft 1.0
 - Draft D1.0 represents the first, official TF draft ready for TF review
 - It is the first milestone in any 802.3 project, opening the process of official TF review, comment resolution, and progressing TF towards the Working Group ballot
 - Draft D1.0 may be still technically incomplete, contain TBDs, editorial notes on missing text, etc., but these will be resolved through comments before D2.0 can be generated

Baseline Proposals

- Baseline means that the given proposal is widely accepted (has many supporters) and it is technically complete (enough) to be included in the draft
- A baseline proposal must contain sufficient detail so that an editor can draft text without having to invent significant technical details
 - baseline proposals must be complete and definitive
 - options, choices, items that are “too be defined” are undesirable but allowed for initial draft versions
 - It is ok for competing proposals for the same item to be developed in parallel
 - The best proposals will gain the most support with time
- Once a coherent and set of baseline proposals has been adopted, the editorial team goes to work, preparing the first official TF review draft

I have some concerns...

- Precipitous drop in IEEE 803cz contributions – two meetings cancelled due to a lack of contributions
- 80% of the contributions are from one individual/company
- We need a broader base of folks contributing to the work



...but I remain optimistic

- We have a proposed timeline
- We now have a volunteer for TF Chief Editor, Luis Manuel Torres Cantón
- it is critical that we get the contributions needed to support the baseline proposals

This is a complex project

- 5 PHY speeds, multiple use cases
- Steps needed
 - We need input from Automotive OEM's, Tier 1's)
 - Data rates
 - Mechanical requirements
 - Environmental requirements
 - Relative cost targets
 - We need participation from VCSEL suppliers
 - We need to establish draft transmitter and receiver specifications
 - We need to develop a link budget analysis
 - We need to converge on a strawman link segment spec for each speed
 - Bandwidth
 - Insertion Loss
 - Return Loss
 - Additional specifications

Recommendations

- IEEE is a contribution driven organization – we need contributions to drive the work
- We need to solicit participation from a broad set of automotive companies
 - OEMs
 - Tier 1 suppliers
 - Component suppliers
- It is critical to keep momentum for a successful project

References

- http://grouper.ieee.org/groups/802/3/bs/public/14_05/anslow_3bs_01_0514.pdf
- http://grouper.ieee.org/groups/802/3/cy/public/jun20/hajduczenia_3cy_01_0620.pdf
- http://grouper.ieee.org/groups/802/3/cy/public/jun20/zimmerman_3cy_01_0620.pdf

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