

Acting Chair's Comments

IEEE 802.3 Study Group
10Mb/s Single Twisted Pair Ethernet (10SPE)

George Zimmerman
CME Consulting, Inc.

Study Group Basics

- Study Group Scope/Authorizing Motion
- The Goal: Get to Task Force
 - Get an approved PAR w/CSDs
- The substance: Objectives
- The forms:
 - The PAR
 - The CSDs
- The process: timing & possible paths
- Final note: setting our ad hoc times

Study Group (SG) Scope / Authorizing Motion

- Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for 10Mb/s Single Twisted Pair Ethernet including optional power.
 - Source: Unconfirmed minutes, 802.3 July 2016 Closing Plenary, Motion 22
- Take aways (my interpretation):
 - Only 10 Mbps on 1 twisted pair is in scope for the SG
 - No other speeds, no other media, not restricted in market applications, reach, etc.
 - Powering is IN scope, but not required, and should be optional
- Generally the group will determine the scope within this
 - Study Groups develop documents for the Working Group
 - Agreements in the SG need to pass the 802.3 Working Group and EC
- Any questions?

The Goal: Get to Task Force

- We are not convened to generically “Study” the problem
- Nominally – this means write a PAR and CSDs which the 802.3 WG and the 802 EC can pass.
 - Other IEEE-SA committees approve PAR, too
 - Templates available, in 802.3 “tools” page, see any 802.3 project for examples of finished product
- Practically – Get agreement on what problem or problems we want to solve and make the case that they are solvable and worthwhile
 - If we don’t do this, we will have trouble
 - If we do this, and document it, the PAR and CSDs will write themselves
 - Generally, we do this through ‘Objectives’

The substance: Objectives

- See my second presentation for draft points
 - Some are already defined in our scope (rate, 802.3 MAC)
 - Most require at least some discussion / presentations
- Determine what the problem(s) to be solved need:
- Define important attributes for a PHY project
 - Full/Half Duplex?, Point to Point/Multi-point?, Reach?, Link Segment performance? Environmental factors?, One PHY, Many PHYs, Options?
- NOT a product specification
 - Power consumption, Cost/Complexity, Markets
- NOT taking a technical decision on a baseline

- Need to work within the CSDs

Some guiding thoughts

- Big issues to get our heads around:
 - Market attributes addressed
 - Commonality and differences in various market segments
 - What exists in the world, what we get to define
 - PHY technical attributes in light of above
- Knocking down little issues can build momentum:
 - Some detailed objectives (e.g., BER)

The substance: Objectives (process)

- Where there are tradeoffs in market needs addressed, technical or economic feasibility, provide presentations
 - Decisions without backup don't progress well
 - We are contribution driven
 - We only go as fast as people contribute
 - Consensus works better if people know what is coming
- Objectives CAN change during Task Force

The Forms: the PAR

- Plan to take a stab at filling the PAR & CSDs in September:
 - http://www.ieee802.org/3/WG_tools/templates/index.html
- The PAR binds us at IEEE-SA highest levels & includes:
 - Project title (ideally the amendment title, but not necessarily)
 - Dates for sponsor ballot & completion (rough)
 - Project Scope!! (Boundaries)
 - Contingencies on other standards (What we may need to wait for/liaise with)
 - Statement of Need (Why we're doing this)
 - Stakeholders in Project (who should pay attention)
- Filling in the PAR takes a working session, but after most of the rest has taken shape.

The CSDs:

Support w/Presentations

- Broad Market Potential – presentations on rationale for size and diversity of market segments addressed by objectives
 - Understanding the different reaches and market segment needs would go here
- Technical Feasibility – presentations that support one can build solutions that address this potential
 - Power considerations would come in here
- Economic Feasibility – that such solutions balance cost & meet market requirements
 - Relative cost is key for the viability ALL our segments
- Distinct Identity, Compatibility & Managed Objects should be fairly straightforward for us
- If you plan a presentation, PLEASE identify which CSDs you are addressing with it – it makes our record clearer

The Process: Timing & Possible Paths

(thanks to David Brandt & David Law for inputs & detailed schedule help)

- Moving to Task Force can only happen at 802 Plenary sessions
 - Insanely fast: Vote to Task Force in November
 - Very doable: Vote to Task Force in March (precirculate 9 Feb)
 - ***AIM FOR INSANE, but make sure its built solidly***
- Looks like 4-5 month difference, more likely 2 months (1 meeting cycle)
 - One meeting cycle can come and go a lot of ways
 - If you to make it up and get fast, plan on a couple, key timed, off-cycle interims

Two Paths to TF, One Plan

November TF Vote

- Cover ALL CSDs in September
- Exit September Interim with drafts for all CSDs, PAR, little to fill in. (precirculate 6 Oct)
- Focus on completing CSD support at November, with minor updates
- Get key issues pre-vetted in ad hocs (Don't rely on private circulation!)
- Leaves a lot of definition of objectives/approach for Task Force in January

March TF Vote

- Still do the same thing in September – if nothing else, identify holes to fill
- Use time to better fleshing out of objectives & build understanding necessary to rapidly adopt baselines in Task Force
- Use time for faster Task Force start at first meeting in May

- ***My focus - DRIVE for November, USE ad hocs to build consensus***
- ***How fast we go depends on your focused contributions***

Final note: Setting our ad hoc times

- Thanks to those who contributed to the Doodle Poll
- Managing times around the world can be hard
- Request/Suggest (times are US Pacific)
 - Alternate week times, to accommodate more
 - This week: Mon 9-11am (late for Asia)
 - Propose alternate weeks: Wed 7-9am

THANK YOU!