

IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force Closing Report

George Zimmerman

CME Consulting/ADI, APL Group,
Aquantia, BMW, Cisco, CommScope,
LTC

Berlin, Germany

July 13, 2017

IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force

Project information

Task Force Organization

George Zimmerman, IEEE P802.3cg Task Force Chair

Jon Lewis, IEEE P802.3cg Task Force Secretary

Peter Jones, Architecture Ad Hoc Chair

Valerie Maguire, IEEE P802.3cg Chief Editor

Task force web and reflector information

Reflector information: <http://www.ieee802.org/3/cg/reflector.html>

Home page: <http://ieee802.org/3/cg/index.html>

PAR: http://www.ieee802.org/3/cg/IEEE_P802_3cg_PAR_071216.pdf

CSD: <https://mentor.ieee.org/802-ec/dcn/16/ec-16-0216-00-ACSD-802-3cg.pdf>

Objectives: http://www.ieee802.org/3/cg/objectives_10SPE_111016.pdf

Approved timeline:

http://www.ieee802.org/3/cg/adopted_802d3cg_timeline_0517.pdf

Private area: <http://ieee802.org/3/cg/private/index.html>

Note: The draft, and any other content, is posted for your review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights

IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force

Activities this week

- Met Mon. 7/11 afternoon and all day Tuesday 7/12
 - 91 total attendees (83 / 78)
- Major items discussed:
 - Multidrop PHY concepts
 - Document structure
 - Adopting intra-system use cases from NEA
 - Cabling and connector characteristics
 - Refinements on long reach PHY and powering specifications
- No new baselines adopted
- Skeleton draft 0.1 was posted to private area
- Straw polls show growing consensus on multidrop possibly based on CSMA/CD.
- Responded to TIA TR42 and ISO SC25 WG3 liaison letters

Intra-system use case (NEA)

Following the NEA ad hoc on Intra-System Use Cases for SPE, the 802.3cg Task Force considered addressing this use case

Results of 802.3cg Task Force Straw Poll #8:

I would support 802.3cg adding the intra-system use case within our project, provided it does not increase the number of PHYs in the project.

Y:30 N:0 A:16

Multidrop Consensus – Path forward

Following presentations and discussion, the Task Force appears to have consensus to address multidrop configurations

- At least for limited number of nodes on short reaches

- Most preference for using 802.3 CSMA/CD (half duplex)

- Within our current objectives

Results of 802.3cg Task Force Straw Poll #8:

Following the provision of further use case and system cost information and detailed implementation proposals, I am likely to support a specified multidrop proposal for up to at least 15m with up to 5 nodes:

Y: 26 N: 6 A: 12

IEEE P802.3cg 10 Mbps Single-Pair Ethernet Proposed Timeline (Adopted 5/17)

- ✓ **January 2017 – First Task Force meeting**
- July 2017 – Objectives Finalized, **Draft 0.1 (skeleton)**, all baselines presented
- September 2017 – Baselines selected, draft 0.9 for Task Force Review
- November 2017 – Last features selected - Task Force Review D1.0**
 - Nov:D1.0, Jan:D1.1, possible Feb 2018 extra off-cycle interim, D1.2
 - March 2018 – Complete Task Force Review(D1.2/1.3)
- May 2018 – Draft 2.0, enter working group ballot** (2 recircs: July:D2.1, Sept:D2.2)
- Nov 2018 – D3.0 – enter Sponsor ballot** (2 recircs Jan'19:D3.1, Mar'19:D3.2)
- June 2019 Standards Board approval**

[NOTE: only 1 meeting cycle slack spread between WG ballot and Sponsor Ballot]

WG Motion

Move that the IEEE 802.3 Working Group approve:

IEEE_802d3_to_TIA_TR42_0717_draft.pdf

with editorial license granted to the Chair (or his appointed agent) as liaison communications from the IEEE 802.3 Working Group to TIA TR42.

M: G. Zimmerman S: J. Lewis

Motion approved by voice without opposition
(Technical $\geq 75\%$)

WG Motion

Move that the IEEE 802.3 Working Group approve:
IEEE_802d3_to_ISOIEC_SC25_WG3_0717_draft
with editorial license granted to the Chair (or his
appointed agent) as liaison communications from
the IEEE 802.3 Working Group to ISO IEC SC25
WG3.

M: G. Zimmerman S: J. Lewis

Motion approved by voice without opposition
(Technical $\geq 75\%$)

Questions?

Thank you!