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

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IEEE P802.3cg 10 Mb/s Single 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

Valerie Maguire, IEEE P802.3cg Task Force Chief Editor

Peter Jones, Architecture Ad Hoc Chair

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/P802_3cg_PAR_140518.pdf

CSD: https://mentor.ieee.org/802-ec/dcn/18/ec-18-0079-00-ACSD-802-3cg.pdf

Objectives http://www.ieee802.org/3/cg/objectives_3cg_0318.pdf

Approved timeline: http://www.ieee802.org/3/cg/adopted_802d3cg_timeline_0718.pdf

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

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IEEE P802.3cg 10 Mb/s Single Pair Ethernet Task Force Activities this week

Met Monday 3/11 afternoon, Tuesday 3/12 morning

- 96 total attendees (M 88, Tu 71 – 18 new)

Major items discussed, decisions made and actions

- Responded to 47 comments on draft 2.4
- - Task Force made no substantive changes to the draft
  - - 33 (non-required) comments withdrawn, 6 (non-required) rejected – out of scope
  - - Heard discussion on Scope & CSDs related to PLCA & on PLCA management
    - - This is a significant source of unsatisfied comments – more in next slides
  - - Generated 4 new unsatisfied comments (from previously disapproving commenter)
  - Reduced unsatisfied comment count from 90 at opening plenary to 69
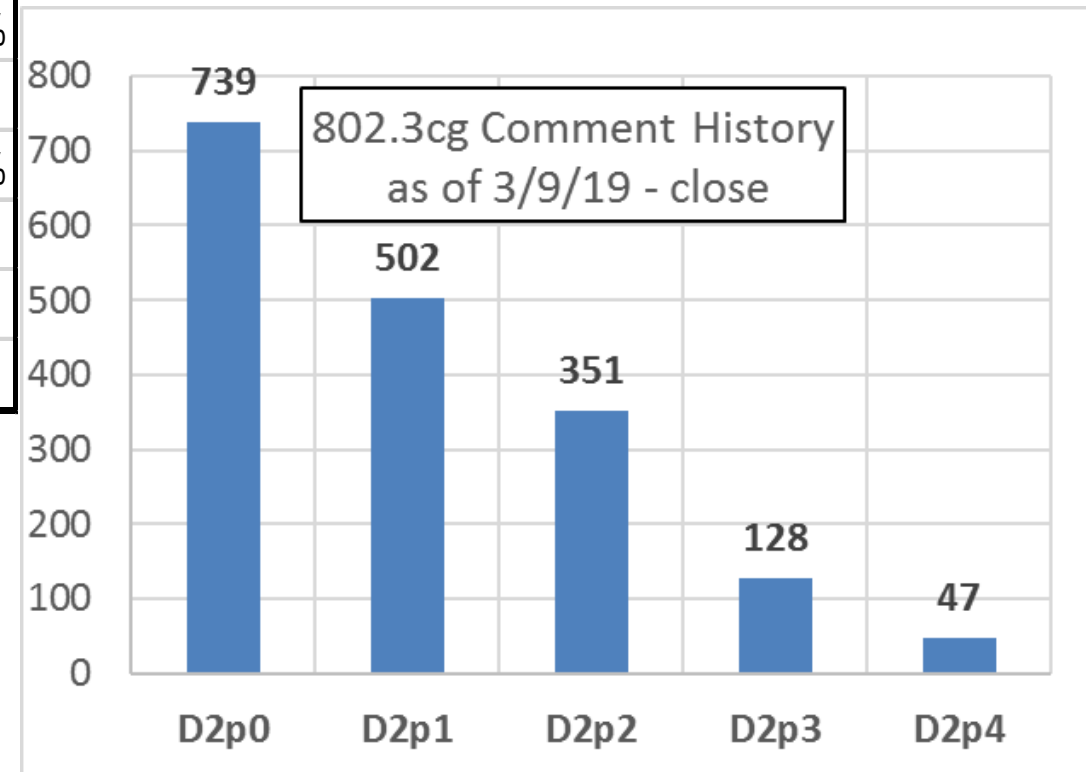- Chartered draft preparation based on closed comments
- Reaffirmed CSDs and requested to proceed to IEEE Standards Association ballot

IEEE P802.3cg 10 Mb/s Single Pair Ethernet Adopted Timeline (July 2018)

- ✓ 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
- ✓ March 2018 –Task Force Review (D1.2)
- ✓ May 2018 – Task Force Review (D1.3)
- ✓ July 2018 – Draft 2.0, request working group ballot
- ➢ **March 2019 – D3.0 – enter Sponsor ballot (2 recircs May'19:D3.1, July'19:D3.2)**
- ➢ **July 2019 – Request approval to proceed to Revcom out of July plenary**
- ➢ **September 2019 Standards Board approval**

Ballot Progress

	D2p0	D2p0%	D2p1	D2p1%	D2p2	D2p2%	D2p3	D2p3%	D2p4	D2p4%	Req
Voters	249		249		249		249		249		
Return	139	55.8%	150	60.2%	156	62.7%	164	65.9%	175	70.28%	>50%
Approve	100	80.6%	116	87.2%	131	93.6%	142	97.3%	153	98.71%	>75%
Disapprove w/comment	24	19.4%	17	12.8%	9	6.4%	4	2.7%	2	1.29%	<25%
Disapprove w/o comment	0	0.0%	2	1.5%	0	0.0%	0	0.0%	0	0.00%	
Abstain	15	10.8%	15	10.0%	16	10.3%	18	11.0%	20	11.43%	<30%
Comments	710		455		282		100		41		
Comments w/floor	726		477		342		124		47		
Comments w/floor & late	739		502		351		128		47		

802.3cg Comment History as of 3/9/19 - close

P802.3cg Draft 2.4 Recirculation Ballot Close and Results

Ballot Closed 3/8/19, 11:59PM AOE

Comments received: 47

	Count	%		Status
		Actual	Require	
Abstain	20	11.4%	< 30	PASS
Disapprove with comment	2	1.3%	-	-
Disapprove without comment	0	-	-	-
Approve	153	98.7%	≥ 75	PASS
Ballots returned	175	70.3%	>50	PASS
Voters	249	-	-	-

TF Motion

Motion #6

- Move to re-affirm the CSD responses in https://mentor.ieee.org/802-ec/dcn/18/ec-18-0079-00-ACSD-802-3cg.pdf and request approval to progress the P802.3cg draft to IEEE Standards Association ballot

- M: Piergiorgio Beruto

- S: Steffen Graber

- (Technical >= 75%)

- Y: 52   N: 3   A: 12

- Motion Passes

Unsatisfied comments review

Unsatisfied comments at:

http://www.ieee802.org/3/cg/comments/8023cg_AllNotSat_report_ID_031219.pdf

Summary: Thompson – 17 comments:

PLCA constitutes a new MAC function, and/or modifies MII.

> D2.0: 637, 645, 646, 650, 656, 657, 658 ; D2.2: 322; D2.3: 128
>
> See http://www.ieee802.org/3/cg/public/Feb2019/Thompson%20addl%20comments%20P802.3cgD2.3v2.pdf

Draft does not use AUI : D2.0: 632, 659, 638

Draft does not support repeaters: D2.0 661

Cross reference to primitives in clause 40.2 rather than clause 22: D2.0 642

PCS reset - desires text describing level or pulse for reset: D2.0 643

Collision detect – desires energy-detect description of collision detect: D2.0 648

Clarification for reg 1.0.11 low power mode: D2.1 337

Unsatisfied comment review:
Kim – 52 comments

Mixing segment specification: – claims draft requires measurements, and violates economic feasibility: D2.4 42

CSDs – claims draft violates CSDs, PLCA a new MAC and/or compatibility concerns at MII:

>D2.4: 44; D2.2: 120, 198, 210; D2.0: 289, 637

>See http://www.ieee802.org/3/cg/public/Mar2019/802.3%20cg%20PAR%20and%20CSD%20Issues%20D2-4_v1_Kim_2019-03-08.pdf

>D2.3 102 (PLCA resides in PCS)

>D2.3 119 (xMII is inappropriate in Figure 1-1)

>D2.2: 264, 265

>D2.0: 292, 295, 313, 605

PLCA Management:

>D2.4: 45 (location of oPLCA in draft)

>D2.4: 46, D2.3 205; D2.0 273, 274, 275 (PLCA management defaults or range)

>D2.3: 105 (name of counter), 106, D2.2: 214

>D2.2 200 (Location of PLCA management in PHY)

>D2.2 269; D2.0 311 (Guidance on parameter setting)

Unsatisfied comments review: Kim – 52 comments (cont'd)

'Multidrop mode': wants word "multidrop" removed/replaced: D2.3: 99; D2.2 206

Register bit naming - D2.3 100 (PCS Fault text, "Fault detected" is vague)

PLCA MDIO registers (no longer in draft): D2.2 211, 214

Definition of collision detect or collision: D2.3: 103, D2.2: 212, 196, 223, 242, 261

Claims no MDI specification: D2.3 104, 113; D2.2 231, 257

Description of echo cancellation in receiver of 10BASE-T1L: D2.3 112

Desires a single PHY or split 10BASE-T1S PHY types : D2.3 116;

Delete P2P Half Duplex mode: D2.2 246, 252

CI 147 PCS processing of PLCA BEACON & COMMIT:
    D2.3 117, 118; D2.2 209, 245, 248

10BASE-T1L use of TXER: D2.3 120

CRS & COL timing: D2.2 244;

Descriptive text of PLCA: D2.2 268; D2.0 286

Use of Carrier Sense primitive: D2.0 287

WG Motion

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in https://mentor.ieee.org/802-ec/dcn/18/ec-18-0079-00-ACSD-802-3cg.pdf and request approval to progress the IEEE P802.3cg draft to IEEE Standards Association ballot.

M: G. Zimmerman, on behalf of the Task Force

WG Motion

Move that the IEEE 802.3 Working Group approve:

   IEEE_802d3_to_EA_0319_draft

with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to the Ethernet Alliance.

M: P. Jones   S: G. Zimmerman

Questions?

Thank you!