Chief Editor’s opening report

Tom Issenhuth, Huawei, P802.3cw Chief Editor

IEEE P802.3cw Task Force, as of 29 September 2022
Interim Teleconference Meeting

802.3cw Editorial team

Tom Issenhuth, Huawei

- Chief Editor and Editor for Clauses 00, 1, 30, 45, 78, 116, 119, 156, Annex 120A and Annex 156A

Dave Lewis, Lumentum

- Editor for Clause 155

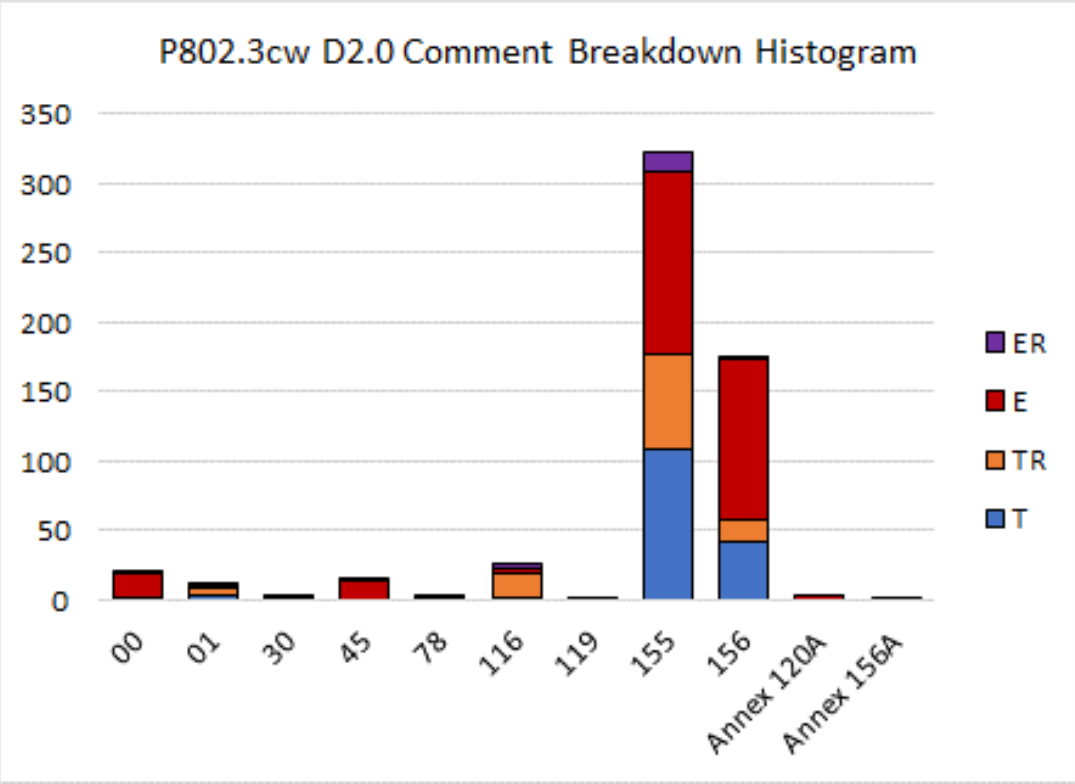
Status

P802.3cw D2.0 Working Group ballot

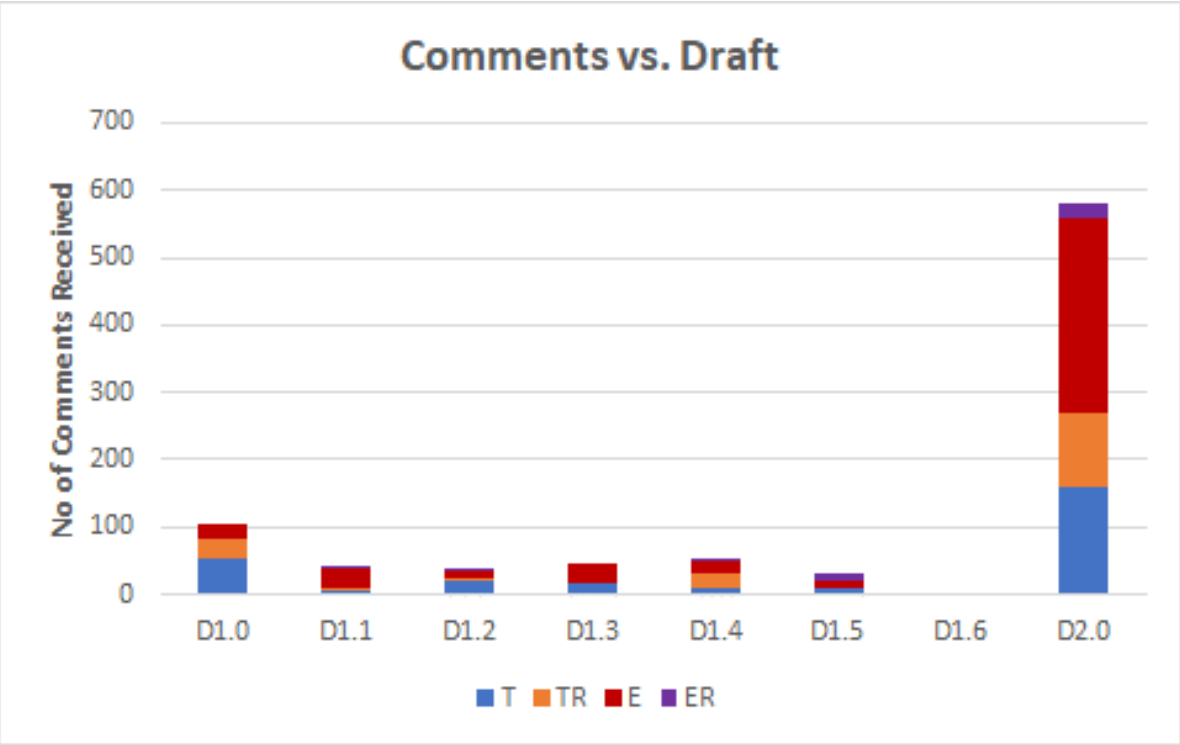
- Opened on July 17, 2022, closed on August 16, 2022
- 31 day comment period
- Thanks to all those that commented

Clause	T	TR	E	ER	Total
00	1		19	1	21
1	3	6	1	1	11
30		1	1		2
45			14	2	16
78	1	1			2
116	2	17	3	4	26
119			2		2
155	109	68	131	15	323
156	42	16	115	1	174
Annex 120A			4		4
Annex 156A	1				1
	159	109	290	24	582

Comment Distribution



Comment History



Cross Clause Comments

Topic	Clause	Comment #	Count
"400GBASE-Z", 400GBASE-ZR, 400GBAS-R encoding, and description	1.4.144b/c, 155.1.5, 156.9.1	10, 170, 171, 173, 338, 347, 412, 413, 414, 417, 418, 419, 423, 526	14
PCS / PMA / PMD Descriptions	116.2.3, 116.2.4, 116.2.5	5, 6, 7, 176, 177, 178, 200, 420, 421, 422	10
Clauses associated with 400GBASE-ZR PMD	116.1.4, 156.1	4, 36, 164, 174, 175, 192, 223	7
Service interface and faw		10, 35, 37, 60, 61, 92, 93, 94, 95, 96, 98, 99, 100, 108, 109, 126, 130, 131, 139, 140, 143, 172, 129, 179, 180, 182, 183, 185, 188, 193, 194, 195, 202, 218, 233, 234, 237, 238, 259, 263, 265, 269, 283, 315, 316, 317, 321, 338, 387, 423, 424, 425, 494, 498, 558, 581, 582	57

Commentors have indicated that supporting presentations will be provided

Clause Comments

Topic	Clause	Comment #	Count
Abstract	FM	[410, 411]	2
Abbreviations	1	339, 340, 415, 148, 149	5
MAU type	30	24	1
Bit numbering	45	198, 221, 222, 416	4
Delete clause	119	165, 201	2
156.1.1	156	91, 313, 314, 493	4
Signal detect	156	318, 320, 495, 97, 496, 501	6
Delay constraints	156	497	1
optical_channel_index	156	319	1
156.6	156	506, 507, 323, 328, 502	5
Transmitter optical specifications	156	102, [353, 354, 330], 508, 509, 510, 104, 105, 106, 331, 332	12
RRC	156	359, 103, 329, 511, 530, 567	5
EVM	156	337	1
I-Q (max instantaneous)	156	350, 357, 360, 361, 117, 512, 538	7
I-Q (mean)	156	351, 358, 362, 363, 364, 119, 539	7
I-Q phase error (max)	156	513, 527	2

Topic	Clause	Comment #	Count
Receiver optical specifications	156	333, 334, 516, 550	4
Black link optical characteristics	156	327, 517, 518, 355, 356, 519, 520, 521, 522, 523, 524	11
Test patterns	156	525, 528, 529	3
Transmit spectrum	156	531, 533,	2
Laser frequency noise mask	156	534, 535, 111, [112, 536], 168, 537, 113	8
EVM	156	114, 115	2
I-Q definitions	156	540, 541, 542, 543	4
OSNR defintions	156	365, 544, 545, 546, 547	5
Definition wording	156	548, 549, 552, 551, 120, 553, 554, 555, 556, 557	10
EVM conformance test setup and calculation	156	562, 559, 336, 569, 570, 564, [121, 565, 566], 335, 571, 572, 573, 574, 575, 576, 577	18
MDI	156	579	1
Black link examples	Annex 156A	367	1

Clause 155 Comments

Topic	Subclause	Comment #	Count
Overview	155.1		
PCS and PMA Overview	155.1.1	169, 181, 186	3
PCS general description	155.1.3	40, 42, 127, 128, 187, 339, 427, 428, 429	9
PCS	155.2		
PCS - functions	155.2.1	16, 20, 28, 29, 43, 44, 46, 48, 190, 224, 430, 431, 433, 434, 437, 438, 439	17
PCS Transmit Path	155.2.4	132, 225	2
PCS Transmit - Encode	155.2.4.1	203	1
PCS Transmit - GMP mapper	155.2.4.3	49, 50, 51, 52, 53, 150, 204, 205, 226, 227, 228, 229, 392, 393, 394, 440, 443, 444, 445, 446	20
PCS Transmit - AM and pad	155.2.4.4	54, 55, 206	3
PCS Transmit - OH	155.2.4.5	56, 390, 397	3
PCS Transmit - OH - MFAS	155.2.4.5.1	58, 59, 189, 448	4
PCS Transmit - OH - Link Status	155.2.4.5.2	230, 231, 232, 389, 449, 450, 451, 452	8
PCS Transmit - OH - JC bytes	155.2.4.5.3	17, 57, 62, 207, 453	5
PCS Transmit - OH map to ZR frame	155.2.4.5.4	247, 348	2
PCS Transmit - CRC32 and MBAS	155.2.4.6	63, 64, 248, 249, 454, 455	6
PCS Transmit - ZR to SCFEC adaptation	155.2.4.7	251, 252, 253, 254, 388, 400	6
PCS Transmit - pad insertion	155.2.4.8	391	1
PCS Transmit - scrambler	155.2.4.9	31, 65, 66, 383, 399, 458, 459, 460, 461	9
PCS Transmit - conv interleaver	155.2.4.10	67, 68, 208, 256, 462	5
PCS Transmit - Hamming encoder	155.2.4.11	69, 257, 258, 463, 464	5
PCS Transmit - Figure 155-8	155.2.4.12	133	1
PCS Receive - Hamming decoder	155.2.5.1	260, 466, 467	3
PCS Receive - descrambler	155.2.5.3	384	1
PCS Receive - SC-FEC decoder	155.2.5.5	70, 71, 401, 408, 469	5
PCS Receive - CRC32check	155.2.5.6	402, 470	2
PCS Receive - AM & OH detect	155.2.5.7	72, 73, 134, 211, 261, 403, 471	7
PCS Receive - MFAS	155.2.5.7.1	395, 472, 473	3
PCS Receive - Link Status	155.2.5.7.2	74, 212, 474, 475, 476	5
PCS Receive - GMP demapping	155.2.5.8	18, 19	2
PCS Receive - decode	155.2.5.10	477	1

Topic	Subclause	Comment #	Count
PMA	155.3		
PMA Overview	155.3.1	135	1
PMA Overview - scope	155.3.1.1	478, 262	2
PMA Overview - position in sublayers	155.3.1.2	481	1
PMA Overview - summary	155.3.1.3	75, 345	2
PMA service interface	155.3.2	15, 76, 77, 136, 264, 266, 268, 482	8
PMA block diagram Fig 155-10	155.3.2	12, 267, 346, 385, 479, 480	6
PMA functions	155.3.3	213, 235, 483	3
PMA functions - gray mapping and poldist	155.3.3.1	78, 80, 81, 236, 343, 484	6
PMA functions - symbol interleaving	155.3.3.2	215, 216, 239, 240, 241	5
PMA functions - FAW, TS, PS insertion	155.3.3.3	137, 242, 243, 244, 245, 270, 271	7
FAW sequence	155.3.3.3.1	485	1
Pilot sequence	155.3.3.3.3	82, 272, 273, 275, 276, 486, 487	7
16QAM encode	155.3.3.4	83, 138 ,277	3
Receive signal ADCs	155.3.3.5	84, 342, 344	3
Receive signal processing	155.3.3.6	85	1
Pol combine & symbol de-interleave	155.3.3.8	87	1
Detailed functions and state diagrams	155.4		
State diagram - variables	155.4.2.1	13, 88, 141, 142, 280, 281, 284, 285, 286, 287, 288, 289, 290, 291, 349, 405	16
State diagram - functions	155.4.2.2	292	1
State diagram - counters	155.4.2.3	293	1
State diagram - description	155.4.2.4	14, 294, 295	3
State diagram - FAW lock	155.4.2.4	89, 217, 296, 297, 298, 299, 300, 301, 303, 304	10
State diagram - AM lock	155.4.2.4	305, 306, 307, 308	4
Management	155.5		
PCS PMA management	155.5.1	310, 311, 488	3
MDIO mapping	155.5.1	33, 144, 145, 146, 147, 312, 406, 407, 409, 489, 490	11
PICS	155.7		
PICs	155.7.4.1	347	1

Bucket Comments

C/A	Comment #	Count
FM	[1, 21, 23, 34, 151, 152, 153, 156, 157, 158, 369, 370, 371, 372, 373], 22, 154, 155, 368	19
1		
30	196	1
45	[25, 160], [162, 163, 197, 199, 377, 376], 159, 161, 374, 375	12
116	8	1
119		
155	[9, 26, 38, 39, 125, 378], [27, 41, 184, 379, 380, 381, 426], [45, 47, 432, 435, 436], [30, 382, 386, 441, 442, 447], 246, 396, 250, [398, 456, 457], 255, 32, 465, [11, 468], [209, 210], 214, 79, 274, 191, 86, [278, 279], [282, 404], 302, 309, 491	49
156	[219, 322, 500], [324, 325, 326, 504], [352, 515], [122, 220, 366], 90, 101, 107, 110, 116, 118, 123, 124, 166, 167, 492, 499, 503, 505, 514, 532, 560, 563, 561, 568, 578, 580	34
Annexes 120A, 156A	2, 3	2

Comment Resolution Process

- Resolve comments against Draft 2.0
  - Any presentations associated with comments will be reviewed during comment resolution session.
  - TRs and ERs require signoff as to whether commenter is satisfied
- Regarding final proposed responses
  - If there is no disagreement on the final proposed response the comment will be closed as proposed.
  - If someone other than the commentor disagrees, a straw poll on the area of concern will be taken and the majority position will decide the final response.
  - If the straw poll contains more than 2 choices, the choice with the lowest number of supporters will be removed. This process will continue until there are only 2 choices.

Comment Resolution Process

- The order and time in which the comments are reviewed during a review cycle are subject to change
- Comments bracketed together with [ ] cover a common topic
- Where a comment number is underlined (e.g., 59) it contains the proposed response for the group of comments
- Comments colored blue have associated hyperlinked presentations

Comment Resolution Process

- Baseline Terminology
  - “Open” comments – comments that Task Force have not agreed upon a remedy
  - “Closed” comments – comments that Task Force have agreed upon a remedy
  - “Final” comments – Task Force has approved motion to adopt the responses to the closed comments
- Post updated comment database after each meeting
  - Allow individuals (other than commenter) two business days (AoE) to request on the reflector reconsideration of a “Closed” comment from the prior meeting
  - Individual needs to be present at next meeting to address
  - Normal procedures within the group will apply to determine if comment will be re-opened
- After all comments closed – normal procedures to adopt responses and generate next draft will be followed
  - Comments can not be re-opened after meeting where responses are adopted by TF

Note about Comment Resolutions Going Forward

- Consensus building will be key
  - Rule #1 – Use the Reflector
  - Rule #2 – See Rule #1

- Reference: IEEE SA Balloting and Comment Resolution Process Guidelines (https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/revcom/guidelines.pdf)
  - Multiple reasons possible for rejecting comment given –
    - a statement that the CRG could not reach consensus on the changes necessary to address the comment;

Meeting Schedule

- September 12th
  - Presentation
    - Dambrosia_3cw_01_2209.pdf (supporting first 3 sets of comments on slide 6)
- September 13th
- September 29th
  - Presentations
    - Stassar_cw_01_220929.pdf (supporting comments 334, 516 & 550)
    - Maniloff_3cw_01_220929.pdf (supporting comment 367)
- October 18th, 19th and 20th
  - Presentations
    - Dambrosia_3cw_01_221018.pdf (supporting 4th set of comments on slide 6)
    - Maniloff_3cw_01_221018.pdf (supporting comments 353 & 354)

- Any requests to remove comments from the bucket must be received by EOD October 7th AOE

Comment Resolution – September 12

- Resolved the following comments
  - Heard supporting presentation Dambrosia_3cw_01_2209.pdf

Topic	Clause	Comment #	Count
"400GBASE-Z", 400GBASE-ZR, 400GBAS-R encoding, and description	1.4.144b/c, 155.1.5, 156.9.1	~~10, 170, 171, 173, 338, 347, 412, 413, 414, 417, 418, 419, 423, 526~~	14
PCS / PMA / PMD Descriptions	116.2.3, 116.2.4, 116.2.5	~~5, 6, 7, 176, 177, 178, 200, 420, 421, 422~~	10
Clauses associated with 400GBASE-ZR PMD	116.1.4, 156.1	~~4, 36, 164, 174, 175, 192, 223~~	7

Topic	Clause	Comment #	Count
Abstract	FM	~~[410, 411]~~	2
Abbreviations	1	~~339, 340, 415, 148, 149~~	5
MAU type	30	~~24~~	1
Bit numbering	45	~~198, 221~~, 222, 416	4
Delete clause	119	165, 201	2
Signal detect	156	318, 320, 495, 97, 496, 501	6
optical_channel_index	156	319	1
156.6	156	506, 507, 323, 328, 502	5

Comment Resolution – September 13

- Resolved the following comments

Topic	Clause	Comment #	Count
Delete clause	119	~~165, 201~~	2
Signal detect	156	318, 320, 495, 97, 496, 501	6
optical_channel_index	156	319	1
156.6	156	~~506, 507, 323, 328, 502~~	5
Transmitter optical specifications	156	102, [353, 354, 330], 508, 509, 510, 104, 105, 106, 331, 332	12
RRC	156	~~359, 103, 329, 511, 530, 567~~	5
EVM	156	~~337~~	1
I-Q (max instantaneous)	156	~~350, 357, 360, 361, 117, 512, 538~~	7
I-Q (mean)	156	~~351, 358, 362, 363, 364, 119, 539~~	7
I-Q phase error (max)	156	~~513, 527~~	2
Receiver optical specifications	156	~~333~~, 334, 516, 550	4
Black link optical characteristics	156	~~327, 517,~~ 518, ~~355, 356, 519, 520~~, 521, 522, ~~523, 524~~	11
Test patterns	156	~~525, 528~~, 529	3
Transmit spectrum	156	~~531, 533~~	2
MDI	156	~~579~~	1

Comment Resolution – September 29

- Resolve the following comments
  - Hear supporting presentations: stassar_3cw_01_220929.pdf and maniloff_3cw_01_220929.pdf

Topic	Clause	Comment #	Count
156.1.1	156	[91, 493], 313, 314	4
Signal detect	156	318, 320, 495, 97, 496, 501	6
Delay constraints	156	497	1
optical_channel_index	156	319	1
Transmitter optical specifications	156	102, 508, 509, 510, 104, 105, 106, 331, 332	9
Receiver optical specifications	156	~~333~~, 334, 516, 550	4
Black link optical characteristics	156	~~327, 517~~, ~~355, 356, 519, 520~~, 521, 522, ~~523, 524~~	10
Laser frequency noise mask	156	534, 535, 111, [112, 536], 168, 537, 113	8
EVM	156	~~114~~, 115	2
I-Q definitions	156	540, 541, 542, 543	4
OSNR defintions	156	365, 544, 545, 546, 547	5
Definition wording	156	548, [549, 529], 552, 551, 120, 553, 554, 555, 556, 557	11
EVM conformance test setup and calculation	156	562, 559, 336, 569, 570, 564, [121, 565, 566], 335, 571, 572, 573, 574, 575, 576, 577	18
Black link examples	Annex 156A	[367, 518]	2

Time permitting

Topic	Subclause	Comment #	Count
Overview	155.1		
PCS and PMA Overview	155.1.1	169, 181, 186	3
PCS general description	155.1.3	40, 42, 127, 128, 187, 339, 427, 428, 429	9
PCS	155.2		
PCS - functions	155.2.1	16, 20, 28, 29, 43, 44, 46, 48, 190, 224, 430, 431, 433, 434, 437, 438, 439	17
PCS Transmit Path	155.2.4	132, 225	2
PCS Transmit - Encode	155.2.4.1	203	1
PCS Transmit - GMP mapper	155.2.4.3	49, 50, 51, 52, 53, 150, 204, 205, 226, 227, 228, 229, 392, 393, 394, 440, 443, 444, 445, 446	20
PCS Transmit - AM and pad	155.2.4.4	54, 55, 206	3

Thanks!