

# **Editor's report**

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IEEE P802.3bj Task Force  
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## Meet the team...

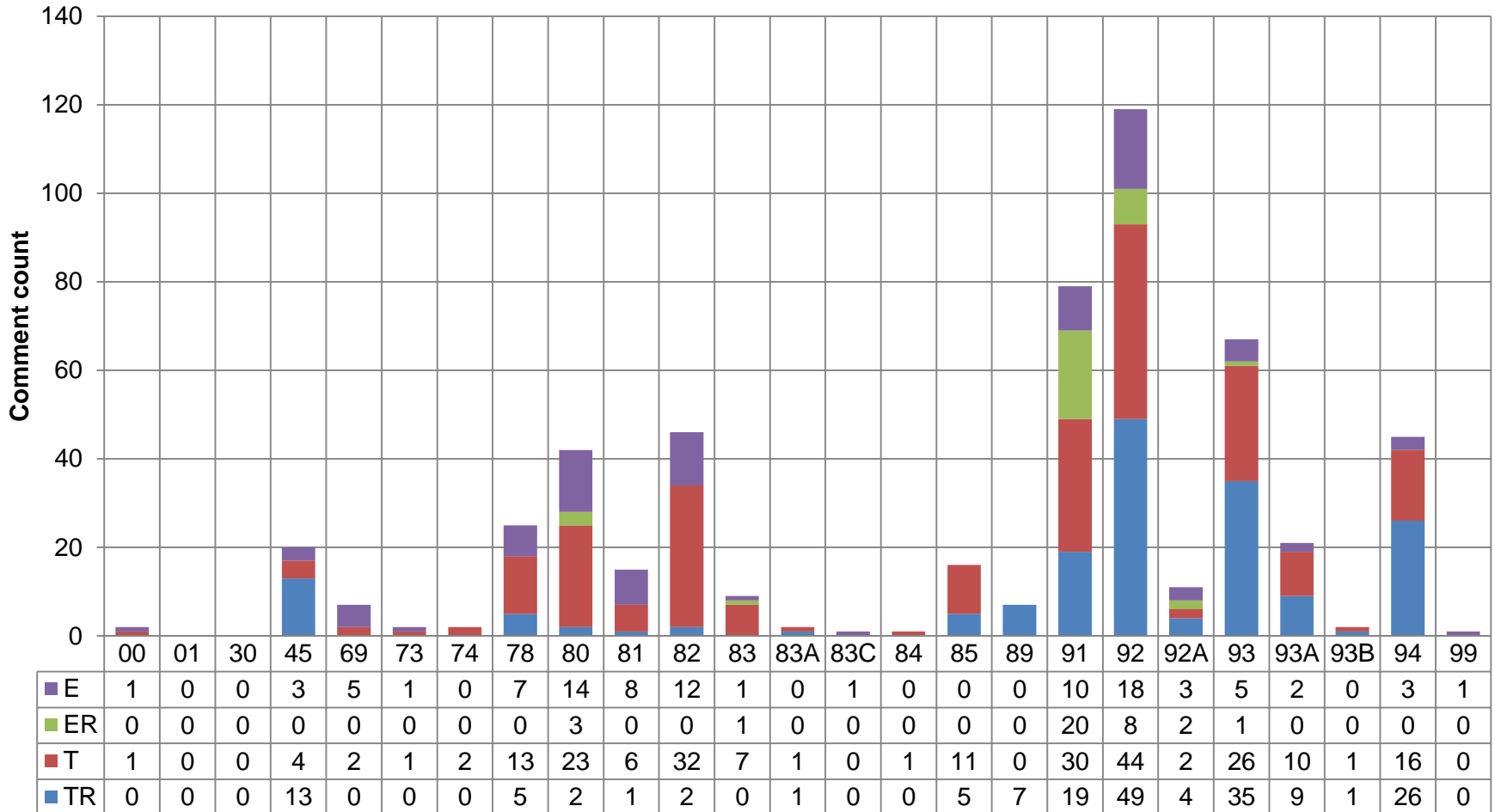
<b>Editor</b>	<b>Edited</b>
Hugh Barrass	Clauses 30, 45, 74, 78, 80–85, Annexes 83A, 83C
Matt Brown	Clause 94
Chris DiMinico	Clause 92, Annex 92A
Adam Healey	Clauses 1, 69, 73, 91, 93, Annexes 93A, 93B

# Activities since July 2012 meeting

- Draft 1.1 posted 13 August 2012
- Task Force review closed 4 September 2012
- 499 comments from 26 participants
- Carried 43 comments forward from Draft 1.0
  - Comment ID 10XXX where XXX is original comment ID
- Proposed responses submitted by the editorial team
  - Listed by Clause
  - Listed by ID

# Comment summary: 412 T(R), 130 E(R)

## IEEE P802.3bj D1.1 2nd Task Force review



“R” (required) denotes that the commenter indicated the comment must be satisfied in order to change a “do not approve” vote to an “approve” vote. Since Task Force review is not a ballot, these comments will be processed as though they were technical (T) or editorial (E) as appropriate.

# Objectives for this meeting

- Respond to all comments against Draft 1.1
- Generate D1.2 and initiate 3rd Task Force review
- Request Working Group ballot November 2012 per adopted timeline

# **Comment resolution agenda (PMD)**

Subject to change

# PMD common

<b>CIs</b>	<b>Topic</b>	<b>Comments (92:15, 93:13, 94:6, 34)</b>
	Optional FEC	263 (CIs 92), 264 (CIs 93)
	BER test methodology (brown_3bj_02_0912, cideciyan_3bj_01a_0912)	392, 159 (CIs 92), 258 (CIs 93), 261 (CIs 94)
	PMD control function for PAM2 (lusted_3bj_02_0912)	[10175, 265], 10097, 10188 (CIs 93) [201, 266], 381, 10187 (CIs 92)
92	SIGNAL_OK definition	410, 414, 415 (should apply to CIs 93)
	Global PMD transmit disable function	421 (CIs 93), 418 (CIs 92), 380 (CIs 94)
	PMD fault	419 (CIs 93), 417 (CIs 92), 420 (CIs 94)
	Local loopback	403 (CIs 93), 10165 (CIs 92)
	Definition of “lane”	373 (CIs 93)
	Out of scope requirements	489 (CIs 93), 250 (CIs 92)
	Interference tolerance crest factor	10061 (CIs 93), 10062 (CIs 94)
	EEE primitives	101 (CIs 92), 102 (CIs 93), 103, 104 (CIs 94)

# Channel Operating Margin

<b>Cls</b>	<b>Topic</b>	<b>Comments (93:9, 93A:17, 94:6, 32)</b>
93A	COM vs. Salz SNR (vareljian_3bj_01_0912)	229
93A	TX filter	[36, 247], 130
93A	Parameter optimization	253, 231
93A	Sampling phase definition	232
93A	Interference variance	233, 260, 259, 34
93A	Voltage threshold sensitivity	132, 131
	COM limit	[246, 35] (Anx 93A), 142 (Cls 93), 136 (Cls 94)
	W value	[254, 144] (Cls 93) [139, 256] (Cls 94)
	Reflection coefficient parameters (benartsi_3bj_02_0912)	[143, 168, 169] (Cls 93), 137 (Cls 94)
	Package model (benartsi_3bj_02_0912)	422 (Anx 93A), 170 (Cls 93)
	sigma_G and A_dd	146 (Cls 93), 147 (Cls 94)
	DFE coefficient magnitude limit (mellitz_3bj_03_0912)	133 (Anx 93A), 145 (Cls 93), 138 (Cls 94)



# Clause 94

<b>Cls</b>	<b>Topic</b>	<b>Comments (25)</b>
94	Encoding ,decoding (farhoodfar_3bj_01_0912, bliss_3bj_01_0912)	10080
94	Decoding	10236
94	EEE signaling (brown_3bj_01_0912)	39, 10234
94	Test fixture performance (benartsi_3bj_01_0912)	135, 350, 134, 371
94	Return loss (benartsi_3bj_02_0912)	10108, 10057, 324, 10109, 10064
94	PMD start-up protocol (lusted_3bj_03_0912)	38
94	AC-coupling cut-off frequency	326
94	Channel parameters (kochuparambil_3bj_01_0912)	363, 10105
94	Interference tolerance	10110
94	Transmitted signal (ran_3bj_01_0912)	255, 369, 10107, 367, 370, 368, 361

# Clause 93, Annex 93B

<b>Cls</b>	<b>Topic</b>	<b>Comments (93:37, 93B:1, 38)</b>
93	Channel characteristics (kochuparambil_3bj_01_0912)	362
93	AC coupling cut-off frequency	323
93	Return loss (benartsi_3bj_02_0912)	171, 167, 491, 10063, 10086, 10065, 10085
93	Test fixture performance (benartsi_3bj_01_0912)	166, 349, 140, 141
93	Interference tolerance (moore_3bj_01_0912)	10078, 10088
93	TX/RX test fixtures	248, 485
93	Transmitter output waveform	252, 10147, 10145
93	Transmitter rise and fall times	251, 237, 406
93	Measurement filters	10146, 10155
93	Transmitter output voltage	10143, 360
93	Transmitter output noise	257
93	Jitter limits	321, 10203
93	Skew and Skew Variation, Delay	235, 236
93	Characteristics vs. specifications	434, 490, 482, 493, 492
93B	Allow for compliance boards at TP1-TP4	487

# Clause 92, Annex 92A

<b>Cls</b>	<b>Topic</b>	<b>Comments (92:84, 92A:9, 93)</b>
92	Tests vs. measurement	412, 411
92	Functional specifications	10141
92	Clause layout	10140
92	“Low-swing” differential signaling	382, 351
92	Transmitter characteristics (38)	273, 386, 384, 352, 447, 385, 446, 383, 27, 10170,10169, 286, 365, 290, 283, 358, 292, 293, 294, 451, 284, 375, 277,158, 388, 433, 389, 366, 390, 450, 322, 306, 307, 308, 309, 310, 291, 10154
92	Receiver characteristics (10)	391, 275, 439, 393, 295, 496, 394, 395, 10219, 311
92	Cable assembly characteristics (22)	398, 460, 274, 285, 399, 288, 280, 278, 400, 279, 281, 452, 282, 401, 314, 315, 317, 316, 60, 318, 319, 320
92	2 <sup>nd</sup> MDI (cole_3bj_01_0912)	37
92	AC coupling (7)	10171, 312, 313, 287, 396, 397, 10153
92A	TP0 and TP5 TP parameters	230, 325, 297, 296, 486, 483, 484, 276, 289

# PMD non-controversial (bucket-worthy)

<b>Cl</b> s	<b>Topic</b>	<b>Comments (92:19, 92A:2, 21)</b>
92	Table format	428
92	PMD_transmit_fault redundant optional	379
92	Transmitter output waveform references	356, 153
92	Typo	16, 374, 378
92	TP3 refers to receiver measurements	357
92	Note	429
92	Subclause heading	376, 387
92	DCD to even-odd jitter	165
92	Label MDI	377
92	Table numbers	262
92	Lane index should be i	413
92	Test points labels	10212, 305
92	Figure editorial	10161
92	Reference	416
92A	Frequency units	19, 364

# PMD non-controversial continued (bucket-worthy)

<b>ClS</b>	<b>Topic</b>	<b>Comments (92:1, 93:8, 93A/B:5, 94:8, 22)</b>
93	Sense of return loss limit	404, 405
93	Add reference to Annexes	426
93	Trailing zeros	17
93A	Parameter naming	33
93A	Location of COM parameters	32
93A	Symbol error rate to ratio	28
93A	Placement of convolution definition	248
93B	Mislabeled test point	481
94	-KP4 encoding variable names	10048
94	Insertion loss equation consolidation	10233
94	FEC is mandatory for 100GBASE-KP4	372
94	Update link model figure	359, 402
	Pre-/Post-cursor range to ratio	353 (ClS 92), 354 (ClS 93), 355 (ClS 94)
	Move AC coupling to channel clause	[488, 407, 238] (ClS 93), 408 (ClS 94)
	Withdrawn	10235 (ClS 94)

# **Comment resolution agenda (FEC)**

Subject to change

# Clause 91

<b>Cls</b>	<b>Topic</b>	<b>Comments (39)</b>
	Management (healey_3bj_01_0912)	196 (master), 197, 244
	Figure 91-1	470
	SIGNAL_OK, error handling (healey_3bj_01_0912)	239, 53, 162, 243
	EEE (healey_3bj_01_0912)	95, 99, 100, 242, 208, 210
	Delay	190 (master), 245, 241
	Skew (healey_3bj_01_0912)	222, 26
	Spell out s nibble assignment	56, 52
	Header scrambling clarifications	155 (master), 198, 471, 157
	Transcoding examples	206
	Alignment mapping clarifications	150 (master), 156, 57, 463, 58
	Specify error correction/detection ability	433 (master), 55
	Polynomial coefficients, codeword examples (langhammer_3bj_01_0912)	234 (master), 59
	Split/rename FEC deskew state diagram	49, 212
	Clarify FEC lane numbering	50
	decoder_bypass	186

# Clause 91 continued

<b>Cls</b>	<b>Topic</b>	<b>Comments (9)</b>
	Delete steps f) and g)?!?	164
	State diagrams	209, 199, 226, 211, 495, 205
	Max. AM distance for 100GBASE-KP4	225
	Block diagram partitioning	207



# FEC non-controversial (bucket-worthy)

<b>Cls</b>	<b>Topic</b>	<b>Comments (31)</b>
	Withdrawn	161
	Clarify sync. header assignments	15, 240
	Blatant errors (indexing, no more scrambling)	473, 54, 163, 472, 182, 498, 183, 474, 476, 51, 477, 478, 479, 204
	Subclause name	464
	Substitute 10 for w	48, 47
	Typos	465, 466, 467, 468, 469, 213
	Cross-references	151
	Medium is allowed to swap lanes	453, 152
	Frames, not packets	475
	Notation	480

# **Comment resolution agenda (EEE)**

Subject to change

# BTI – Including 40GBASE-C/KR4 & 100GBASE-CR10

<b>Cls</b>	<b>Topic</b>	<b>Comments (24)</b>
78		107, 108, 109, 112, 113, 114, 216, 331, 332, 348
80		115
81		116, 117, 118, 160, 330, 334, 335
82		193, 223, 227
84		90
85		218, 219

# BTI – Optional EEE

<b>ClS</b>	<b>Topic</b>	<b>Comments (22)</b>
45	Presentation – barrass_3bj_01_0912	96 (master), 97, 105
78		110, 111, 444, 445
82		119, 120, 456
83		122, 123, 124
83A		67, 494
85		66, 125, 126, 127, 128, 457, 458

# BTI – Change to rx\_mode (etc.)

<b>Cls</b>	<b>Topic</b>	<b>Comments (33)</b>
80	Presentation – barrass_3bj_01_0912	61, 62, 63, 70 (master), 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 129, 440
82		64, 81, 82, 83, 84, 85, 86, 87, 184, 338
83		88, 89
85		91, 92, 94, 459, 462

# BTI – EEE & FEC

<b>ClS</b>	<b>Topic</b>	<b>Comments (4)</b>
74	Presentation – barrass_3bj_01_0912	68, 69
82		217
85		93

# Clauses 45, 70, 80, 81, and 85

<b>Cls</b>	<b>Topic</b>	<b>Comments (23)</b>
	Autoneg order	220 (Cls 45), 425 (Cls 78)
78	XLAUI/CAUI parameters	347
78	Management	189, 448
80	Objectives clause	6, 328, 432,
80	PHY ordering	173, 178, 427
80	PHY descriptions	23, 343, 431, 438, 449
80	FEC	431, 441, 454
81	LF/RF	333, 499
81	Editorial style	329
85	Tap weights	461

# Clause 82

<b>Clis</b>	<b>Topic</b>	<b>Comments (16)</b>
	Editorial style	337
	Variable definitions	346
	Count down	214
	LPI s/m	188, 202, 203
	RAMs	187
	BIP	215, 228
	Skew	409
	RAMs	191, 194, 195, 200, 224, 455



# EEE non-controversial (bucket-worthy)

<b>Clis</b>	<b>Topic</b>	<b>Comments (57)</b>
45		1, 30, 40, 41, 42, 43, 44, 45, 46, 98, 267, 268, 269, 270, 271, 272,
78		4, 5, 21, 22, 148, 327
80		10022, 8, 9, 10, 42, 174, 175, 176, 179, 181, 430, 435
81		11, 24, 336, 442, 497
82		12, 13, 14, 65, 121, 149, 185, 192, 339, 340, 341, 342, 345
83		25, 154, 177, 221, 18 (Anx 83C)

# **Comment resolution agenda (Other)**

Subject to change

# Other comments

<b>ClS</b>	<b>Topic</b>	<b>Comments (4)</b>
69	Objectives	31, 106
69	Interface width	436
73	Receive switch function	437

## Other non-controversial (bucket-worthy)

<b>Cls</b>	<b>Topic</b>	<b>Comments (15)</b>
	Frontmatter, refer to IEEE Std 802.3-2012	29 (Cls 99), 172 (Cls 00)
00	Complete management, PICS	180
69	Editorial	2, 3
69	Figure 80-1 (BASE-R FEC optional)	423
69	PICS	20
73	PHY order in Table	424
89	Out of scope (error?)	298, 299, 300, 301, 302, 303, 304

# Clean-up

Consider comments not included in any other group