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2 | REVISION REQUEST |  
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4 DATE: May 14th, 2024  
5 NAME: Andras de Koos  
6 COMPANY/AFFILIATION: Microchip Technology  
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9 REQUESTED REVISION:  
10 STANDARD: 802.3cx  
11 CLAUSE NUMBER: 90.7.1  
12 CLAUSE TITLE: FEC and PCS lane distribution functions  
13 PROPOSED REVISION TEXT:  
14 Replace  
15 'start of the FEC codeword'  
16 with  
17 'start of the FEC codeword(s)'  
18  
19 Perhaps better phrasing is possible.  
20 'start of the (set of) FEC codeword(s)' seems even worse.  
21  
22 Worth also clarifying that 'PCS lane distribution' refers to  
23 'Clause 82 block distribution towards PCS lanes'? I don't see a  
24 concise way of including such a clarification.  
25  
26  
27 RATIONALE FOR REVISION:  
28 The text (part of which which existed prior to 802.3cx) seems to have  
29 been written with Clause 82 block distribution & Clause 91 FEC in  
30 mind.  
31  
32 The subclause is meant to refer to the beginning of the cyclical  
33 function that causes the delay variation, i.e. the start of the  
34 Clause 82 block distribution and/or start of the FEC codeword.  
35  
36 The current text is fine for PHYs that have a single FEC engine.  
37 But for PHYs with multiple FEC engines, and thus multiple FEC  
38 codewords in parallel (such as 200G/400G/800G/1.6Tbps), the current  
39 language ('start of the FEC codeword') is awkward.  
40  
41 Also, 'PCS lane distribution' is ambiguous. Does it mean 66b block  
42 distribution towards PCS lanes as in clause 82, pre-FEC distribution  
43 as in Clause 119, symplol distribution towards PCS lanes like in  
44 Clause 119, or all of the above? I'm quite sure it meant as block  
45 distribution like in a Clause 82 PCS. OK to leave as-is?  
46  
47 Also note that PCS layers for 800Gbps and 1.6Tbps have two 'flows'.  
48 But 'flow' does not need to be mentioned here, since the 'start of the  
49 FEC codeword(s)' necessarily corresponds to the first 'flow'.  
50  
51  
52 IMPACT ON EXISTING NETWORKS:  
53 None. Just making language less awkward for recent PCS clauses like  
54 200G/400G/800G/1.6Tbps.  
55  
56  
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2 |Please attach supporting material, if any
3 |Submit to:- David Law, Chair IEEE 802.3
4 |and copy:- Adam Healey, Vice-Chair IEEE 802.3
5 |
6 |At:- E-Mail: stds-802-3-maint-req@ieee.org
7 |
8 | +----- For official use -----+
9 | | REV REQ NUMBER: 1433
10 | | DATE RECEIVED: 14 May 2024
11 | | EDITORIAL/TECHNICAL
12 | | ACCEPTED/DENIED
13 | | BALLOT REQ'D YES/NO
14 | | COMMENTS:
15 +-----+
16 | For information about this Revision Request see -
17 | http://www.ieee802.org/3/maint/requests/revision\_history.html#REQ1433
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