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4  DATE: 29 August 2019
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9
10 REQUESTED REVISION:
11   STANDARD: 802.3-2018
12   CLAUSE NUMBER: 97.3.8
13   CLAUSE TITLE: 1000BASE-T1 OAM requirements
14 PROPOSED REVISION TEXT:
15 Insert new second sentence to first paragraph of 97.3.8,
16 "When OAM is implemented, behavior shall conform to the state diagrams
17 in Figure 97-17 and Figure 97-18."
18
19 In 97.3.8.4.3:
20 on rx_exp_toggle, change "shall reset" to "is reset"
21
22 Add new Major Capability to 97.11.3
23 *OAM | PCS-level Operations, Administration, and Maintenance channel
24 capability | 97.3.8 | | O | Yes[] No[]
25
26 Insert new subclause 97.11.7a OAM
27 Add new first PICS item to 97.11.7a OAM:
28 OAM1 | State diagram behavior | 97.3.8 | Conforms to Figure 97-18 and
29 Figure 97-19 | OAM: M | Yes [] NA[]
30
31 Insert additional PICS from text of 97.3.8 and subclauses, including:
32 OAM2 | OAM fields set to zero if OAM is not supported | 97.3.8.2.1 |
33 | !OAM:M | Yes[] NA[]
34 OAM3 | Reserved fields are zero | 97.3.8.2.2 | | OAM:M | Yes[] NA[]
35 OAM4 | CRC16 | 97.3.8.2.12 | Produces equivalent result to
36 implementation shown in Figure 97-16 | OAM:M | Yes[] NA[]
37 OAM5 | CRC initialization | 97.3.8.2.12 | Delay elements initialized
38 to zero | OAM: M | Yes[] NA[]
39 OAM6 | OAM fields accepted and updated | 97.3.8.2.13 | except if
40 a) Incorrect parity on any of the 12 symbols, or, b) Incorrect CRC16,
41 or c) Uncorrectable PHY frame on any of the 12 symbols
42 | OAM:M | Yes[] NA[]
43 OAM7 | PHY Health indicator | 97.3.8.14 | Prevent entering quiet/refresh,
44 or exit quiet/refresh if PHY Health indicator of 01 is received
45 | EEE:O OAM:M | Yes[] NA[]
46 OAM8 | mr_tx_received | 97.3.8.4.3 | mr_tx_received clears on read
47 | OAM:M | Yes[] NA[]
48
49
50 RATIONALE FOR REVISION:
51 The state diagram behavior for optional PCS OAM in clause 97 was
52 never called out as a 'shall' and existing shall's associated with
53 it were left out of the PICS, as well as the declaration of the
54 PCS OAM as a major capability and option.
55
56 In addition to the general problem that 97.3.8 and subclauses lack
57 PICS and 'shall' statements associated with the state diagrams, this

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1 also resolves that the OAM transmit register bits (3.2308.15 and  
2 3.2308.14) now have a normative requirement calling out the state  
3 diagram which, according to clause 45 sets and clears them.  
4 (draft 2.2 of 802.3ch is expected to have changes in it removing  
5 the separate problem of duplicate shalls on those bits)  
6

7 The fact that these are coming up suggests the 802.3 revision might  
8 benefit from a maintenance ad hoc or study group taking a deeper  
9 look at maintenance required resulting from the 802.3bp and 802.3bw  
10 projects prior to the next revision.  
11

12  
13 IMPACT ON EXISTING NETWORKS: None. I am not changing the specified  
14 behavior, just calling out. I believe these requirements were  
15 assumed to exist, and it was an editorial miss.  
16  
17

18 +-----+  
19 |Please attach supporting material, if any  
20 |Submit to:- David Law, Chair IEEE 802.3  
21 |and copy:- Adam Healey, Vice-Chair IEEE 802.3  
22 |  
23 |At:- E-Mail: stds-802-3-maint-req@ieee.org  
24 |  
25 | +----- For official use -----+  
26 | | REV REQ NUMBER: 1349 |  
27 | | DATE RECEIVED: 29 August 2019 |  
28 | | EDITORIAL/TECHNICAL |  
29 | | ACCEPTED/DENIED |  
30 | | BALLOT REQ'D YES/NO |  
31 | | COMMENTS: |  
32 +-----+  
33 | For information about this Revision Request see -  
34 | [http://www.ieee802.org/3/maint/requests/revision\\_history.html#REQ1349](http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1349)  
35 +-----+