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4  DATE: 04 October 2024
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9  REQUESTED REVISION:
10     STANDARD: 802.3-2022
11     CLAUSE NUMBER: Figure 149-25
12     CLAUSE TITLE: Transmit state diagram
13  PROPOSED REVISION TEXT:
14  Add
15
16  "tx_boundary <= FALSE"
17
18  to the beginning of the CHECK_ACK and TRANSMIT_SYMBOL states in Figure
19  149-25.
20
21  RATIONALE FOR REVISION:
22  The tx_boundary TRUE/FALSE conditions in 149.3.9.4.3 are not clear in
23  regards to when the variable is set to FALSE after being set to TRUE.
24  Adding this to the state diagram would make it clear that tx_boundary
25  is set FALSE after being acted upon in the state diagram. Without this
26  clarification the state diagram could rapidly cycle through the
27  TRANSMIT_SYMBOL state potentially setting each tx_oam_field<9:0> with
28  tx_oam<0><9:0> overwriting tx_oam_field prior to being embedded into
29  the RS-FEC frame. While it is unlikely any implementation does this the
30  clarification would be helpful.
31
32  IMPACT ON EXISTING NETWORKS:
33  This change will impact any 2.5GBASE-T1, 5GBASE-T1, or 10GBASE-T1 PHY
34  implementations that keeps tx_boundary = TRUE beyond the time the state
35  diagram acts upon it. Any implementation that kept tx_boundary = TRUE
36  in this way would not have a functional OAM in any practical way.
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39  |Please attach supporting material, if any
40  |Submit to:-   David Law, Chair IEEE 802.3
41  |and copy:-   Adam Healey, Vice-Chair IEEE 802.3
42  |
43  |At:-         E-Mail: stds-802-3-maint-req@ieee.org
44  |
45  |             +----- For official use -----+
46  |             | REV REQ NUMBER: 1461
47  |             | DATE RECEIVED: 04 October 2024
48  |             | EDITORIAL/TECHNICAL
49  |             | ACCEPTED/DENIED
50  |             | BALLOT REQ'D   YES/NO
51  |             | COMMENTS:
52  +-----+
53  | For information about this Revision Request see -
54  |http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1461
55  +-----+
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