Clause 45

1. Table 45-38, Clause 45.2.3.11

Insert a new row into Table 45-38 ahead of the PRBS31 row.

3.32.3	PRBS9 pattern testing ability	1 = PCS is able to support PRBS9 pattern testing 0 = PCS is not able to support PRBS9 pattern testing	RO

In the row above this, (reserved bits) change 3.32.11:3 to 3.32.11:4.

Do we need to change the last line of clause 45.2.3.11 to include PRBS9?

2. Insert a new paragraph.

45.2.3.11.5 PRBS9 pattern testing ability (3.32.3)

When read as a one, bit 3.32.3 indicates that the PCS is able to support PRBS9 pattern testing. When read as a zero, bit 3.32.3 indicates that the PCS is not able to support PRBS9 pattern testing. If the PCS is able to support PRBS9 pattern testing then the pattern generation is controlled using bit 3.42.6.

Do we need to change the last line of clause 45.2.3.12 to include PRBS9?

3. Table 45-42, Clause 45.2.3.15

Insert a new row into Table 45-42 ahead of the first PRBS31 row.

3.42.6	PRBS9 transmit test-pattern enable	1 = Enable PRBS9 test-pattern mode on the transmit path 0 = Disable PRBS9 test-pattern mode on the transmit path	R/W

In the row above this, (reserved bits) change 3.42.15:6 to 3.42.15:7.

4. Insert a new paragraph.

45.2.3.15.7 PRBS9 transmit test-pattern enable (3.42.6)

If the PCS supports the optional PRBS9 pattern testing advertised in bit 3.32.3 and the mandatory transmit test-pattern enable bit (3.42.3) is not one and the optional PRBS31 transmit test-pattern enable bit (3.42.4) is not one, then setting bit 3.42.6 to a one shall set the transmit path of the PCS into the PRBS9 test-pattern mode. Setting bit 3.42.6 to a zero shall disable the PRBS9 test-pattern mode on the transmit path of the PCS. The PRBS9 test-pattern is specified in Clause 68.6.1.

5. Clause 45.5.5.6.

Add a row to the end of the table.

??	Implementation of PRBS9 pattern testing	45.2.3		??	Yes [ ] No [ ] N/A [ ]

6. Clause 45.5.5.7.

Add two rows to the end of the table.

RM51	Setting bit 3.42.6 to a one enables PRBS9 transmit pattern testing if bit 3.32.3 is a one and bit 3.42.3 is not a one and bit 3.42.4 is not a one	45.2.3.15.7		??	Yes [ ] N/A [ ]
RM52	Setting bit 3.42.6 to a zero disables PRBS9 transmit pattern testing	45.2.3.15.7		??	Yes [ ] N/A [ ]

Clause 49

1. Clause 49.2.2.

In the last paragraph of clause 49.2.2, insert a sentence in the beginning of the 3rd line ahead of the PRBS 31 sentences: “It may provide support for the optional PRBS9 transmit test pattern.”

2. Clause 49.2.8.

In the 2nd paragraph of 49.2.8, insert a sentence ahead of the PRBS31 sentences: “There is an optional PRBS9 transmit test pattern which may be used for some transmitter tests.”

3. Clause 49.2.8.

Insert a new paragraph at the end of Clause 49.2.8. “The optional PRBS9 pattern is defined in Clause 68.6.1.”

4. Clause 49.3.5.

Add two rows to the end of the table.

JT8	Support for PRBS9 transmit test pattern	49.2.8		??	Yes [ ] No [ ] N/A [ ]
JT9	PRBS9 transmit test pattern is implemented	49.2.8		??	Yes [ ] No [ ] N/A [ ]

Clause 68

1. **Clause 68.6.1, footnote to Table 68-6, line 1 of Page 29.**
   a. Change the beginning of the first sentence: “The PRBS9 pattern is optional. If used, the pattern should be generated by…”.
   b. Delete the last sentence. (It’s minor advantage of DC balance is outweighed by its disadvantages – its spectrum is not uniform, and the industry should avoid the confusion of two PRBS9 options.