

Proposed Edits for "Normal Operation" (Comments 65, 66, 67)

P802.3dm / D2.1

Ragnar Jonsson - 11 September, 2026

The following table details the recommended editing instructions to resolve the ambiguity of "normal operation" without breaking the technical intent of the draft.

Instead of a blanket replacement with "data mode (SEND_N)", these targeted edits replace "normal operation" with terms like **"data mode (SEND_N)"**, **"non-test operation"**, or **"standard link initialization"** depending on the specific technical context.

Section	Page Line	Change From Text	Change To Text	Explanation
191.1.3	69L50	...determine common abilities, and configure for normal operation.	...determine common abilities, and configure for standard link initialization and data transmission.	Auto-Negotiation configures parameters for the entire link bring-up sequence (including Link Sync and Training), not just the data mode.
191.2.2.3.1	81L16	{-1, -1/3, +1/3, +1} in normal operation for 10G+100MBASE-T1/V1.	{-1, -1/3, +1/3, +1} in data mode (SEND_N) for 10G+100MBASE-T1/V1.	Aligns with the commenter's suggestion. In this context, it correctly distinguishes the PAM4 data payload phase from the PAM2 training phase.
191.2.2.3.1	81L17	{-1, +1} in normal operation for 2.5G...	{-1, +1} in data mode (SEND_N) for 2.5G...	Aligns with the commenter's suggestion. Properly identifies the payload data phase.
191.2.2.3.1	81L25	{0,1} in normal operation.	{0,1} in data mode (SEND_N).	Aligns with the commenter's suggestion.
191.6.1	140L32	101 Test mode 5-Normal operation in Idle mode.	101 Test mode 5-Non-test operation in Idle mode.	Aligns with the explicit terminology used on pages 140 & 141, indicating the PHY is utilizing its standard encoding rather than a forced artificial test pattern.
191.6.1	140L37	111 Test mode 7-Normal operation with zero data pattern.	111 Test mode 7-Non-test operation with zero data pattern.	Consistent with Test Mode 5 terminology for describing the PHY's underlying state.
191.6.2.6	146L8	In test mode 5 (normal operation), the transmit power...	In test mode 5 (non-test operation), the transmit power...	Clarifies that the test measures standard transmit power levels without implying that power

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				constraints <i>only</i> apply to SEND_N.
191.6.2.7	147L47	In test mode 5 (normal operation), the transmit signal...	In test mode 5 (non-test operation), the transmit signal...	Prevents a logical contradiction. If changed to SEND_N, it would imply Test Mode 5 only measures data mode, but the sentence explicitly applies these limits to SEND_S and SEND_T as well.
191.7.1	150L20	101 Test mode 5–Normal operation in Idle mode.	101 Test mode 5–Non-test operation in Idle mode.	Same rationale as 191.6.1.
191.7.1	150L23	111 Test mode 7–Normal operation with zero data pattern.	111 Test mode 7–Non-test operation with zero data pattern.	Same rationale as 191.6.1.
191.7.2.7	153L12	In test mode 5 (normal operation), the transmit power...	In test mode 5 (non-test operation), the transmit power...	Same rationale as 191.6.2.6.
191.12.3	164L47	Normal operation shall resume after the short circuit(s) is (are) removed.	The standard link initialization sequence shall resume after the short circuit(s) is (are) removed.	After a short circuit, the link drops. The PHY must execute Auto-Negotiation and training (SEND_S, SEND_T) before reaching data mode. It cannot jump straight back to SEND_N.
191.15.4.1 (PICS)	182L20	...from those of normal operation.	...from those of non-test operation.	Clarifies that test modes must match the PHY's standard electrical constraints across all modes (including SEND_S/T), not just during SEND_N.
191.15.4.1 (PICS)	182L39	TM10 Test Mode 5... Transmit as in normal operation	TM10 Test Mode 5... Transmit as in non-test operation	Keeps PICS consistent with Clause text edits.
191.15.4.2 (PICS)	184L46	...from those of normal operation.	...from those of non-test operation.	Keeps PICS consistent with Clause text edits.
191.15.4.2 (PICS)	185L11	TML7 Test Mode 5... Transmit as in normal operation	TML7 Test Mode 5... Transmit as in non-test operation	Keeps PICS consistent with Clause text edits.
191.15.4.8 (PICS)	188L16	MDI5 MDI recovery... Normal operation shall resume	MDI5 MDI recovery... The standard link initialization sequence shall resume	Keeps PICS consistent with Clause text edits.

