List of TBDs in Clause 167

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TBDs

Clause 167 (clause for 802.3db)

Based on presentations, comment resolution and discussion to date, D1.1 is expected to have a total of 20 TBDs.

The TBDs are classified into key and related parameters (next two slides).

Please bring presentations to help set the parameters. To be most effective in meeting the project timeline, the presentations should line up with D1.1 and D1.2 comment periods.

Other Clauses

Section numbers and register allocations, e.g., in clauses 1 and 45, are written in coordination with other 802.3 projects to prevent overlap. They may have to be updated as more information becomes available.

Clause 167

Key TBD	50m reach	100m reach	Proposals	Related TBDs	Owner & Date
Center wavelength	✓		• 842 – 868 nm [1] • Centered at 940 nm [2]	• TDECQ reference response filter bandwidth	David Lewis, Jun 24
TDECQ	✓		• 4.5 dB [1] • 3.4 dB [3]	• TECQ • Interoperability between –SR and –VR	Piers Dawe, Jul
# taps on the reference equalizer	✓		• 9 taps [1], [3]	• Position of cursor in TDECQ • Position of cursor in TECQ	Piers Dawe, Jul
Stressed receiver sensitivity (OMA_{outer}), each lane (max)	✓	✓	• -2.0 dB [1] • -1.6 dB [4]	• Launch power in OMA_{outer} – TDECQ (min) • Average launch power, each lane (min) • OMA_{outer}, each lane (min)	Yi Tang, Jun 10

[1] Ramana Murty and David Dolfi, murty_3db_adhoc_01b_121720.pdf
[2] David Lewis, lewis_3db_01_041521.pdf
[3] Ryan Latchman, latchman_3db_01_031621.pdf
[4] R. Nering, nering_3db_01_021821.pdf

Clause 167

Key TBD	50m reach	100m reach	Proposals	S	Owner & Date
Over/undershoot	✓	✓		• Hit ratio (3E-3 TBC) [5], [6]	Ramana Murty, Jul
TDECQ calculation method	✓	✓	• Optimize tap weights to minimize TDECQ (normative) • Optimize tap weights for minimum mean squared error [7] • Use ±2% for the sub-eye threshold level adjustment [8], [9]		Ali Ghiasi, Greg le Cheminant, Jul
Constraints on tap coefficients	✓	✓	• For TDECQ, tap 2, 3, or 4 is constrained to be at least 0.8 in –SR links [1]	• Minimum value of cursor for TDECQ • Minimum value of cursor for TECQ • Maximum value of taps 7, 8, and 9 [10]	Piers Dawe, Jul?

[5] Piers Dawe, comment #26 against D1.0
[6] Greg Le Cheminant, comment against D0.2
[7] Greg Le Cheminant, comment against D0.2
[8] Piers Dawe
[9] J. M. Castro, castro_3db_adhoc_01_040121.pdf
[10] Piers Dawe, comment #25 against D1.0