

Homework items for BZ on draft 1.1 (10/7/15)
G. Zimmerman

With any of these sections, if you believe we are done, please comment to delete the associated editor's note. Below I have listed (I think) all of the various editor's notes calling for contributions or specific technical review of issues.

P 59 Clause 45: 45.5 PICS for Clause 45 need checking for updates

P 64 Clause 46:46.6 (XGMII) PICS: Provide solutions to ensure existing 10G-only interfaces remain compliant and consider whether future XGMII MUST be triple speed, or if the support of new speeds is an option – PROPOSE TEXT.

Clause 126:

P77: 126.1.3 (general list) – to be deleted, as redundant:

126.5.4.4 Alien crosstalk noise rejection test *needs level & bandwidths*

126.5.4.3 Rejection of External EM fields – *is this now done?*

126.7.3.1 Alien crosstalk criterion text *needs review and clarification*

P156: 126.5.3.2 Transmitter nonlinear distortion: *PHY designers to consider whether a simulated far-end signal from a short line is needed to stress the transmitter on the linearity test for 2.5GBASE-T. Options include leaving the test as is, specifying an injected stressing signal (and possibly relaxing the 2.5GBASE-T linearity requirement), or reexamining the PBO for 2.5GBASE-T and leaving the test as is.*

P157: 126.5.3.3 Transmitter timing jitter: *PHY designers to consider impact of relaxing Master TX jitter spec to 11 ps for 2.5GBASE-T, and 8 ps for 5GBASE-T, and bring contributions to support the change.*

P160: 126.5.4.3 Rejection of External EM Fields: *please review whether this now applies appropriately to 2.5G and 5GBASE-T link segments and frequencies. Look for things that are broken, not just 'made better'. Ensure test is described as informative.*

P160: 126.5.4.4 Alien crosstalk noise rejection: *the alien crosstalk noise rejection test here is as specified in 802.3 clause 55 and represents unapproved text. The Task force needs to determine the appropriate levels and bandwidths for 2.5G and 5GBASE-T. Note that bandwidth is 10 MHz to 400 MHz and noise level is -141.9 dBm/Hz (TBD). These are the 10GBASE-T numbers, and need revision.*

P167: 126.7.2 Link Segment transmission parameters, Table 126-18: *PHY designers to consider whether further bandwidth is needed on the specification for the 2.5GBASE-T link segment. (currently specified to Nyquist – 100MHz)*

P173: 126.7.3.1 Alien Crosstalk Limited Signal-to-Noise Ratio Criteria: *Review entire section for clarity and consistency. Propose text to improve clarity while maintaining same function. Separately, consider complexity of test and improvements to that, while maintaining it as a link segment requirement.*

P174: 126.7.3.1 Alien Crosstalk Limited Signal-to-Noise Ratio Criteria (Step 4): *consider whether we need to specify how to compute the PBO for consistency (4 pair average received power, single fixed pair, or worst pair to be used – OR, does it make a difference).*

P179: 126.8.2.2 MDI Impedance Balance (equation 126-43): *Contributions are solicited if relaxations from the level shown here, derived from Clause 55, are desired (see cobb_1_0505.pdf (Impedance Balance) from IEEE P802.3an Task Force).*