P802.3 D3.2 ERL-related comment summary and proposed responses

Prepared by Adee Ran, Chris Diminico, and Mike Dudek, for the editorial team's use

Comment classification

Topic	Comments	Presentations	Notes
ERL equation - change G_{rr}	19, 21 (Mellitz)	mellitz_3cd_01_0518 dudek_3cd_01_0518	Change would require corresponding changes to ERL parameters in multiple places.
Tx ERL min clause 136	32, 20, 16 (Rysin, Mellitz, Dawe)	mellitz_3cd_01_0518 sakai_3cd_01_0518 dudek_3cd_01_0518	
Tx ERL min clause 137	25, 35 (Mellitz, Dawe)	mellitz_3cd_01_0518	
Rx ERL min	22, 31, 25, 36, 17 (Mellitz, Rysin)	mellitz_3cd_01_0518 dudek_3cd_01_0518	
Cable assembly ERL min clause 136	23, 15 (Mellitz, Dudek)	mellitz_3cd_01_0518 dudek_3cd_01_0518	
Channel ERL min clause 137	38 (Dawe)		
Channel ERL response length	11, 26 (Mellitz)	mellitz_3cd_01_0518	Apparent consensus
ERL in Rx test	29 (Ran)		
Delete old RL specs	59, 24 (Tracy, Mellitz)		
Termination effect on COM	30 (Ran)	ran_3cd_01_0518	

Resolution topics and options

The list below suggests options for resolving some groups of comments. For any item, the option to adopt another resolution also exists. Straw polls may be taken for each item if consensus is not obvious.

Text in red is editor's notes and should not be retained in the final document.

1. ERL equation - change G_{rr}
   a. Accept r02-19 (proposed modification of the equation) and r02-21 (proposed modification of beta_x and rho_x accordingly).
   b. Reject both comments (if no consensus).
   Consensus to a - accept both comments.

2. Tx ERL minimum in clause 136
   a. Accept r02-32 (in Clause 136 change to 12 dB regardless of V_f or p_max) and AIP r02-20. Do not implement dudek_3cd_01_0518. (Note: Updated mellitz_3cd_01a_0518 has two proposed values, 12 dB (slide 4) and 10 dB (slide 11))
   b. Implement change per dudek_3cd_01_0518 slide 19: $ERL \geq 4 + 40 \cdot \log_{10} \frac{V_f}{p_{max}}$ dB.
   c. Implement change per dudek_3cd_01_0518 slide 19 but with TBD instead of 4.
   d. ~~Implement piecewise constant version at bottom of slide 19 in dudek_3cd_01_0518.~~
   e. Use SNR_ISI>31.5 (mellitz_3cd_01_050918_elect_adhoc slide 4)
   f. Reject both comments (if no consensus).

   Straw poll #1:
   For Tx ERL minimum in clause 136, I would support
         1. One of the fixed values per option a
         2. Option c
         3. Option e
   Chicago rules
   1: 16, 2: 9, 3: 0

   Straw poll #2:
   For Tx ERL minimum in clause 136, I would support
         1. A fixed value 11 dB per option a
         2. $ERL \geq 0 + 40 \cdot \log_{10} \frac{V_f}{p_{max}}$ per option c
   Choose one
   1: 3, 2: 17
   Consensus to use $ERL \geq 0 + 40 \cdot \log_{10} \frac{V_f}{p_{max}}$

3. Tx ERL minimum in clause 137

a. Accept r02-25 (in clause 137 change to 15 dB), AIP r02-35
b. Use other value lower than channel spec per r02-35, AIP both r02-35 and r02-25
c. Reject both comments (if no consensus)

Straw poll #3:
For Tx ERL minimum in clause 137, I would support
  1. 15 dB
  2. No change
Choose one
1: 11, 2: 4
Consensus to use 15 dB (accept r02-25)

4. ERL of pattern generator in Rx test
   a. Accept r02-29 - specify pattern generator meets Tx ERL
   b. Reject r02-29 (if no consensus)
Comment accepted.

5. Cable assembly ERL minimum in clause 136
   a. Accept r02-15 (Change to 14 dB), reject r02-23
   b. AIP r02-15 but change to 11.5 dB, reject r02-23
   c. Accept r02-23 (keep value but apply only with COM<4 dB), reject r02-15
   d. Reject both comments (if no consensus)

Straw poll #4:
For Cable assembly ERL minimum in clause 136, I would support
  1. Option b
  2. Option c
  3. Option d
Chicago rules
1: 4, 2: 13, 3: 14

Straw poll #5:
For Cable assembly ERL minimum in clause 136, I would support
  1. Accepting r02-23
  2. Rejecting r02-23
Choose one
1: 15, 2: 8
Consensus to accept r02-23

6. Channel ERL minimum in clause 137
   a. AIP r02-38 (value TBD higher than Tx spec?)
No consensus to make a change

7. Channel ERL response length (currently 300 UI)
   a. Accept r02-26 and r02-11 - change to 1000 UI in clause 137
   b. Reject both comments (if no consensus)
Consensus to accept both comments.

8. Rx ERL minimum in clause 136
   a. Accept r02-22 (Change from 14.5 to 12 dB), AIP r02-31 (same remedy)
   b. Change to 10 dB as presented mellitz_3cd_01_0518 slide 11
   c. Reject both comments (if no consensus)

   Straw poll #7:
   For Host Rx ERL minimum in clause 136, I would support
   1. Changing to 12 dB
   2. Changing to 10 dB
   3. No change
   Choose one
   1: 6, 2: 8 , 3: 0
   Consensus to change to 10 dB

9. Rx ERL minimum in clause 137
   a. Accept r02-25 (Change from 16.1 to 15 dB), AIP r02-36, AIP r02-17
   b. Use value TBD lower than the Tx and channel specs per r02-36; AIP r02-25, AIP r02-17
   c. Accept only r02-17, reject comments r02-25 and r02-36 (if no consensus)
   Consensus to change to 15 dB

10. Delete old RL spec

    Straw poll #10:
    For the cable assembly specifications, I would support
    1. Removing the recommended differential return loss
    2. Retaining the recommended differential return loss
    Choose one
    1: 25, 2: 1
    Consensus to remove the recommended differential return loss