IEEE 802.3 Channel Operating Margin (COM) Ad Hoc

Kent Lusted
Synopsys
New Orleans, LA, USA
15 May 2025

IEEE 802.3 COM Ad Hoc

- Ad Hoc Organization
 - Kent Lusted, IEEE 802.3 COM Ad Hoc Chair
- Ad Hoc Web and Reflector Information
 - Home Page https://www.ieee802.org/3/ad_hoc/COM/
 - Reflector Information In process
 - COM Ad Hoc Calls see <u>IEEE 802.3 Call and Meeting</u>
 Calendar

Open Change Requests (1/2)

| Commit Request # | Submitter | Description | Proposed Disposition |
|---------------------|--------------------|--|----------------------|
| 4p8_1 | Hossein Shakiba | Request 4p8_1: Correction in Implementation of Equation 187A-42 in D1.4 in the COM Matlab Code | Accept |
| 4p8_2 | Hossein Shakiba | Request 4p8_2: How to Handle negative 'delta COM' in the COM Matlab Code | Accept |
| 4p8_3 | Hossein Shakiba | Request 4p8_3: Correction to Calculation of 'g_an', Scale Factor for Added Noise | Accept |
| 4p8_4 | Hossein Shakiba | Request 4p8_4: Adding an Independent Parameter in COM Configuration for the Receiver Impairment Target | Accept |
| 4p8 5 | Hossein Shakiba | Request 4p8_5: Improving COM Simulation Run Time in the Presence of Quantization Noise | Incomplete |

Open Change Requests (2/2)

| Commit Request # | Submitter | Description | Proposed Disposition |
|---------------------|-----------------|---|-----------------------------|
| 4p8_6 | Adam Gregory | Request 4p8_6: Optimize FOM Reduction | Deferred |
| 4p8_7 | Rich Mellitz | Request 4p8_7: SNDR (REF) commit request | Accept |
| 4p8_8 | Rich Mellitz | Request 4p8_8: SNR MDNEXT commit request | Accept |
| 4p8_9 | Adam Gregory | Request 4p8_9: MMSE FOM Speed Up commit request | Deferred |

COM Ad Hoc Straw Poll

Straw Poll #1:

I would support the proposed dispositions per lusted_COM_01a_2505

Results: Y: 25 N: 0, A: 11

3

WG Motion

 Move to generate COM v4.9 from COM 4.8 and the dispositions per 0525_COM_ad_hoc_interm_report slides 3 and 4

M: Kent Lusted

S: Howard Heck

Technical (>=75%)

Results:

Thank You!

Current COM Code Commit Request Dispositions (WIP) Managed at the Task Force level via COM ad hoc for the short-term

- Proposed short-term disposition designations for COM code commit requests were leveraged from the IEEE SA Balloting and Comment Resolution Process Guidelines
 - https://standards.ieee.org/wp-content/uploads/import/governance/revcom/guidelines.pdf
- Disposition Designations:
 - Accepted: The group agreed exactly with the commit request and change proposed by the submitter.
 - Revised: The group agrees with the commit request (at least in part) and implements a change that is not exactly what the submitter proposed.
 - **Rejected:** The group does not agree to make the change, or cannot come to a consensus to make changes necessary to address the commit request
 - **Deferred:** The group is unable to review or implement the commit request within the specified timeline for the next release
 - **Incomplete:** The commit request is missing details.

Page 8