Channel Operating Margin (COM) Code Change Request Summary – 15 May 2025

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IEEE 802.3 COM Ad Hoc Chair

List of 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

List of 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

Thanks!

Proposed *Short-term* COM Code Change Management Guidelines (WIP)

- Managed at the Task Force level via COM ad hoc for the short-term
- Presented in the IEEE P802.3dj Task Force Electrical ad hoc meeting on 4 April 2024
  - https://www.ieee802.org/3/dj/public/adhoc/electrical/24_0404/lusted_3dj_elec_02_240404.pdf

- Steps
  1. Requests for changes to the COM code are sent to Kent and Rich as a “Commit Request”
     - Brief title, submitter, description of desired change, suggested remedy
  2. Commit Requests are assigned a number associated with the COM version
     - For tracking purposes
  3. Commit Requests are introduced in the COM ad hoc
     - Details are discussed, if time allows
     - Specific code changes are provided to participants by website or reflector (TBD)
  4. Participants review the Commit Request(s) offline between the COM ad hoc meetings
     - Use of the 3dj electrical track reflector is encouraged for discussion and debate on Commit Requests
  5. A straw poll on a Commit Request is taken at a future COM ad hoc meeting to gauge support
     - If there was support, then a Commit Request becomes part of the next formal COM code release

Proposed *Short-term* 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.