Channel Operating Margin (COM) Code Commit Request Summary – 2 July 2024

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Change Management Guidelines

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

- Managed at the Task Force level via COM ad hoc for the short-term

- 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

https://www.ieee802.org/3/dj/public/24_05/lusted_3dj_03_2405.pdf

Request Dispositions

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.

https://www.ieee802.org/3/dj/public/24_05/lusted_3dj_03_2405.pdf

List of Commit Requests (1/2)

Commit Request #	Submitter	Description	Proposed Disposition
4p5_1	Rich Mellitz	• Implement function for MLSD described in Annex 178A • Remove access to untested MLSE code • And subsequent reporting requirements • Add new config parameters to support MLSE	Accept
4p5_2	Adam Healey	• The location of the cursor sample (or the number of channel pre-cursor samples dh), is not always correctly identified in functions MMSE() and get_PSDs().	Accept

Note: 4p5_1 and 4p5_2 are in COM 4.6beta3

List of Commit Requests (2/2)

Commit Request #	Submitter	Description	Proposed Disposition
4p5_3	Upen Reddy Kareti and Ali Ghiasi	• The NEXT lengths and voltage values for the package is supposed to come from the receiver package. However, the current version of COM takes lengths from the transmitter package (this is incorrect) and the voltages from the receiver (this is correct) • Minimal impact observed. ~0.2dB	Accept
4p5_4	Upen Reddy Kareti and Ali Ghiasi	• The reported location of floating taps does not match the locations of the reported coefficient values	Accept

Note: 4p5_3 and 4p5_4 are in COM 4.6beta4.

Summary

- Participants are asked to use and review all 4.6beta COM code
  - Switching gears to configuration definitions
- 4.6beta4 COM targeting a COM 4.6 presentation at the July 2024 IEEE 802 plenary meeting.
  - **Includes commit requests 4p5_1 to 4p5_4**
- Send bug reports or functional issues to Kent and Rich
  - Or bring them to the COM ad hoc