

# Channel Operating Margin (COM) Code as Open Source?

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# Background

- IEEE Std. 802.3 and amendments specify Channel Operating Margin (COM) via equations and methods in Annex 93A
- There have been and continue to be contributions of software code implementations of these equations and methods for participants to use
- The contributed COM software code implementation is being widely used by industry participants
- It is increasingly important to ensure that the “reference” code implementation is revision controlled, peer reviewed, cross checked, and bug free and maintained over time

# A Path – Open Source

- Looking into the use of the IEEE SA BOG Open Source Committee (IEEE OSCom) framework for the COM code
  - [https://standards.ieee.org/wp-content/uploads/import/documents/other/OSCOM\\_Operations\\_Manual.pdf](https://standards.ieee.org/wp-content/uploads/import/documents/other/OSCOM_Operations_Manual.pdf)
- The IEEE Open Source Platform consists of the code and document repositories, license repositories, communication forums, Project management systems, and related administrative and end-user tools maintained by IEEE for the purpose of hosting Open Source Projects together with the associated governance mechanisms, support mechanisms, and other services offered to participants, users, and consumers of Open Source Projects.

# Some Things to Consider

- Also possible to store the COM reference spreadsheets and the reference channels, if desired
- Contributors to the Open Source project will need to submit an IEEE Contributor License Agreement (CLA)
- Some responsibilities to assign: Source Project Lead (“Chair”) and Maintainers (“Editors”)
- Create submission, review, and approval flows that work for us

# Summary

- Going forward, we need to ensure that the COM “reference” code implementation is revision controlled, peer reviewed, cross checked, and bug free and maintained over time
- IEEE SA Open Source is a viable path
- Let’s start the conversation now
  - Work towards a solution framework for the May 2024 interim
  - Prepare a robust proposal for consideration at the July 2024 Plenary
- Reach out to me for more details or to help out!