Working Output from PDCC 5/29/2024 on CFI

# Request and announcement of a tutorial / Consensus Building Meeting

Call for Interest: Single-Pair Ethernet Powering Cabling Restrictions

This is a call for interest to initiate a Study Group to develop a PAR and CSD to provide clarification on the cabling requirements for single-pair Ethernet powering.

The IEEE 802.3WG’s Power Delivery Coordinating Committee (PDCC) is working with other SDOs to avoid potential issues, but has serious concerns about a currently proposed approach that an international cabling SDO has taken. In particular, the SDO is proposing to specify cabling at different current carrying capacities that do not support all the power classes that are presently defined in IEEE 802.3. This threatens the historic assumption that PoE is plug-and-play. It may be necessary to have additional information in IEEE Std 802.3 to provide guidance regarding the usage of such cabling. The PDCC meeting on Tuesday evening will provide a tutorial presentation on the proposed CFI.

# Potential Outline of the Tutorial Presentation

What is in Clause 104

* Different classes
* Progression of increased power in PoE over time

What is the current status of ISO 11801 on this issue

* Progression from:
  + Support for 2A, to
  + Keyed connectors, to
  + Labels…

What is the fundamental issue/potential problem

* Misuse of labels
* Hidden cable segments
* Overheating, premature aging of cabling
* Installer, user, and regulator confusion

What might 802.3 include

* Warning text
* Explanatory text to notify people of the problems and how to avoid them

Why a study group

* Open process
* Wide notification