IEEE P802.3dg 100 Mb/s Long-Reach Single-Pair Ethernet Task Force
Closing Report

George Zimmerman

CME Consulting/ADI, APL Group, Cisco, Marvell, OnSemi, SenTekSe, Sony

802 Plenary

November 2024

IEEE P802.3dg 100 Mb/s Long-Reach SPE Task Force Project Information

Task Force Organization

George Zimmerman, IEEE P802.3dg Task Force Chair

Bob Voss, IEEE P802.3dg Task Force Secretary

Yan Zhuang, IEEE P802.3dg Chief Editor

Task Force web and reflector information

Reflector information: https://www.ieee802.org/3/dg/reflector.html

Home page: https://www.ieee802.org/3/dg/index.html

PAR: https://www.ieee802.org/3/dg/P802d3dg_PAR.pdf

CSD: https://mentor.ieee.org/802-ec/dcn/22/ec-22-0086-00-ACSD-p802-3dg.pdf

Objectives: https://www.ieee802.org/3/dg/Objectives_adopted_8023_03172022.pdf

Approved timeline: https://www.ieee802.org/3/dg/revised_2_timeline_20240918.pdf

Private area: https://www.ieee802.org/3/dg/private/index.html

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IEEE 802.3dg Task Force
Activities at July 2024 plenary

Held meetings jointly with IEEE P802.3da TF:

Wednesday 13 Nov (PM1, PM2), and Thursday14 Nov (AM1)

Major items discussed, decisions made and actions

- Request draft-sharing relationship with Profibus & Profinet International (PI)
- Adopted Baselines for: PCS encoding, EEE parameters, Auto-Negotiation
- Progressed discussion on PMA link training

Current status

- Adopting baselines to achieve objectives

Draft sharing relationship - rationale

Substantive text in Request form

- The only substantiative question in the request form explains the group's relevance to the IEEE 802 project.

- The proposed response is:
  - PROFIBUS & PROFINET International (PI) develops, standardizes, and promotes industrial communication and automation technologies. As such, the organization has significant technical competence and expertise in the applications that IEEE P802.3dg is developing. The Joint Working Group - Independent Protocol Physical Layer within PI is developing environment-specific extensions to the technologies that the IEEE P802.3dg Task Force is developing. Additionally, they have developed extensions and have experience relative to 10BASE-T1L, developed by IEEE P802.3cg, the predecessor to IEEE P802.3dg.

Task Force Motion – Draft Sharing Relationship

Motion #2

Move to request the working group establish a draft-sharing relationship between the IEEE 802.3 Ethernet Working Group and Profibus & Profinet International.

M: Jon Lewis

S: Bob Voss

(Procedural > 50%)

Motion Passes by unanimous consent

Motion

Move to request the IEEE 802.3 working group establish a draft-sharing relationship between the IEEE 802.3 Ethernet Working Group and Profibus & Profinet International.

M: George Zimmerman, on behalf of the IEEE P802.3dg Task Force

IEEE P802.3dg 100 Mb/s Long-Reach SPE Task Force Adopted Timeline

802.3dg Revised² Timeline Adopted by TF 9/18/2024

- ✓ Sept 2022 – Measurements of Noise, Link segments examples
  - ✓ Need to consider hybrid cables, separation of circuits, internal coupling
- ✓ Nov 2022 – Potential PHY & Link segment baseline starts
- ✓ Jan 2023 – PHY baseline discussion
  - • Link segment baselines (electrical characteristics of communication) selected
- ✓ July 2024 –Major PCS/PMA baselines selected
- ❖ Nov 2024 – Draft 1.0 (baselines + skeleton draft)
- ❖ Nov - Mar 2025 - TF review
- ❖ May 2025 – Draft 2.0, Initial WG ballot
- ❖ Nov 2025 – initiate SA ballot
- ❖ Mar 2026 – conditional approval for RevCom
- ❖ June 2026 – SASB – standard complete

IEEE P802.3dg Next meetings

Ad hocs – Wednesday 7-9 pacific, (AS NEEDED, CALLED OFF IF NO REQUESTS)

Jan 2024 802.3 Interim, Phoenix AZ - days TBA

In-person with remote access

See https://www.ieee802.org/3/interims/index.html for information

Questions?

Thank you!