

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

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802 Plenary

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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 since March 2024 plenary

Met jointly with IEEE P802.3da 16-18 Sept 2024 (802.3 interim),
Met via Electronic Interim 29-Oct-2024

Major items discussed, decisions made and actions

- Adopted baseline for scrambler and PMA training frame, no OAM channel
- Progressed additional baselines for PCS and PMA training
- Heard consideration of supporting “APL powering” for 100BASE-T1L
- Adopted revised timeline

Current status

- Adopting baselines to achieve objectives
- Determining whether additional powering work fits within the project
- Producing initial review drafts (d 1.0)

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

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Meeting week plan

(meet jointly w/802.3da Wed PM/Thurs AM)

Goals for the meeting

- Adopt baselines to fill out d1.0 PCS baseline

- Adopt baseline to progress PMA training

- Progress powering discussion

Big ticket items

- PCS encoding text

- PMA training

Future

- Begin Task Force review of d1.0

- Determine how much powering work fits within 802.3dg

Questions?

Thank you!