

Objectives

IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group

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- Support a MAC data rate of 800 Gb/s *
- Support full-duplex operation only *
- Preserve the Ethernet frame format utilizing the Ethernet MAC *
- Preserve minimum and maximum FrameSize of current IEEE 802.3 standard *
- Support a BER of better than or equal to 10^{-13} at the MAC/PLS service interface (or the frame loss ratio equivalent) **
- Provide support to enable mapping over OTN ***
- Define a physical layer specification that supports 800 Gb/s operation:
 - over 8 pairs of MMF with lengths up to at least 50 m *
 - over 8 pairs of MMF with lengths up to at least 100 m *
 - over 8 pairs of SMF with lengths up to at least 500 m *
 - over 4 pairs of SMF with lengths up to at least 500 m *
 - over 4 pairs of SMF with lengths up to at least 2 km *
 - over 4 wavelengths over a single SMF in each direction with lengths up to at least 2 km *
 - over a single SMF in each direction with lengths up to at least 10 km *
 - over a single SMF in each direction with lengths up to at least 40 km *

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Approval by 802.3 WG Pending