

Adopted IEEE P802.3df Objectives

- **Non-Rate Specific**
 - 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
- **400 Gb/s Related**
 - Support a MAC data rate of 400 Gb/s
 - Define a physical layer specification that supports 400 Gb/s operation:
 - over 4 pairs of SMF with lengths up to at least 2 km
- **800 Gb/s Related**
 - Support a MAC data rate of 800 Gb/s
 - Support optional eight-lane 800 Gb/s attachment unit interfaces for chip-to-module and chip-to-chip applications
 - Define a physical layer specification that supports 800 Gb/s operation:
 - over eight lanes of twin axial copper cables with a reach up to at least 2 meters
 - over eight lanes over electrical backplanes supporting an insertion loss ≤ 28 dB at 26.56GHz
 - 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 8 pairs of SMF with lengths up to at least 2 km

Approved by IEEE 802.3 WG 17 Nov 2022