Objectives
IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group

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- 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 ***

- 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 ****
  - Support optional four-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 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 \#
    - 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 *

- 1.6 Tb/s Related
  - Support a MAC data rate of 1.6 Tb/s \#
  - Support optional eight-lane 1.6 Tb/s attachment unit interfaces for chip-to-module and chip-to-chip applications \#
  - Define a physical layer specification that supports 1.6 Tb/s operation:
    - 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 \#