# 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

- Define a physical layer specification that supports 800 Gb/s operation over 8 pairs of MMF with lengths up to at least 50 m

- Define a physical layer specification that supports 800 Gb/s operation over 8 pairs of MMF with lengths up to at least 100 m

- Define a physical layer specification that supports 800 Gb/s operation over 8 pairs of SMF with lengths up to at least 500 m

- Define a physical layer specification that supports 800 Gb/s operation over 4 pairs of SMF with lengths up to at least 500 m

- Define a physical layer specification that supports 800 Gb/s operation over 4 pairs of SMF with lengths up to at least 2 km

- Define a physical layer specification that supports 800 Gb/s operation over 4 wavelengths over a single SMF in each direction with lengths up to at least 2 km

- Define a physical layer specification that supports 800 Gb/s operation over a single SMF in each direction with lengths up to at least 10 km

- Define a physical layer specification that supports 800 Gb/s operation over a single SMF in each direction with lengths up to at least 40 km