

# P802.3cs Objectives

- Provide Physical Layer specifications that:
  - Preserve the Ethernet frame format utilizing the Ethernet MAC
  - Support a BER of better than or equal to  $10^{-12}$  at the MAC/PLS service interface (or the frame loss ratio equivalent)
  - Support a passive point-to-multipoint ODN with a reach of at least 50 km with at least 1:64 split ratio per wavelength pair
  - Support at least 16 wavelength pairs for point-to-multipoint PON operation
  - Support the MAC data rate of 10Gb/s downstream
  - Support the MAC data rates of 2.5Gb/s and 10Gb/s upstream
  - Leverage existing EPON PCS and PMA to support the above MAC data rates
  - Support tunable transmitters