100G-EPON Objectives

Objectives

- ❑ Support subscriber access networks using point to multipoint topologies on optical fiber
- ❑ Provide specifications for physical layers operating over a single SMF strand and supporting symmetric and/or asymmetric the MAC data rates of:
  - – 25 Gb/s in downstream and less than or equal to 25 Gb/s in upstream
  - – 50 Gb/s in downstream and less than or equal to 50 Gb/s in upstream
  - – 100 Gb/s in downstream and less than or equal to 100 Gb/s in upstream
- ❑ PHY(s) to have a BER better than or equal to 10-12 at the MAC/PLS service interface (or the frame loss ratio equivalent)
- ❑ Support coexistence with 10G-EPON
  - – Optical power budgets to accommodate channel insertion losses equivalent to those supported by the 10G-EPON standard
  - – Wavelength allocation allowing concurrent operation with 10G-EPON PHYs