

NG-EPON Objectives

Objectives

1. Support subscriber access networks using point to multipoint topologies on optical fiber
2. Provide specifications for physical layers operating over a single SMF strand and supporting the MAC data rate of:
 - 25 Gb/s in downstream and 25 Gb/s in upstream
 - 100 Gb/s in downstream and 100 Gb/s in upstream. This physical layer specification shall accommodate flexible configuration to support operation at reduced MAC data rates.
3. 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)
4. 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