

# **NG-EPON Objectives**

# Objectives #1

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Support subscriber access networks using point to multipoint topologies on optical fiber

# Objectives #2

## Old

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.

## New

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. ~~This physical layer specification shall accommodate flexible configuration to support operation at reduced MAC data rates.~~

# Objectives #3

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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)

# Objectives #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

Approve the modified objectives as defined in 1511\_ngepon\_objectives\_changes.pdf

Technical ( $\geq 75\%$ )

- Moved: Glen Kramer
- Seconded: Frank Effenberger
- Results: Y: 18 N: 0 A: 6
- Motion passes