

# *Objectives*

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# Agenda

- “Apple Pie” Objectives
- Rate / BER Objectives
- Reach Objectives

# “Apple Pie” Objectives

- There are some objectives that are typically adopted for a project.
  - Support full-duplex operation only
  - Preserve the Ethernet frame format utilizing the Ethernet MAC
  - Preserve minimum and maximum FrameSize of current Ethernet standard
  - Provide appropriate support for OTN
  - Specify optional Energy Efficient Ethernet (EEE) capability

# Rate / Ber Objectives

1. 50 Gb/s
  1. Support a MAC data rate of 50 Gb/s
  2. Support a BER of better than or equal to  $10^{-12}$  at the MAC/PLS service interface (or the frame loss ratio equivalent) for 50 Gb/s
2. 100 Gb/s
  1. Support a MAC data rate of 100 Gb/s
  2. Support a BER of better than or equal to  $10^{-12}$  at the MAC/PLS service interface (or the frame loss ratio equivalent) for 100 Gb/s
3. 200 Gb/s
  1. Support a MAC data rate of 200 Gb/s
  2. Support a BER of better than or equal to  $10^{-13}$  at the MAC/PLS service interface (or the frame loss ratio equivalent) for 200 Gb/s
4. 400 Gb/s
  1. Support a MAC data rate of 400 Gb/s
  2. Support a BER of better than or equal to  $10^{-13}$  at the MAC/PLS service interface (or the frame loss ratio equivalent) for 400 Gb/s

# 50 Gb/s Physical Layer Specifications

## At Nov 17 Plenary

- Strawpoll #4 - Strong support for this proposed objective
  - Provide physical layer specifications which support 50 Gb/s operation over at least 40 km of SMF
  - Results (y/n/a) 59 / 0 / 8
- Strawpoll #3 - No perceived BMP for 50 Gb/s coherent solutions targeting 40 or 80 km
  - Results 40km (y/n/a): 2/41/7                      80km (y/n/a): 3/36/9

# Study Group Objectives Discussions to Date

	50 GbE	100 GbE	200 GbE	400 GbE
40 km to 80 km	Minimal Interest for Coherent (Nov 17, Straw Poll #3)	Coherent / DWDM?		Coherent?
40 km	High Interest (Nov 17, Straw Poll #4)	Raised at Nov 17 CFI	Tech Feasibility being addressed	Tech Feasibility being addressed