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# Proposed GEPOF Objectives

IEEE 802.3 Gigabit Ethernet over Plastic Optical Fiber  
Study Group

Name

Affiliation

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12 May 2014

# Objectives for 802.3 projects

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- Objectives are not required but are expected for 802.3 projects
- Objectives are an agreement between a study group or task force and the 802.3 working group that provide more detail on what is being done than what is included in the PAR and five criteria
- New objectives or modified objectives can be presented to 802.3 during project development

# Basic PHY project objectives

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- **Preserve the IEEE 802.3/Ethernet frame format utilizing the IEEE 802.3 MAC**
- **Preserve minimum and maximum frame size of the current IEEE 802.3 standard**
- **Support full duplex operation only**
- **Support a data rate of 1000 Mb/s at the MAC/PLS service interface**

# Possible error rate objective

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- **Maintain a bit error ratio (BER) better than or equal to  $10^{-12}$  at the MAC/PLS service interface**

**Or the generic**

- **Maintain a bit error ratio (BER) better than or equal to  $10^{-??}$  at the MAC/PLS service interface**

# Possible link length objective

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- Specify operation over at least 50m of plastic optical fiber (POF) for home networking
- Specify operation over at least 15m of plastic optical fiber (POF) for automotive networking

Or generic format for SG/TF refinement

- Specify operation over at least ?? m of plastic optical fiber (POF)

# Possible EEE objective

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- **Specify optional Energy-Efficient Ethernet for 1000 Mb/s over POF**

**or**

- **Consider optional Energy-Efficient Ethernet for 1000 Mb/s over POF**

# Possible market specific objective

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- **Support operation in automotive & industrial environments (e.g. EMC, temperature)**