## **Opening 802.3 Plenary Report**

IEEE 802.3 Gigabit Ethernet over Plastic Optical Fiber Study Group

Robert M. Grow
Chair, GEPOF Study Group
San Diego, CA, USA
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### **GEPOF Study Group Charter**

(per March 2014 motion)

Authorize formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) document for Gigabit Ethernet over Plastic Optical Fibre.

#### Reflector and web

To subscribe to the GEPOF reflector, send an email to:
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- Send GEPOF reflector messages to: stds-802-3-GEPOF@listserv.ieee.org
- Study Group web page URL:

http://www.ieee802.org/3/GEPOFSG/index.html

#### Activities since March 2014

- GEPOF study group meeting in Norfolk, VA, USA (thanks to our host, the Ethernet Alliance)
  - Technical presentations covered transmitter, receiver, cabling and channel
  - Market potential and requirements presentations for both home networking and automotive
  - Approved PAR, CSD and Objectives
  - Project documents submitted to IEEE 802 and NesCom

# Objectives

- 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
- For the automotive environment:
  - Specify operation over at least 15m of POF with 4 in-line connectors
  - Specify operation over at least 40m of POF with no in-line connectors
- For the home and industrial environment specify operation over at least 50m of POF with 1 in-line connector
- Maintain a bit error ratio (BER) better than or equal to 10<sup>-12</sup> at the MAC/PLS service interface
- Specify optional Energy-Efficient Ethernet for 1000 Mb/s over POF

#### Goals for this week

- Address comments on the PAR and CSD
- Seek working group approval of PAR, CSD and Objectives
- Study Group presentations and discussions
  - Technical solution possibilities
    - Possible solutions for PCS and PMA
  - Market potential and requirements
    - Requirements for automotive applications
    - Reinforcement of broad market potential
    - Energy consumption and emissions
  - Planning in anticipation of project approval

# Thank You!