IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber (GEPOF) Closing Report

Bob Grow

RMG Consulting / KDPOF
Berlin, Germany
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IEEE P802.3bv GEPOF project information

Task force web and reflector information

Reflector information: http://www.ieee802.org/3/bv/reflector.html

Home page: http://ieee802.org/3/bv/index.html

PAR:
http://www.ieee802.org/3/bv/P802_3bv_PAR_approved_121214.pdf

CSD: http://www.ieee802.org/3/bv/CSD_GEPOF_1114.pdf

Objectives:
http://www.ieee802.org/3/bv/Objectives_GEPOF_2_0714.pdf

Private area

Private area:
http://ieee802.org/3/bv/private/index.html

Username: ****

Password: ****

(802.3 Username/Password also work)

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Approved GEPOF 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 POF connections

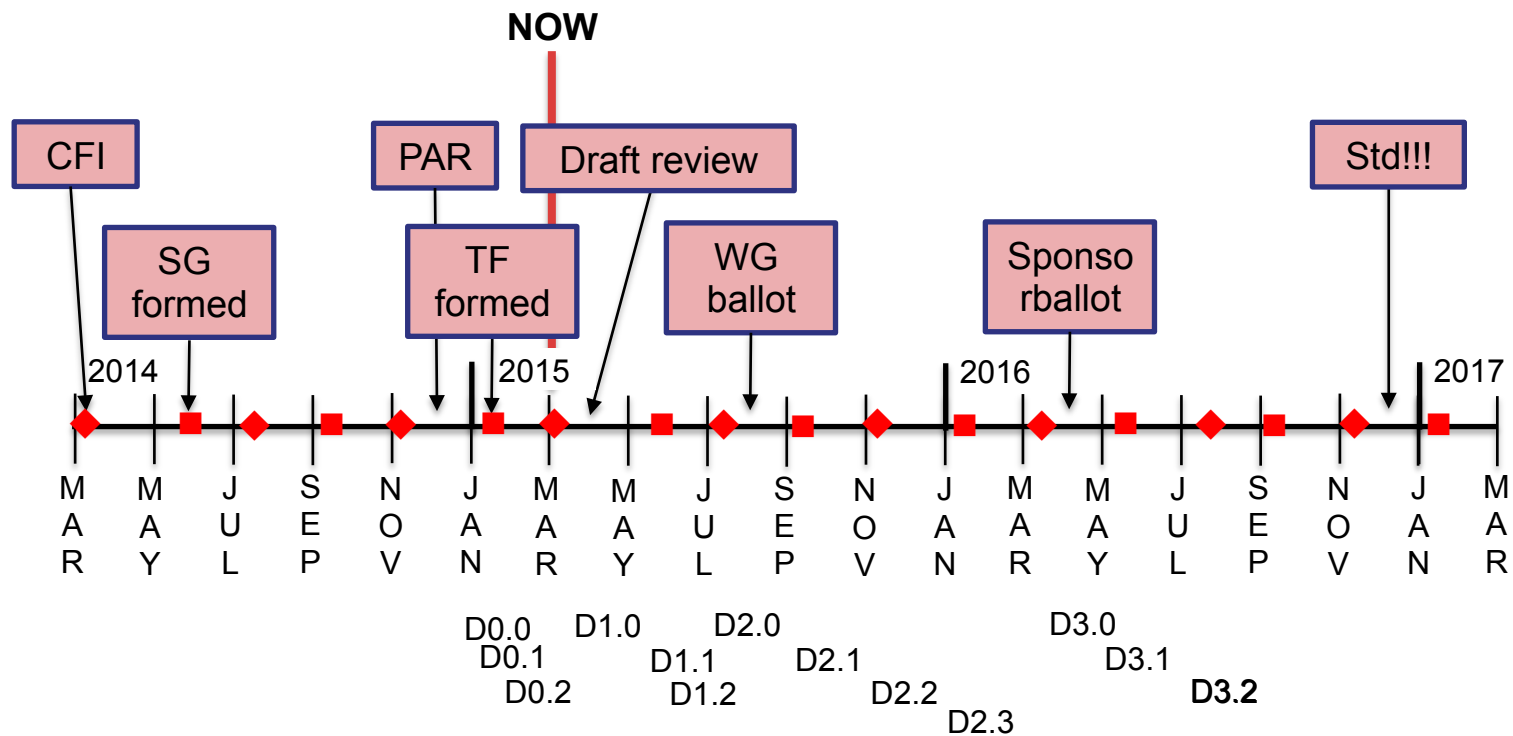   Specify operation over at least 40m of POF with no POF connections

For the home and industrial environment specify operation over at least 50m of POF with 1 POF connections

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

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

P802.3bv Timeline
Revised 16 January 2015

Activity this week

- Continued work on development of GEPOF draft
  - 13 presentations
  - Adopted additional core proposals
- Big ticket items addressed/~~closed~~
  - ✓ Adoption of core PMD proposals
  - ✓ ~~Adoption of additional PCS proposals~~
  - ✓ Common (P802.3bp, P802.3bw, P802.3bx) changes to base standard (mostly Clauses 22, 34, 35)
  - ✓ Environmental/safety specifications
  - ✓ Complete management specifications

Common changes

- 100BASE-T1, 1000BASE-T1 and 1000BASE-RH are adding capability for speeds of operation defined decades ago

- Use of Clause 45 registers and MDIO interface creates ambiguity problems with compliance IEEE Std 802.3
  - A problem for the three projects
  - Some ambiguity currently in Std 802.3

- All three TFs support a common fix to be introduced to P802.3 initial sponsor ballot

P802.3bv TF Review

- Approved additional core proposals
- Authorized production of P802.3bv/D1.0 for Task Force Review

Questions?

Thank you!