

# IEEE 802.3az

# Energy Efficient Ethernet

## Opening Plenary Report

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# Reflector and Web

- To subscribe to the EEESG reflector, send your request to:

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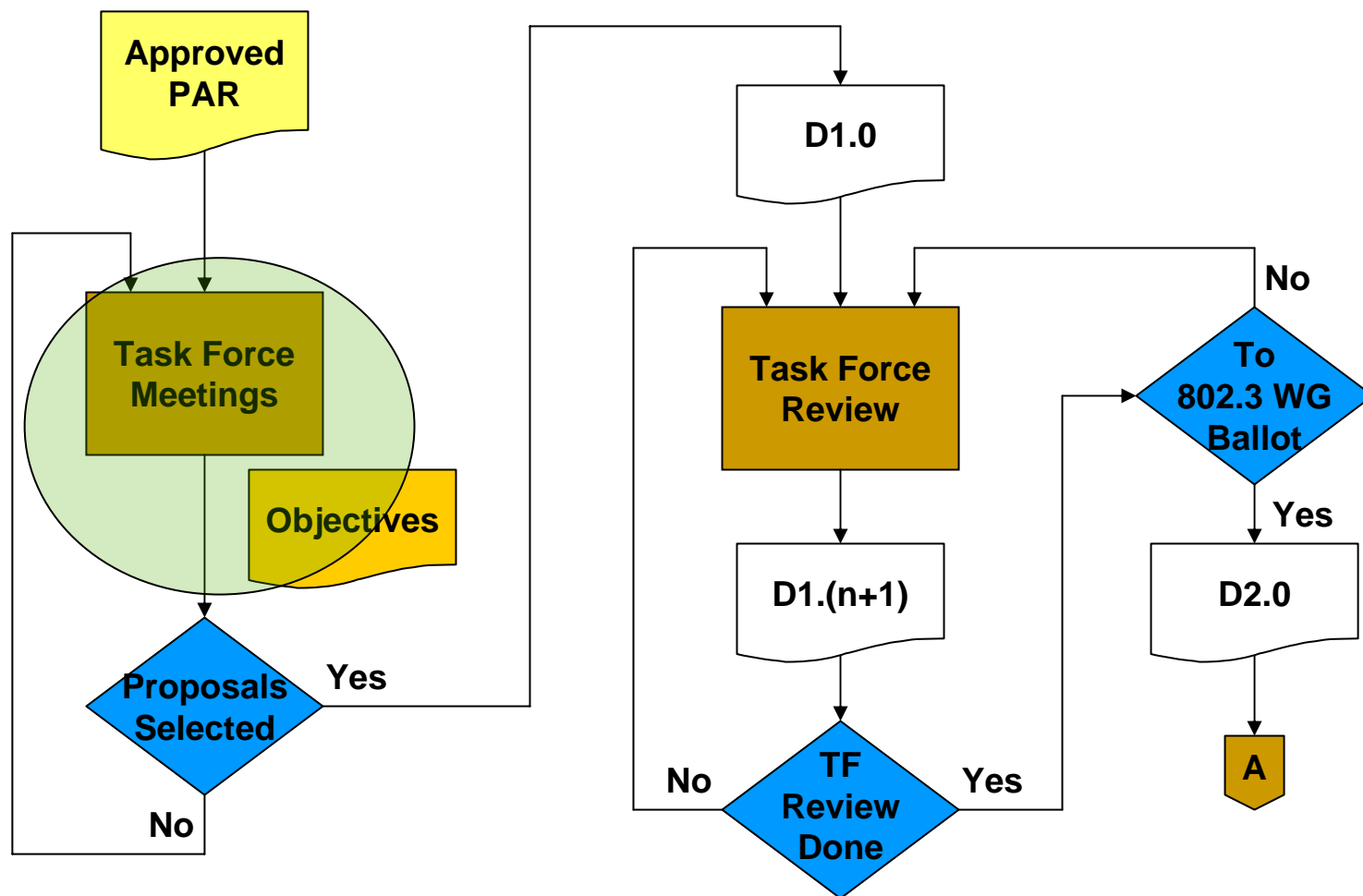
<http://www.ieee802.org/3/az/reflector.html>

- EEESG web page URL:

<http://www.ieee802.org/3/az/>

# Overview of IEEE 802.3 Standards Process (2/5)

## Task Force Comment Phase



# EEE Study Group Report

- We had one interim meeting
- September 11-13, 2007 - Seoul, Korea
  - Hosted by Samsung
    - Great venue – thank you!
- 4 presentations
  - Applicability of EEE to fiber PHYs
  - Subset PHY Cost and Power Analysis
  - Packet loss in protocol based speed change
  - 802.1 and Energy Efficient Ethernet

# Objectives

**Define a mechanism to reduce power consumption during periods of low link utilization for the following PHYs**

- 100BASE-TX (Full Duplex)**
- 1000BASE-T (Full Duplex)**
- 10GBASE-T**
- 10GBASE-KR**
- 10GBASE-KX4**

- Define a protocol to coordinate transitions to or from a lower level of power consumption**
- The link status should not change as a result of the transition**
- No frames in transit shall be dropped or corrupted during the transition to and from the lower level of power consumption**
- The transition time to and from the lower level of power consumption should be transparent to upper layer protocols and applications**

# Objectives

- **Define a 10 megabit PHY with a reduced transmit amplitude requirement such that it shall be fully interoperable with legacy 10BASE-T PHYs over 100 m of Class D (Category 5) or better cabling to enable reduced power implementations.**
- **Any new twisted-pair and/or backplane PHY for EEE shall include legacy compatible auto negotiation**

# Goals for this Meeting

- Identify the challenges for this project
  - Document structure
  - Architecture
- Start hearing proposals
- Lay the ground work for the next meeting

Thank You!