

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:

ListServ@ieee.org

with the following in the body of the message (do not include “<>”):

*subscribe stds-802-3-eee <yourfirstname> <yourlastname>
end*

- Send reflector messages to:

stds-802-3-eee@listserv.ieee.org

- For complete instructions on reflector usage, subscription, and unsubscription:

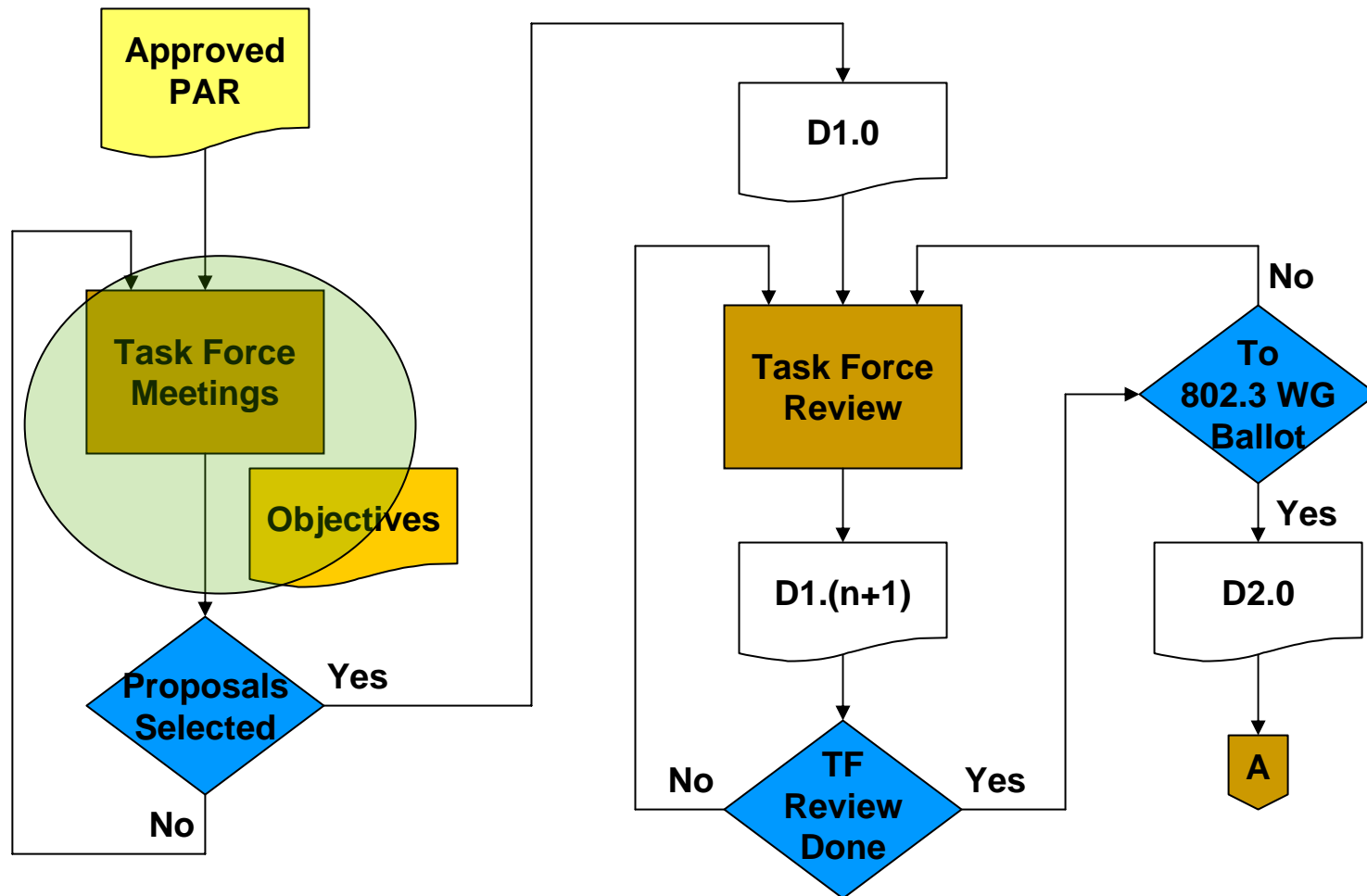
<http://www.ieee802.org/3/az/reflector.html>

- EEESG web page URL:

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

Overview of IEEE 802.3 Standards Process (2/5)

Task Force Meeting Phase



802.3az Task Force Report

- We had one interim meeting
- January 22-23, 2008 – Portland, Oregon
 - Hosted by Intel
 - Cold, but great venue – thank you!
- 12 presentations
 - Musings on Savings
 - 6 related to Active/Idle Toggling with Low-Power Idle
 - Energy Efficient Ethernet Switching Perspective
 - Supporting Legacy Devices
 - Transmit Amplitude Reduction: “Green-T” the path to greener 10BASE-T
 - 2 related to A “Subset PHY” approach for 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

- Continue to identify the challenges for this project
 - Document structure
 - Architecture

- Meet with 802.1 AVB and DCB groups to get discuss their requirements and how to minimize the impact of our work on their groups and vice-versa
 - Wednesday from 10AM-noon

- Continue hearing proposals

- Lay the ground work for the next meeting

Thank You!