IEEE 802.3az
Energy Efficient Ethernet

Opening Plenary Report

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Reflector and Web

- To subscribe to the EEE TF 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

- Task Force web page URL:

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

Reflector and Web

- Our latest draft is D2.1

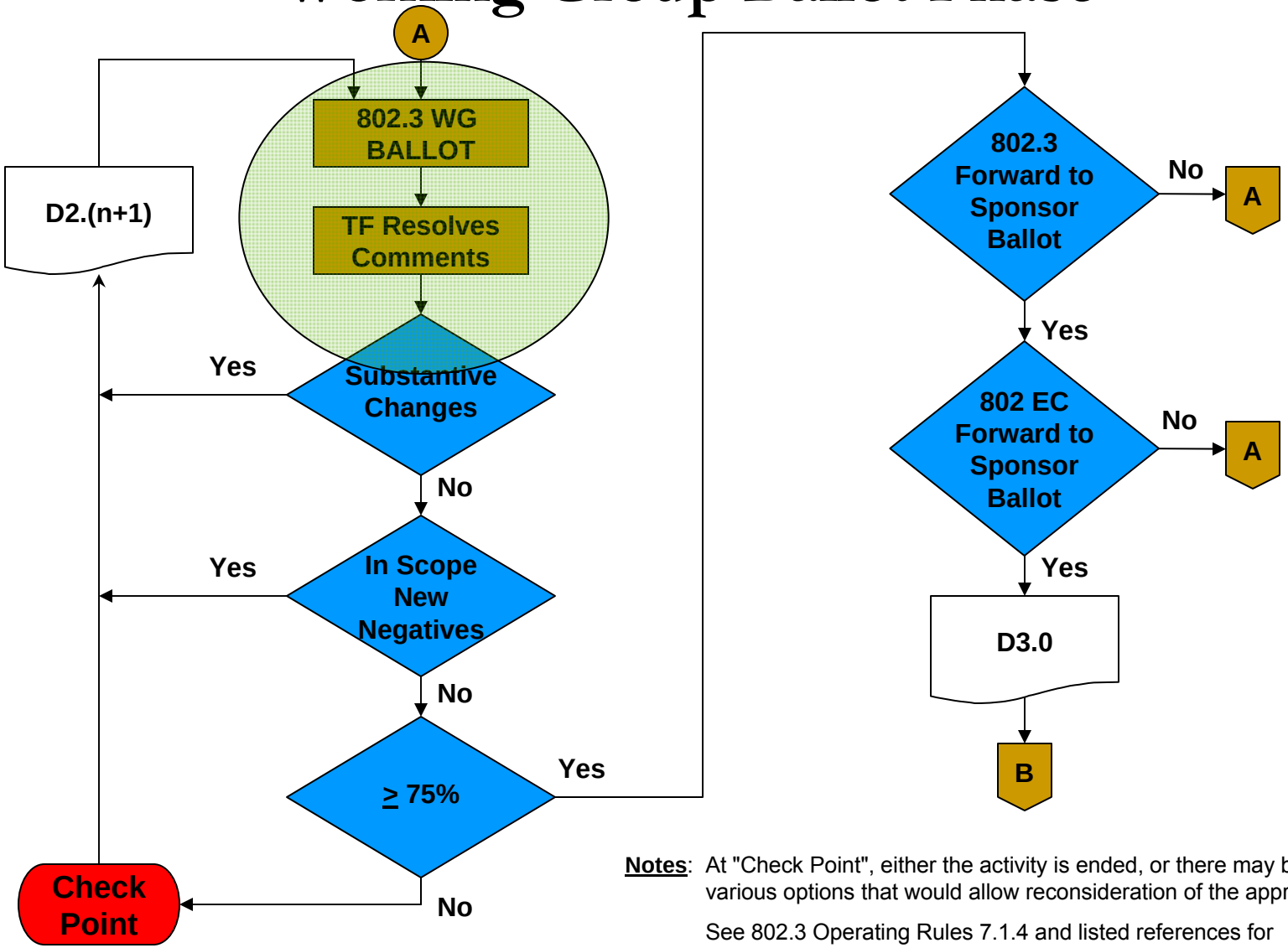
- Task Force *private* web page URL:

http://www.ieee802.org/3/az/private/index.html

Login: 802.3az

Password: xxxxxxx

Overview of IEEE 802.3 Standards Process (3/5)
Working Group Ballot Phase



Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.4 and listed references for complete description

802.3az Task Force Report

- Initial Working Group ballot
  - Ballot open: Tuesday, 28th July 2009
  - Ballot close: Monday, 31st August 2009 11:59PM AOE

802.3az Task Force Report

- Ballot Results on D2.0

Comments: 483	Initial Working Group Ballot Draft 2.0			Req
	#	%	Status	%
Abstain	25	17.86%	PASS	< 30
Disapprove with comment	21			-
Disapprove without comment	0			-
Approve	94	81.74%	PASS	≥ 75
Ballots returned	140	67.31%	PASS	≥ 50
Voters	208			

  - 483 comments received
    - 142 E
    - 55 ER
    - 167 T
    - 119 TR

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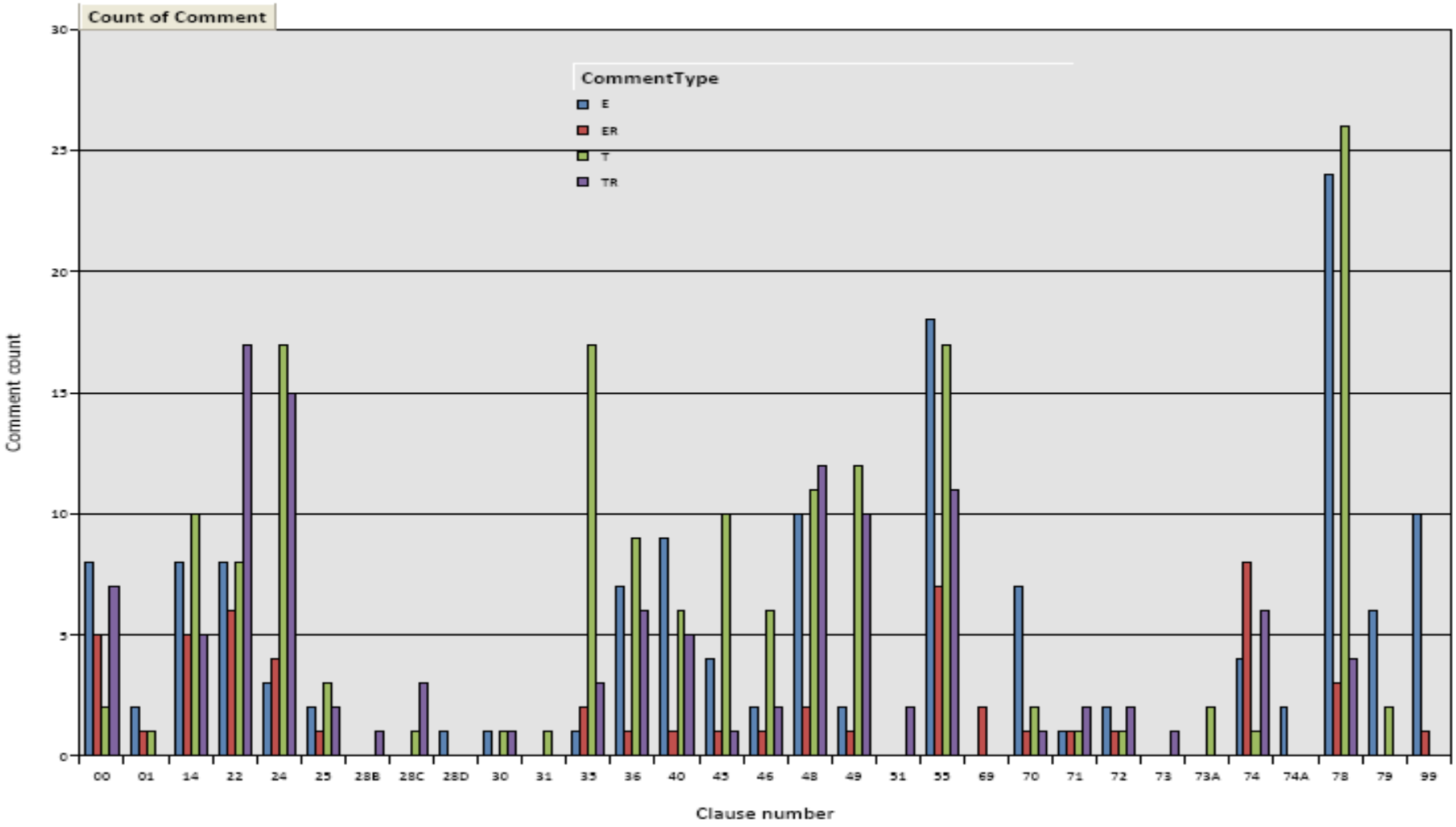
- Comment stats on D2.0



802.3az Task Force Report

- Interim meeting
- September 22-25, Chicago, IL
  - The Sutton Place Hotel
  - Hosted by High Speed Design, Inc
    - Thanks!
    - Attendance: ~18 people

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- Presentations/Contributions
  - Document Structure example
    - Annexes 24A and 25A, Howard Frazier
  - Edits to Clause 49 to replace scrambler reset with scrambler bypass, Matt Brown, Velu Pillai
  - Next-Page Sequence for EEE, Mario Traeber

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- Presentations/Contributions
  - Fixing state diagrams
    - Fixing the 10GBASE-T EEE state diagrams , Gavin Parnaby
    - Outstanding issues in Clause 36, 48 and 49 state diagrams, Velu Pillai
    - Revised Receive State Diagram Figure 24-11a, Joseph Chou
    - Revised CL49 LPI State diagrams and changes to the PCS scrambler, Matt Brown, Velu Pillai
    - Corner Case Discussion IEEE802.3az Figure 40-15b, Mario Traeber

802.3az Task Force Report

- Motions from the Interim

Motion #02 -

Include the proposed resolution to maintenance requests1206, 1207 and 1210 as captured in the Maintenance minutes in the next draft of P802.3az

Moved by: W. Diab Second by: R. Grow

All Y:13 N:0 A:2 Technical; ≥ 75% required to pass

Motion passed

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Maintenance requests 1206, 1207 and 1210

http://ieee802.org/3/maint/requests/maint_1206.pdf

CLAUSE: 24.1.2 – change “Support cable plants using Category 5 UTP, 150 Ω STP or optical fiber, compliant with ISO/IEC 11801.” to

“Support cable plants using Class D or better or optical fiber cabling as specified in ISO/IEC 11801:1995. When Class D cabling is used, the cabling system components (cables, cords, and connectors) used to provide the link segment shall consist of Category 5e components as specified in ANSI/TIA-568-C.2 and ISO/IEC 11801:2002.

NOTE—ANSI/TIA-568-C.2 provides a specification (category 5e) for cabling that meets the minimum requirements for 100BASE-X operation

http://ieee802.org/3/maint/requests/maint_1207.pdf

CLAUSE: 24.1.2 – change Unshielded twisted-pair links of 100 m to twisted-pair links of 100 m;

http://ieee802.org/3/maint/requests/maint_1210.pdf

Replace “untwisted shielded pair” in 25.3, (d) with “unshielded twisted pair”.

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- Motions from the Interim

Motion #03 –

Grant the IEEE P802.3az editorial team license to implement proposed responses to editorial comments and to replace “optional Low Power Idle mode” with “EEE capability” as appropriate to be consistent with other comment resolution

Moved by: H. Barrass Second by: G. Parnaby

All Y:14 N:0 A:0

Technical; ≥ 75% required to pass Motion passed

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- Motions from the Interim

Motion #04 -

Accept comment resolutions from D2.0 as recorded in the comment database.

Direct the IEEE P802.3az editorial team to generate Draft 2.1, based on Draft 2.0 and the resolution of comments against Draft 2.0.

Request Working Group Chair to Conduct an IEEE 802.3 WG recirculation ballot for P802.3az/D2.1.

Moved by: H. Barrass

Second by: M. Chadha

All Y:14 N:0 A:0 Technical; ≥ 75% required to pass

Motion passed

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- Issue during initial ballot – missed comments
  - Oversight when comments were collected into the database and we didn't catch it till after the interim

- Our plan to handle the missed comments:
  - Missed comments have been marked in the database
    - They were posted in the proposed response file for 2.1 recirc, but marked with different number than the 2.1 comments
  - Will treat all comments as in scope

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- First recirculation ballot
  - Ballot open: Tuesday, 20, October 2009
  - Ballot close: Wednesday, 4 November 2009 11:59PM AOE

802.3az Task Force Report

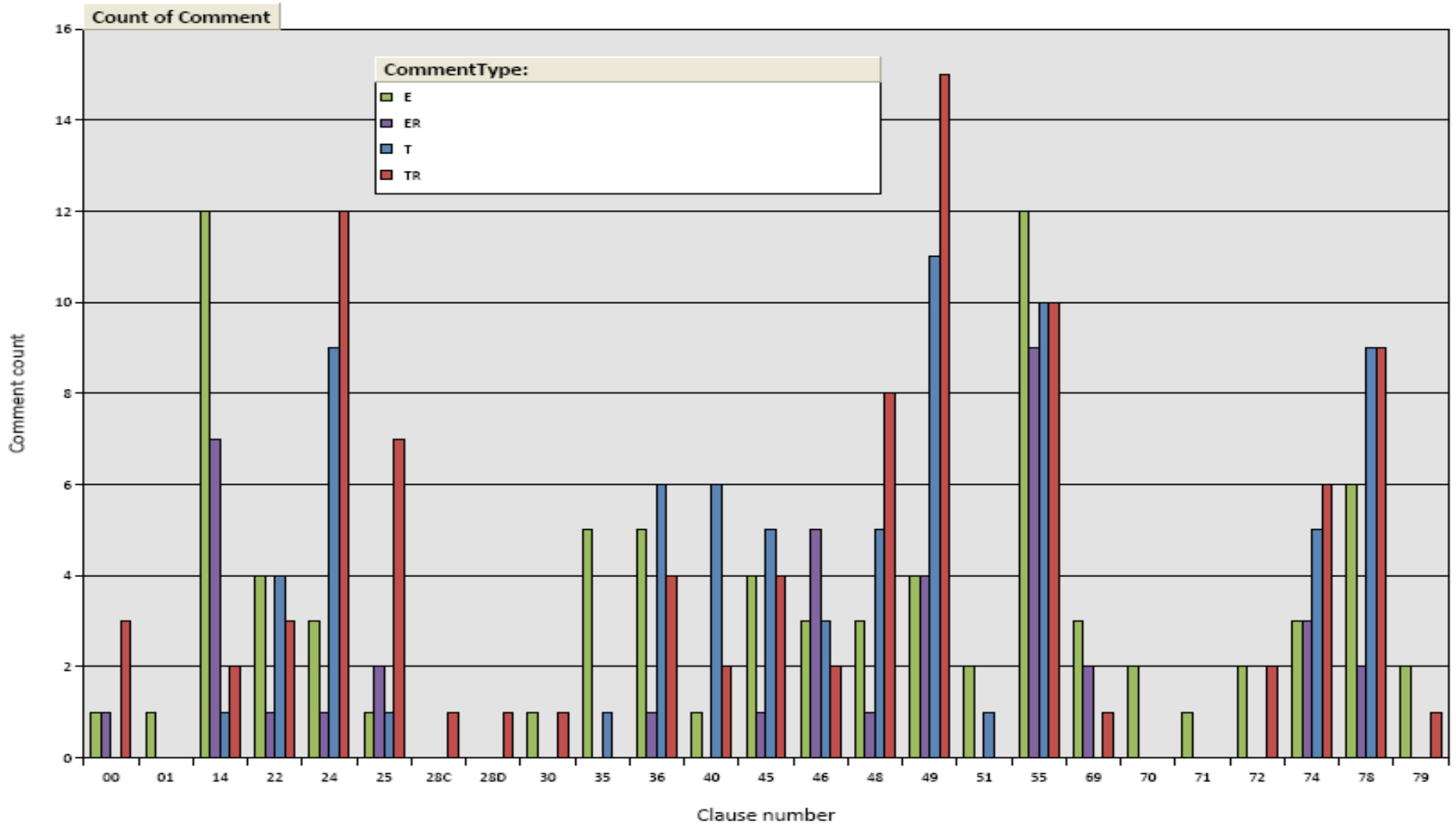
- Ballot Results on D2.1

Comments 262	1st Working Group Ballot Recirc Draft 2.1			Req
	#	%	Status	%
Abstain	24	16.67%	PASS	< 30
Disapprove with comment	21			-
Disapprove without comment	0			-
Approve	99	82.50%	PASS	≥ 75
Ballots returned	144	69.23%	PASS	≥ 50
Voters	208			

  - 262 comments received
    - 81 E
    - 28 ER
    - 77 T
    - 76 TR
  - 21 unsatisfied negative comments

802.3az Task Force Report

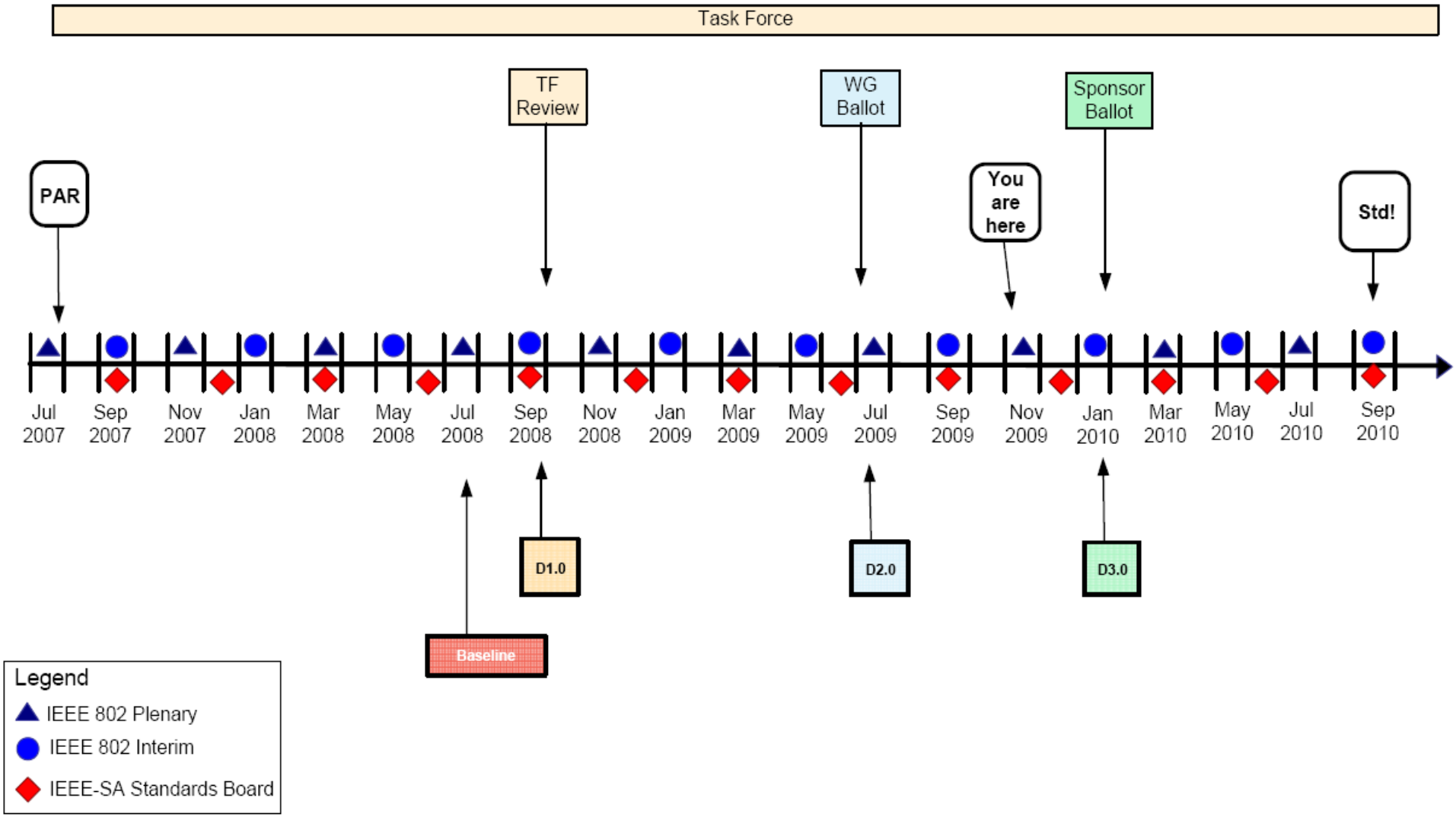
Comment stats on D2.1



Goals for this Meeting

- Process comments against D2.1
- Fix bugs
- Direct editorial team to produce D2.2
- Big ticket item(s)
  - Attempt to resolve 21 unsatisfied negative comments

802.3az timeline



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
– 1000BASE-KX
– 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**

Thank You!