



# IEEE P802.3ap Task Force

## Opening Plenary Meeting Report

San Francisco, CA

July 18, 2005



# Task Force Organization

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# Reflector and Web

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- To subscribe to the IEEE P802.3ap Backplane Ethernet Task Force reflector send an email to:  
[\*listserv@ieee.org\*](mailto:listserv@ieee.org)

with the following in the body of the message (do not include “<>”):  
***subscribe stds-802-3-blade <yourfirstname> <yourlastname>***

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

<http://ieee802.org/3/ap/reflector.html>

- IEEE P802.3ap Task Force web page:  
<http://www.ieee802.org/3/ap/>
- Channel Model Ad Hoc web page:  
[http://www.ieee802.org/3/ap/public/channel\\_adhoc](http://www.ieee802.org/3/ap/public/channel_adhoc)
- Signaling Ad Hoc web page:  
[http://www.ieee802.org/3/ap/public/signal\\_adhoc](http://www.ieee802.org/3/ap/public/signal_adhoc)



# IEEE P802.3ap Draft Repository

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- IEEE P802.3ap Private Area:

- <http://ieee802.org/3/ap/private/index.html>

- Username: 802.3ap

- Password: XXXXXX

- Write it down...



# IEEE P802.3ap Task Force Documents

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- Approved PAR

<http://standards.ieee.org/board/nes/projects/802-3ap.pdf>

- 5 Criteria

[http://ieee802.org/3/ap/802\\_3\\_ap\\_5criteria.pdf](http://ieee802.org/3/ap/802_3_ap_5criteria.pdf)

- Objectives

[http://ieee802.org/3/ap/802\\_3\\_ap\\_objectives.pdf](http://ieee802.org/3/ap/802_3_ap_objectives.pdf)

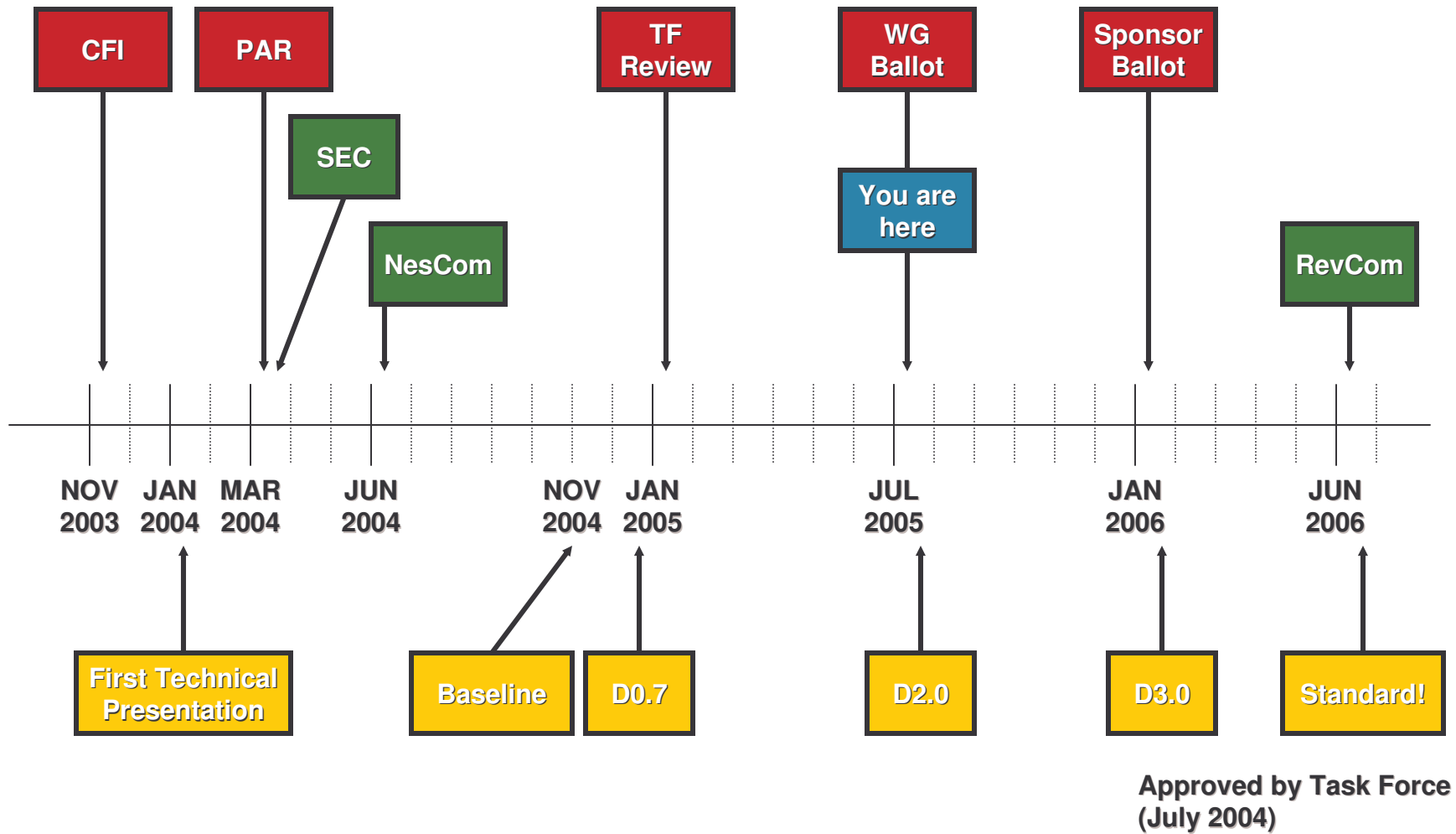


# IEEE P802.3ap Objectives

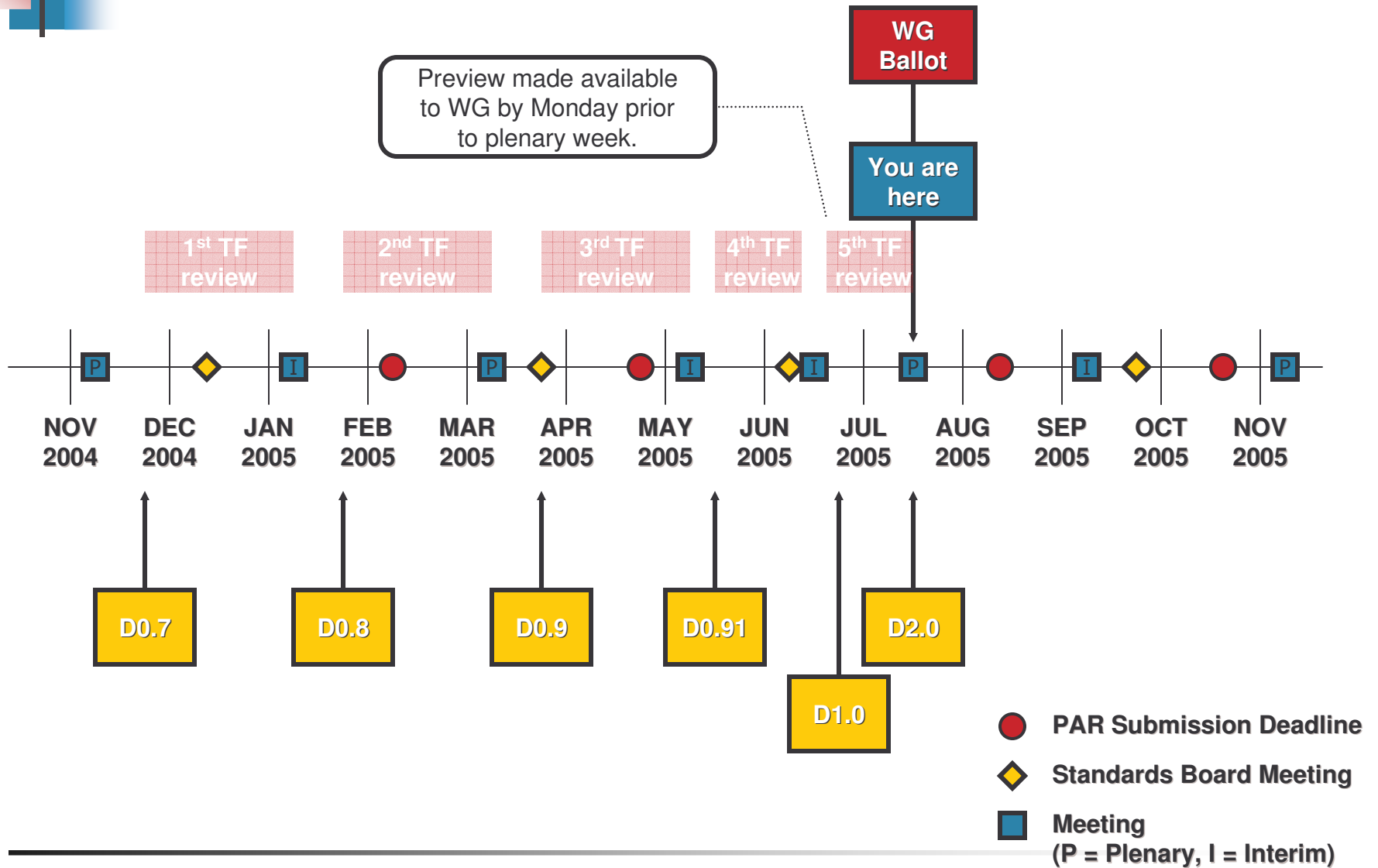
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- **Preserve the 802.3/Ethernet frame format at the MAC Client service interface.**
- **Preserve min. and max. frame size of current 802.3 Std.**
- **Support existing media independent interfaces.**
- **Support operation over a single lane across 2 connectors over copper traces on improved FR-4 for links consistent with lengths up to at least 1m.**
  - **Define a 1 Gb/s PHY**
  - **Define a 10 Gb/s PHY**
- **Define a 4-lane 10Gb/s PHY for operation over the 802.3ap channel model.**
- **Consider auto-negotiation.**
- **Support BER of  $10^{-12}$  or better.**
- **Meet CISPR/FCC Class A.**

# IEEE P802.3ap Timeline



# Timeline Detail







# May Interim Meeting

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- May 16-18, Austin, TX
  - Hosted by Tyco Electronics
- Completed specification framework
  - Channel specifications informative, transmit and receive specifications normative
  - Defined channel specification methodology
  - Defined receiver compliance test methodology (applies to all port types)
  - Adopted 10GBASE-KR transmitter specifications
  - Analog signal detect made optional
- Resolved 152 comments against Draft 0.9



# May Interim Motions (1/3)

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- Adopt thaler\_01\_05 as the basis for resolution of comment 93 (C bits will not be moved, Analog Signal Detect will be optional).
  - M: Thaler, S: Ganga, Y: 32, N: 0, A: 7 (PASSES)
- Channel characterization be defined using (1) the attenuation limits as in Draft 0.9, (2) deviation limits as in Draft 0.9, and (3) crosstalk methodology as in dambrosia\_01\_0505 (single aggressor and ACR)
  - M: Palkert, S: Spagna, Y: 32, N: 0, A: 5 (PASSES)
- Receiver testing in Annex 72A be modified per palkert\_01\_0505.
  - M: Spagna, S: Goergen, Y: 27, N: 0, A: 12 (PASSES)
- IEEE P802.3ap compliance methodology be based on 2/3 approach: TX is normative, channel is informative, RX is normative.
  - M: Goergen, S: Ghiasi, Y: 28, N: 1, A: 7 (PASSES)



## May Interim Motions (2/3)

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- Use the same receiver compliance methodology for -KX and -KX4 as described in Annex 72A and modified by palkert\_01\_0505.
  - M: Moore, S: Bachar, Y: 23, N: 1, A: 10 (PASSES)
- Accept the transmitter Equalization Ratio Test (ERT) methodology as described in slides 3 - 5 of brink\_04\_0505.
  - M: Brink, S: Gaither, Y: 27, N: 1, A: 5 (PASSES)
- Accept the transmitter equalization solution space and test methodology as described on slides 7 and 8 of brink\_04\_0505.
  - M: Brink, S: Gaither, Y: 26, N: 0, A: 9 (PASSES)
- Accept the updates to the startup protocol as described on slides 11 and 12 in brink\_04\_0505.
  - M: Brink, S: Gaither, Y: 23, N: 1, A: 10 (PASSES)



## May Interim Motions (3/3)

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- Use the same informative channel model for 1000BASE-KX, 10GBASE-KX4, and 10GBASE-KR.
  - Motion to amend FAILS.
  - M: van Doorn, S: Lerer, Y: 20, N: 7, A: 10 (FAILS)
- Add a table to subclause 69.3 binding f1 and f2 values to the port types.
  - M: Goergen, S: Moore, Y: 26, N: 0, A: 6 (PASSES)
- Accept proposed comment resolutions (with editorial comments to be addressed by the editor) and integrate into interim Draft 0.91.
  - M: Spagna, S: Moore, Y: 31, N: 0, A: 1 (PASSES)



# June Interim Meeting

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- June 21-23, Minneapolis, MN
  - Hosted by Xilinx
- Resolved 187 comments against Draft 0.91
- Authorized pre-circulation of Draft 1.0 in anticipation of requesting Working Ballot.

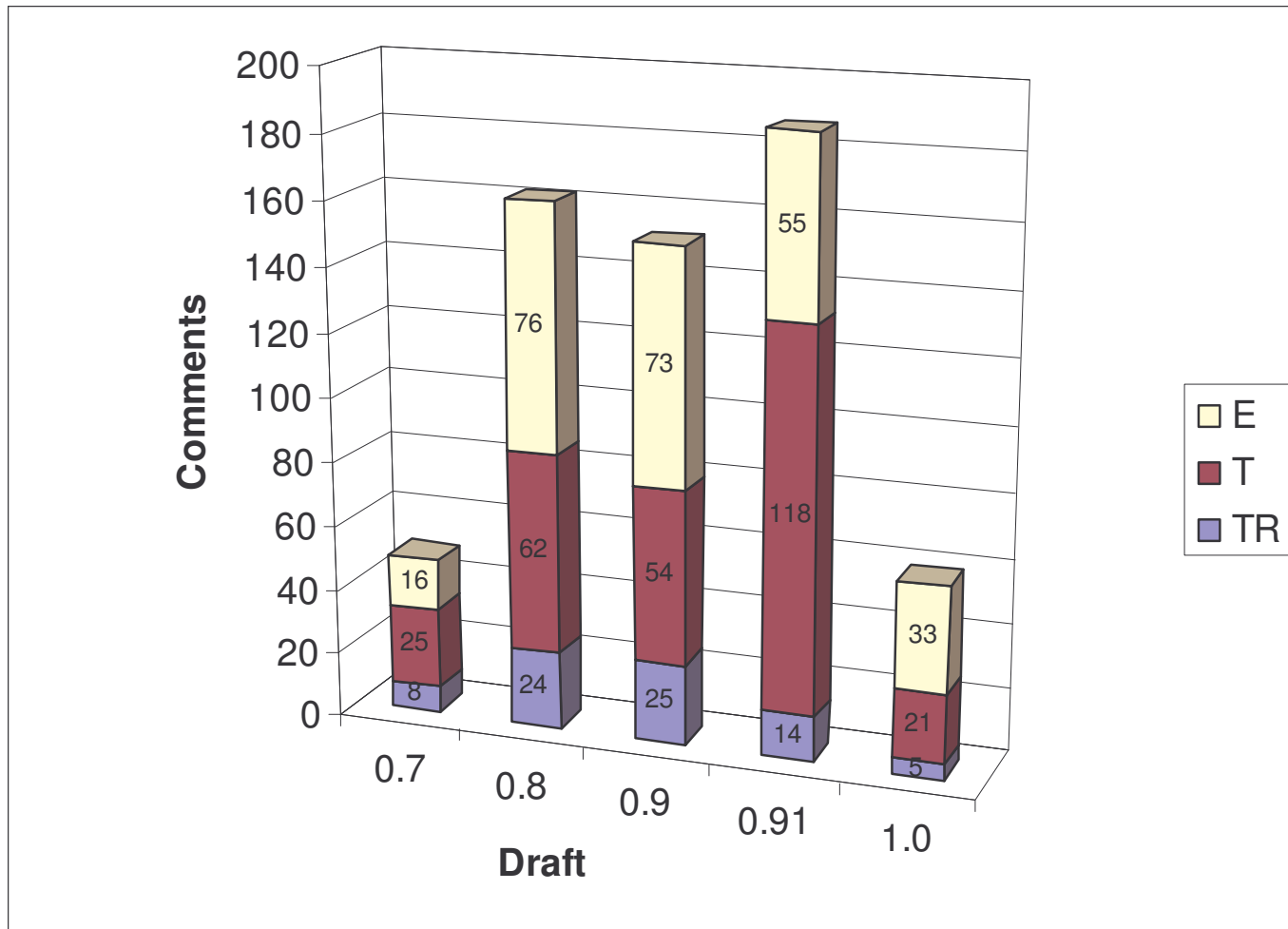


# June Interim Motion

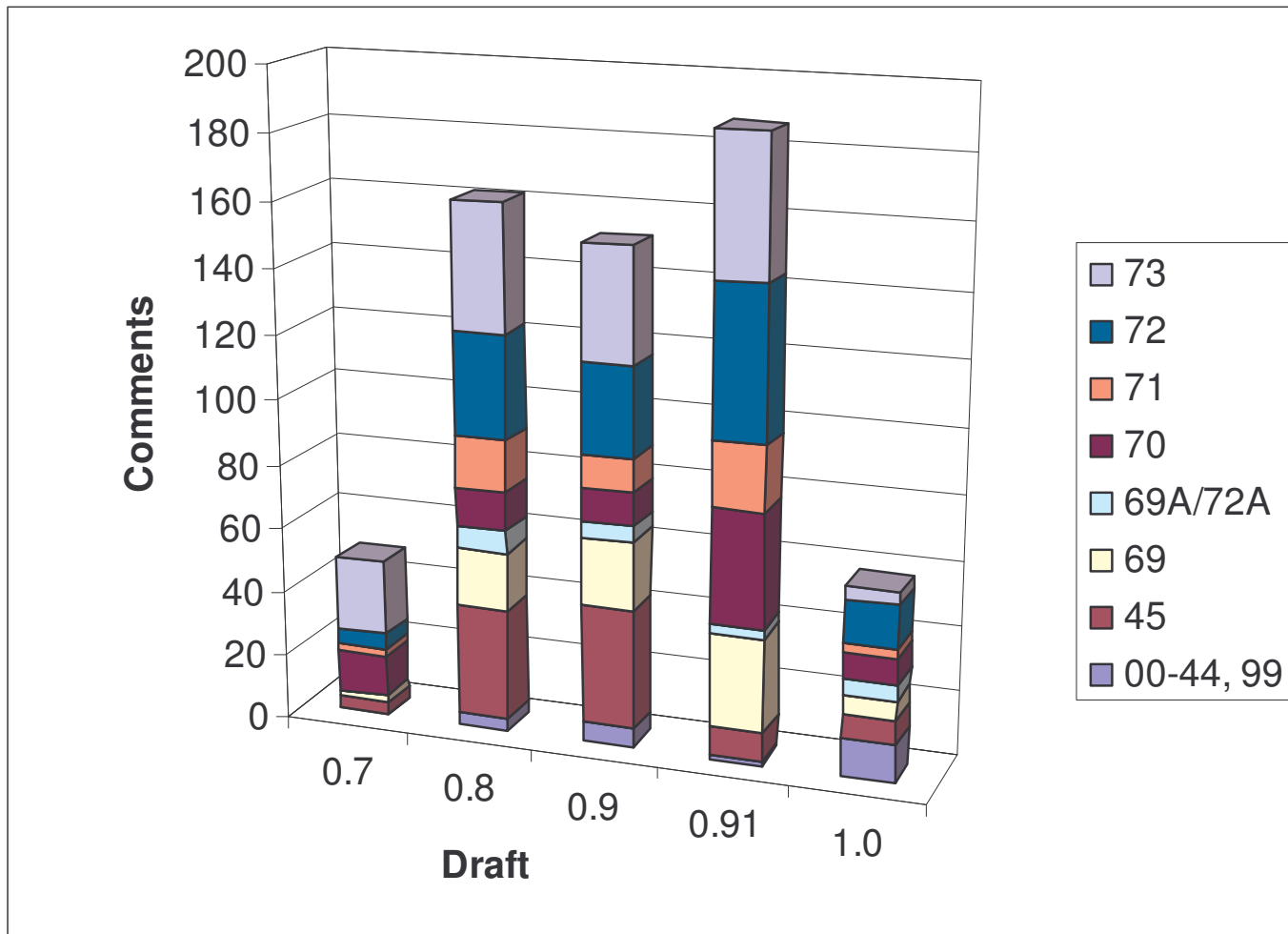
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- Accept proposed comment resolutions (with editorial comments to be resolved by the editor) and instruct the editor to generate Draft 1.0.
- Grant editor license to make necessary editorial changes not addressed by editorial comments.
- Pre-submit Draft 1.0 to IEEE 802.3 in anticipation of requesting WG ballot at the July plenary.
  - M: D'Ambrosia, S: Mellitz, Y: 24, N: 0, A: 0 (PASSES)
- Draft 1.0 pre-circulated to the IEEE 802.3 WG on July 1...

# Comment History by Type



# Comment History by Clause







# Goals for this Meeting

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- Resolve comments against IEEE P802.3ap Draft 1.0.
- Prepare draft for Working Group ballot.



Thank you!