




# IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet

## Closing Plenary Report

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# IEEE P802.3ba Task Force Organization

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- To subscribe to the IEEE P802.3ba Task Force reflector, send an email to:

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

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- Task Force web page URL:

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# IEEE P802.3ba Private Area

- URL: <http://www.ieee802.org/3/ba/private/>
  - Username: 802.3ba
  - Password: xxxxxxxx
  - Password is case sensitive
  
- Write it down...

# Task Force Approved Project Documents

## ■ PAR

- [http://ieee802.org/3/ba/PAR/par\\_0308.pdf](http://ieee802.org/3/ba/PAR/par_0308.pdf)

## ■ 5 Criteria (pending IEEE 802 EC Approval)

- [http://ieee802.org/3/ba/PAR/P802.3ba\\_5C\\_0308.pdf](http://ieee802.org/3/ba/PAR/P802.3ba_5C_0308.pdf)

## ■ Objectives

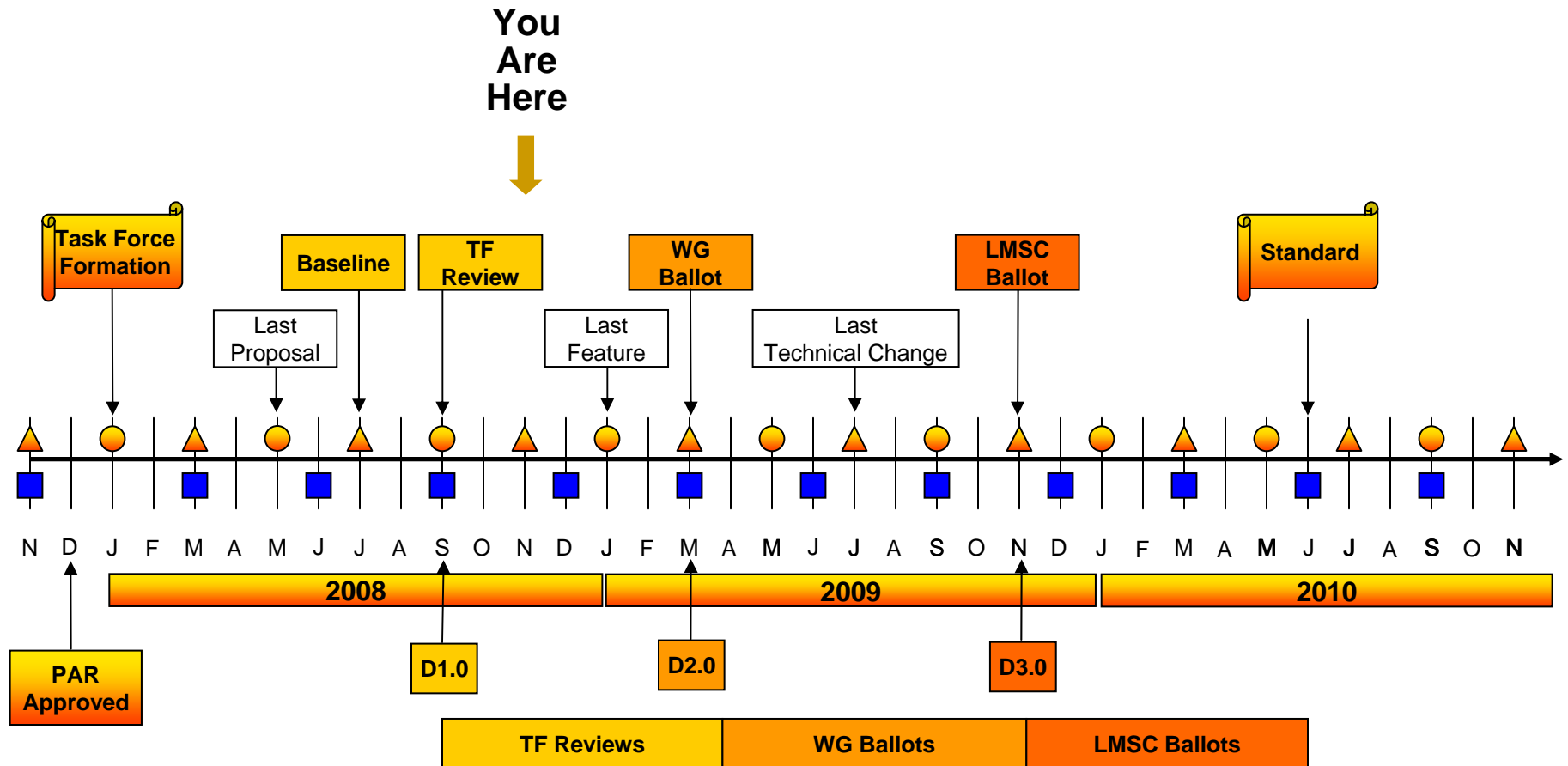
- [http://ieee802.org/3/ba/PAR/P802.3ba\\_Objectives\\_0308.pdf](http://ieee802.org/3/ba/PAR/P802.3ba_Objectives_0308.pdf)

# Task Force Objectives

- Support full-duplex operation only
- Preserve the 802.3 / Ethernet frame format utilizing the 802.3 MAC
- Preserve minimum and maximum FrameSize of current 802.3 standard
- Support a BER better than or equal to 10<sup>-12</sup> at the MAC/PLS service interface
- Provide appropriate support for OTN
- Support a MAC data rate of 40 Gb/s
- Provide Physical Layer specifications which support 40 Gb/s operation over:
  - at least 10km on SMF
  - at least 100m on OM3 MMF
  - at least 10m over a copper cable assembly
  - at least 1m over a backplane
- Support a MAC data rate of 100 Gb/s
- Provide Physical Layer specifications which support 100 Gb/s operation over:
  - at least 40km on SMF
  - at least 10km on SMF
  - at least 100m on OM3 MMF
  - at least 10m over a copper cable assembly

Adopted by IEEE P802.3ba and approved by 802.3 at Mar 2008 Plenary

# IEEE P802.3ba Task Force Timeline



\* Adopted by IEEE P802.3ba TF at March 08 Plenary

Legend	
▲	IEEE 802 Plenary
●	IEEE 802.3 Interim
■	IEEE-SA Standards Board

# Comments Received Against D1.0

Description	Clause (s)	T/TRs	E/ERs	Total
Front matter, MAC, 40G and 100G Introduction	00, 01, A, 4, 4A, 80, 99	37	38	75
Management	30, 30A, 30B, 45	43	14	57
RS/MII and PCS	81, 82	66	41	107
PMA	83	29	22	51
XLAUI and CAUI	83A	43	18	61
Backplane KR4 related	69, 69A, 69B, 73, 74, 84	32	10	42
Copper CR4 & CR10	85	73	7	80
Optical SR4 & SR10	86	81	17	98
Optical 40G LR4	87	25	6	31
Optical 100G LR4 & ER4	88	32	8	40
	<b>Total</b>	<b>461</b>	<b>181</b>	<b>642</b>



# Accomplishments for the Week

- Completed comment resolution
  - We resolved all 461 T/TRs comments received on D1.0
  - The editorial team will address the remaining E/ER comments as proposed
  - 37 technical presentations
- Approved generation of Draft 1.1
  - Motion - Move to charter the editorial team to create Draft 1.1, based on Draft 1.0 and all resolved comments (with editorial comments to be addressed by the editorial team), as recorded in “p8023ba-D10\_ProposedResponses\_by\_Clause.pdf”
    - Results (y/n/a): All 79 / 0 / 2
- Liaisons
  - ITU-T SG15, Document #COM 15-LS-02-E: Will communicate latest draft
  - ISO/IEC JTC 1/SC 25/WG 3, Document #N 882A: Will respond in March

# Open Issues

- Logic Sub-task Force
  - Short PRBS pattern for PMA test pattern (PRBS9, PRBS7, Manf pattern are under consideration)
- Cu Sub-task Force
  - Clause 85: Refinements to transmitter and receiver testing; validation of channel budget.
  - Backplane: Additional crosstalk considerations
  - nAUI (Annex 83A): Jitter methodology, interference tolerance tests
- Optics Sub-task Force
  - Jitter requirements for PPI
  - Aggregate TP2 signal metric for clause 86
  - Skew measurement definition
  - Electrical measurement definitions for clause 86
  - Jitter specification for stressed receiver sensitivity
  - Test patterns for each measurement

# Next Steps

- Proposed schedule for D1.1
  - Editorial team plans to prepare D1.1 for task force review by Dec 10
  - Task force review opens Dec 10
  - Task force review closes by Dec 30
- Close all remaining technical opens (TBDs) by Jan interim meeting
- Request to go to WG ballot at Mar'09 Plenary
  - Release technically complete draft for 802.3 WG preview on Mar 02<sup>nd</sup>

# Future Meetings

- Future Meeting information at:
  - <http://ieee802.org/3/interims/index.html>
- Jan 2009 Interim
  - Jan 12 - 16
  - New Orleans, LA
- March 2009 Plenary
  - March 8 – 13
  - Hyatt Regency Vancouver and Fairmont Hotel
  - Vancouver, BC, Canada



Thank You!

