

# IEEE P802.3ae Document Structure Update

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# Outline

- Introduction
- Existing Clauses
- New Clauses
- Clause Editor Volunteers
- Future Work

# Introduction

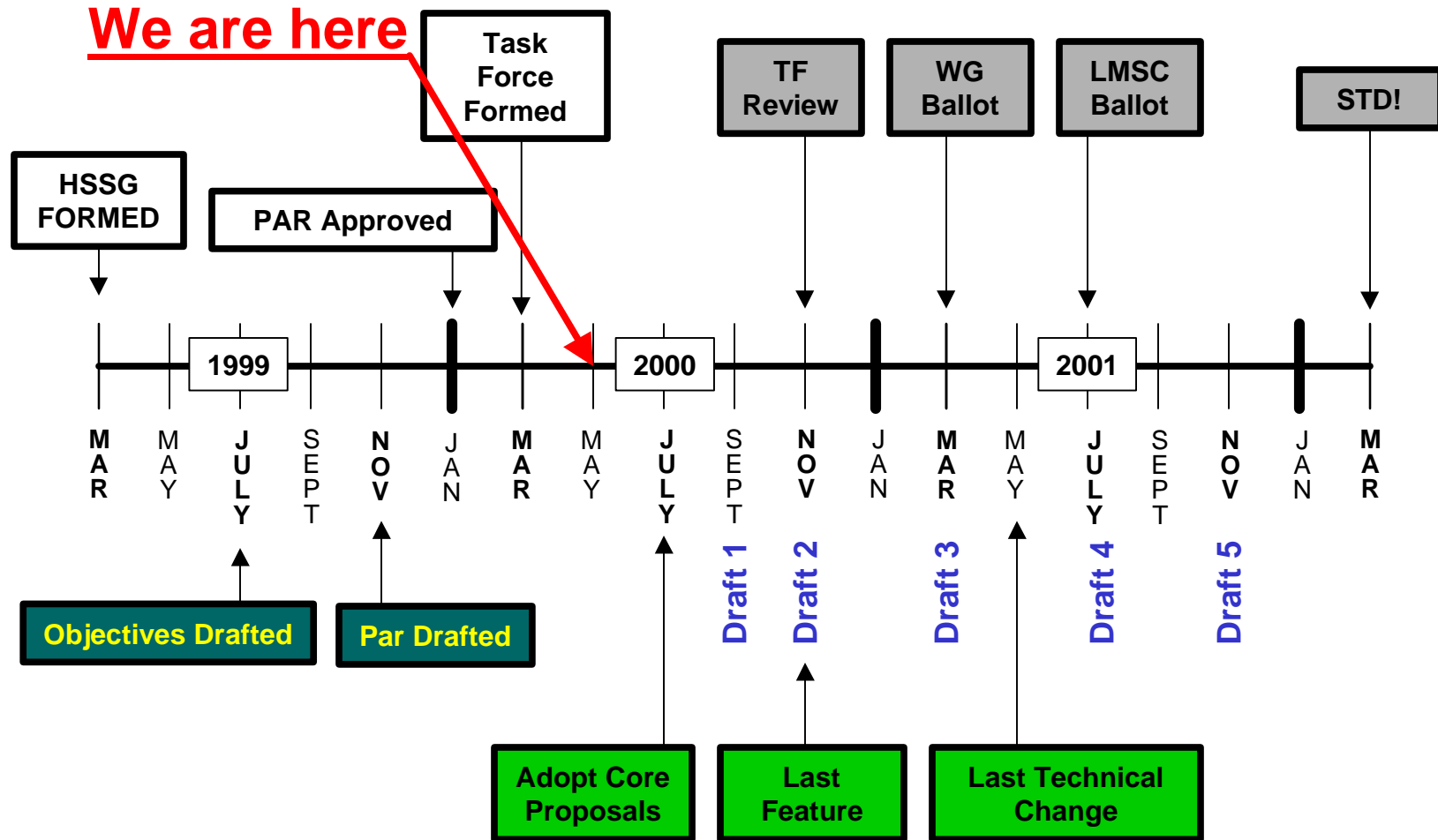
- Third pass at P802.3ae document structure
- Evolves as Task Force adopts “core” proposals
- Overview of the ***Document Architecture***, NOT an ***Implementation Architecture***
- Evaluation of changes to clauses
  - Technical (mild, medium, hot, suicide)
  - Editorial (minor, junior, senior, pro)



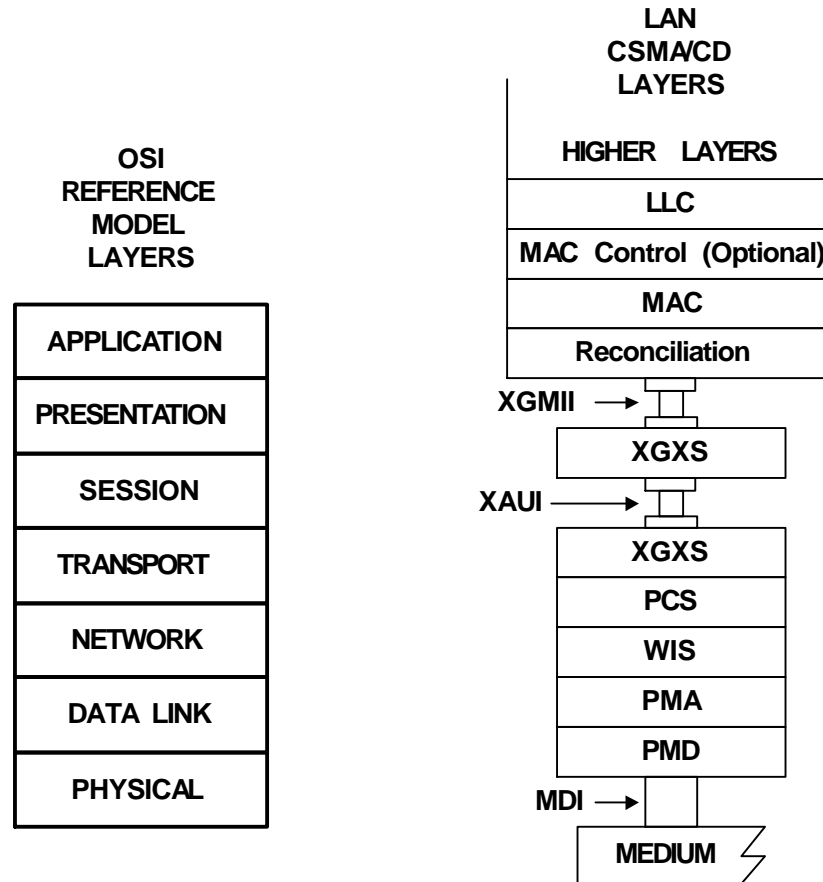
# Clause Information

- Clause 43 taken by P802.3ad (Link Aggregation)
- P802.3af (DTE Power via MDI) may impact clause numbering
- Number of PCS's, PMA's and PMD's will impact clause numbering

# Schedule



# P802.3ae Layer Model



MDI = Medium Dependent Interface  
 XGMII = 10 Gigabit Media Independent Interface  
 XGXS = XGMII Extender Sublayer  
 XAUI = 10G AUI  
 PCS = Physical Coding Sublayer

WIS = WAN Interface Sublayer  
 PMA = Physical Medium Attachment  
 PHY = Physical Layer Device  
 PMD = Physical Medium Dependent

# Existing Clauses

- Clause 1 - Introduction
  - Layer diagram (mild, minor)
  - Half duplex & CSMA/CD wording (mild, junior)
  - Additions to definitions (mild, junior)
  - Additions to abbreviations (mild, minor)
  - Speed independent (medium, senior)
- Clause 2 - MAC Service
  - Layer diagram (mild, minor)
  - Speed independent (medium, senior)

# Existing Clauses (cont.)

- Clause 3 - MAC Frame Structure
  - Speed independent (medium, senior)
- Clause 4 - Media Access Control
  - Layer diagram (mild, minor)
  - Rate adaptation (hot, pro)
  - Parameterized values (medium, senior)
  - Speed independent (hot, pro)
- Clause 5
  - Half duplex wording (mild, junior)



# Existing Clauses (cont.)

- Clause 6 - PLS Service
  - Layer diagram (mild, minor)
- Clause 22 - Reconciliation Sublayer & MII
  - Layer diagram (mild, minor)
  - Management interface registers (medium, senior)
- Clause 30 - Management
  - PHY/PMD attributes (medium, pro)

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# Existing Clauses (cont.)

- Annex 31B - MAC Control PAUSE
  - Pause quanta requirements (medium, junior)

# New Clauses

- Clause 44 - Introduction to 10 Gb/s baseband network (mild, junior)
- Clause 45 - Reconciliation Sublayer & 10G MII (XGMII) (medium, senior)
- Clause 46 - XGMII Extender Sublayer & 10G AUI (XGXS & XAUI) (hot, senior)
- Clause 47 - Physical coding sublayer (PCS) (hot, senior)

# New Clauses (cont.)

- Clause 48 - WAN Interface Sublayer (WIS) (hot, senior)
- Clause 49 - Physical medium attachment (PMA) sublayer (medium, senior)
- Clause 50 - PMD #1 (hot, senior)
- Clause 51 - PMD #2 (hot, senior)
- ...



# Clause Editor Volunteers

- Clause 1 - Shimon Muller, Brad Booth
- Clause 2 - Shimon Muller
- Clause 3 - Shimon Muller
- Clause 4 - Shimon Muller \*
- Clause 5 - Brad Booth
- Clause 6 - Brad Booth
- Clause 22 - David Law, Ed Turner \*
- Clause 30 - David Law, Ed Turner \*
- Clause 31B - Shimon Muller



# Clause Editor Volunteers (cont.)

- Clause 44 (Intro.) - Brad Booth
- Clause 45 (XGMII) - Bob Grow
- Clause 46 (XGXS/XAUI) - Rich Taborek \*
- Clause 47 (PCS) -
- Clause 48 (WIS) - Stuart Robinson \*
- Clause 49 (PMA) -
- Clause 50 (PMD) - Del Hanson \*
- Clause 51 (PMD) -
- ...



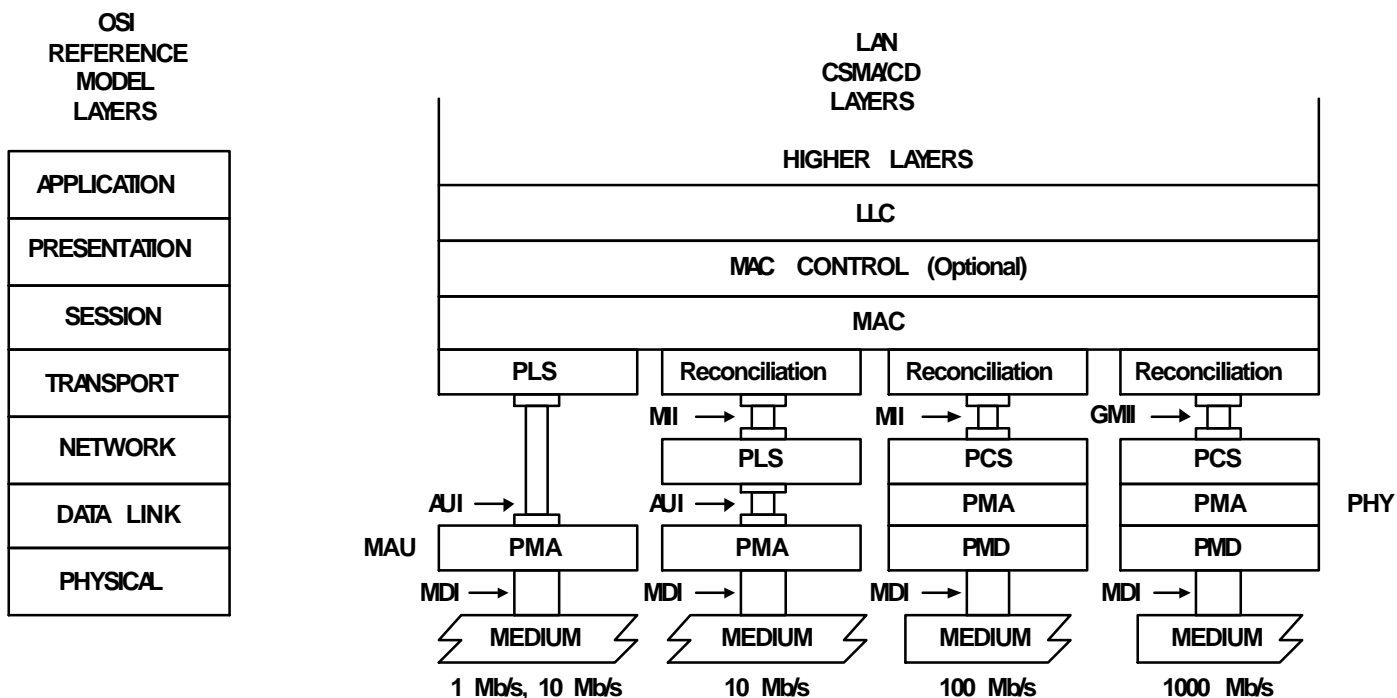
# Future Work

- Recruit more victims... volunteers :-)
- July - adopt “core” proposals
- July - authorize distribution of D1.0 prior to September Interim Meeting
- September - comment resolution on D1.0

# Backup



# 802.3 Layer Model



AUJ = Attachment Unit Interface  
 MDI = Medium Dependent Interface  
 MII = Media Independent Interface  
 GMII = Gigabit Media Independent Interface  
 MAU = Medium Attachment Unit

PLS = Physical Layer Signaling  
 PCS = Physical Coding Sublayer  
 PMA = Physical Medium Attachment  
 PHY = Physical Layer Device  
 PMD = Physical Medium Dependent