

A decorative border in green, resembling a circuit board trace, runs along the left and bottom edges of the slide. It features small circles at the corners and various notches and protrusions.

# Draft Document Backplane Signaling Proposal

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*IEEE 802.3ap*

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# Structure

- Clause 69
  - Ethernet Backplane Overview
    - Including Channel characteristics
  - Electrical characteristics for 1Gig Serial
  - Electrical characteristics for 4 Lane 10Gig
  - Electrical characteristics for 10Gig Serial
  - Auto Negotiation
- Need to consider requesting 5 Clauses

# Nomenclature

- The only meaning full letter left for Backplanes was “K”.
- This translates to:
  - for 1Gig Serial 1000BASE-KX
  - for 4 Lane 10Gig 10GBASE-KX4
  - for 10Gig Serial 10GBASE-K?
- Options for 10Gig serial are: K1, KX1, .....
  - We need to pick one

# 1000BASE-KX

- Builds on 1000BASE-CX when converted from 75 Ohm to 50 Ohm.
- Defined Characteristics based on 1000BASE-CX, FC, PICMG, etc
- Set a Max amplitude to 1600mV for all PMDs
- Defined Channel characteristics based on CX4 cable characteristics. This need more work
- Incorporated most of the 1G presentations

# 10GBASE-KX4

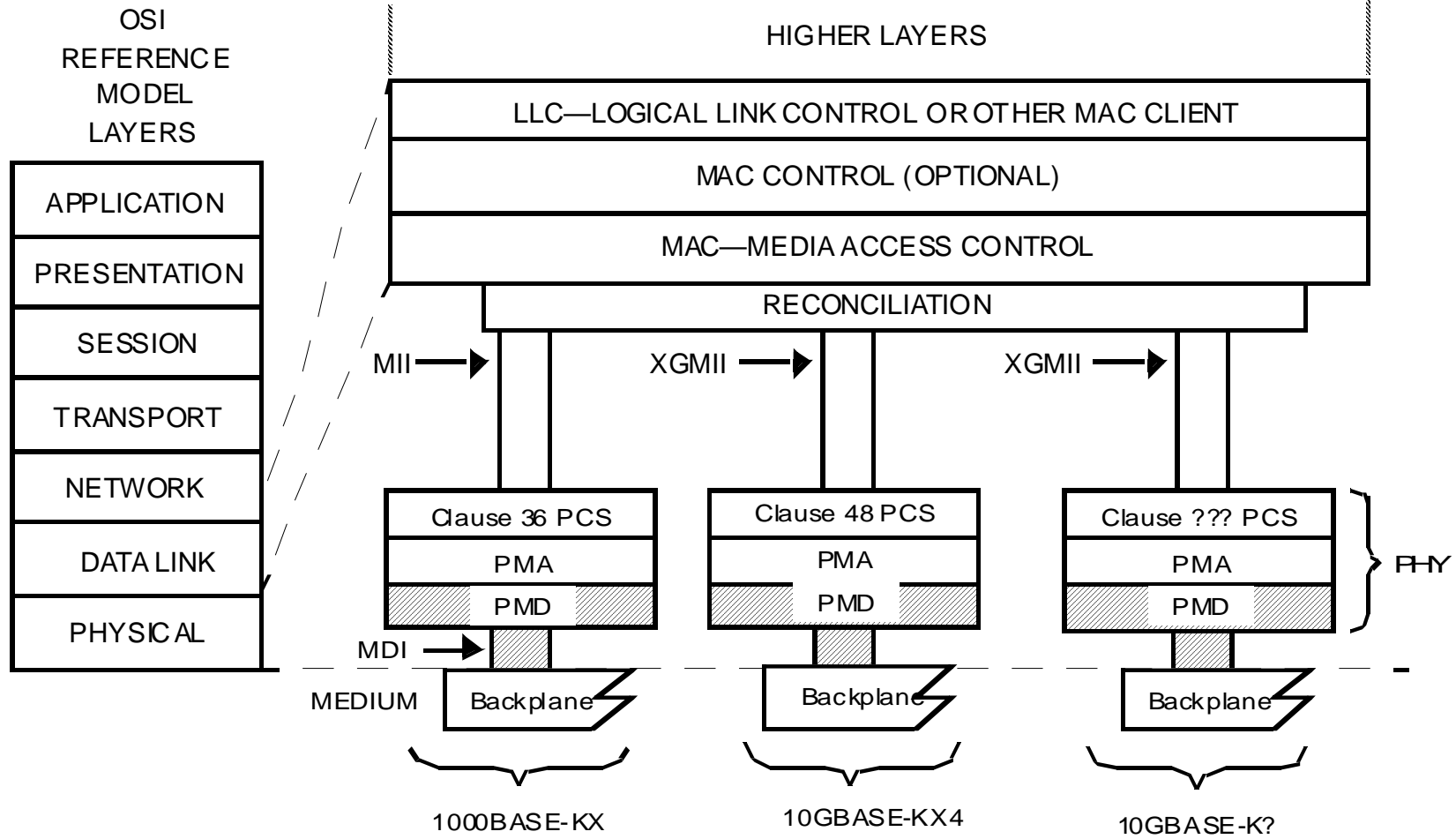
- Builds on 802.3ak Channel Model
- Electrical characteristics derived from 10GBASE-CX4 with test points moved from TP2/3 to TP1/4
- Defined Transmitter Characteristics based on CX4, etc
- Defined Channel characteristics based on CX4 cable characteristics , etc
- Incorporated most of the 4 Lane presentations

# Introduction and Channel model

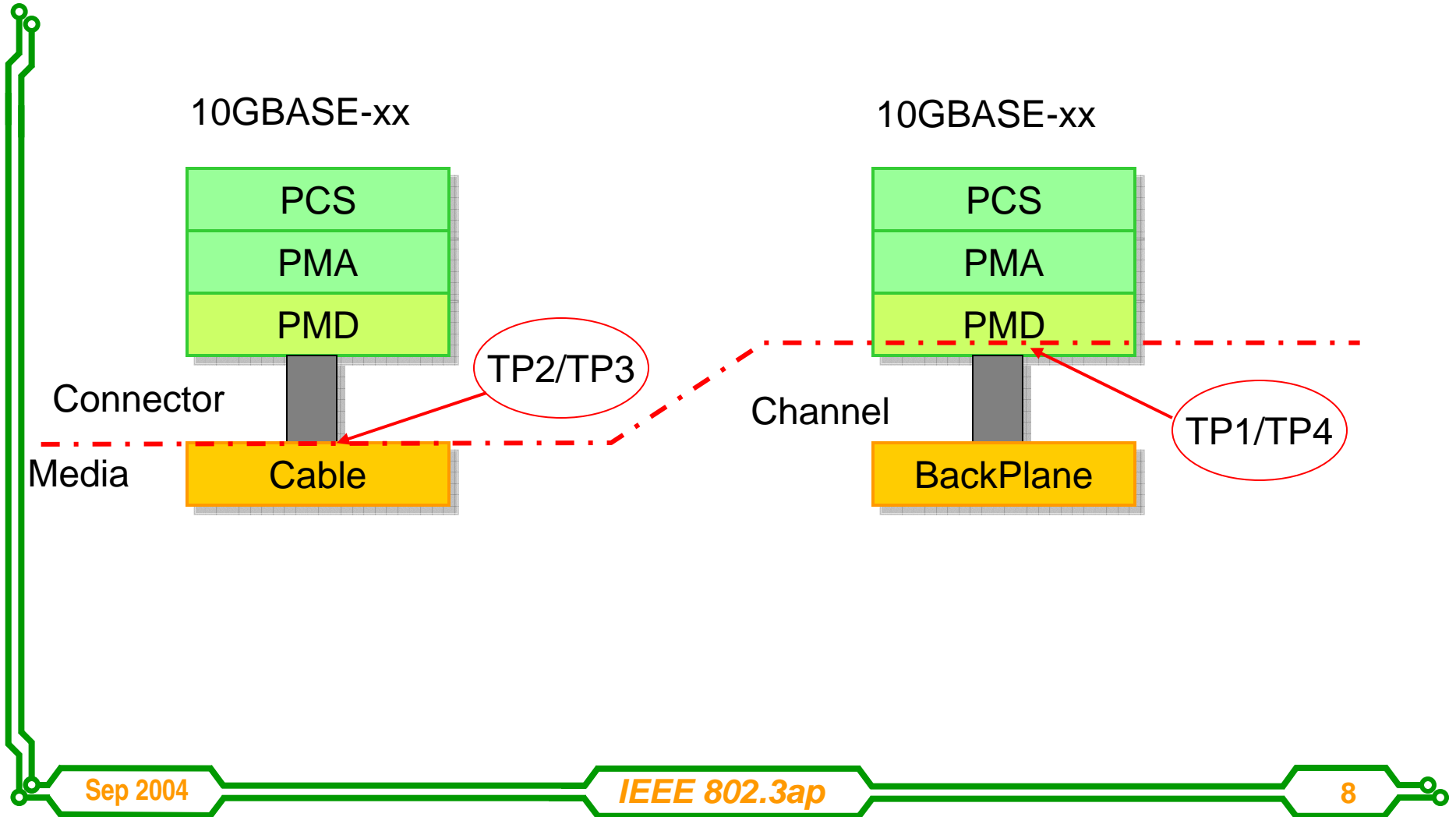
- This text is based on CX4 with modifications by the editor to reflect the 3 PMDs using the same Channel Model.
- Created a test fixture proposal
- This text is a “straw dog” to throw darts at and needs thorough scrubbing.

# ISO Fit

LAN  
CSMA/CD  
LAYERS



# Media vs Channel





# 10GBASE-K? & Auto Negotiation

- Text will be added when proposal is stable

# Conclusion

- Propose to use the draft text as contained in WP 0.5, with the proposed changes by the ap Task Force, as a first draft