Architecting the Document
IEEE 802.3 HSSG

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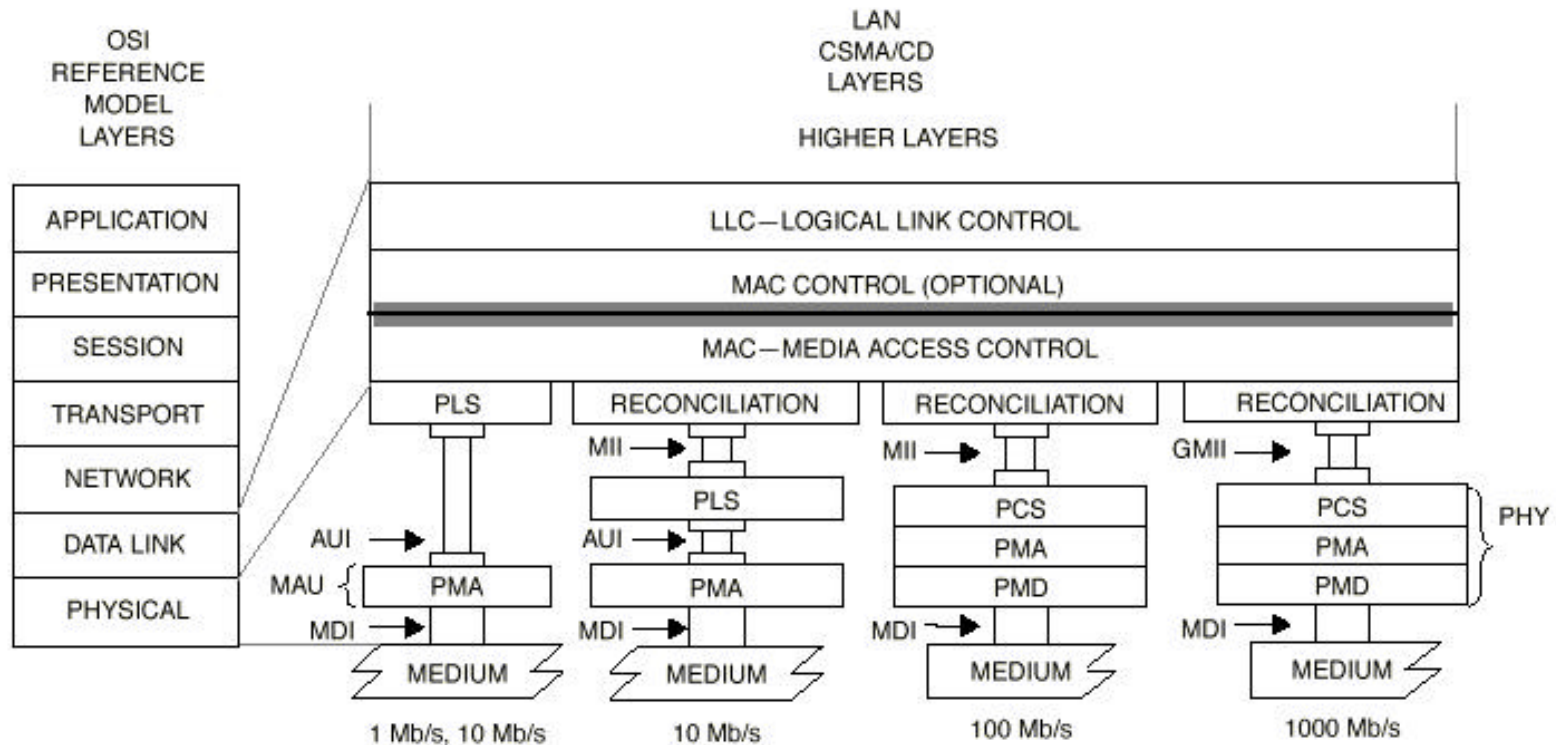David Law

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Introduction

- First pass look at a 10G Document structure
  - Changes to existing Clauses
  - Additional new Clauses
- Assumption
  - Full Duplex only
  - No major modification to the MAC
- Expect this will evolve with the Study Group

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Overview from 1000 Mb/s

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Existing Clauses

- Clause 1 - Introduction

- Clause 4 - Media Access Control

  - Minor changes such as Parameterized table

- Clause 22 - Reconciliation Sublayer (RS) and Media Independent Interface (MII)

  - On the basis that MII management interface will be used in 10G and that register set will therefore need extended

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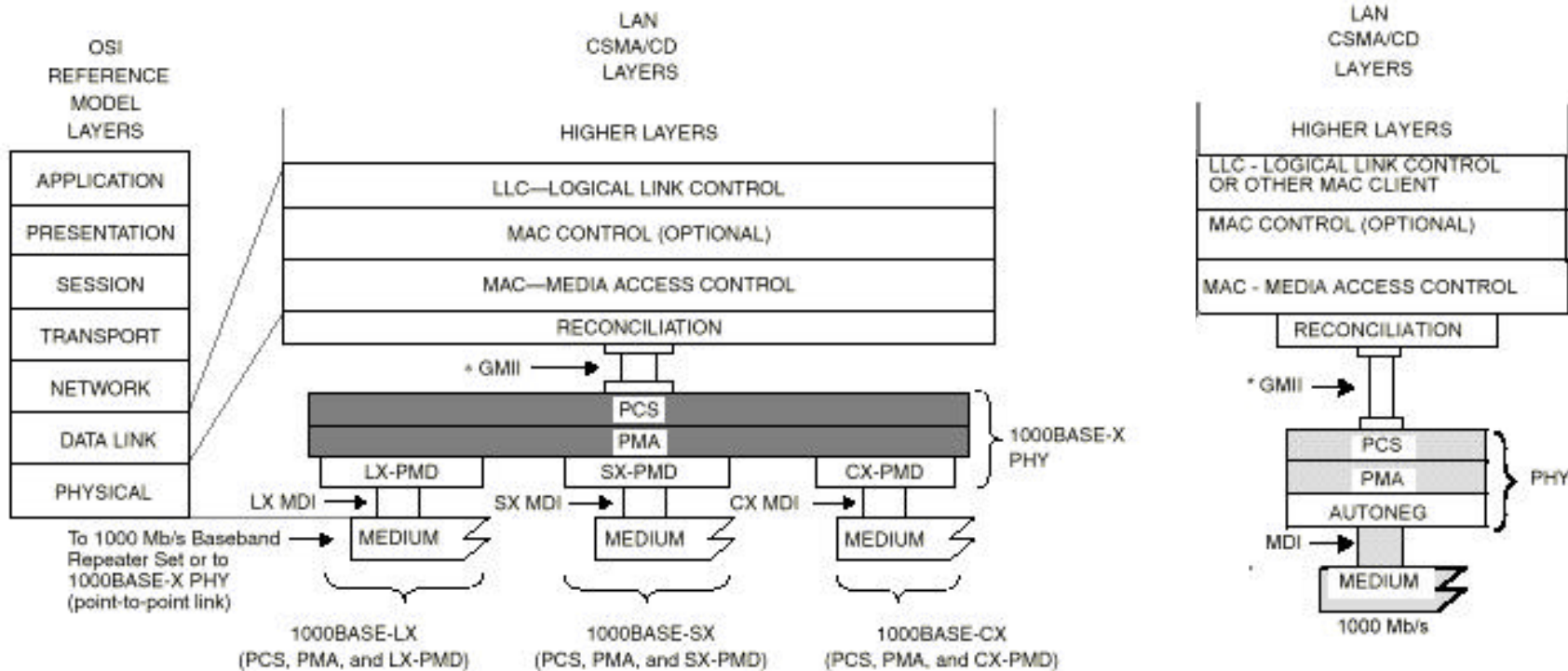**Higher Speed**
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Existing Clauses (cont.)

- Clause 30, Annex 30A & 30B - Management
  - Minor changes as appropriate
    - Most in the PHY area - new PHY attributes
    - Counter sizes already fixed

- Annex 31B - MAC Control PAUSE operation
  - May need response time modification

- Clause 37 - 1000BASE-X Auto-Negotiation
  - Modification may be required if 1G/10G Auto-Negotiation on Fibre is to be supported

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Overview from 1000 Mb/s

Possible New Clauses

- Clause 43 - Introduction to 10,000 Mb/s baseband network

- Clause 44 - Reconciliation sublayer and '10G-MII'

- Clauses 45 to XX - PCS, PMA and PMD specifications as required

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Summary

- Minor changes
  - 1, 4 (also 2, 3, 6 and elsewhere for Layer diagram)

- Substantive changes
  - 22 MII registers, 30 Management, 31B Pause, 37 Auto-Negotiation

- New Clauses
  - 43 Introduction, 44 Reconciliation, 45 to XX PCS, PMA and PMD as required

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