

# Management models (in support of comment #335)

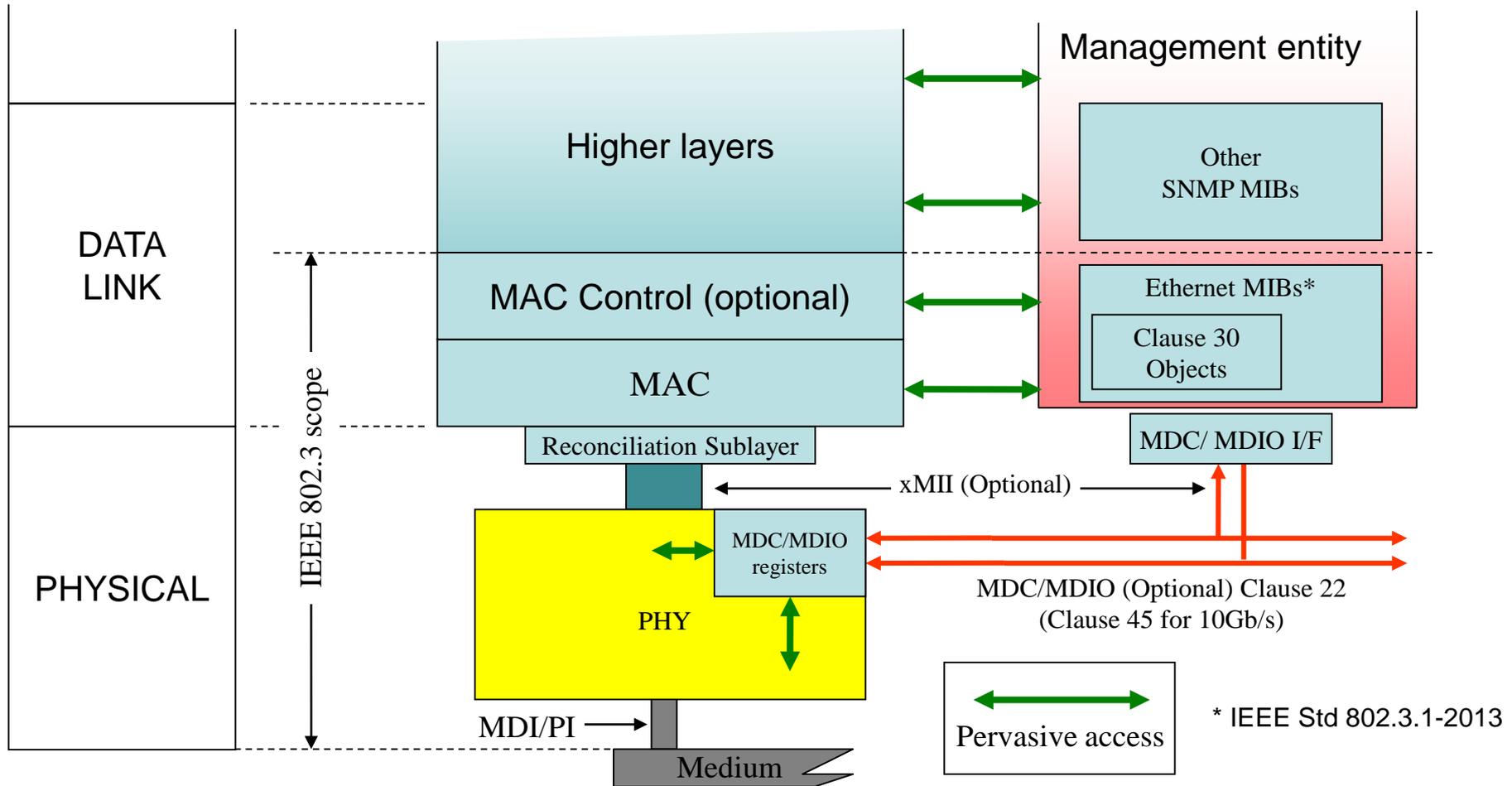
David Law, HPE  
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# Supporters

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- Yair Darshan, Microsemi Corporation
- Fred Schindler, Seen Simply
- David Tremblay, HPE
- Matthias Wendt, Philips
- George Zimmerman, CME Consulting

# Management model



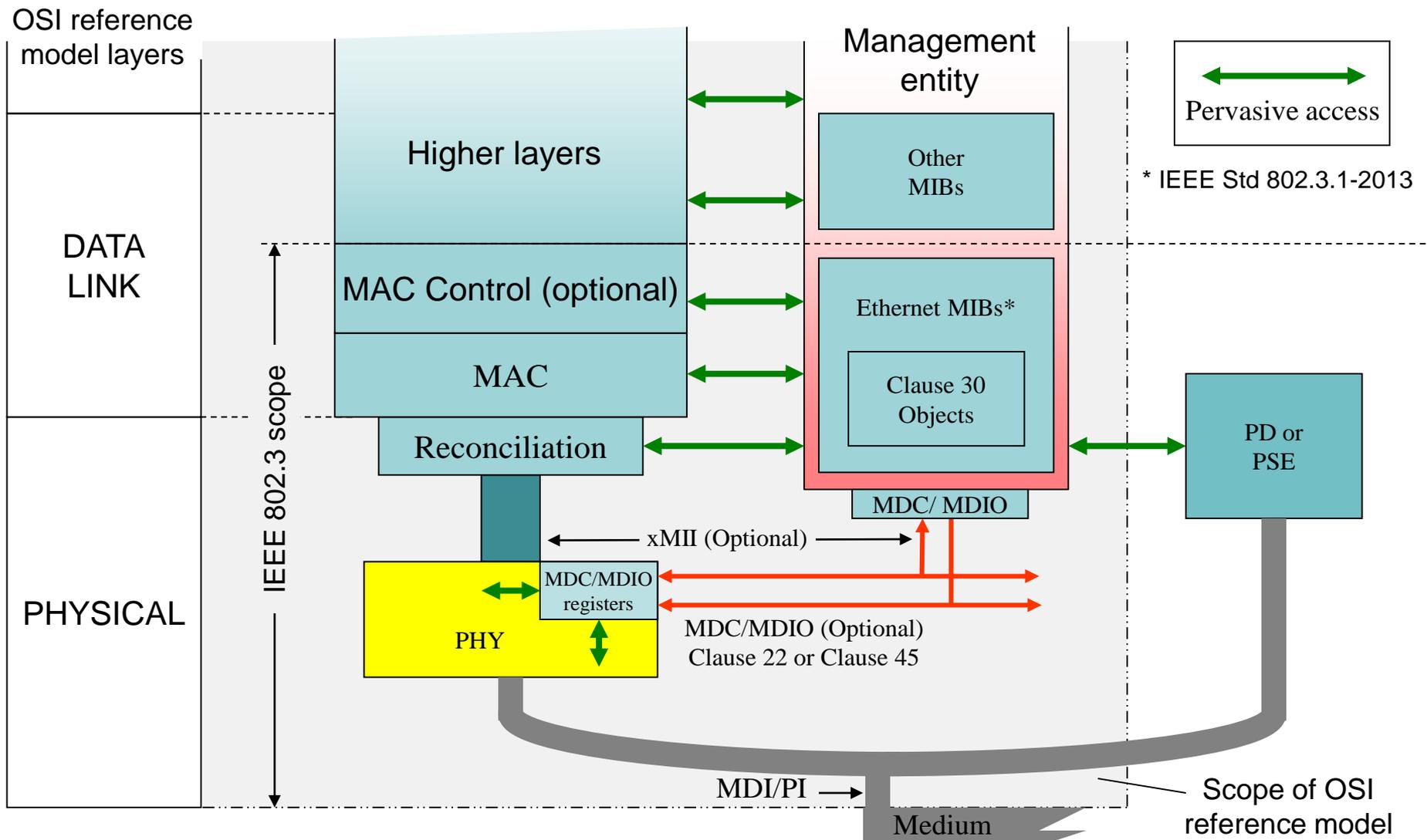
Reference: IEEE P802.3at DTE Power Enhancements management ad hoc, David Law, IEEE 802 July 2007 plenary week  
 URL: <[http://www.ieee802.org/3/at/public/2007/07/law\\_2\\_0707.pdf](http://www.ieee802.org/3/at/public/2007/07/law_2_0707.pdf)>

# Management model

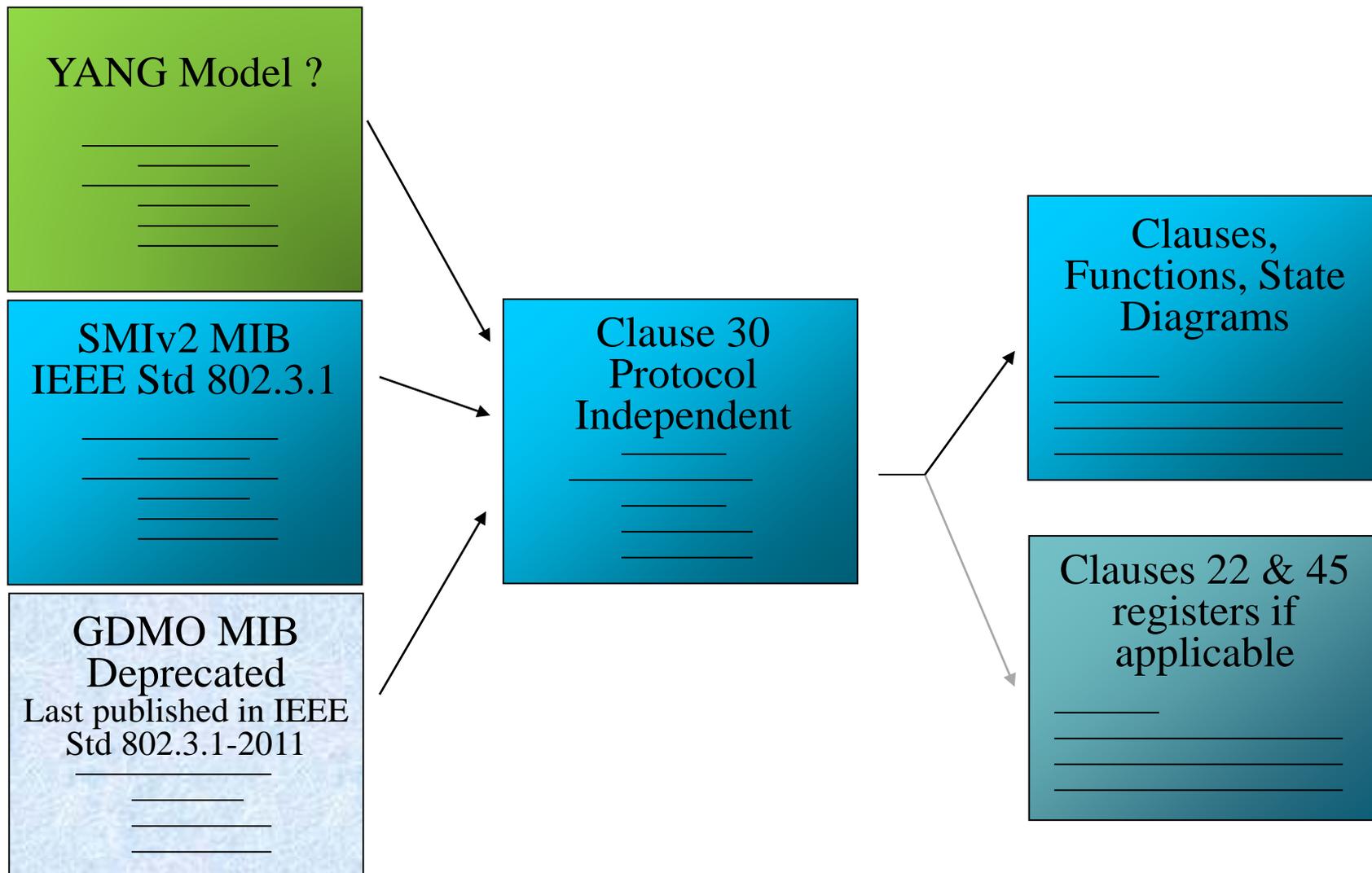
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- Observations
  - Model doesn't make PSE/PD position clear
    - MDI/PI shown as directly below the PHY
    - Provision for PSE/PD 'under' xMII
      - Register defined accessible through MDIO interface
- Potential improvements
  - Follow IEEE Std 802.3-2015 Figures 33-1 and 33-2
    - PSE and PD not part of the PHY
      - Remove provision for PSE/PD to be 'under' xMII
      - PSE implementations don't use MDIO
  - Pervasive access from management entity to PSE/PD
    - Same as RS, MAC, MAC Control sublayers
  - DTE Power via MDI is optional non-data entity
    - See IEEE Std 802.3-2015 subclause 33.1.3
      - Does not appear in a depiction of the OSI Reference Model

# Management model



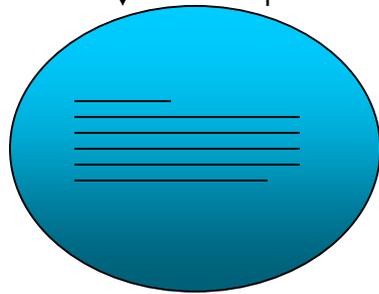
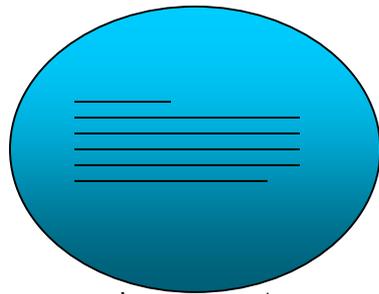
# References to and from IEEE Std 802.3 Clause 30



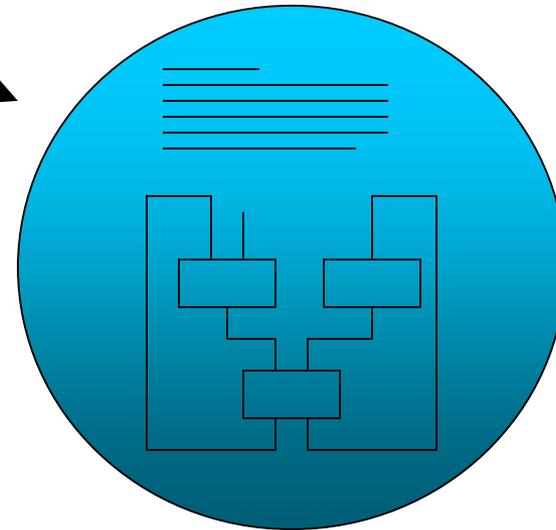
# MIB, Registers and Function

Function in PHY needs register access to make it manageable across xMII

MIB definition



Function

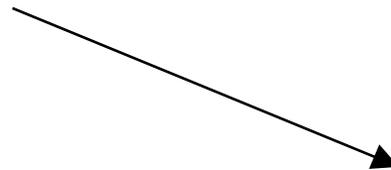
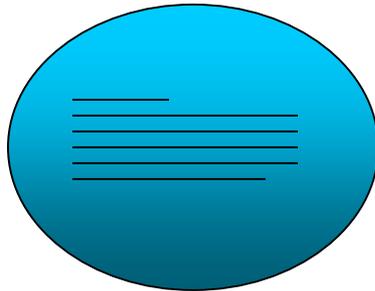


Register definition

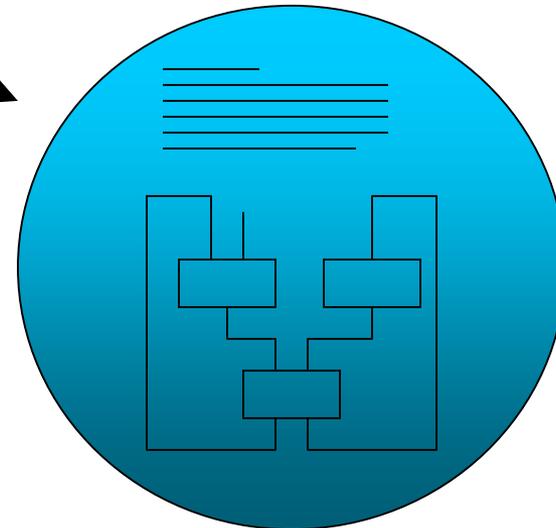
# MIB, Registers and Function

Can have a MIB attribute but no register. Example: MAC packet counters

MIB definition



Function



# Recommendations

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- Clause 30 MIB
  - Remove references to Clause 22 register access from Clause 33 related attributes
    - Same as RS, MAC, MAC Control attributes
- Clause 33 management registers
  - Delete subclause 33.5 and its subclauses
    - Existing implementation can reference 802.3-2015
  - Update state diagram variables
    - Remove references to management registers

# Thank You!