

# MIBs location in 802.16g Reference Model

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Purpose:

For discussion of the 802.16g reference model and location of MIBs

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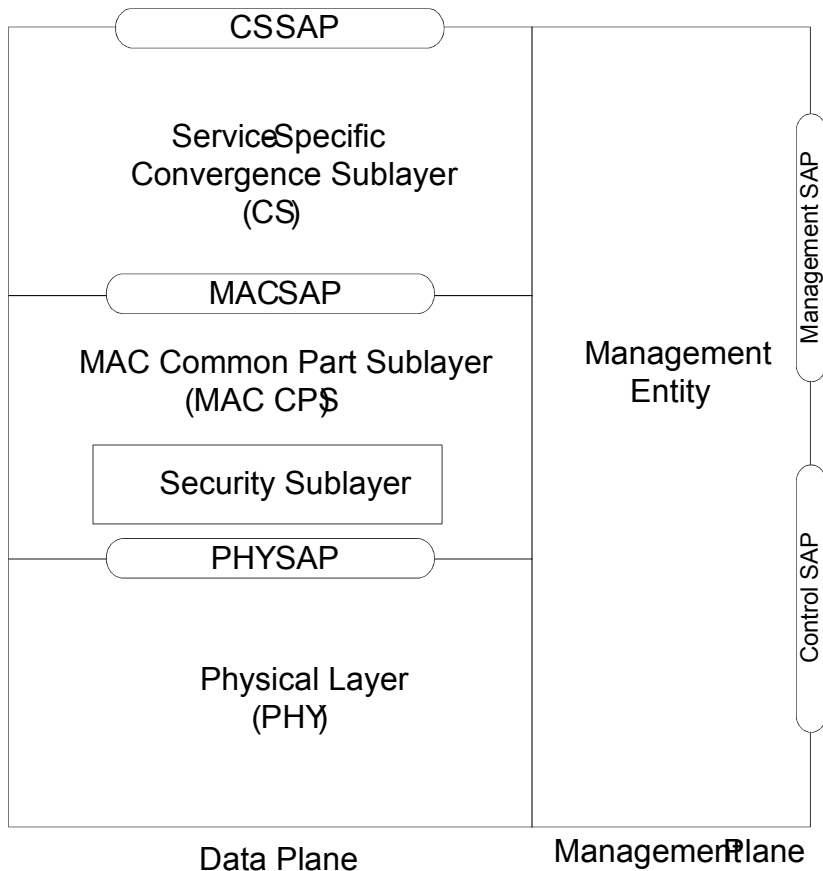
# **MIBs location 802.16g Reference Model**

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# Outline

- Present 802.16g Reference Model
- 802.16f Fixed MIBs Definition and Use
- Mobile MIBs Definition and Use
- Impact of location of MIBs
- Recommendation
- Discussion

# Present 802.16g Reference Model



- Service Access Points (SAPs)
  - Logical interfaces
  - Not Implementation specific
  - Codifies interaction and parameters
- Management SAP
  - Example functional aspects
    - Network Monitoring
- Control SAP
  - Example functional aspects
    - Authentication
    - Accounting

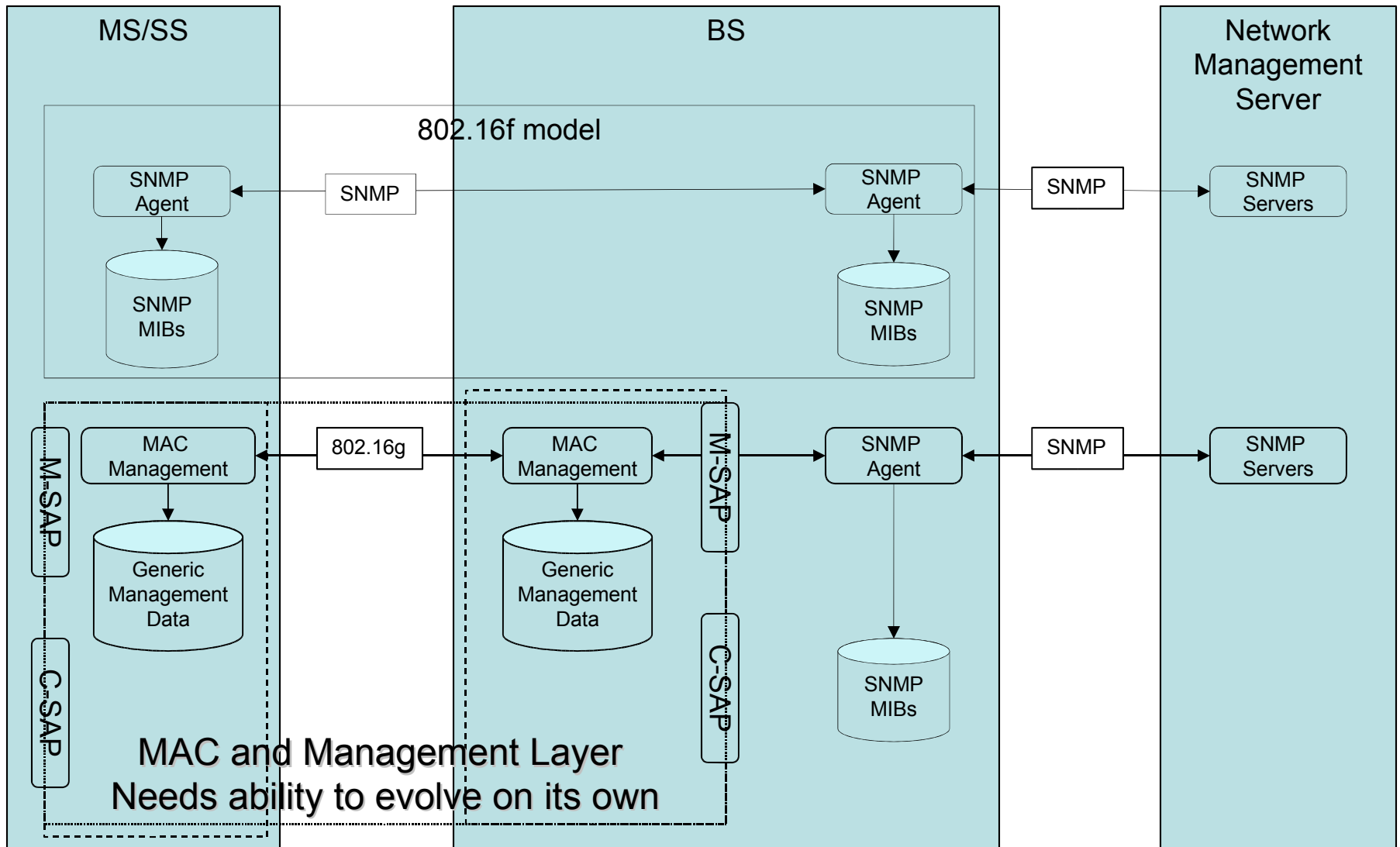
# 802.16f Fixed MIB Definition & Use

- Defines an SMIv2 protocol neutral MIB with SNMP as most likely protocol for use
  - Two MIBs : (1) wmanIfMib and (2) wmanDevMib defined
- Both (1) & (2) mandatory on BS. Also mandatory on SS implementing SNMP.
  - SNMPv2 compatible, SNMPv3 optional but recommended for secure and flexible access to MIB
  - **Important Implications!:** If SNMP is not used over the air, then SS need not implement MIBs (1) and (2).
    - MAC management messages or some other protocol required to manage SS
    - Parameters definitions if not using MIBs it is currently undefined (as 802.16f does not cover)

# Mobile MIBs Definition and use

- 802.16i project proposed
- Understanding is:
  - A protocol neutral definition will be done using IRP methodology
  - SNMP MIB will be one of the solution sets
  - XML/CORBA based solution sets also may be defined
- Over the Air definitions will still need to be optimal

# Impact of Location of MIBs



# Recommendation

- Option 1:
  - Define MIB within the MAC Management Entity (ME)
- Option 2:
  - Define MIB outside MAC Management Entity
- Option 3:
  - Define MIB partially within ME and partially without
  - Allows implementations to scale over the SAP interfaces
  - Allows MAC layer protocol independence



# Discussion

# Backup

# Architectural Model

