

IEEE 802.3 Ethernet

IEEE 802 Technical plenary

Monday 11 July 2022

This is a response to a request the IEEE 802.3 Chair received from the IEEE 802.1 Chair that reads “I would like to ask each WG chair (or delegate) to present a few slides to indicate their standard’s architecture, where it is defined, and what they understand their relationship is to IEEE Std 802 Overview and Architecture.”

IEEE Std 802-2014

IEEE 802 Reference Model for end stations

MSAP MAC service access point
 LSAP link service access point

PSAP PHY service access point

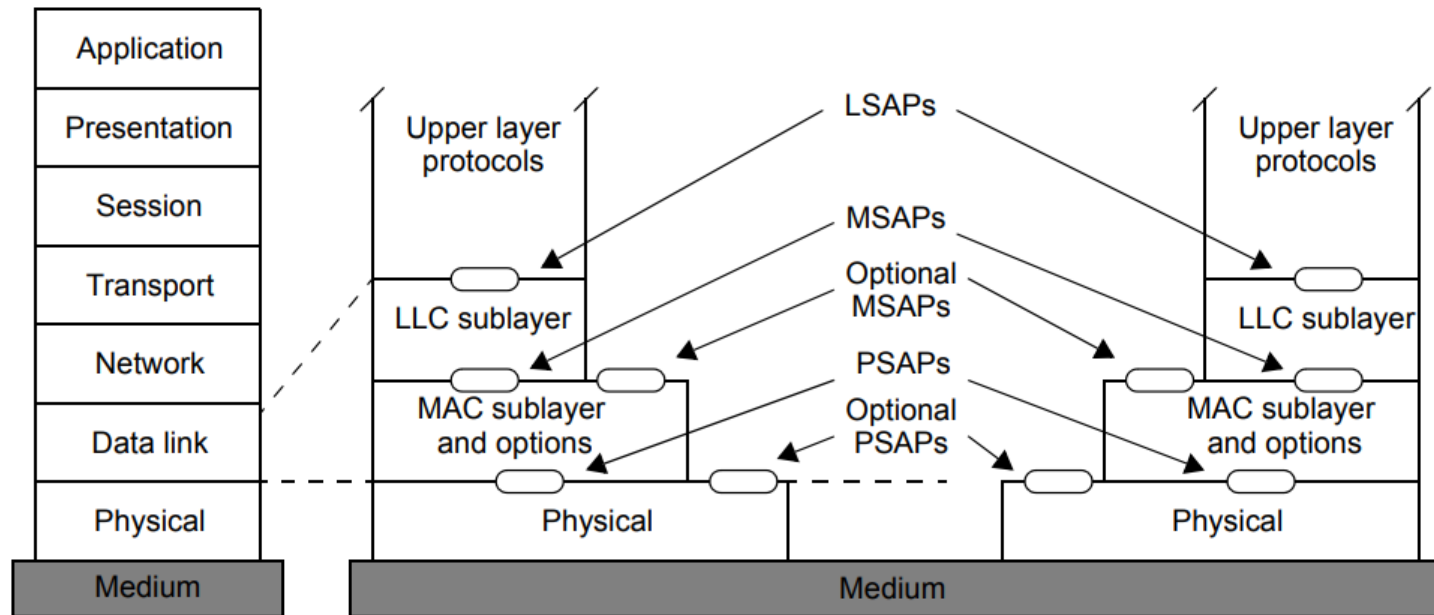


Figure 3—IEEE 802 RM for end stations

IEEE Std 802-2014

Basic Reference Model for IEEE 802.3 stations

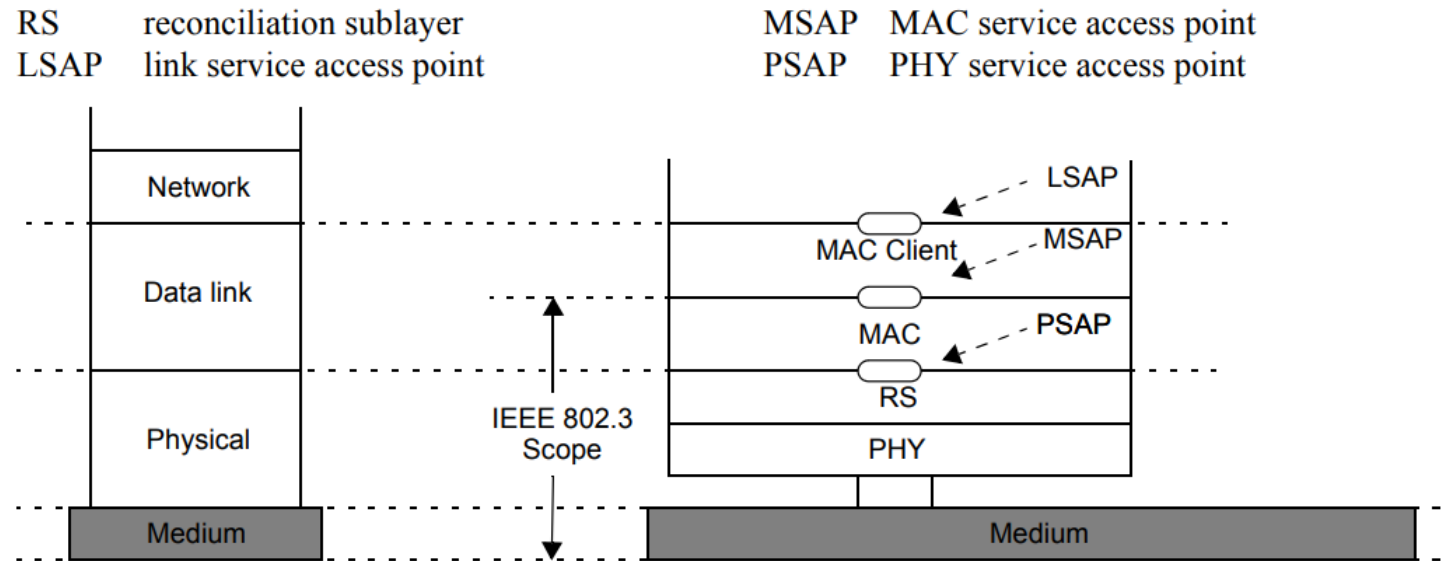


Figure B.1—Basic RM for IEEE 802.3 stations

MSAP: IEEE Std 802.3-2022 Clause 2 Media Access Control (MAC) service specification

PSAP: IEEE Std 802.3-2022 Clause 6 Physical Signalling (PLS) service specification

IEEE Std 802-2014

Full Reference Model for IEEE 802.3 stations

OAM operations, administration and maintenance sublayer
 RS reconciliation sublayer
 LSAP link service access point

MSAP MAC service access point
 OSAP OAM service access point
 MCSAP MAC control service access point
 PSAP PHY service access point

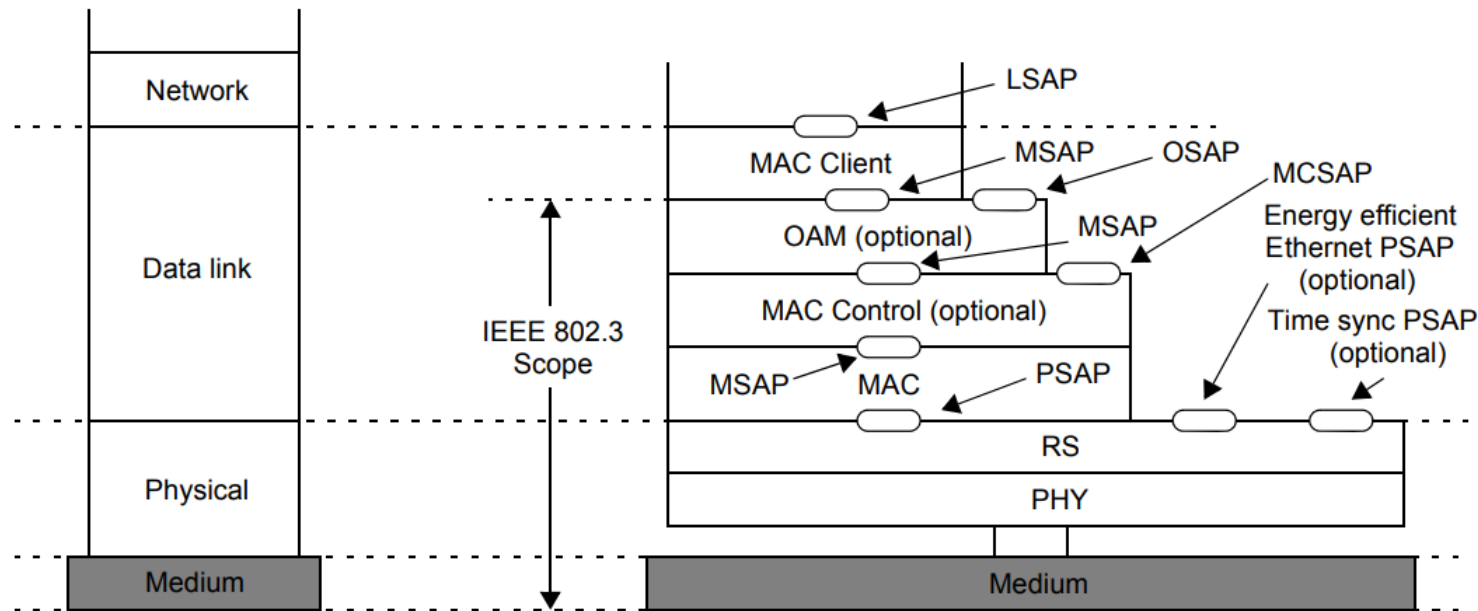


Figure B.2—The RM for IEEE 802.3 point-to-point stations

Optional MSAPs:

MCSAP: IEEE Std 802.3-2022 Clause 31 MAC Control

OSAP: IEEE Std 802.3-2022 Clause 57 Operations, Administration, and Maintenance (OAM)

IEEE Std 802-2014

Full Reference Model for IEEE 802.3 stations

OAM operations, administration and maintenance sublayer
 RS reconciliation sublayer
 LSAP link service access point

MSAP MAC service access point
 OSAP OAM service access point
 MCSAP MAC control service access point
 PSAP PHY service access point

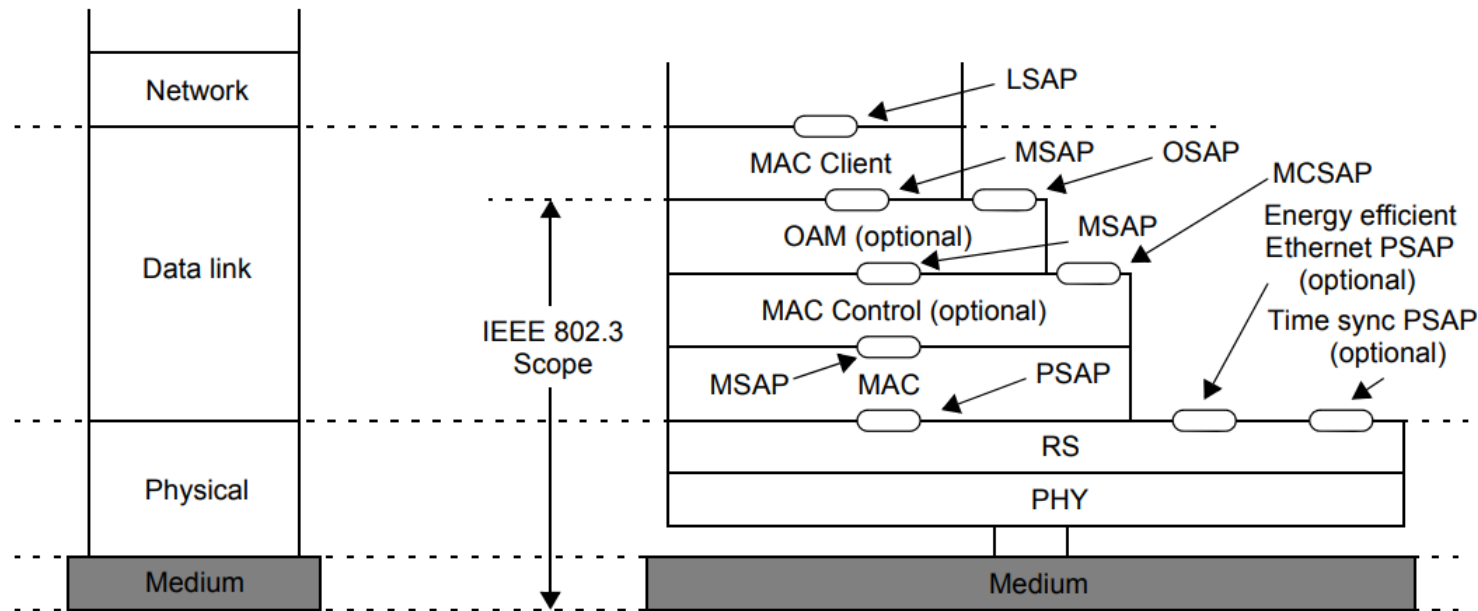


Figure B.2—The RM for IEEE 802.3 point-to-point stations

Optional PSAPs:

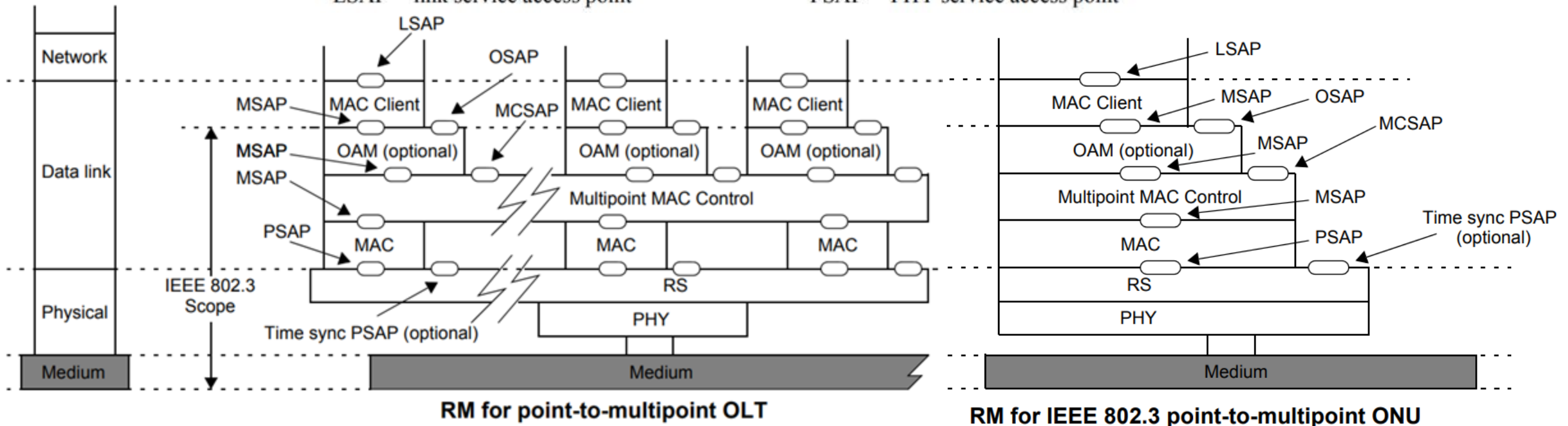
Energy efficient Ethernet PSAP: IEEE Std 802.3-2022 Clause 78 Energy-Efficient Ethernet (EEE)

Time sync PSAP: IEEE Std 802.3-2022 Clause 90 Ethernet support for time synchronization protocols

IEEE Std 802-2014 Reference Model for IEEE 802.3 for point-to-multipoint optical line terminal (OLT)

OAM operations, administration and maintenance sublayer
 RS reconciliation sublayer
 LSAP link service access point

MSAP MAC service access point
 OSAP OAM service access point
 MCSAP MAC control service access point
 PSAP PHY service access point



MCSAP: IEEE Std 802.3-2022 Clause 64 Multipoint MAC Control
 IEEE Std 802.3-2022 Clause 77 Multipoint MAC Control for 10G-EPON
 IEEE Std 802.3-2022 Clause 144 Multipoint MAC Control for Nx25G-EPON