

The A-MSDU subframe header contains three fields: DA, SA, and Length. The order of these fields and the bits within these fields are the same as the IEEE 802.3 frame format. The DA and SA fields of the A-MSDU subframe header contain the values passed in the MA-UNITDATA.request and MA-UNITDATA.indication primitives. The Length field contains the length in octets of the MSDU.

An A-MSDU contains only MSDUs whose DA and SA parameter values map to the same receiver address (RA) and transmitter address (TA) values, i.e., all the MSDUs are intended to be received by a single receiver, and necessarily they are all transmitted by the same transmitter. The rules for determining RA and TA are independent of whether the frame body carries an A-MSDU.

NOTE—It is possible to have different DA and SA parameter values in A-MSDU subframe headers of the same A-MSDU as long as they all map to the same Address 1 and Address 2 parameter values.

The MPDU containing the A-MSDU is carried in any of the following data frame subtypes: QoS Data, QoS Data + CF-Ack, QoS Data + CF-Poll, QoS Data + CF-Ack + CF-Poll. The A-MSDU structure is contained in the frame body of a single MPDU. If encrypted, the MPDU is encrypted as a single unit.

NOTE 1—The value of TID present in the QoS Control field of the MPDU carrying the A-MSDU indicates the TID for all MSDUs in the A-MSDU. Because this value of TID is common to all MSDUs in the A-MSDU, only MSDUs delivered to the MAC by an MA-UNITDATA.request primitive with an integer priority parameter that maps to the same TID can be aggregated together using A-MSDU.

NOTE 2—The maximum MPDU length that can be transported using A-MPDU aggregation is 4095 octets. An A-MSDU cannot be fragmented. Therefore, an A-MSDU of a length that exceeds 4065 octets (4095 minus the QoS data MPDU overhead) cannot be transported in an A-MPDU.

When Mesh Data frames are aggregated, the Aggregate MSDU subframe header includes Mesh DA, Mesh SA, Length, and Mesh Control. The A-MSDU subframe structure for Mesh Data is defined in Figure 8-33.

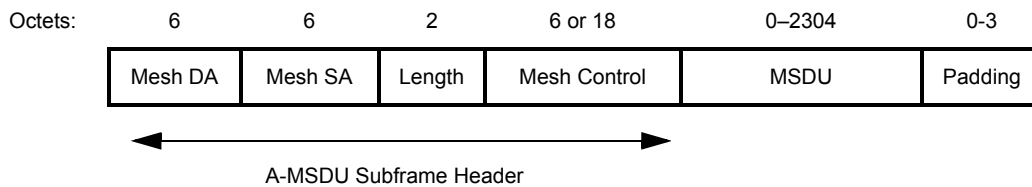


Figure 8-33—A-MSDU Subframe structure for Mesh Data

The Mesh DA and Mesh SA fields contain the addresses of the destination mesh STA and the source mesh STA, respectively, determined in 9.32.3.

The Length field contains the length in octets of the MSDU.

The format of the Mesh Control field is described in 8.2.4.7.3.

NOTE—It is possible to have different Mesh DA, Mesh SA, and Mesh Control in Subframe Headers of the same A-MSDU as long as they all map to the same Address 1 and Address 2 values.

8.3.3 Management frames

8.3.3.1 Format of management frames

The format of a management frame is defined in Figure 8-34. The Frame Control, Duration, Address 1, Address 2, Address 3, and Sequence Control fields are present in all management frame subtypes. The maximum unencrypted MMPDU size, excluding the MAC header and FCS, is 2304 octets.