

- The **Length/Type** field indicates a **value from 0 to $2^{16}-1$** (65 535).

If the value in the field lies from 0 to 1500 it indicates the length of the Data field. If the value ranges from 1536 to 65 535 it indicates the nature of the Data field. **Examples of field types:**

0x0800: IPv4; 0x8600: IPv6; 0x8808: Ethernet flow control; 0x8847: MPLS unicast; 0x8848: MPLS multicast; 0x8100: IEEE 802.1Q; 0x88A8: IEEE 88A8.

- The **Data** field is the only one with **variable dimension**. It varies from **46 to 1500 octets** and contains the payload data.

If the **payload data is less than 46 octets** additional **bits are padded** to the data field to make it 46 octets.

- If the **first bit of the most significant octet of the address field** is made **equal to 0** it indicates a **unicast address** (sent to **one station**), while this **bit at 1** indicates **multicast address** (many stations).

The total number of unicast or multicast addresses is equal to $2^{47}=1.4 \times 10^{14}$. Note that the **address space of IPV4** is $2^{32}=4.3 \times 10^9$.