

# **802.3ar Frame Expansion**

***Proposed changes to Clause 3***

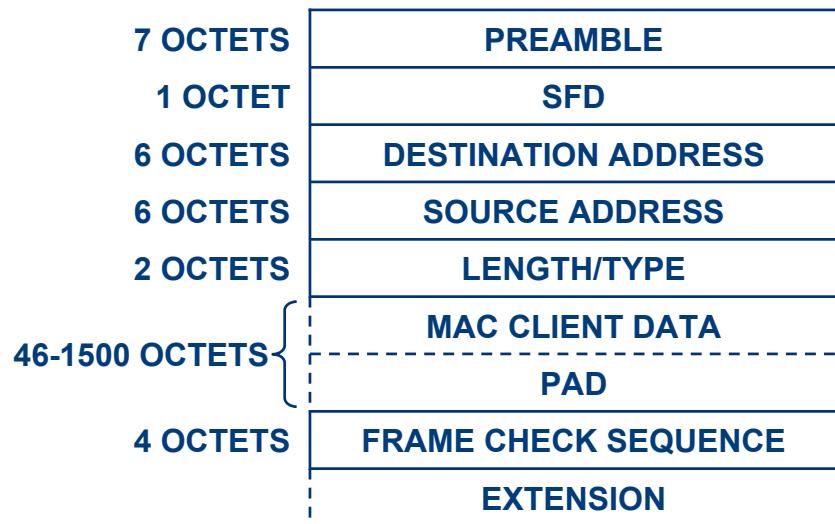
**Kevin Daines**

**13 July 2004**

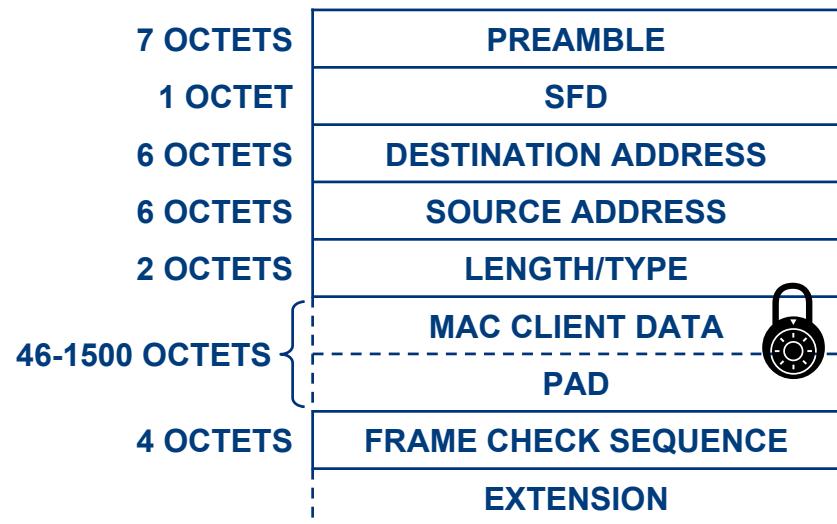
# **Agenda**

- **Figure 3-1**
- **Figure 3-3**
- **Frame sizes**
- **Sample frames**

# Figure 3-1

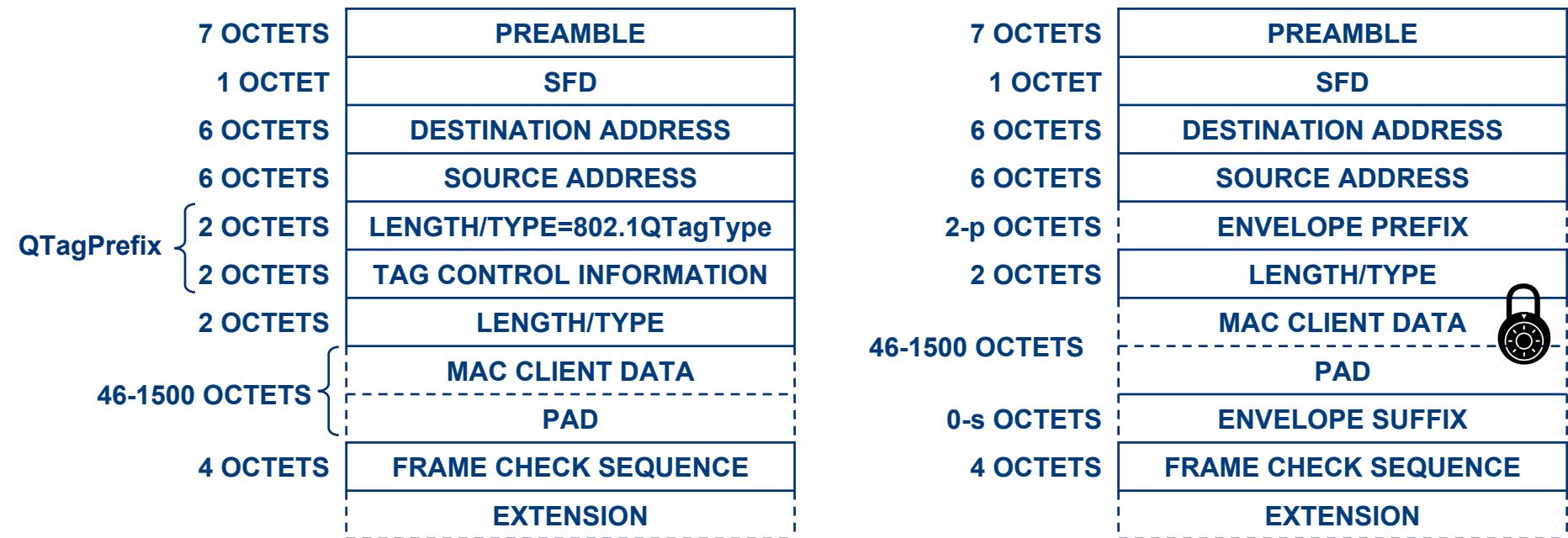


IEEE 802.3-2002/Figure 3-1  
MAC frame format



IEEE 802.3ar/Figure 3-1  
MAC frame format

# Figure 3-3



IEEE 802.3-2002/Figure 3-3  
Tagged MAC frame format

IEEE 802.3ar/Figure 3-3  
*Envelope* MAC frame format

p is 2 to max[2, **TBD – suffixSize**]

s is 0 to max[0, **TBD – prefixSize**]

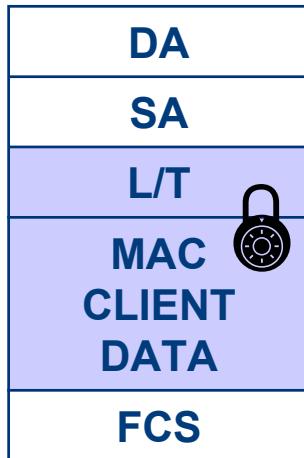
# Frame sizes

Frame Sizes	802.3-2002	802.3ar
Minimum basic MAC frame size	64 octets	64 octets
Maximum basic MAC frame size	1518 octets	1518 octets
Minimum Tagged MAC frame size	64 octets	N/A
Maximum Tagged MAC frame size	1522 octets	N/A
Minimum <i>Envelope</i> MAC frame size	N/A	68 octets
Maximum <i>Envelope</i> MAC frame size	N/A	TBD octets

# Sample frames (1/4)

*Basic MAC frame*

6 OCTETS	DA
6 OCTETS	SA
2 OCTETS	L/T
46-1500 OCTETS	MAC CLIENT DATA
4 OCTETS	FCS
<hr/> <b>64-1518 OCTETS</b>	



*802.1Q Tagged Frame*

*Envelope MAC frame*

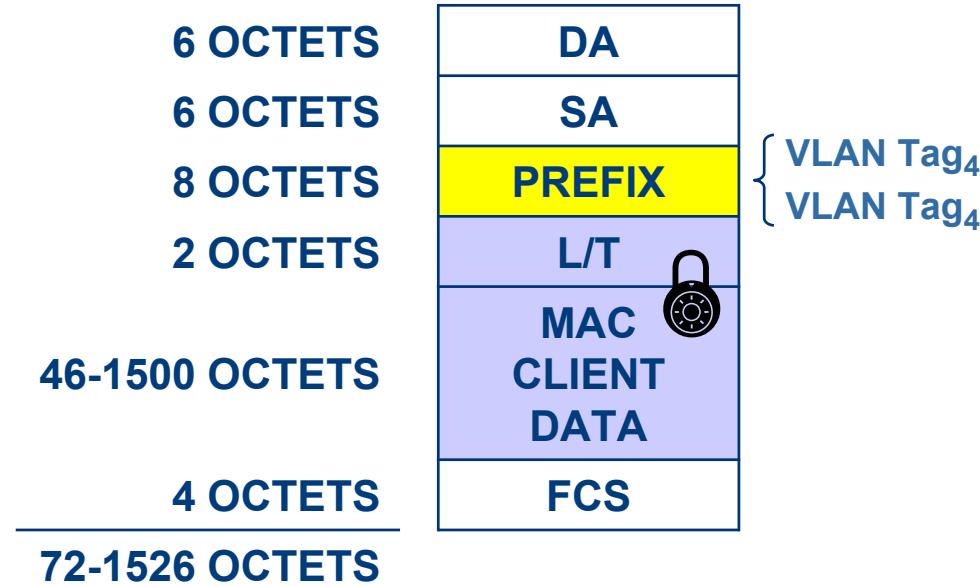
6 OCTETS	DA
6 OCTETS	SA
4 OCTETS	PREFIX
2 OCTETS	L/T
46-1500 OCTETS	MAC CLIENT DATA
4 OCTETS	FCS
<hr/> <b>68-1522 OCTETS</b>	

**PREFIX=4, SUFFIX=0**

# Sample frames (2/4)

## 802.1ad Double Tagged Frame

### *Envelope MAC frame*

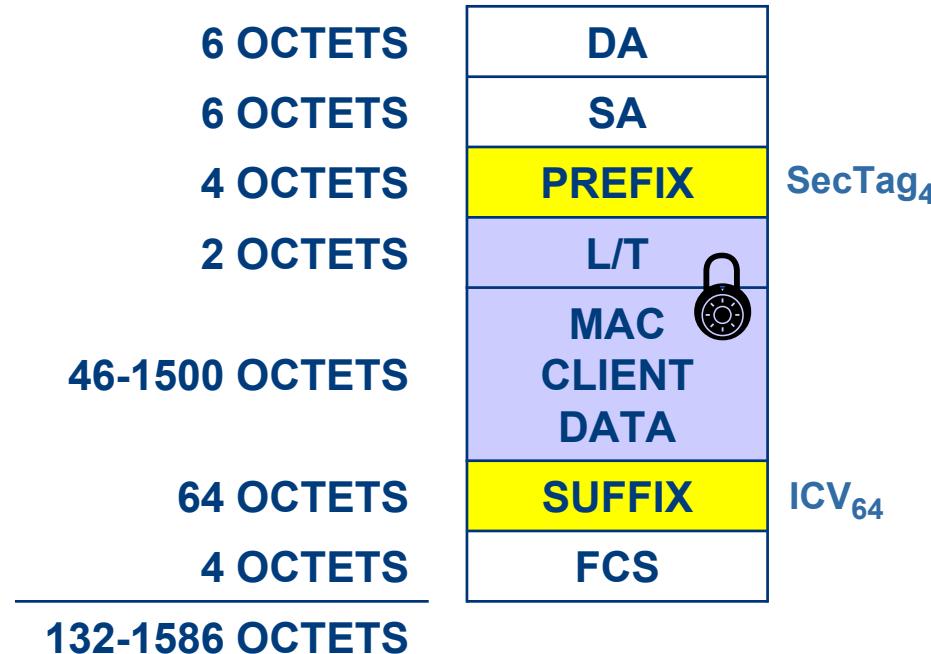


PREFIX=8, SUFFIX=0

# Sample frames (3/4)

## 802.1AE MACSec Frame

### *Envelope MAC frame*



PREFIX=4, SUFFIX=64

# Sample frames (4/4)

## MPLS

### *Envelope MAC frame*

