

# ***Proposed changes to Clause 3***

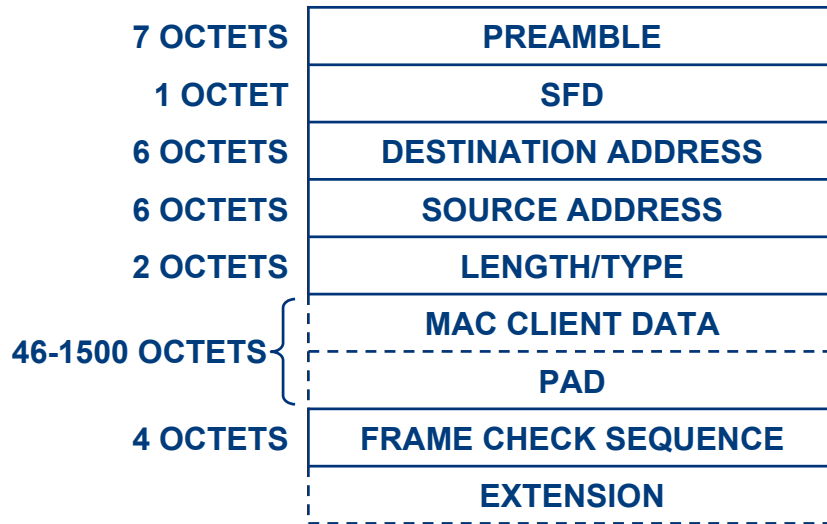
**Kevin Daines**  
**World Wide Packets**

**30 September 2004**

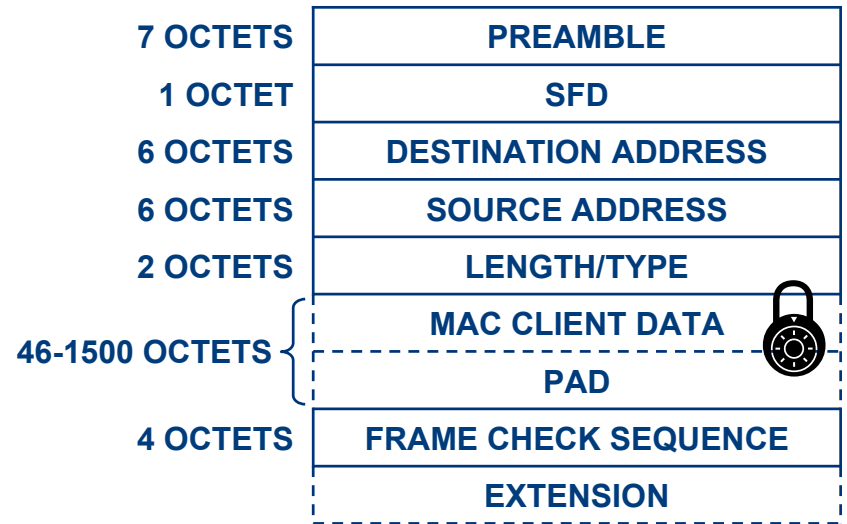
# *Agenda*

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

# Figure 3-1

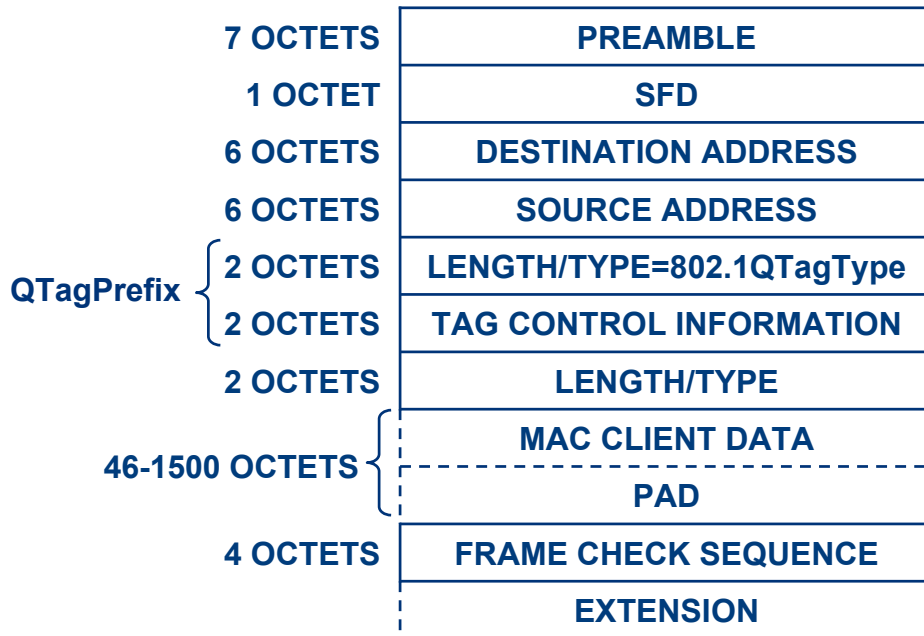


Current Figure 3-1  
MAC frame format

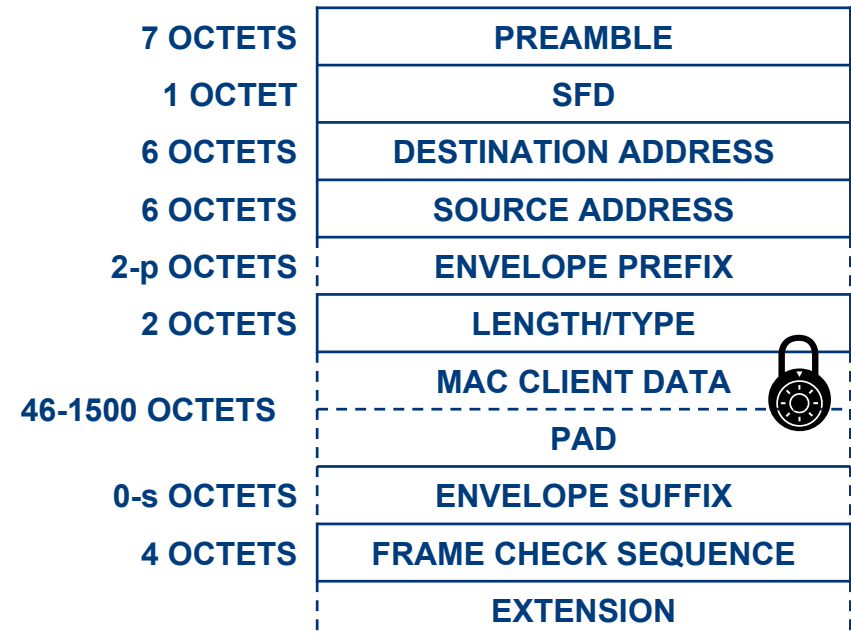


**NEW** Figure 3-1  
MAC frame format

# Figure 3-3



Current Figure 3-3  
Tagged MAC frame format



**NEW** Figure 3-3  
Envelope MAC frame format

p is 2 to max[2, TBD – suffixSize]

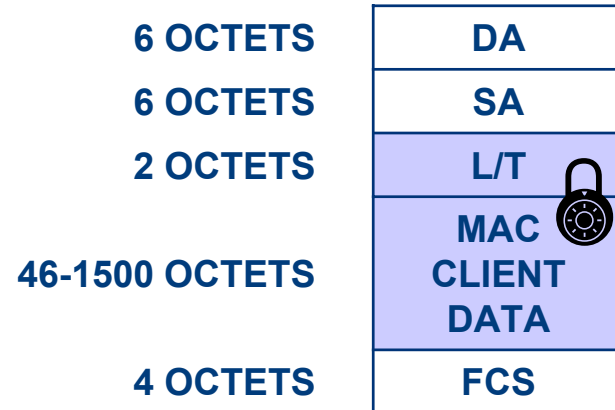
s is 0 to max[0, TBD – prefixSize]

# Frame sizes

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

# Basic MAC frame

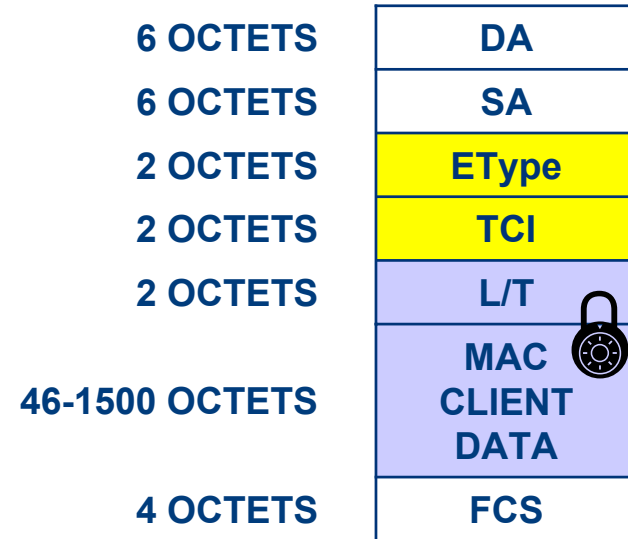
- No prefix
- No suffix



- 64-1518 octets

# Sample envelope frames (1/5)

- 802.1Q Tagged frame
- Prefix=4
- Suffix=0
  
- 68-1522 octets



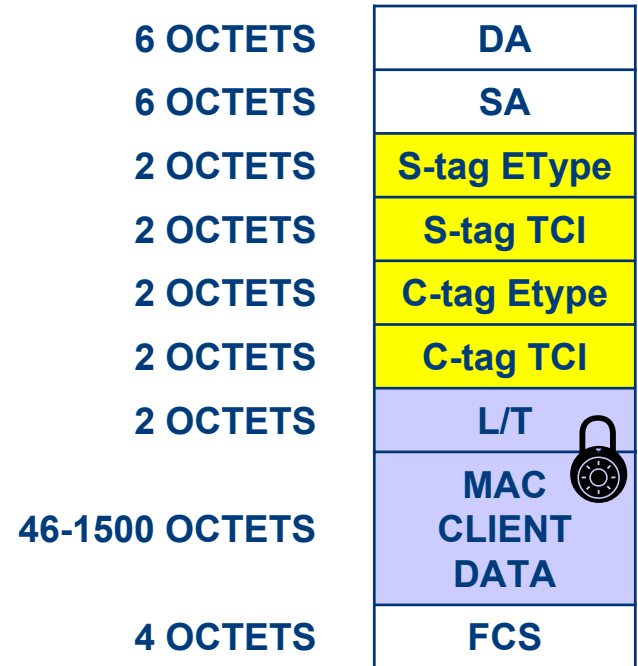
# Sample envelope frames (2/5)

- 802.1ad Tagged frame

- Prefix=8

- Suffix=0

- 72-1526 octets





# Sample envelope frames (3/5)

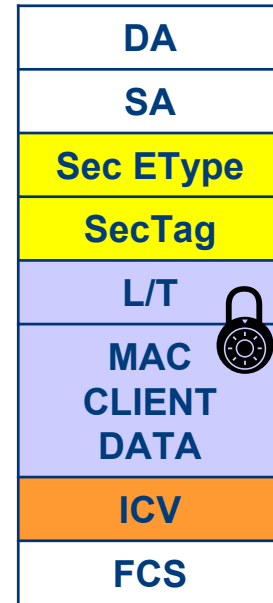
- 802.1AE MACSec frame

- Prefix=4

- Suffix=64

- 132-1586 octets


6 OCTETS  
 6 OCTETS  
 2 OCTETS  
 2 OCTETS  
 2 OCTETS  
 46-1500 OCTETS  
 64 OCTETS<sup>1</sup>  
 4 OCTETS



- <sup>1</sup>Illustrative ICV length


# Sample envelope frames (4/5)

- MPLS encapsulation
- Prefix=34
- Suffix=0
  
- 98-1552 octets

6 OCTETS	DA
6 OCTETS	SA
2 OCTETS	EType
2 OCTETS	TCI
2 OCTETS	MPLS EType
4 OCTETS	Tunnel
4 OCTETS	VC
6 OCTETS	DA
6 OCTETS	SA
2 OCTETS	VLAN EType
2 OCTETS	TCI
2 OCTETS	VLAN EType
2 OCTETS	TCI
2 OCTETS	L/T
46-1500 OCTETS	MAC CLIENT DATA 
4 OCTETS	FCS

# Sample envelope frames (5/5)

- MPLS encapsulation
- Prefix=34
- Suffix=72
  
- 174-1628 octets

6 OCTETS	DA
6 OCTETS	SA
2 OCTETS	MPLS EType
4 OCTETS	Tunnel
4 OCTETS	PW
4 OCTETS	CW
6 OCTETS	DA
6 OCTETS	SA
2 OCTETS	Sec EType
2 OCTETS	SecTag
2 OCTETS	VLAN EType
2 OCTETS	TCI
2 OCTETS	L/T
46-1500 OCTETS	MAC CLIENT DATA 
64 OCTETS	ICV
4 OCTETS	FCS
4 OCTETS	FCS
4 OCTETS	FCS

# *Summary*

- **Proposed Figure 3-3 provides flexible means to upper layer protocols to convey additional fields, both before and after the payload**