Proposed changes to Clause 3

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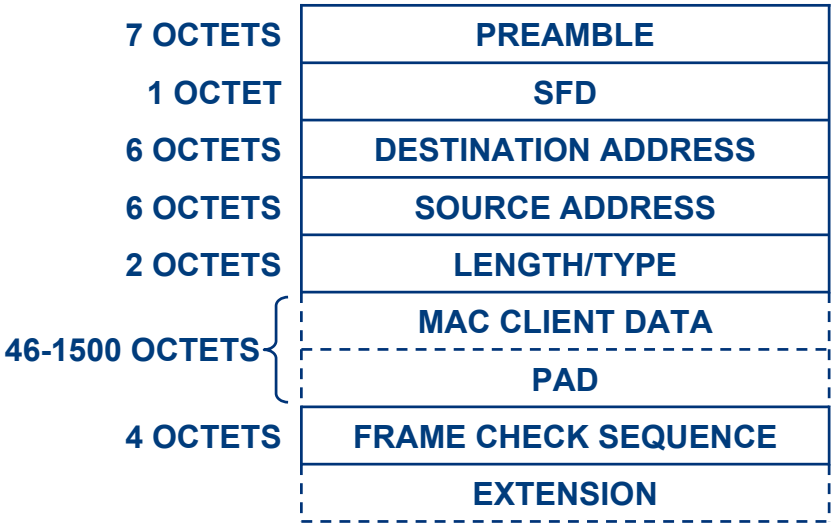
Outline

- Overview of changes
- Two frame formats
  - Figure 3-1
  - Figure 3-3
- Confusing maxValidFrame constant

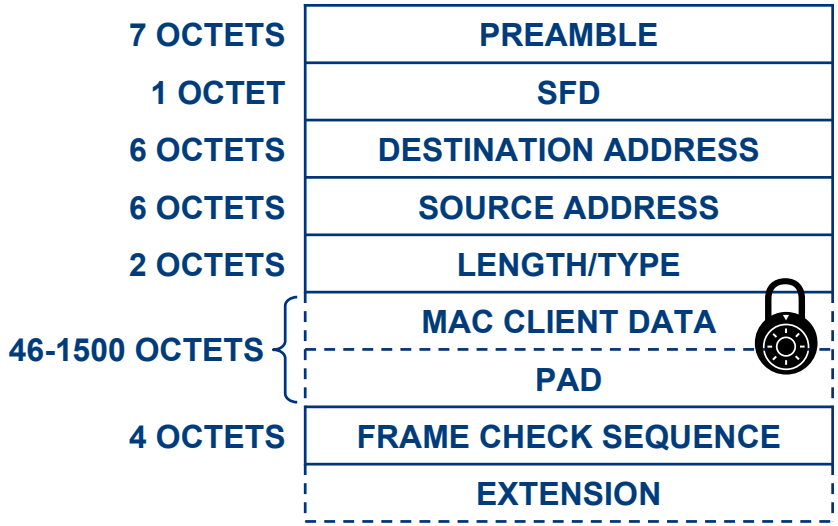
Overview of changes

- 802.3-2002 currently defines basic MAC frames and Tagged MAC frames
- Tagged MAC frames only cover one type of prefix field
- Propose replacing Tagged MAC frame format with Envelope MAC frame format

Figure 3-1



Current Figure 3-1
MAC frame format



NEW Figure 3-1
MAC frame format

Padlock?

- Should we have the padlock?
- Does it reinforce the length/type field being affixed to the data field?
- Does it reinforce the fact that the data field isn't being expanded?

802.3-2002/3.2.6

- This sub-clause uses a constant from 4.2.7.1 called *maxValidFrame*
- This constant is defined as:
  - maxValidFrame = maxUntaggedFrameSize – (2 x addressSize + lengthOrTypeSize + crcSize) / 8;
  - {In octets, the maximum length of the MAC client data field. This constant is defined for editorial convenience, as a function of other constants}
- Propose changing 3.2.6 to a fixed 5EEh (1500 decimal) rather than using maxValidFrame, which is confusing and misleading

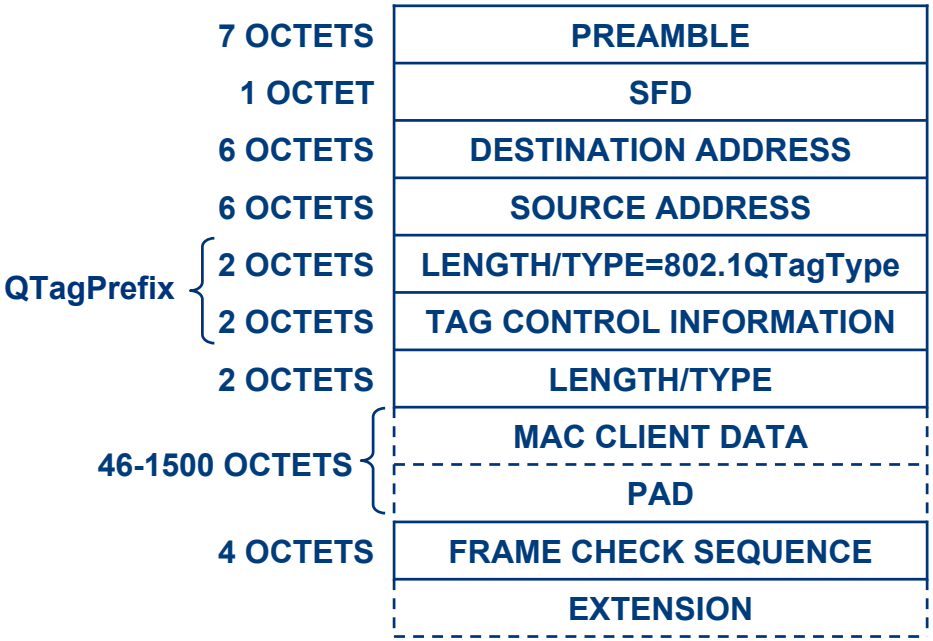
802.3ae/3.2.7

- See previous slide, make same change in this sub-clause
- Also, remove last sentence of first paragraph, which reads:
  - The maximum size of the data field is determined by the maximum frame size and address size parameters of the particular implementation.

802.3ae/3.5

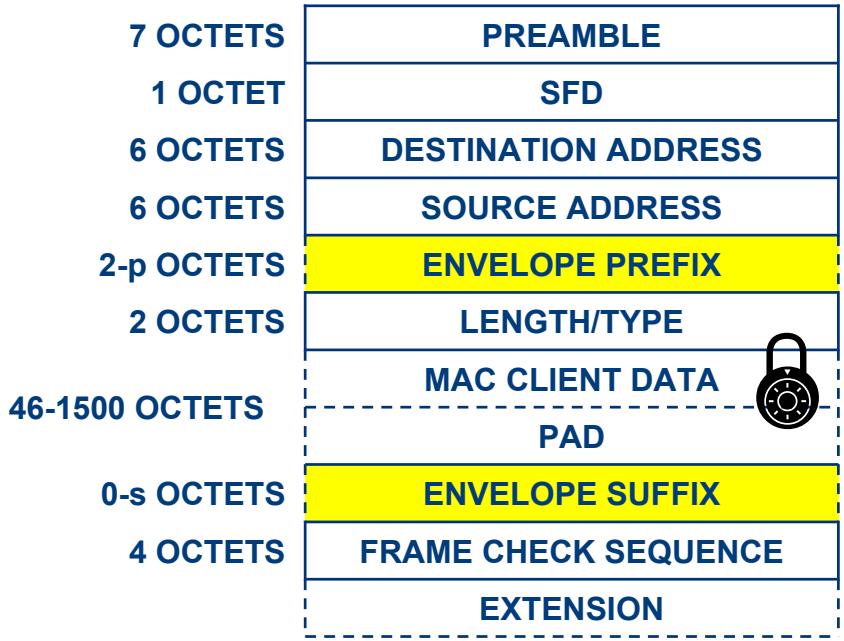
- Propose replacing Tagged MAC frame format with Envelope MAC frame format
- See next slide for proposed old/new figures
  - Coloring provided to highlight changes
  - Figure will be black & white in draft

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]

802.3ae/3.5.*

- Propose making following changes:

Clause	802.3-2002	Proposed 802.3as/D1.0
3.5.4	Length/Type	Prefix field
3.5.5	Tag Control Information	MAC Client Length/Type field
3.5.6	MAC Client Length/Type field	Data and PAD fields
3.5.7	Data and PAD fields	Suffix field
3.5.8	Frame Check Sequence (FCS) field	*No change*
3.5.9	Extension field	*No change*

Summary

- Proposed Figure 3-3 provides flexible means to upper layer protocols to convey additional fields, both before and after the payload
- Will propose motion to adopt presentation in closing session