

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Proposed Changes in 16m/D2 Related to MAC Header Formats (15.2.2.1)	
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Re:	IEEE 802.16 Working Group Letter Ballot #30a on P802.16m/D2	
Abstract	The contribution proposes the changes in 16m/D2 regarding MAC Header formats.	
Purpose	To be discussed and adopted by TGM for the 802.16m DRAFT amendment.	
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Proposed Changes in 802.16m/D2 Related to MAC Header Formats (15.2.2.1)

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1 Introduction

This contribution combines the changes proposed on the same MAC header formats section by two separate comments: one is to recognize the MAC signaling header is one of the MAC header types, the other is to propose MAC control message MAC Header format.

2 Suggested changes in the 802.16m/D2

The following are combined changes in the 802.16m/D2 from the two separate comments about MAC header formats. Note that the new text is marked with blue and underline; the deleted text are marked with red and strikethrough.

Suggested change #1: page 17, line 42

Change the paragraph in line 42 on page 17 as follows:

There are four ~~two~~ defined MAC header formats. The first is the Advanced Generic MAC Header that begins each DL and UL MAC PDUs containing either MAC control messages or CS data. The second is the compact MAC header that begins MAC PDUs of the connections using persistent allocation or group allocation. ~~The~~ These two MAC header formats shall not be used simultaneously on the same connection. The third is the MAC signaling header that begins MAC PDUs containing short MAC control signals. The fourth is the MAC control message header that begins MAC PDUs containing MAC control messages.

Suggested change #2: page 18, line 58

Insert the following before line 58 on page 18:

15.2.2.1.3 MAC Signaling Header Format

MAC signaling header format is defined in Table 654a.

Table 654a—MAC Signaling Header Format

<u>Syntax</u>	<u>Size (bit)</u>	<u>Notes</u>

<u>MAC Signaling Header {</u>		
<u>Flow ID</u>	<u>4</u>	<u>Flow identifier for the MAC signaling header, i.e., 0b0010.</u>
<u>Type</u>	<u>4</u>	<u>MAC signaling header type.</u>
<u>contents</u>	<u>variable</u>	<u>Contents of the MAC signaling header, with the size implied by the Type field.</u>
<u>}</u>		

15.2.2.1.4 MAC Control Message MAC Header (CMMH) Format

The Control Message MAC Header (CMMH) is defined in Table 654b.

Table 654b—CMMH Format

<u>Syntax</u>	<u>Size (bit)</u>	<u>Notes</u>
<u>Control Message MAC Header {</u>		
<u>Flow ID</u>	<u>4</u>	<u>Flow identifier for the MAC management connections, i.e., 0b0000 or 0b0001.</u>
<u>EH</u>	<u>1</u>	<u>Extended header presence indicator; When set to '1', this field indicates that an Extended Header is present following this CMMH.</u>
<u>Length</u>	<u>11</u>	<u>This field indicates the length in bytes of MAC PDU including the CMMH and extended header if present.</u>
<u>EC</u>	<u>1</u>	<u>Encryption Control indicator 0 = Payload is not encrypted 1 = Payload is encrypted</u>
<u>Polling</u>	<u>1</u>	<u>0 = no acknowledgement required 1 = acknowledge required upon receiving the MAC message</u>
<u>FC</u>	<u>2</u>	<u>Fragmentation control (see Table 659)</u>
<u>SN</u>	<u>4</u>	<u>Payload sequence number of MAC control message MAC PDU</u>
<u>}</u>		

Suggested change #3: page 19, line 38

Delete the row of “Fragmentation extended header” in Table 656.

Suggested change #4: page 22, line 38

Delete subsection 15.2.2.2.2 on page 17 and page 18.

Suggested change #5: page 97, line 64

Change the paragraph in line 64 on page 97 as follows:

For management connections [the Control Message MAC Header \(CMMH\)](#) ~~FEH (as defined in 15.2.2.2.2)~~ in the MAC PDU provides the information about the control message fragment. SN in [CMMH](#) ~~FEH~~ is used for sequencing the control message fragments and Fragmentation Control (FC) bits in [CMMH](#) ~~FEH~~, are used to tag the control message fragments with respect to their position in the parent control message.

Suggested change #6: page 24, line 35

Change “8” to “4”.

Suggested change #7: throughout 802.16m/D2

Change “FEH” to “CMMH” throughout the 802.16m/D2

Suggested change #8: page 29, line 46,

Delete line 46 to line 65 on page 29, as the contents have been moved to section 15.2.2.1.

3 References

[1] IEEE Std 802.16-2009

[2] IEEE P802.16m/D2, “DRAFT Amendment to IEEE Standard for Local and metropolitan area networks”