

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Clean-up of MAC Header and Subheader Support TLVs
Date Submitted	2005-06-08
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Re:	IEEE P802.16e/D8-2004
Abstract	This contribution provides text clean-up regarding the MAC header and subheader support TLVs
Purpose	Review and Adopt the suggested changes into P802.16e/D8
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1 Introduction

The TLVs regarding supporting various MAC header/subheader in REG-REQ/RSP message needs to be clean up. This contribution suggests that all the supporting indications regarding the various MAC header/subheader in REG-REQ/RSP message are consolidated into one TLV – MAC header and extended subheader support TLV.

2 Proposed text change

[Modify Section 11.7.26 HO header support as the following]:

11.7.26 H0 **MAC header and extended subheader support**

The ‘**MAC Hheader and subheader support**’ field indicates whether or not the MS and BS support various types of **MAC header and extended** sub-headers. This field may be sent by either BS or MSS. Omission of this field from the RNG-REQ/RSP message indicates that none of the sub-headers are supported.

- Bandwidth request and UL Tx power report header
- Bandwidth request and downlink burst profile change request header
- CQICH Allocation Request Header
- PHY channel report header
- Bandwidth request and uplink sleep control header
- SN report header
- Feedback header

A bit value of 0 indicates “not supported” while 1 indicates it is supported.

Type	Length	Value	Scope
MAC header and extended sub-header support	3	Bit #0:Bandwidth request and UL Tx power report header support Bit #1: Bandwidth request and UL Tx power report header Bit #21: Bandwidth request and downlink burst profile change request header support Bit #32: CQICH allocation request header support Bit #43: PHY channel report header support Bit #54: Bandwidth request nad uplink sleep control header support Bit #65: SN report header support Bit #76: Feedback header support <u>Bit #7-#10: SDU SN extended subheader support and parameter</u> Bit #7: SDU SN extended subheader support Bit #8-#10 (=p): period of SDU SN transmission for non-ARQ connection = once every 2 ^p MAC PDUs <u>Bit #11: DL sleep control extended subheader</u> <u>Bit #12: Feedback request extended sunheader</u> <u>Bit #13: MIMO mode feedback extended subheader</u> <u>Bit #14: UL Tx power report extended subheader</u> <u>Bit #15: Mini-feedback extended subheader</u> <u>Bit #16: SN request extended subheader</u> <u>Bit #17-#23: reserved</u>	REG-REQ/RSP

A bit value of 0 indicates “not supported” while 1 indicates it is supported.

[Modify the sentence in page 29, line 7 as the following]:

The support of Feedback header is OFDMA PHY specific and **shall be negotiated between the BS and the MS** is specified as part of the capability **registration** exchange dialog (REG-REQ/RSP)

[Insert the following before the Table 13b]

The support of each extended subheader shall be negotiated between the BS and the MS as part of the registration dialog (REG-REQ/RSP)

[Delete page 38, paragraph on lines 19-22]

[Modify page 37, paragraph on lines 57-61 as follows]

The SDU SN Extended subheader shall only be sent by the BS if SDU SN Extended subheader SN Feedback capability is supported (negotiated through REG-REQ/RSP) and if SDU_SN Feedback is enabled for a DL connection (negotiated through DSA-REQ/RSP). The SDU SN Extended subheader shall contain the last virtual MAC SDU sequence number of current MAC PDU. The format of the SDU SN Extended subheader is as described in Table 13c.

[Modify page 38, paragraph on lines 58-64 as follows]

Feedback Request Extended subheader shall be only sent by BS to allocate dedicated UL resource for obtaining the feedback value from an MS. For each PDU in the DL, the BS shall indicate presence or absence of such subheader in the extended subheader bit (ESF) ~~This field subheader shall only be used if the MS has successfully negotiated the support of Feedback request Extended Subheader with the BS through the capabilities exchange dialog (SBC-REQ/RSP).~~ The format of the Feedback request extended subheader is as described in Table 13e.

[Remove Section 11.7.8.13 SN Feedback support]

[Remove Section 11.7.17 MS feedback support]

[Modify page 48, lines 10-14 as follows]

~~If an MS supports UL transmit diversity, the REG-REQ may shall contain the following TLV:
MS Mode Selection Feedback~~ MAC header and extended subheader support (11.7.4726).

[Modify page 48, lines 57-59 as follows]

~~If an MS supports UL transmit diversity, the REG-REQ may shall contain the following TLV:
MS Mode Selection Feedback~~ MAC header and extended subheader support (11.7.4726).

[Modify page 190, lines 32 as follows]

... where p is specified in the MAC header and extended subheader support SN Feedback support TLV (11.7.8.9) (11.7.26).