	IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>
Title	**Comments on location information request and response messages**
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Re:	IEEE 802.16j-07/013: "Call for Technical Comments Regarding IEEE Project 802.16j"
Abstract	This contribution proposes the comments on location information request and response messages
Purpose	Discussion and Adoption in IEEE 802.16j
Notice	
Release	
Patent Policy and Procedures	

Comments on location information request and response messages

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Introduction

The purpose of this document is to comment subclause 6.3.2.3.65 location information request and response messages. In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the baseline working document IEEE 802.16j-06/026r3 are listed below.

Proposed Text Change

6.3.2.3.65 Location information request~~ing~~ and response messages

6.3.2.3.65.1 MR_LOC-REQ message

[change the following Table as indicated:]

Syntax	Size	Notes
MR_LOC-REQ_ Message_Format() {	-	-
Type = xx	8 bits	-
Report Mode	2 bits	0b00: Once 0b01: Periodic report 0b10~11: reserved
Neighbor Location Req Flag	1 bit	0b0: Location request of the receiving RS only 0b1: Request message contains location request for neighboring access stations
Reserved for future use	5 bits	Shall be zero
If(Report Mode = 0b01) {	-	Available when the value of Report Mode is set to 0b01.
Report period	16~~2~~ bits	Report period in units of frame, a value between 0 to 65535~~4095~~ corresponding to a range of 1 frame to 65536~~4096~~ frame.
}	-	-
If (Neighbor Location Req Flag != 0) {	-	If this message is transmitted by an RS to MR-BS
N_RS	8 bits	Number of neighboring stations for which the RS wants to know the location information.
For (j=0;j<N_RS; j++) {	-	-
RSID	48 bits	The 48 bit MAC address of the neighboring station (BS or RS) whose location is requested.~~.~~
}	-	-
}	-	-
~~padding~~	~~variable~~	~~Padding bits to ensure byte aligned.~~
TLV Encoded Message	variable	TLV Encoded Message
}	-	-

Table X1.MR_LOC-REQ message format

[Insert the following paragraph and figures at the end of subclause 6.3.2.3.65.1:]

The following TLV parameters can be included:

The following parameters may be included in MR_LOC-REQ message

Short-HMAC/CMAC Tuple (see 11.1.2)

The Short-HMAC/CMAC Tuple shall be the last attribute in the message.

The flow charts (Figure uuu, and Figure vvv) on the following pages defines MR_LOC-REQ process that shall be followed by compliant RSs and MR-BSs.

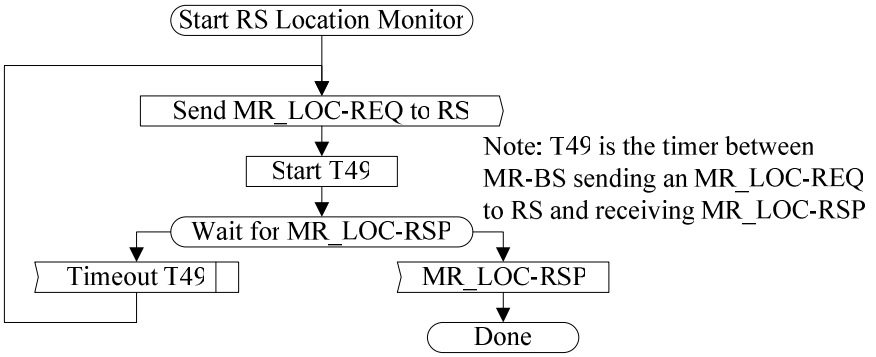

Figure uuu Relay location information request procedure – MR-BS

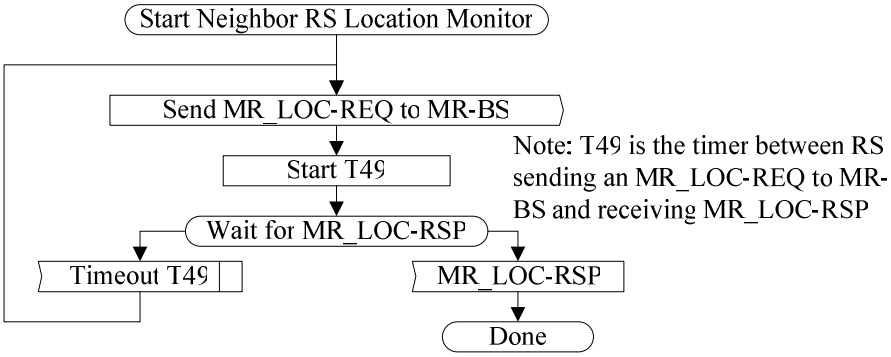

Figure vvv Relay location information request procedure – RS

6.3.2.3.65.2 MR_LOC-RSP message

[change the following Table as indicated:]

Syntax	Size	Notes
MR_LOC-RSP_ Message_Format(){	-	-
Type = xx	8 bits	-
Report Mode	2 bits	0b00: Once 0b01: Periodic report 0b10~11: reserved
Neighbor Location Req Flag	1 bit	0b0: Location request of the receiving RS only 0b1: Request message contains location request for neighboring access stations
Reserved for future use	5 bits	Shall be zero
If (Neighbor Location Req Flag == 0)) {	-	If this message is transmitted by an RS to MR-BS
LLA_IE()	64 bits	Specifies the location of relay station in LLA format defined in section 6.3.2.3.62.3.
} else {	-	If this message is transmitted by an MR-BS to RS
N_RS	8 bits	Number of stations whose location information is included in the current MR_LOC-RSP message.
For (j=0;j<N_RS;j++) {	-	-

RSID	48 bits	The 48 bit MAC address of the neighboring station (BS or RS)
LLA_IE()	64 bits	Specifies the location of neighbor access station in LLA ~~deviation~~ format defined in section 6.3.2.3.62.3.
}	-	-
}	-	-
~~Padding~~	~~variable~~	~~Padding bits to ensure byte aligned.~~
TLV Encoded Message	variable	TLV Encoded Message
}	-	-

Table X2:MR_LOC-RSP message format.

[Insert the following paragraph and figures at the end of subclause 6.3.2.3.65.2:]

The following TLV parameters can be included:

The following parameter shall be included in the MR_LOC-RSP when the BS wishes to acknowledge a valid Short-HMAC/CMAC Tuple in the acknowledged MR_LOC-REQ management message:

Short-HMAC/CMAC Tuple (see 11.1.2)

The Short-HMAC/CMAC Tuple shall be the last attribute in the message.

The flow charts (Figure xxx, and Figure yyy) on the following pages defines MR_LOC-RSP process that shall be followed by compliant RSs and MR-BSs.

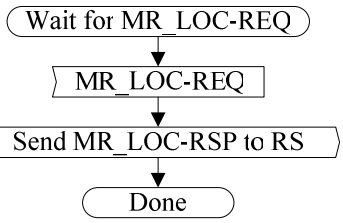

Figure xxx Relay location information response procedure – MR-BS

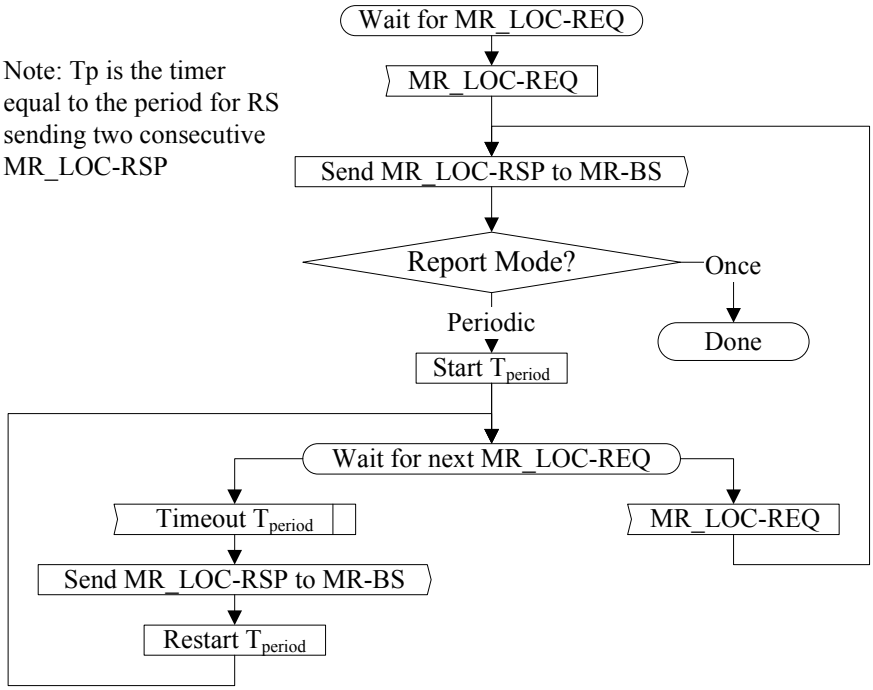

Figure yyy Relay location information response procedure – RS

[change the subclause as indicated:]

6.3.2.3.65.3 ~~LLA IE()~~Location information request and response IE format and sequence charts

10.1 Global values

[Insert the following rows into Table 342 at 10.1 Global Values:]

Table 342—Parameters and constants

System	Name	Time reference	Minimum value	Default value	Maximum value
MR-BS or RS	T49	The timer between MR-BS (or RS) sending an MR_LOC-REQ to RS (or MR-BS) and receiving MR_LOC-RSP	tbd	tbd	tbd
RS	T_{period}	The timer equal to the period for RS sending two consecutive MR_LOC-RSP	1 frame duration	N/A	65536 frame duration

11.1.2 Authentication Tuples

11.1.2.2 CMAC Tuple

[Change Table 348a as indicated:]

Table 348a—CMAC Tuple definition

Type	Length	Value	Scope
150	13 or 19	See Table 348b	DSx-REQ, DSx-RSP, DSx-ACK, REG-REQ, REG-RSP, RES-CMD, DREG-CMD, TFTP-CPLT, PKM-REQ, PKM-RSP, MOB_SLP-REQ, MOB_SLP-RSP, MOB_SCN-REQ, MOB_SCN-RSP, MOB_BSHO-REQ, MOB_MSHO-REQ, MOB_BSHO-RSP, MOB_HO-IND, DREG-REQ, MR_LOC-REQ, MR_LOC-RSP

11.1.2.3 Short-HMAC Tuple

[Change Table 348c as indicated:]

Table 348c—Short-HMAC Tuple definition

Type	Length	Value	Scope
151	variable	See Table 348d	MOB_SLP-REQ, MOB_SLP-RSP, MOB_SCN-REQ, MOB_SCN-RSP, MOB_MSHO-REQ, MOB_BSHO-RSP, MOB_HO-IND, RNG-REQ, RNG-RSP, PKM-REQ, PKM-RSP, MR_LOC-REQ, MR_LOC-RSP