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Title	Reporting CINR mean to Serving BS	
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Re:	This contribution is response to call for contribution about IEEE802.16e-D2	
Abstract	MSS shall report CINR mean to Serving BS using MSS-CINR-REP message	
Purpose	This document is submitted for review by 802.16e Working Group members	
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Reporting CINR mean to Serving BS

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1. Problem Statement

In the IEEE802.16e-D2, It is necessary for MSS to provide periodical reports to Serving BS about reception CINR mean of the neighbor BS. For this reason, MSS transmits CINR mean by MOB-BSHO-REQ message at a periodic interval that is in “MAHO report period” field of the MOB-NBR-ADV message.

Standard indicates on the line 38, page 21, “ by the MOB-BSHO-REQ message of active MSS’s”. However, MOB-BSHO-REQ message goes from Serving BS to MSS and CINR mean should come form MSS to Serving BS. Therefore, we conjecture that originally MOB-BSHO-REQ is intended for MOB-MSSHO-REQ message.

If this is the case, there is a big problem. The MOB-MSSHO-REQ message is transmitted by MSS only when MSS wants to initiate an HO. Since MSS uses MOB-MSSHO-REQ for an HO initialization, it doesn't make sense for MSS to transmit “ periodically”.

2. Proposed Remedy

Therefore, The MOB-MSSHO-REQ message can not be used for reporting periodically CINR mean to Serving BS. We propose a new MSS-CINR-Report message to report CINR mean periodically to Serving BS.

We propose the remedy as following :

- change sentence page 21, line 38, section 6.3.2.3.50
- Add a new section 6.3.2.3.51 for MSS-CINR-Report message after section 6.3.2.3.50 in page 21.

[Change the sentence page 21, line 38]

MAHO report period- Length of time interval (in multiples of 100msec) between reports of the neighbor BS's reception CINR mean, ~~by the MOB-BSHO-REQ message of active MSS's (not I sleep mode)~~ by MSS-CINR-Report message of MSS normal operation. All other parameters are coded as TLV values (see Table 282a). All TLV items are optional.

[Insert the following after section 6.3.2.3.50 in page 21]

6.4.2.3.51 CINR mean Report (MSS-CINR-Report) message

An MSS shall transmit a MSS-CINR-Report message to the Serving BS for the purpose of reporting measured CINR mean of neighbor BSs

Table NNN – MSS-CINR-REP Message Format

<u>Syntax</u>	<u>Size</u>	<u>Note</u>
<u>MSS-CINR-Report_Message_Format() {</u>		
<u> Management Message Type = TBD</u>	<u>8 bit</u>	
<u> For (j=0; j<N_NEIGHBORS; j++) {</u>		<u>N_NEIGHBORS can be derived from the know length of the message</u>
<u> Neighbor BS-ID</u>	<u>48bit</u>	
<u> BS CINR mean</u>	<u>8 bit</u>	
<u> }</u>		
<u>}</u>		

An MSS shall generate MSS-CINR-Report message in the format shown in Table nnn. The following parameters shall be included in the MSS-CINR-Report message :

Neighbor BS-ID

Same as the Base Station ID parameter in the DL-MAP message of Neighbor BS

BS CINR mean

This parameter indicates the signal to noise and interference ratio measured by the MSS from the particular BS. The value shall be interpreted as an unsigned byte with units of 1dB.