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Re:	IEEE P802.16e/D7.
Abstract	This presentation clarifies MBS-MAP message format.
Purpose	Review and adoption of the proposed text change into IEEE P802.16e/D7.
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Clarification of MBS-MAP message

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1. Problem Statements

1.1 Backward Reference of MBS Data Burst

When MBS data bursts are located by MBS_DATA_IE as specified in the current draft [1], backward reference by MBS-MAP can occur. This occurs when the start symbol of an MBS data burst precedes that of MBS_DATA_IE in the MBS-MAP message. We can prevent MBS_DATA_IE from pointing the MBS data burst backward if the last slot used for MBS-MAP message ends always before the first slot of MBS data bursts. We need to specify this condition in the current draft [1].

1.2 MBS Downlink Burst Profile Update Time

When a burst profile changes, it takes time for the MS to apply a new one after the new burst profile is informed. According to the current draft [1], there is no description when the new MBS Downlink Burst Profile shall be applied. We need to define MBS_Downlink_Burst_Profile_Update_Time.

2 Remedy

[Add the underlined sentence to line 32, page 119 of 6.3.2.3.56]

6.3.2.3.56 Multicast Broadcast Service Map (MBS-MAP) message

The BS may send an MBS-MAP message on an MBS portion to describe the MBS connections serviced by the MBS portion. When a MBS-MAP is sent, the connections need be described in the DL-MAP, but a MBS_MAP_IE() shall be substituted instead. When MBS-MAP is written in the MBS portion, the last slot used for MBS-MAP message shall end before the first slot of any MBS data burst starts.

[Change Table 108p, page 120 of 6.3.2.3.56 as follows:]

Table 108p – MBS-MAP

Syntax	Size (bits)	Notes
MBS-MAP Message Format (){	--	--
Management Message Type = 62	4	--
Frame number	4	The frame number is identical to the 4LSBs of the frame number in the DL-MAP.

MBS_~~DIUC~~Downlink_Burst_Profile_Change_Count	8	--
#MBS_DATA_IE	4	The number of included MBS_DATA_IE.
For (i=0; i<n; i++) {		n=#MBS_DATA_IE
MBS_DATA_IE ()	Variable	--
}		--
#MBS_DATA_Time_Diversity_IE	4	The number of included MBS_DATA_Time_Diversity_IE
For (i=0; i<m; i++) {		m=#MBS_DATA_Time_~~d~~Diversity_IE
MBS_DATA_Time_Diversity_IE ()	Variable	--
}		--
If (!byte boundary){		--
Padding Nibble	4	--
}	~~8~~	--
MBS Downlink Burst Profile Update Time	12	The MS shall apply the new MBS_Downlink_Burst_Profile in the number of frames specified in the field.
reserved	4	--
TLV encoding element		
}		--

Figure 1: MBS-MAP

[Change line 45~49, page 120 as follows:]

MBS ~~DIUC~~ Downlink Burst Profile Change Count

It is used to notify the Burst Profile used for Multi-BS-MBS data has been changed. If MBS_~~DIUC~~Downlink_Burst_Profile_Change_Count changes, the MBS-MAP shall include Downlink_Burst_Profile TLV and when it shall be applied. ~~MS should wait until receiving DCD message unless Downlink Burst Profile TLV is included in MBS_MAP message.~~

MBS Downlink Burst Profile Update Time

This field notifies when MS will apply the new MBS Downlink_Burst_Profile. The MS shall update its MBS Downlink Burst Profile as specified in the field. The unit of MBS Downlink Burst Profile Update Time is the number of frames.

3 References

[1] IEEE, IEEE P802.16e/D7, April 2005.