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Re:	IEEE-SA Sponsor Ballot: P802.16j/D6a	
Abstract	We clarify the usage of frame configuration TLVs in the RCD message.	
Purpose	Text proposal for 802.16j Draft Document.	
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Clarifications on Frame Configuration in 802.16j Networks

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Introduction

In 6.3.2.3.60, it is stated that:

"...The message can be sent over the relay zone in operation mode or in the access zone (unicast) during the neighborhood measurement phase (if neighbor measurement is required by the MR-BS) and during the configuration phase for providing relay link usage and configuration information in the network entry procedure. It is also used to inform subordinate RSs of any changes to the configuration of the relay link that may occur after the RS has entered the network."

In 11.24.5, it is mentioned that the frame configuration TLV informs the usage of frame structure to the subordinate relay stations. However, this information alone is not sufficient to perform such tasks as resource allocation in lower hops along the path for centralized scheduling, and interference management in distributed scheduling.

We need to clarify how the multiple frame configuration shall be interpreted by the subordinate RSs. We propose an additional frame configuration TLV that indicates frame usage of the receiver RS.

Spec changes

[Modify text from Line 3 of Page 283 as follows:]

This field is used by an MR-BS to inform the usage of the frame structure to all RSs.

The DL/UL subframe configuration TLVs with types 16/17 inform the usage of frame structure at the super-ordinate station. The DL/UL subframe configuration for destination TLVs with types 21/22 inform the usage of frame structure for the RS receiving the RCD message.

[Insert the following rows at the end of the table in Subclause 11.24.5]

<u>DL subframe configuration for destination</u>	<u>21</u>	<u>variable</u>	<u>Number of frame (8-bit unsigned)</u> <u>for(i = 0; i < Number of frame; i++){</u> <u> <u>Number of zones (unsigned 2-bit)</u></u> <u> <u>Reserved (6-bit unsigned)</u></u> <u> for(j = 0; j < Number of zones; j++){</u> <u> <u>Transceiver mode (unsigned 2-bit)</u></u> <u> <u>Zone mode (1 bit)</u></u> <u> <u>OFDMA Symbol Offset (unsigned 7-bit)</u></u> <u> <u>Frame Configuration Duration (unsigned 5-bit)</u></u> <u> <u>Zone Configuration indicator (unsigned 1-bit)</u></u> <u> If(Zone Configuration indicator == 1) {</u> <u> <u>Zone Configuration IE() (variable size in bytes)</u></u> <u> }</u> <u> }</u> <u>}</u>	<u>RCD</u>
<u>UL subframe configuration for destination</u>	<u>22</u>	<u>variable</u>	<u>Number of frame (8-bit unsigned)</u> <u>for(i = 0; i < Number of frame; i++){</u> <u> <u>Number of zones (unsigned 2-bit)</u></u> <u> <u>Reserved (6-bit unsigned)</u></u>	

			<pre> for(j = 0; j < Number of zones; j++){ <u>Transceiver mode (unsigned 2-bit)</u> <u>Zone mode (1 bit)</u> <u>OFDMA Symbol Offset (unsigned 7-bit)</u> <u>Frame Configuration Duration (unsigned 5-bit)</u> <u>Zone Configuration indicator (unsigned 1-bit)</u> <u>If(Zone Configuration indicator == 1) {</u> <u>Zone Configuration IE() (variable size in bytes)</u> } ↓ ↓ ↓ </pre>	
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