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Re:	In response to the call for comments and contributions on the IEEE 802.16j baseline draft (802.16j-06/26r4).	
Abstract	[Description of document contents.]	
Purpose	Discussion and Adoption in the IEEE 802.16j baseline draft	
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Prescribing the timing for MAC PDU transmission

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Introduction to the problem

In the current TGj baseline draft (802.16j-06/26r4) the following shortcomings can be observed in the case of centralized scheduling:

(1) The BS does not tell the RS exactly when it should transmit the MAC PDUs.
(2) The specification does not prescribe how the RS should relate the bursts to the MAP.
(3) The specification does not provide mechanisms to the RS for handling the situation when the MAP and the related data bursts arrive asynchronously.

Suggested Remedy

The foregoing problems can be overcome by letting the BS specifically prescribe the time when the RS should transmit the MAC PDUs. In 802.16 j, the simplest way to include timing information is by means of Frame Number, i.e. when sending a relay MAC PDU to the RS, the BS can instruct the RS in which frame the MPDU should be transmitted.

Efficiency can be obtained by prescribing only the last 4 LSBs of the frame number.

Proposed Text

Modify Table 7a – Relay MAC PDU Header on page 7, as follows:

Table 7a – Relay MAC PDU header

Syntax	Size	Notes
Relay MAC header(){		
HT	1bit	
If(HT==0){		
Reserved	1bit	
RMI	1bit	Relay mode indication is used to indicate whether this MAC header is GMH or Relay MAC header RMI=0; use GMH RMI=1; use Relay MAC header
Frame number	4 LSBs	Frame number inserted by the MR-BS to indicate to the RS when the associated MPDU should be transmitted. In the UL, the frame number shall be ignored by the receiver.
Reserved	3 bits	Currently reserved. Content is subject to further discussion
Priority	3bits	Priority of the associated tunneled MPDU
LEN	11bits	
CID	16bits	May be tunnel CID or basic CID of the RS
HCS	8bits	Header check sequence
}		
Else{		
Use legacy 802.16e or 802,16j format	39bits	
HCS	8bits	
}		
}		

Modify Figure 22a as shown below:

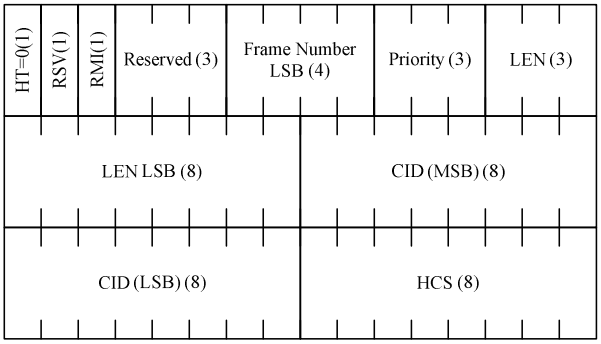

Figure 22a: Header format of relay MAC PDU with payload

Insert the following text at the end of section 6.3.3.8 (on page 66 of the current draft).

In case of centralized scheduling, the MR-BS uses the frame number to instruct the RS exactly when it should relay the payload contained in the MAC PDU with the relay MAC header. The MR-BS uses 4 LSBs of the frame number to specify the frame in which the payload must be forwarded.