

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >		
Title	Clarifications of some Coexistence Protocol messages		
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Re:	IEEE 802.16h-06/015 – Working Group Review		
Abstract	Proposes a more logical structure which will allow better understanding of the existing mechanisms		
Purpose			
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as RBS, is given the possibility for 20 radio signatures, which may differ due to Beam Forming or power concentration on specific sub-channels. The various RBS signatures are identified by the configuration number. The various SS signatures are identified by the RSS number, which runs from 1 to 199. The message is indicating the MAC Frame number, the offset from its start and the duration of the requested Radio Signature time-slot. A number of radio signatures may be concatenated, such that will be respected the total time-slot duration, including the propagation delays. It is recommended that this duration will be lower than 1ms. The time-slot shall use the DL sub-frame for BS signatures and UL sub-frame for SS signatures. The Radio Signature shall use the max. power used during the operation.

Code: 19

Parameters: t.b.e. The attributes are indicated in the table hx.

Table hx - Evaluate_Interference_Request Parameter set

<u>Attribute</u>	<u>Contents</u>
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—
—	—

15.5.2.20 Evaluate_Interference_Reply message

A message sent by the existing Master BSs, reply to the Evaluate_Interference_Request. It provides the timing and the identification of the scheduled radio signatures.

Code:20

The attributes are indicated in the table hy.

Table hy - Evaluate_Interference_Replay Parameter set

<u>Attribute</u>	<u>Contents</u>
—	—
—	—
—	—

<u> </u>	<u> </u>
<u> </u>	<u> </u>

Parameters: t.b.e.

15.5.2.21 Work_In_Paralel_Request message

A message sent by a new BS wishing to use an existing Master sub-frame, to ~~the a~~ BS already acting as Masters in the specific sub-frame, and requesting ~~them to evaluate its interference the existing BS to evaluate its interference.~~

If more than one Base Station is using the sub-frame as Master, the IBS will send this message to every BS separately.

The Radio Signature will be transmitted during the claimed Master sub-frame and will consist of a DL sub-frame, starting with the first zone using the mandatory permutation (if applicable) and continuing with other used zones and their permutations. Each zone will be transmitted using the maximum power.

Code: 21

Parameters: t.b.e.

The attributes are indicated in the table hz.

Table hz - Work_In_Paralel_Request Parameter set

<u>Attribute</u>	<u>Contents</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

Work_In_Parallel

15.5.2.22 Work_In_Parallel_Reply message

A message sent by the existing Master BSs, reply to the Evaluate_Interference_Request.

Code:22

Parameters: t.b.e.

The attributes are indicated in the table ht.

Table ht - Work_In_Parallel_Reply Parameter set

<u>Attribute</u>	<u>Contents</u>
<u>Receive antenna type (1 – omni, 2 – directional)</u>	1:=Acceptance 2 = Rejection

15.5.2.23 Reduce_Power_or_Quit_Sub_Frame_Request message

A message sent by an ~~old~~operating Base Station, using the sub-frame as Master, in order to request the newer Base Station to cease the operation as Master or Slave in the current sub-frame. Supplementary, the message may indicate the power reduction for accepting the Base Station to use the sub-frame as Slave.

Code:23

~~Parameters: tbc.~~

The attributes are indicated in the table hu.

Table hu - Reduce_Power_or_Quit_Sub_Frame_Request Parameter set

<u>Attribute</u>	<u>Contents</u>

15.5.2.24 Reduce_Power_or_Quit_Sub_Frame_Reply message

A message sent by an new Base Station, in response to the old Base Station’s Quit_Sub_Frame_Request message. The message indicates the actual power reduction for the requested signatures.

Code:24

~~Parameters: tbc.~~

The attributes are indicated in the table hu.

Table hu - Reduce_Power_or_Quit_Sub_Frame_Replay Parameter set

<u>Attribute</u>	<u>Contents</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>

15.5.2.25 Create_New_Sub_Frame_Request message

A message sent by a BSs to all the community BSs, to request the creation of a new Master sub-frame; the message will include: interfering BSIDs the intended operating channel and the frame-number in which the change will take place

Code:25

Parameters: ~~tbc.~~

The attributes are indicated in the table hv.

Table hv - Create_New_Sub_Frame_Request Parameter set

<u>Attribute</u>	<u>Contents</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>
<u>Repetition interval between two Master sub-frames, measured in MAC-frames</u>	<u>The repetition interval between two Master sub-frames</u>
<u>MAC Frame number</u>	<u>---</u>

15.5.2.26 Create_New_Sub_Frame_Request-Replay message

A message sent in response to the Create_New_Sub_Frame_Request message. In case of reject

Code:26

Parameters: ~~tbc.~~

The attributes are indicated in the table hr.

Table hr - Create_New_Sub_Frame_Replay Parameter set

<u>Attribute</u>	<u>Contents</u>
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Note: the following 4 messages are redundant – shall be deleted also from table h9

15.5.2.27 Reduce_Power_Request message

A message between a BS and an interfering BS requesting to reduce the power of the specified transmitter (identified by frame_number, sub-frame, time-shift) by P dB

Code: 27

Parameters: tbc.

15.5.2.28 Reduce_Power_Reply message

A message by an interfering BS in response to the Reduce_Power_Reply message.

Code: 28

Parameters: tbc.

15.5.2.29 Stop_Operating_Request message

A message sent by a Master BS to the BSs operating in its Master sub-frame, but not being Masters for this sub-frame, requesting to cease using this sub-frame in parallel

Code: 29

Parameters: tbc.

15.5.2.30 Stop_Operating_Reply message

A message sent by the BSs operating in its Master sub-frame, in response to the Stop_Operating_Request message.

Code: 30

Parameters: tbc.