Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	CIS, community and power levels for non-interfering transmissions
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Re:	Call for Contributions, IEEE 802.16h Task Group on License-Exempt Coexistence, IEEE 802.16h-05/014
Abstract	Corrections / improvements to the Working Document
Purpose	
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CIS, community and power levels for non-interfering transmissions

Mariana Goldhamer

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Coexistence Identification Server

Discussion:

The problem is the naming of the server. The coexistence should be created, and not "identified". However, this Server is maintaining and providing the info relative to GPS coordinates of the Base Stations and their operators, together with the IP address to be used by the Coexistence Protocol.

Proposal: Replace "Coexistence Identification Server" with "Deployment Identification Server".

Power levels for sub-frames dedicated to non-interfering traffic

Discussion:
No radio signature has been defined for systems using a sub-frame dedicated to "non-interfering traffic". In typical situations the non-interfering links are representing the highest percentage of links, and sending the radio signature may become a serious overload for the system. However, the Base Station data-base and appropriate messages can resolve the interferer identification problem.
The radio signature for different transmitters is sent during Master sub-frames and can be measured by different receivers. The Base Station data base shall keep the following information regarding the usage of "non-interfering sub-frame" or Master sub-frames belonging to other systems:
-    BS power, relative to the radio signature, when using each of the sub-frames;
-    List of SSs and their power, relative to the radio signature, when using each of the sub-frames.
The received power during other sub-frames can be calculated based on the radio signature measurement and suitable calculations, according to data-base information.

Proposal

Insert at …
The Base Station data base shall keep the following information regarding the usage of "non-interfering sub-frame" or Master sub-frames belonging to other systems:
-    BS power, relative to the radio signature, when using each of the sub-frames;
-    List of SSs and their power, relative to the radio signature, when using each of the sub-frames.
The received power during other sub-frames can be obtained by using the radio signature measurement and suitable calculations, according to data-base information on used powers. Messages as Stop_Operating_Request and Reduce_Power_Request can be used for controlling the interference levels.

Community definition

Discussion
Community definition should be based on the idea of interference between a cell and the adjacent cells. Taking into account that in reality the cells are not circular, their coverage depending on propagation loss, shadowing and outdoor-to-indor penetration loss, the figure named "Figure 10 802.16 LE Neighbor BSs discovery and definition of neighbor and community" should be modified, to remove the elements which describe a perfect circle.