

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Radio Resources Sharing Opportunities Advertisement Discovery	
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Re:	IEEE 802.16h-06/011 – Working Group Review	
Abstract	This contribution proposes fast, reliable and secure over the air advertisement discovery mechanisms in support of the credit tokens based BS-BS rental protocol. Advertisement discovery information between master and slave BSs (and conversely) is conveyed by SSs acting as RF bridges. New text is proposed to be included in the IEEE 802.16h working document.	
Purpose	This contribution proposes over the air advertisement discovery mechanisms in support of the credit tokens based BS-BS rental protocol.	
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Radio Resources Sharing Opportunities Advertisement Discovery

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Overview

Dynamic cooperative radio resources sharing mechanisms between BSs have been proposed [1] and included within the section 15.7.2.2.6 of the IEEE 802.16h working document [2]. The sharing is enabled by a credit tokens based negotiation protocol. This mechanism requires signaling messages between BSs during the different phases of the negotiation cycle between the master and slave BSs. All the signaling messages between the master/slave BSs can already be exchanged with IP-based wired communications via the server and local databases proposed in [2]. Over the air signaling for the first phase of the negotiation cycle would be also of great support to facilitate critical time radio resources sharing opportunities discovery between IEEE 802.16h systems themselves, but also between IEEE 802.16h systems and non IEEE 802.16h systems. This contribution proposes over the air signaling discovery procedures so that the slave BSs are aware of master cells' offers and the slave cells can inform the master cells that they are looking for temporally some additional radio resources. The inter BS signalling messages are conveyed by the SSs that act as RF bridges between the different BSs. The text of this new contribution is intended for being added in a new section (15.7.2.2.6.5) of the IEEE 802.16h draft document [2].

Text proposal for section 15.7.2.2.6.5

Add the text below to a new section (15.7.2.2.6.5).

Detail is TBD

References

- [1] IEEE C802.16h-05/036r1 - Proposal for enhanced credit tokens based co-existence resolution and negotiation protocol, 2005-07-11
- [2] IEEE 802.16h-06/010: Part 16: Air Interface for Fixed Broadband Wireless Access Systems Amendment for Improved Coexistence Mechanisms for License-Exempt Operation, Working document; 2006-03-29