

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Consideration on BS-BS Communication over the Air for Dynamic Resource Sharing	
Date Submitted	2006-02-28	
Source(s)	David Grandblaise Motorola Labs Parc Les Algorithmes Commune de Saint Aubin 91193 Gif sur Yvette, France	Voice: +33 (0)1 6935 2582 Fax: +33 (0)1 6935 4801 mailto: david.grandblaise@motorola.com
Re:	Call for Contributions, IEEE 802.16h Task Group on License-Exempt Coexistence, IEEE 802.16h-06/004	
Abstract	This contribution suggests basis for OFDMA frame structure in support of BS-BS communication over the air for dynamic resource sharing.	
Purpose		
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures < http://ieee802.org/16/ipr/patents/policy.html >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < mailto:chair@wirelessman.org > as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site < http://ieee802.org/16/ipr/patents/notices >.	

Consideration on BS-BS Communication over the Air for Dynamic Resources Sharing

David Grandblaise
Motorola

1 Overview

Dynamic cooperative resource 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. The implementation of this mechanism requires communication messages between BSs during the different phases of the negotiation. These messages can already be exchanged with IP-based wired communications via the server and local databases. Also, as a second option, these BS-BS communications can be considered over the air. Purpose of this contribution is to propose basis for the OFDMA frame structure to support these BS-BS communications over the air. The text of this new contribution is intended for inclusion in a new subsection within the section 15.7.2.2.6.4 of the IEEE 802.16h draft document [2].

2 Specific editorial changes

This section provides a list of changes to the draft document.

Blue text represents specific editorial additions.

~~Red strikethrough~~-text is to be deleted.

Black text is text already in the draft.

Bold italic text is editorial instructions to the editor.

Detail is TBD

3 References

[2] IEEE C802.16h-05/036r1 - Proposal for enhanced credit tokens based co-existence resolution and negotiation protocol, 2005-07-11

[1] IEEE 802.16h-06/004: Part 16: Air Interface for Fixed Broadband Wireless Access Systems Amendment for Improved Coexistence Mechanisms for License-Exempt Operation, Working document; 2006-01-24