Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >
Title	New Additions in BS and SS information table in IEEE 802.16h Networks
Date Submitted	2006-02-28
Source(s)	John Sydor, Shanzeng GuoVoice:(613) 998-2388Communication Research CenterFax:(613) 998-40773701 Carling Ave{jsydor, sguo}@crc.caOttawa, ON, Canada, K8H 8S2
Re:	Call for Comments and Contribution, "IEEE 802.16's License-Exempt (LE) Task Group", 2006-02 Item 8.
Abstract	This document specifies new additions in BS and SS information table to the draft IEEE802.16h. The sections and paragraphs given below refer to those of the subject working draft document IEEE802.16h-06/004.
Purpose	This document specifies new additions in BS and SS information table to the draft IEEE802.16h working document dealing with the use of CTS in a synchronized network environment.
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/.</mailto:chair@wirelessman.org>

New Additions in BS and SS information table in IEEE 802.16h Networks

John Sydor, Shanzeng Guo Communication Research Centre, Ottawa, Canada

15.2.2.4 Information table in share database

The following tables are the update of section 15.2.2.4. The following table h3 should replace the existing table h3 in section 15.2.2.4. The changes and new additions are highlighted in the table.

Syntax	Size	Notes
	(bits)	
BS_information_table () {		
Index	16 bits	
BSID	48 bits	This base station ID
Operator ID	?	
IP address	32 bits	IPv4 address
Sector ID	8 bits	
Master resource ID	8 bits	Sub-frame number
Negotiation status	8 bits	Bit0: get communication in the IP network Bit1: be registered in Bit2: register to Bit3: done for resource sharing (if coexistence neighboring) Bit4-7: tbc
Coexistence neighboring	1 bit	Coexistence neighbor with this BS ? 1 – yes 0 – no
BS GPS coordinates		
BS nominal EIRP		
BS antenna azimuth		
BS antenna beamwidth		
If (coexistence neighbor) {		

Table h3 BS information table

Number of victim SSs	16 bits	N: The number of victim SSs of this coexistence neighbor in this network
For (I=1; I<=n; I++) {		
SSID	48bits	
RSSI	16bits	1 byte RSSI mean
		1 byte RSSI standard deviation
}		
Tbc		
}		
Number of coexistence neighbors	8bits	M: the number of coexistence neighbors of this BS
For (I=1;I<=m;I++) {		
BSID	48bits	
Tbc		
}		
Profile () {		
Band		
Phy mode() {		
Modulation		
Tbc		
}		
Maximum power		
Number of registered SS		
Tbc		
}		
Tbc		
}		
If (CTS frame used) {		
Number of coexistence neighbors		
For (i=0; i<=n; i++) {		All Co-existing neighbor BS information. These BSs are all also referred as foreign base station.
Foreign BSID		
Foreign BS IP address		
Foreign BS CTS-ID		
Number of foreign SSs causing		
Co-channel interfering		
For (j=0; j<=m; j++) {		All SSs associated with this foreign BS, which causing co-channel interference

Interfering SSID	Foreign SS that causes interference to this BS
CTS Interfering occurrence	
RSSI of interfering SS	
SS interference resolved	
}	
}	
}	
}	

The following new table h4 shall replace the existing table h4 in section 15.2.2.4. The changes and new additions are highlighted in the table.

Table h4 - SS information Table					
Syntax	Size	Notes			
	(bits)				
SS information table () {					
Index					
SSID					
SS location					
SS GPS location					
SS antenna beam width					
SS nominal uplink EIRP					
PSD vector					
Interface status	1	Interfered by coexistence neighbor ?			
		1 - yes			
		0 – no			
If (interfered) {					
Number of source BSs	8				
For (I=1; I<=n; I++){					
BSID	48				
IBS_IPBC deleted	1	1- yes; 0 – no			
If (IBS_IPBC deleted) {					
IP address	32	If the IBS_IPBC message detected, the IP address report			
		by the SS will add here, and update the bit above			
Sector ID		Reported by SS			

Frame number	24	Reported by SS
Error Status		0 - no error
		1 - not capable to decode the energe pluuse symbol
		2 - not able to find the eligible <sof></sof>
		3 - not able to find the eligible <eof></eof>
		4 – not able to pass the CRC chech for message
(tbc.)		
}		
RSSI	16	1 byte for RSSI mean
		1 byte for standard deviation
(tbc.)		
}		
(tbc.)		
}		
If (CTS frame used) {		
Home BS ID		
Home BS RSSI		
Home BS BER		
Number of foreign BSs		
For (I=0; I <=n; I++) {		
Foreign BS ID		
Foreign BS EIRP		
Foreign BS antenna sector ID		
Foreign BS IP address		
Downlink BER		
CCI frequency		
CCI resolution		
CTS-ID		
}		
}		

This document was created with Win2PDF available at http://www.daneprairie.com. The unregistered version of Win2PDF is for evaluation or non-commercial use only.