

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Attributes of co-existence zone	
Date Submitted	2006-09-18	
Source(s)	Soma Bandyopadhyay TATA Consultancy Services Limited M2 & N2, Sector V, Block GP, Salt Lake Electronics Complex Kolkata - 700091, West Bengal India	Voice: 091-33-2333-7417 soma.bandyopadhyay@tcs.com
Re:	Call for Comments and Contribution, "IEEE 802.16's License-Exempt (LE) Task Group – Action item (AI-1004) was decided in July, 2006 conference (Conf number #44)	
Abstract	This document contains the attributes of the co-existence zone	
Purpose	To provide ideas on the attributes of the co-existence zone	
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 >.	

Following table denotes the attributes of CXZ for **downlink path - These attributes can be considered as part of downlink information element (DL_MAP_IE)**

Syntax	Size	Notes	Phy-Scope
Extended DIUC	4 bits	Val = 0x0A	OFDM/OFDMA
Length	4bits	Val =0x07(Since CSI start and CMI start are mutually exclusive)	
DIUC	4 bits		OFDM – Denotes the modulation type used in the co-existence zone
Duration	12 bits	Duration of co-existence zone in OFDM symbol (Inclusive preamble present). N.B: Since the co-existence zone needs to be the part of DL_MAP, star time will be available from the start-time field of DLMAP	OFDM
Canter frequency (DL)	8 bits	Operating frequency of the co-existence zone	FDD duplexing
Next CMI start time	8 bits	Start time of the next CMI	Neighbour having same PHY and profile
Frame number	16 bits	Where this co-existence zone will be going to belong	All
Next CSI start time	8 bits	Gives the location of the next CSI cycles start	N.B Neighbour having different PHY and profile
Synchronous clock	8 bits	A time stamp, may be used by BS	Neighbour having same PHY and profile,

Following table denotes the attributes of CXZ for **uplink path** – **These attributes can be considered as part of uplink information element (UL_MAP_IE)**

Syntax	Size	Notes	Phy-Scope
Extended UIUC	4 bits	Val = 0x04. Denotes co-existence	OFDM/OFDMA
Length	4bits	Val =0x06	
UIUC	4 bits	Type of uplink access and the burst profile needs to be used by a service station in co-existence zone	All
Duration	12 bits	Duration of uplink grant-in co-existence zone in OFDM symbol (Inclusive preamble present).	All
Start time	16 bits	Indicates the start time of the co-existence zone in units of symbol duration	All
Frame number	16 bits	Where this co-existence zone will be going to belong	All