Project	IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>
Title	Attributes of co-existence zone
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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**
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Attributes of the Coexistence Zone

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Introduction

IEEE, 802.16 July 2006 meeting an action item was decided to define the co-existence zone attributes

This contribution is to define basically the new attributes of the co-existence zone .

Following table denotes the attributes of CXZ for **downlink path - These attributes can be considered as part of downlink information element (DL_MAP_IE)**
The following table defines the co existence zone attributes for both OFDM and OFDMA. For OFDMA some of the attributes are already existing (defined in the table 286aa— CXZ downlink IE of the IEEE P802.16h/D0 August 2006).

CXZ for **downlink path**

Syntax	Size	Notes	Phy-Scope
Extended DIUC	4 bits	Val = 0x09	OFDM/OFDMA
Length	4bits	Val =0x08(Since CSI start and CMI start are mutually exclusive)	
CXZ type	8bits	Type of cxz zone (control channel, common, master or slave sub-frame etc)	All
DIUC	4 bits		OFDM/ OFDMA – 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:	OFDM

		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	
CXZ duration	12 bits	Denotes the duration of the zone	OFDMA
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	OFDM/OFDMA. Neighbour having same PHY and profile
OFDMA symbol offset	8 bits	Denotes the start of the zone (counting from the frame preamble and starting from 0).	OFDMA
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
Next CXZ start	12 bits	The time interval, in symbols, until the start of the next downlink CXZ.	OFDMA
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 = 0x0F. Denotes co-existence	OFDM/OFDMA
Length	4bits	Val =0x07	
UIUC	4 bits	Type of uplink access and the burst profile needs to be used by a service station in co-existence zone	All
CXZ type	8bits	Type of cxz zone (control channel, common, master or slave sub-frame etc)	All
Duration or CXZ duration in case of OFDMA	12 bits	Duration of uplink grant-in co-existence zone in OFDM symbol (Inclusive preamble present).	All
CXZ zone length offset	8 bits	The length of the uplink CXZ zone.	OFDMA
Next CXZ start	12 bits	The time interval, in symbols, until the start of the next uplink CXZ.	OFDMA
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-	All

		existence zone will be going to belong	