

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Mandatory Features for Wireless MAN-CX Systems	
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Re:	Changes to Draft Standard	
Abstract	List of Mandatory Features for Wireless MAN-CX	
Purpose	Initiate discussion of Mandatory Features for Wireless MAN-CX	
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Mandatory Features for Wireless MAN-CX Systems

By

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Introduction

It is necessary to stipulate a number of mandatory features that will provide Wireless MAN-CX systems with a basic functionality. Mandatory Requirements will embody features that can be improved and varied to meet specific operational requirements.

This document is meant to initialize the discussion on Mandatory Features in Session 46.

Proposal

It is proposed that a table be constructed for inclusion of the Draft Standard which would form the basis of a set of Mandatory Requirements for WirelessMAN-CX systems. This table would reference relevant sections in the Draft Standard, which would provide additional information on the Mandatory Requirements.

Proposed Text Changes to Draft Standard

Bold italic text is editorial instruction to the editor

Insert the following as an Annex to the Draft Standard

Mandatory Function and/or Capability	Relevance	Applicable Section of Draft Standard
Universally synchronized timing recovery by Base Stations.		
Each base station to be capable of undertaking synchronization to the CX_CC (coexistence control channel)		
Universal Time stamping with 1 millisecond granularity.		
Support of CMI claiming & operation.; including fixed parameters related to UL-MAP, DL_MAP, UCD, DCD, Cyclic Prefix etc.		
BS_CCID_IND; BS_CCID_RSP; SSURF and BSD, SS_CCID_IND and SS_CCID_RSP Messaging.		
Each BS to be capable of having a Base Station Interference Table.		
Each SS to be capable of having a Subscriber Station Interference Table.		
Set profile for 2.4, 3.65, 4.9, and 5.7 GHz operation with stipulation of channel bandwidths, frame durations, etc .		
10 msec frame durations		
Type 2 Sub Frame Structure with DL:UL at 60:40		

partitioning.		
Mandatory support of 3 co-channel systems with a predetermined (but variable for future changes) partitioning of Common to Master/Slave intervals at a ratio of 4:1		
Each BS must be able to undertake Channel Search to determine channels with lowest activity using No and Io determination as outlined in Draft Standard.		
Each BS to be capable of undertaking PSD (or equivalent) and passing the information as part of the SS and BS Interference Tables.		
IEEE 802.16d-2004 Registration opportunities relegated to Master Frame Intervals only.		
Support of MADD and ADPD messaging to initially support renting of Slave interval Blocks, not fractions of blocks.		