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Title	**Missing Attributes in the Interface MIBs**	
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Source(s)	George Khoury, Erik Colban Nextwave Broadband Inc. 12670 High Bluff Dr. San Diego, CA 92130	Voice: +1 858 480 3200 Fax: [Fax Number] mailto: ecolban@nextwave.com mailto: gkhoury@nextwave.com
Re:	This contribution is in response of the call for contributions in 802.16i-06/012.	
Abstract	This contribution lists a set of attributes that are currently missing in the MIBS in the 802.16i baseline document and suggestions where to add these attributes. A previous version of this contribution has been submitted to 802.16 WG, Netman TG, on an earlier occasion. However,	
Purpose	Discuss and adopt.	
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Missing Attributes in the Interface MIBs

George Khoury, Erik Colban
Nextwave Broadband Inc.

Introduction

This contribution lists a set of attributes that are currently missing in the MIBs in the 802.16i baseline document and suggestions where to add these attributes. A previous version of this contribution has been submitted to 802.16 WG, Netman TG, on an earlier occasion. Time did not allow for an open discussion, but comments were received as annotations by one of the TG's members.

The authors have updated the contribution based on the comments received.

1. Missing attributes/items:

Name	**Unit**	**802.16e Section**	**Proposal**
NSP ID List		N/A	WmanIf2BsOfdmaDownlinkChannelEntry
Max Map Pending		Table 342	WmanIf2BsConfigurationEntry
Number of downlink transport CIDs supported	int	11.7.6.2	WmanIf2BsCapabilitiesConfigEntry
Maximum amount of MAC level data per DL frame	256-byte block	11.7.8.10.1	WmanIf2BsCapabilitiesConfigEntry
Maximum amount of MAC level data per UL frame	256-byte block	11.7.8.10.2	WmanIf2BsCapabilitiesConfigEntry
MAC Extended rtPS support	boolean	11.7.8.12	WmanIf2BsCapabilitiesConfigEntry
MAC header and extended subheader support	bit mask	11.7.25	WmanIf2BsCapabilitiesConfigEntry
OFDMA SS permutation support	bit mask	11.8.3.7.4	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA SS demodulator for MIMO support	bit mask	11.8.3.7.5	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA SS MIMO uplink support	bit mask	11.8.3.7.6	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA AAS private map support	bit mask	11.8.3.7.7	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA AAS capabilities	bit mask	11.8.3.7.8	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA SS CINR measurement capability	bit mask	11.8.3.7.9	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA SS uplink power control support	bit mask	11.8.3.7.11	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA MAP Capability	bit	11.8.3.7.12	WmanIf2BsOfdmaCapabilitiesConfigEntry

	mask		
Uplink control channel support	bit mask	11.8.3.7.13	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA MS CSIT capability	bit mask	11.8.3.7.14	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA SS Modulator for MIMO Support	bit mask	11.8.3.7.16	WmanIf2BsOfdmaCapabilitiesConfigEntry
OFDMA Multiple Downlink Burst Profile Capability	boolean	11.8.3.7.18	WmanIf2BsOfdmaCapabilitiesConfigEntry
Initial Ranging Backoff Start	8 bits	6.3.2.3.3 Table 17	WmanIf2BsOfdmUplinkChannelEntry, WmanIf2BsOfdmaUplinkChannelEntry
Initial Ranging Backoff End	8 bits	6.3.2.3.3 Table 17	WmanIf2BsOfdmUplinkChannelEntry, WmanIf2BsOfdmaUplinkChannelEntry
Request Backoff Start	8 bits	6.3.2.3.3 Table 17	WmanIf2BsOfdmUplinkChannelEntry, WmanIf2BsOfdmaUplinkChannelEntry
Request Backoff End	8 bits	6.3.2.3.3 Table 17	WmanIf2BsOfdmUplinkChannelEntry, WmanIf2BsOfdmaUplinkChannelEntry
UL AMC Allocated physical bands bitmap	6 bits	11.3.1 Table 353	WmanIf2BsOfdmaUplinkChannelEntry
Band AMC Entry Average CINR	byte	11.3.1 Table 353	WmanIf2BsOfdmaUplinkChannelEntry
Maximum retransmission	byte	11.3.1 Table 353	WmanIf2BsOfdmaUplinkChannelEntry
Normalized C/N override 2	int	11.3.1 Table 353	Add WmanIf2BsOfdmaNorCOverNOverride2 in WmanIf2BsOfdmaUcdBurstProfileEntry
UpperBoundAAS_PREAMBLE	int	11.3.1 Table 353	WmanIf2BsConfigurationEntry
LowerBoundAAS_PREAMBLE	int	11.3.1 Table 353	WmanIf2BsConfigurationEntry
Allow AAS Beam Select Messages	boolean	11.3.1 Table 353	WmanIf2BsConfigurationEntry
Use CQICH indication flag	byte	11.3.1 Table 353	WmanIf2BsOfdmaUplinkChannelEntry
Normalized C/N for Channel Sounding	byte	11.3.1 Table 353	WmanIf2BsOfdmaUcdBurstProfileEntry
Permutation type for broadcast region in HARQ zone	byte	11.4.1 Table 358	WmanIf2BsOfdmaDcdBurstProfileEntry
Maximum retransmission	byte	11.4.1 Table 358	WmanIf2BsOfdmaDcdBurstProfileEntry
Default RSSI and CINR averaging parameter	byte	11.4.1 Table 358	WmanIf2BsOfdmaDcdBurstProfileEntry

DL AMC allocated physical bands bitmap	int	11.4.1 Table 358	WmanIf2BsOfdmaDcdBurstProfileEntry
ASR(Anchor Switch Report) Slot Length (M) and Switching Period (L)	byte	11.4.1 Table 358	WmanIf2BsOfdmaDcdBurstProfileEntry

2. Typos/Spelling/Inconsistencies:
- The "wman2DevCommonObjects" and "wman2DevCmnEventLog" element names are inconsistent. Suggest to use Cmn as the keyword for common attributes across the MIB. Similar comments for "WmanIf2CommonObjects" and other element in the interface MIB.
- The "WmanIf2BsOfdmaCQICHBandAMCTranaDelay" element should be named "WmanIf2BsOfdmaCQICHBandAMCTransDelay".
- The "WmanIf2BsOfdmaHARQAackDelayBurst" element should be named "WmanIf2BsOfdmaHARQAckDelayBurst".
- The "WmanIf2BsOfdmaHARQAackDelayUlBurst" element should be named "WmanIf2BsOfdmaHARQAckDelayULBurst".

- The REFERENCE attribute of the "WmanIf2NumOfUplinkCid" element points to Subclause 11.7.4. It should point to Subclause 11.7.6.1 instead.

3. Handover:

There are attributes proposed to be introduced for handover support in Annex F of 802.16i. However, some attributes defined in 802.16e and required for handover support are not included. They are the following:
- Handoff Ranging Start (Table 349)
- Handoff Ranging End (Table 349)
- Number of Handover Ranging Codes (Table 353)
- Handover H_Add Threshold (Table 358)
- Handover H_Delete Threshold (Table 358)
- Handover Hysteresis Margin (Table 358)
- Handover time-to-trigger Duration (Table 358)

4. Power Control:

The following attributes are defined in Table 20 of 802.16i, but are not defined in the MIB:
- msUpPowerAdjStep
- msDnPowerAdjStep
- minPowerAdjLever (should be minPowerAdjLevel)
- maxPowerAdjLever (should be maxPowerAdjLevel)
- txPwrRepThresholdCQI
- txPwrRepIntervalCQI