Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Proposed ASN.1 code to support new TLVs in MOB_NBR-ADV**
Date Submitted	**2007-03-09**
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Re:	
Abstract	This contribution proposes the text and ASN.1 code in wmanIf2mMib to support new TLVs in MOB_NBR-ADV.
Purpose	Adoption
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1. Introduction

This contribution proposes ASN.1 code in wmanIf2mMib to new TLVs in 11.18 MOB_NBR-ADV management message encodings

2. Proposed changes

2.1 ASN.1 Code Changes

13.2 ASN.1 Definitions of MIB Modules

13.2.3 wmanIf2mMib

[Add the following code to WMAN-IF2m-MIB:]

```
-- XXX
WmanIf2mOfdmaFftSize ::= TEXTUAL-CONVENTION
        STATUS        current
        DESCRIPTION
            "FFT size for OFDMA PHY
             0b000 = 2048
             0b001 = 1024
             0b010 = 512
             0b100 = 128"
        REFERENCE
            "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
        SYNTAX        INTEGER {fft2048(0),
                               fft1024(1),
                               fft512(2),
                               reserved(3),
                               fft128(4)}

-- XXX
WmanIf2mOfdmaCp ::= TEXTUAL-CONVENTION
        STATUS        current
        DESCRIPTION
            "Cycle prefix for OFDMA PHY
             0b00 = 1/4
             0b01 = 1/8
             0b10 = 1/16
             0b11 = 1/32"
        REFERENCE
            "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
        SYNTAX        INTEGER {oneForth(0),
                               oneEighth(1),
                               oneSixteenth(2),
                               oneThirtySecond(3)}

-- XXX
WmanIf2mOfdmaFrame ::= TEXTUAL-CONVENTION
        STATUS        current
        DESCRIPTION
            "Frame duration for OFDMA PHY
             0b0000 = 2.0 ms
```

```
1                       0b0001 = 2.5 ms
2                       0b0010 = 4 ms
3                       0b0011 = 5 ms
4                       0b0100 = 8 ms
5                       0b0101 = 10 ms
6                       0b0110 = 12.5 ms
7                       0b0111 = 20 ms"
8            REFERENCE
9                "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
10           SYNTAX     INTEGER {twoMs(0),
11                                twoPointFiveMs(1),
12                                fourMs(2),
13                                fiveMs(3),
14                                eightMs(4),
15                                tenMs(5),
16                                twelvePointFiveMs(6),
17                                twentyMs(7)}
18
19   wmanIf2mBsNeighborAdvertizementTable OBJECT-TYPE
20           SYNTAX     SEQUENCE OF WmanIf2mBsNeighborAdvertizementEntry
21           MAX-ACCESS  not-accessible
22           STATUS      current
23           DESCRIPTION
24               "This table contains the attributes specific to each neighbor
25                BS for the MOB_NBR-ADV message."
26           REFERENCE
27               "Subclause 6.3.2.3.47, in IEEE Std 802.16e-2005"
28           ::= { wmanIf2mBsNeighborAdv 2 }
29
30   wmanIf2mBsNeighborAdvertizementEntry OBJECT-TYPE
31           SYNTAX     WmanIf2mBsNeighborAdvertizementEntry
32           MAX-ACCESS  not-accessible
33           STATUS      current
34           DESCRIPTION
35               "This table provides one row for each neighboring BSs, and
36                is indexed by ifIndex and wmanIf2mBsNeighborBsIndex."
37           INDEX    { ifIndex, wmanIf2mBsNeighborBsIndex }
38           ::= { wmanIf2mBsNeighborAdvertizementTable 1 }
39
40   WmanIf2mBsNeighborAdvertizementEntry::= SEQUENCE {
41           wmanIf2mBsNeighborBsIndex               INTEGER,
42           wmanIf2mBsNeighborBsId                  WmanIf2mNbrBsId,
43           wmanIf2mBsPhyProfileId                  WmanIf2mPhyProfileId,
44           wmanIf2mBsFaIndex                       Unsigned32,
45           wmanIf2mBsEirp                          INTEGER,
46           wmanIf2mBsPreampleSubchIndex            Unsigned32,
47           wmanIf2mBsHandoverProcOptimization      WmanIf2mHoProcOptm,
48           wmanIf2mBsSchedulingService             WmanIf2mSchedulingSupp,
49           wmanIf2mBsChannelBandwidth              INTEGER,
50           wmanIf2mBsFftSize                       WmanIf2mOfdmaFftSize,
51           wmanIf2mBsCyclicPrefix                  WmanIf2mOfdmaCp,
52           wmanIf2mBsFrameDurationCode             WmanIf2mOfdmaFrame,
53           wmanIf2mBsMobilityFeatureSupported      WmanIf2mOfdmaMobility,
54           wmanIf2BsNeighborAdvertizementRowStatus RowStatus}
55
56   -- XXX
57   wmanIf2mBsChannelBandwidth OBJECT-TYPE
58           SYNTAX     INTEGER (0 .. 127)
59           UNITS      "125KHz"
60           MAX-ACCESS  read-create
61           STATUS      current
62           DESCRIPTION
63               "This field indicates the channel BW in units of 125 kHz."
64           REFERENCE
```

```
1                    "Subclause 11.18.1 in IEEE Std 802.16e-2005"
2            ::= { wmanIf2mBsNeighborAdvertizementEntry 9 }
3
4     -- XXX
5     wmanIf2mBsFftSize OBJECT-TYPE
6            SYNTAX      WmanIf2mOfdmaFftSize
7            MAX-ACCESS  read-create
8            STATUS      current
9            DESCRIPTION
10               "This field indicates the channel BW in units of 125 kHz
11                for OFDMA PHY."
12           REFERENCE
13               "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
14           ::= { wmanIf2mBsNeighborAdvertizementEntry 10 }
15
16    -- XXX
17    wmanIf2mBsCyclicPrefix OBJECT-TYPE
18           SYNTAX      WmanIf2mOfdmaCp
19           MAX-ACCESS  read-create
20           STATUS      current
21           DESCRIPTION
22               "This field indicates the CP for OFDMA PHY."
23           REFERENCE
24               "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
25           ::= { wmanIf2mBsNeighborAdvertizementEntry 11 }
26
27    -- XXX
28    wmanIf2mBsFrameDurationCode OBJECT-TYPE
29           SYNTAX      WmanIf2mOfdmaFrame
30           MAX-ACCESS  read-create
31           STATUS      current
32           DESCRIPTION
33               "This field indicates the frame duration for ODMA PHY."
34           REFERENCE
35               "Subclause 11.18.1, Table 384b in IEEE Std 802.16e-2005"
36           ::= { wmanIf2mBsNeighborAdvertizementEntry 12 }
37
38    -- XXX
39    wmanIf2mBsMobilityFeatureSupported OBJECT-TYPE
40           SYNTAX      WmanIf2mOfdmaMobility
41           MAX-ACCESS  read-create
42           STATUS      current
43           DESCRIPTION
44               "This field indicates whether the neighbor BS supports
45                mobility features."
46           REFERENCE
47               "Subclause 6.3.2.3.47, Table 109f in IEEE Std 802.16e-2005"
48           ::= { wmanIf2mBsNeighborAdvertizementEntry 13 }
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