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

This contribution proposes the text and ASN.1 code in wmanIf2mMib to support MOB_PAG-ADV message.

2. Proposed changes

2.1 wmanIf2mMib Change

13.1.4.1 wmanIf2mBsObjects

13.1.4.1.1 wmanIf2mBsCm

[Change Figure 19 as the following:]

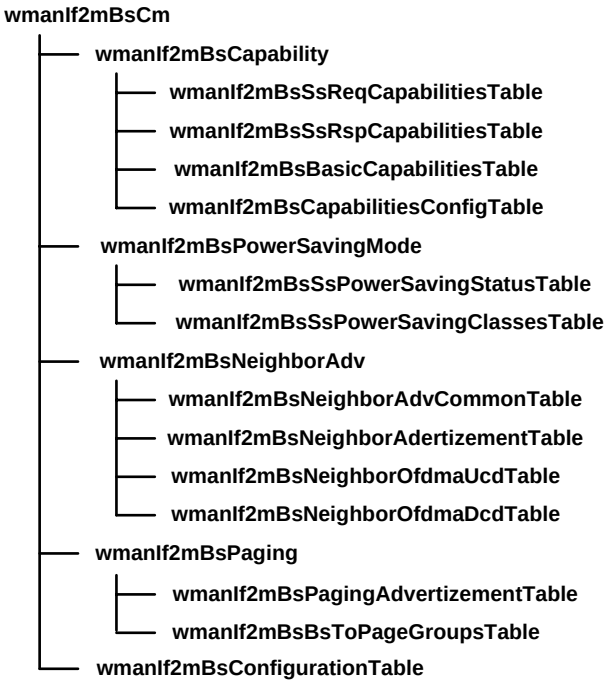

Figure 19—wmanIf2mBsCm structure

[Add the following text to subclause 13.1.4.1.1:]

13.1.4.1.1.4 wmanIf2mBsPaging

13.1.4.1.1.4.1 wmanIf2mBsPagingAdvertizementTable

wmanIf2mBsPagingAdvertizementTable contains the attributes specific to each neighbor BS for the MOB_PAG-ADV message.

13.1.4.1.1.4.2 wmanIf2mBsBsToPageGroupsTable

This table maps the serviing BS and neighbor BS to paging groups. One or more paging group IDs are to be broadcast in DCD for the serving BS and MOB_NBR-ADV message for the neighbor BSs if idle mode is supported..

2.2 ASN.1 Code Change

13.2 ASN.1 Definitions of MIB Modules

13.2.4 wmanIf2mMib

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

```
WmanIf2mPagingAction ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Paging action instruction to MS
             0b00 = No Action Required
             0b01 = Perform Ranging to establish location and
                    acknowledge message
             0b10 = Enter Network"
        REFERENCE
            "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {noAction(0),
                             performRanging(1),
                             enterNetwork(2)}


WmanIf2mSsMacAddrHash ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
          "24 bit SS MAC address hash that is obtained by computing a
           CRC24 on the MS 48-bit MAC address."
        REFERENCE
            "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
        SYNTAX      OCTET STRING (SIZE(3))

wmanIf2mBsPaging OBJECT IDENTIFIER ::= { wmanIf2mBsCm 4 }

--
-- wmanIf2mBsPagingAdvertizementTable
--
wmanIf2mBsPagingAdvertizementTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF WmanIf2mBsPagingAdvertizementEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table contains the attributes specific to each neighbor
             BS for the MOB_PAG-ADV message."
        REFERENCE
            "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
        ::= { wmanIf2mBsPaging 1 }

wmanIf2mBsPagingAdvertizementEntry OBJECT-TYPE
```

```
            SYNTAX      WmanIf2mBsPagingAdvertizementEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table is indexed by ifIndex, wmanIf2mBsPagingGroupId,
                 and wmanIf2mBsSsMacAddress."
            INDEX { ifIndex,
                    wmanIf2mBsPagingGroupId,
                    wmanIf2mBsSsMacAddress }
            ::= { wmanIf2mBsPagingAdvertizementTable 1 }

    WmanIf2mBsPagingAdvertizementEntry ::= SEQUENCE {
            wmanIf2mBsPagingGroupId                 INTEGER,
            wmanIf2mBsSsMacAddrHash                 WmanIf2mSsMacAddrHash,
            wmanIf2mBsPagingActionCode              WmanIf2mPagingAction}

    wmanIf2mBsPagingGroupId OBJECT-TYPE
            SYNTAX      INTEGER (0 .. 65535)
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
              "ID of the paging group."
            REFERENCE
                "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
            ::= { wmanIf2mBsPagingAdvertizementEntry 1 }

    wmanIf2mBsSsMacAddrHash OBJECT-TYPE
            SYNTAX      WmanIf2mSsMacAddrHash
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
              "The hash is obtained by computing a CRC24 on the MS 48-bit
                 MAC address. The polynomial for the calculation is
                 0x1864CFB"
            REFERENCE
                "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
            ::= { wmanIf2mBsPagingAdvertizementEntry 2 }

    wmanIf2mBsPagingActionCode OBJECT-TYPE
            SYNTAX      WmanIf2mPagingAction
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
              "Paging action instruction to MS."
            REFERENCE
                "Subclause 6.3.2.3.56, Table 109p in IEEE Std 802.16e-2005"
            ::= { wmanIf2mBsPagingAdvertizementEntry 3 }

    wmanIf2mBsBsToPageGroupsTable OBJECT-TYPE
            SYNTAX      SEQUENCE OF WmanIf2mBsBsToPageGroupsEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table maps the serviing BS and neighbor BS to paging
                 groups. One or more paging group IDs are to be broadcast
                 in DCD for the serving BS and MOB_NBR-ADV message for the
                 neighbor BSs if idle mode is supported."
            REFERENCE
                "Table 109f and Table 358 in IEEE Std 802.16e-2005"
            ::= { wmanIf2mBsPaging 2 }

    wmanIf2mBsBsToPageGroupsEntry OBJECT-TYPE
            SYNTAX      WmanIf2mBsBsToPageGroupsEntry
            MAX-ACCESS  not-accessible
```

```
        STATUS      current
        DESCRIPTION
            "This table is indexed by wmanIf2BsSsProvMacAddress and
             wmanIf2BsProvSfId."
        INDEX { wmanIf2mBsPagingBsId, wmanIf2mBsPagingGroup }
        ::= { wmanIf2mBsBsToPageGroupsTable 1 }

WmanIf2mBsBsToPageGroupsEntry ::= SEQUENCE {
        wmanIf2mBsPagingBsId                    WmanIf2mNbrBsId,
        wmanIf2mBsPagingGroup                   INTEGER,
        wmanIf2BsBsToPageGroupsRowStatus        RowStatus}

wmanIf2mBsPagingBsId OBJECT-TYPE
        SYNTAX      WmanIf2mNbrBsId
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The least significant 24 bits of the Base Station ID
             parameter in the DL-MAP message of the serving BS or
             Neighbor BSs."
        REFERENCE
            "Table 109f in IEEE Std 802.16e-2005"
        ::= { wmanIf2mBsBsToPageGroupsEntry 1 }

wmanIf2mBsPagingGroup OBJECT-TYPE
        SYNTAX      INTEGER (0 .. 65535)
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This field indicates ID of the paging group the MS is
             assigned to."
        REFERENCE
            "Subclause 6.3.2.3.47, Table 109f in IEEE Std 802.16e-2005"
        ::= { wmanIf2mBsBsToPageGroupsEntry 2 }

wmanIf2BsBsToPageGroupsRowStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "This object is used to ensure that the write, create,
             delete operation to multiple columns is guaranteed to
             be treated as atomic operation by agent."
        ::= { wmanIf2mBsBsToPageGroupsEntry 3 }
```

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