Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Adding new REG/SBC capabilities to wman2IfMib**
Date Submitted	**2006-09-22**
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Re:	
Abstract	This contribution proposes the changes being included to wmanIf2Mib in order to support new capabilities that have been introduced in REG and SBC messages in IEEE 802.16e 2005.
Purpose	Adoption
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1. Introduction

This contribution proposes the changes being included to wmanIf2Mib in order to support new capabilities that have been introduced in REG and SBC messages in IEEE 802.16e 2005.

2. wmanIfMib change Proposal

2.1 wman2IfBsCps Change

15.2.1.1.2 wman2IfBsCps

[Replace Fig 20 with the following:]

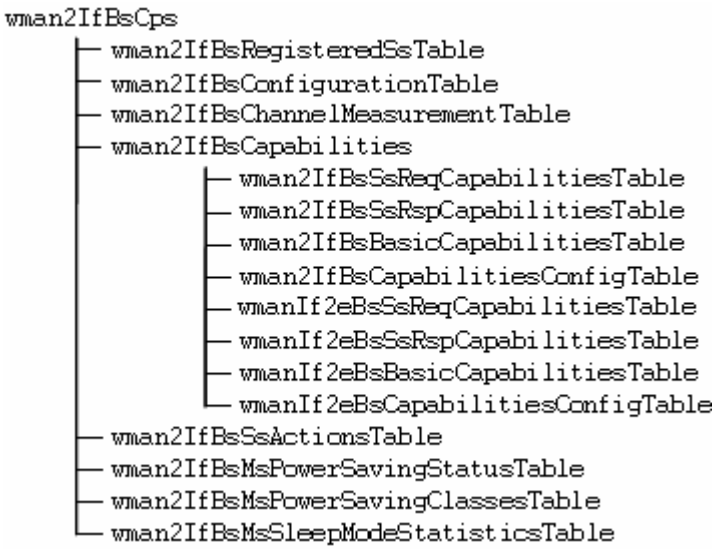

Figure 20—wman2IfBsCps Structure

15.2.1.1.2.4 wman2IfBsCps

[Insert the following new subclauses:]

15.2.1.1.2.4.5 wmanIf2eBsSsReqCapabilitiesTable

wmanIf2eBsSsReqCapabilitiesTable is the AUGMENTS to wmanIf2BsRegisteredSsTable to contain new basic capability information of SS that have been added to IEEE 802.16e 2005.

15.2.1.1.2.4.6 wmanIf2eBsSsRspCapabilitiesTable

wmanIf2eBsSsRspCapabilitiesTable is the AUGMENTS to wmanIf2BsRegisteredSsTable to contain new basic capability information of SS that have been added to IEEE 802.16e 2005.

15.2.1.1.2.4.7 wmanIf2eBsBasicCapabilitiesTable

wmanIf2eBsBasicCapabilitiesTable is the AUGMENTS to wmanIf2BsRegisteredSsTable to contain new basic capability information of SS that have been added to IEEE 802.16e 2005.

15.2.1.1.2.4.8 wmanIf2eBsCapabilitiesConfigTable

wmanIf2eBsCapabilitiesConfigTable is the AUGMENTS to wmanIf2BsRegisteredSsTable to contain new basic capability information of SS that have been added to IEEE 802.16e 2005.

15.2.2 ASN.1 Definitions of 802.16 MIB for SNMP

2.2 Wman2IfNumOfUplinkCid Change

[Insert the following ASN.1 notation:]

```
Wman2IfNumOfUplinkCid ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "The object of this type shows the number of Uplink CIDs
             the SS can support."
        REFERENCE
            "Subclause 11.7.4 in IEEE Std 802.16-2004"
        SYNTAX      INTEGER (2..65535)
```

2.3 Wman2IfOfdmFftSizes Change

[Change `Wman2IfOfdmFftSizes` from:]

```
Wman2IfOfdmFftSizes ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the FFT sizes supported by the SS/MS.
             It is used for describing OFDM or OFDMA capabilities,
             depending on context. For each FFT size, a bit value of 0
             indicates 'not supported' while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.8.3.7.1 in IEEE 802.16e-2005"
        SYNTAX      BITS {fft256(0),
                          fft2048(1),
                          fft128(2),
                          fft512(3),
                          fft1024(4)}
```

[To:]

```
WmanIf2OfdmFftSizes ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the FFT sizes supported by the SS.
             For each FFT size, a bit value of 0 indicates 'not
             supported' while 1 indicates 'supported'."
        REFERENCE
```

```
            "Subclause 11.8.3.6.1 in IEEE 802.16-2004"
        SYNTAX      BITS {fft256(0),
                          fft2048(1)}
```

2.4 Wman2IfOfdmSsDeModType Change

[Changes from:]

```
Wman2IfOfdmSsDeModType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the different demodulator options
             supported by a WirelessMAN-OFDM PHY SS for downlink. This
             field is not used for other PHY specifications. A bit
             value of 0 indicates 'not supported' while 1 indicates
             'supported'."
        REFERENCE
            "Subclause 11.8.3.6.2 in IEEE Std 802.16-2004"
        SYNTAX      BITS {qam64(0),
                          btc(1),
                          ctc(2),
                          stc(3),
                          aac(4)}

Wman2IfOfdmSsModType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the different modulator options
             supported by a WirelessMAN-OFDM PHY SS for uplink. This
             field is not used for other PHY specifications. A bit
             value of 0 indicates 'not supported' while 1 indicates
             'supported'."
        REFERENCE
            "Subclause 11.8.3.6.3 in IEEE Std 802.16-2004"
        SYNTAX      BITS {qam64(0),
                          btc(1),
                          ctc(2),
                          subchanellization(3),
                          focusedCtBwReq(4)}
```

[To:]

```
WmanIf2OfdmSsDeModType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the different demodulator options
             supported by a WirelessMAN-OFDM PHY SS for downlink. This
             field is not used for other PHY specifications. A bit
             value of 0 indicates 'not supported' while 1 indicates
             'supported'."
        REFERENCE
            "Subclause 11.8.3.6.2 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {qam64(0),
                          btc(1),
                          ctc(2),
                          stc(3),
                          aas(4),
                          subchannelization(5)}

WmanIf2OfdmSsModType ::= TEXTUAL-CONVENTION
        STATUS      current
```

```
            DESCRIPTION
                "This field indicates the different modulator options
                 supported by a WirelessMAN-OFDM PHY SS for uplink. This
                 field is not used for other PHY specifications. A bit
                 value of 0 indicates 'not supported' while 1 indicates
                 'supported'."
            REFERENCE
                "Subclause 11.8.3.6.3 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {qam64(0),
                              btc(1),
                              ctc(2),
                              subchanellization(3),
                              focusedCtBwReq(4),
                              ulCyclicDelay(5)}
```

2.5 WmanIf2eOfdmPrivMap Change

[Insert the following ASN.1 notation:]

```
WmanIf2eOfdmPrivMap ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates if the private map parameters
             is supported. A bit value of 0 indicates
             'not supported' while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.8.3.6.6 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {regularMap(0),
                          compressedMap(1)}

WmanIf2eOfdmUlPower ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the uplink power control options
             supported by a WirelessMAN-OFDM PHY SS for uplink
             transmission. A bit value of 0 indicates
             'not supported' while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.8.3.7.10 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {ulOpenLoopPwrCntl(0),
                          ulAasPreamblePwrCntl(1)}

WmanIf2OfdmaFftSizes ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the FFT sizes supported by the SS/MS.
             For each FFT size, a bit value of 0 indicates 'not
             supported' while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.8.3.7.1 in IEEE 802.16e-2005"
        SYNTAX      BITS {fft256(0),
                          fft2048(1),
                          fft128(2),
                          fft512(3),
                          fft1024(4)}
```

2.6 Wman2IfOfdmaMsDeModType Change

[Changes from:]

```
Wman2IfOfdmaMsDeModType ::= TEXTUAL-CONVENTION
```

```
            STATUS      current
            DESCRIPTION
                "This field indicates the different demodulator options
                 supported by a WirelessMAN-OFDMA PHY SS for downlink.
                 A bit value of 0 indicates 'not supported' while 1
                 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.2 in IEEE 802.16e"
            SYNTAX      BITS {qam64(0),
                              btc(1),
                              ctc(2),
                              stc(3),
                              aasDiversityMapScan(4),
                              harqChase(5),
                              harqCtcIr(6),
                              reserved(7),
                              harqCcIr(8),
                              ldpc(9)}

    Wman2IfOfdmaPermutation ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the OFDMA SS Permutation support
                 A bit value of 0 indicates 'not supported' while 1
                 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.5 in IEEE 802.16e"
            SYNTAX      BITS {optionalPuscSupport(0),
                              optionalFuscSupport(1),
                              amcOneBySixSupport(2),
                              amcTwoByThreeSupport(3),
                              amcThreeByTwoSupport(4),
                              amcSupportWithHarqMap(5),
                              tusc1Support(6),
                              tusc2(7)}
```

[To:]

```
    WmanIf2OfdmaMsDeModType ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the different demodulator options
                 supported by a WirelessMAN-OFDMA PHY SS for downlink.
                 A bit value of 0 indicates 'not supported' while 1
                 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.2 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {qam64(0),
                              btc(1),
                              ctc(2),
                              stc(3),
                              ccWithInterleacer(4),
                              harqChase(5),
                              harqCtcIr(6),
                              reserved(7),
                              harqCcIr(8),
                              ldpc(9),
                              dedicatedPilots(10)}


    WmanIf2OfdmaPermutation ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the OFDMA SS Permutation support
```

```
                A bit value of 0 indicates 'not supported' while 1
                indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.4 in IEEE 802.16e"
            SYNTAX      BITS {optionalPuscSupport(0),
                              optionalFuscSupport(1),
                              amcOneBySixSupport(2),
                              amcTwoByThreeSupport(3),
                              amcThreeByTwoSupport(4),
                              amcSupportWithHarqMap(5),
                              tusc1Support(6),
                              tusc2Support(7)}
```

2.7 WmanIf2eOfdmaDemMimo Change

[Insert the following ASN.1 notation:]

```
WmanIf2eOfdmaDemMimo ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the MIMO capability of OFDMA MS
             demodulator. A bit value of 0 indicates 'not supported'
             while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.8.3.7.5 in IEEE 802.16e"
        SYNTAX      BITS {twoAntStcMatrixA(0),
                          twoAntStcMatrixBVCoding(1),
                          twoAntStcMatrixBHCoding(2),
                          fourAntStcMatrixA(3),
                          fourAntStcMatrixBVCoding(4),
                          fourAntStcMatrixBHCoding(5),
                          fourAntStcMatrixCVCoding(6),
                          fourAntStcMatrixCHCodingt(7)}

WmanIf2eOfdmaMimoCap ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "This field indicates the MIMO capability of
             OFDMA MS demodulator."
        REFERENCE
            "Subclause 11.8.3.7.5 in IEEE 802.16e"
        SYNTAX      BITS {twoAntStcMatrixA(0),
                          twoAntStcMatrixBVCoding(1),
                          fourRxAntenna(2),
                          fourAntStcMatrixA(3),
                          fourAntStcMatrixBVCoding(4),
                          fourAntStcMatrixBHCoding(5),
                          fourAntStcMatrixCVCoding(6),
                          fourAntStcMatrixCHCodingt(7),
                          threeAntStcMatrixA(8),
                          threeAntStcMatrixB(9),
                          threeAntStcMatrixCVCoding(10),
                          threeAntStcMatrixCHCodingt(11),
                          calculatingPrecodingWeight(12),
                          adaptiveRateControl(13),
                          calculatingChannelMatrix(14),
                          antennaGrouping(15),
                          antennaSelection(16),
                          codebookBasedPrecoding(17),
                          longTermPrecoding(18),
                          mimoMidamble(19)}

WmanIf2eOfdmaUlMimo ::= TEXTUAL-CONVENTION
```

```
            STATUS      current
            DESCRIPTION
                "This field indicates the different MIMO options supported
                 by a WirelessMAN-OFDMA PHY SS in the uplink.
                 A bit value of 0 indicates 'not supported' while 1
                 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.6 in IEEE 802.16e"
            SYNTAX      BITS {twoAntSttd(0),
                              twoAntSmVCoding(1),
                              oneAntCooperativeSm(2)}

    WmanIf2eOfdmaPrivMap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the AAS private map parameters
                 supported by a WirelessMAN-OFDMA SS. A bit value of
                 0 indicates 'not supported' while 1 indicates
                 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {harqMap(0),
                              privMap(1),
                              reducedPrivMap(2),
                              privMapChainEnable(3),
                              privMapDlFrameOffset(4),
                              privMapUlFrameOffset(5)}

    WmanIf2eOfdmaAasCap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the different AAS options
                 supported by a WirelessMAN-OFDMA PHY SS in the
                 downlink. A bit value of 0 indicates 'not supported'
                 while 1 indicates 'supported' for most bits."
            REFERENCE
                "Subclause 11.8.3.7.8 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {aasZone(0),
                              aasDiversityMapScan(1),
                              aasFbckRsp(2),
                              dlAasPreamble(3),
                              ulAasPreamble(4)}

    WmanIf2eOfdmaCinrCap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the CINR measurement capability
                 supported by a WirelessMAN-OFDMA PHY SS in the
                 downlink. A bit value of 0 indicates 'not supported'
                 while 1 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.9 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {phyCinrPreamble(0),
                              phyCinrPilotSubc(1),
                              phyCinrDataSubc(2),
                              effectiveCinrPreamble(3),
                              effectiveCinrPilotSubc(4),
                              effectiveCinrDataSubc(5),
                              twoCqiChannel(6),
                              freqSelectivityReport(7)}

    WmanIf2eOfdmaUlPower ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
```

```
                "This field indicates the power control options
                 supported by a WirelessMAN-OFDMA PHY SS for uplink
                 transmission. A bit value of 0 indicates
                 'not supported' while 1 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.11 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {ulOpenLoopPwrCntl(0),
                              ulAasPreamblePwrCntl(1)}

    WmanIf2eOfdmaMapCap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the different MAP options supported
                 by a WirelessMAN-OFDMA PHY SS. A bit value of 0
                 indicates 'not supported' while 1 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.12 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {harqMap(0),
                              extendedHarqIe(1),
                              subMapFor1stZone(2),
                              subMapForOtherZone(3),
                              dlRegionDefinition(4)}

    WmanIf2eOfdmaUlCntlCh ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates different uplink control channels
                 supported by a WirelessMAN-OFDMA PHY SS. A bit value
                 of 0 indicates 'not supported' while 1 indicates
                 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.13 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {threeBitMimoFastFeedback(0),
                              enhancedFastFeedback(1),
                              ulAck(2),
                              reserved(3),
                              uepFastFeedback(4),
                              fastDlMeasurementFeedback(5),
                              priSecFastFeedback(6),
                              diucCqiFastFeedback(7)}

    WmanIf2eOfdmaMsCistCap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates MS capability of supporting CSIT
                 (uplink sounding). A bit value of 0 indicates 'not
                 supported' while 1 indicates 'supported'."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {csitTypeA(0),
                              csitTypeB(1),
                              powerAssignment(2),
                              noP9Or18ForCsitTypeA(10),
                              csitNotSupported(11)}

    WmanIf2eOfdmaModMimo ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA SS
                 modulator. A bit value of 0 indicates 'not supported'
                 while 1 indicates 'supported'"
            REFERENCE
                "Subclause 11.8.3.7.16 in IEEE Std 802.16e-2005"
            SYNTAX      BITS {twoTxAntenna(0),
```

```
                            txDiversity(1),
                            spatialMultiplexing(2),
                            beamforming(3),
                            adaptiveRateControl(4),
                            singleAntenna(5),
                            twoAntenna(6)}

    WmanIf2eSdmaPilotCap ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates SDMA pilot pattern support for
                 AMC zone."
            REFERENCE
                "Subclause 11.8.3.7.17 in IEEE Std 802.16e-2005"
            SYNTAX      INTEGER {noSupport(0),
                                 sdmaPilotAandB(1),
                                 allSdmaPilotPatterns(2)}

    WmanIf2eMultiBurst ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates whether multiple FEC types are
                 supported in DL/UL burst profiles. A bit value of 0
                 indicates 'not supported' while 1 indicates
                 'supported'"
            REFERENCE
                "Subclause 11.8.3.7.18 in IEEE Std 802.16e-2005"
            SYNTAX      INTEGER {dlWithMultiFecType(0),
                                 ulWithMultiFecType(1)}

    WmanIf2eIncrHarqBuf ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the aggregation flag control for
                 buffering for NEP/NSCH based incremental redundancy CTC
                 in DL and UL transmissions.

                 Bit     4: Aggregation Flag for DL
                            0 = the number of bits is counted separately
                                for each channel
                            1 = buffering capability may be shared between
                                channels

                 Bit    12: Aggregation Flag for UL
                            0 = the number of bits is counted separately
                                for each channel
                            1 = buffering capability may be shared between
                                channels"
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE Std 802.16e-2005"
            SYNTAX      INTEGER {dlAggFlag(4),
                                 ulAggFlag(12)}

    WmanIf2eChaseHarqBuf ::= TEXTUAL-CONVENTION
            STATUS      current
            DESCRIPTION
                "This field indicates the Aggregation Flag control for
                 buffering of DIUC/duration based HARQ methods (Chase
                 combining and CC-IR)in downlink and uplink transmissions.

                 Bit     6: Aggregation Flag for DL
                            0 = the number of bits is counted separately
                                for each channel
                            1 = buffering capability may be shared between
```

```
                                channels

                Bit    14: Aggregation Flag for UL
                           0 = the number of bits is counted separately
                               for each channel
                           1 = buffering capability may be shared between
                               channels"
        REFERENCE
            "Subclause 11.8.3.7.19.2 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {dlAggFlag(6),
                             ulAggFlag(14)}
```

2.8 Wman2PsClassType Change

[Changes from:]

```
Wman2PsClassType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "The types of power saving classes."
        REFERENCE
            "Table 374a in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {powerSavingClassTypeI(1),
                             powerSavingClassTypeII(2),
                             powerSavingClassTypeIII(3)}

Wman2PsClassCidDirection ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "The direction of power saving class's CIDs.
             0b00 = Unspecified. Each CID has its own direction
                    assign in its connection creation. Can be
                    DL, UL, or both (in the case of management
                    connections).
             0b01 = Downlink direction only.
             0b10 = Uplink direction only."
        REFERENCE
            "Subclause 6.3.2.3.44 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {unspecified(0),
                             downlink(1),
                             uplink(2)}
```

[To:]

```
WmanIf2ePsClassType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "The types of power saving classes."
        REFERENCE
            "Table 374a in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {powerSavingClassTypeI(1),
                             powerSavingClassTypeII(2),
                             powerSavingClassTypeIII(3)}

WmanIf2ePsClassCidDir ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "The direction of power saving class's CIDs.
             0b00 = Unspecified. Each CID has its own direction
                    assign in its connection creation. Can be
                    DL, UL, or both (in the case of management
```

```
                    connections).
                0b01 = Downlink direction only.
                0b10 = Uplink direction only."
        REFERENCE
            "Subclause 6.3.2.3.44 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {unspecified(0),
                             downlink(1),
                             uplink(2)}
```

2.9 WmanIf2eMaxMacLevel Change

[Insert the following ASN.1 notation:]

```
WmanIf2eMaxMacLevel ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "maximum amount of MAC level data including MAC headers
             and HARQ retransmission bursts the MS is capable of
             processing in the DL/UL part of a single MAC frame."
        REFERENCE
            "Subclause 11.7.8.10 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER (0..65535)

WmanIf2ePackingSupport ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Indicates the availability of MS support for Packing"
        REFERENCE
            "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {noPackingSupport(0),
                             packingSupported(1)}

WmanIf2eExtRtpsSupport ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Indicates the availability of MS support for Extended
             rtPS."
        REFERENCE
            "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
        SYNTAX      INTEGER {noExtendedRtpsSupport(0),
                             extendedRtpsSupported(1)}

WmanIf2eIpAllocMethod ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Indicates the method of allocating IP address for the
             secondary management connection. A bit value of 0
             indicates 'not supported' while 1 indicates 'supported'."
        REFERENCE
            "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {dhcp(0),
                          mobileIpv4(1),
                          dhcpV6(2),
                          ipv6Autoconfig(3)}

WmanIf2eHandoverType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Indicates what type(s) of Handover the BS and the MS
             supports.
               bit#0: when it is set to 1, MDHO/FBSS HO not supported.
                      the BS shall ignore all other bits.
               bit#1: when it is set to 1, FBSS/MDHO DL RF Combining
```

```
                        is supported with monitoring MAPs from active BSs
                bit#2: when it is set to 1, MDHO DL soft Combining is
                        supported with monitoring single MAP from
                        anchor BS
                bit#3: when it is set to 1, MDHO DL soft combining is
                        supported with monitoring MAPs from active BSs
                bit#3: when it is set to 1, MDHO UL Multiple
                        transmission is supported"
        REFERENCE
            "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {mdhcFbssHoNotSpported(0),
                          mdhcFbssDlMapsFromActiveBss(1),
                          mdhcDlMapFromAnchorBs(2),
                          mdhcDlMapsFromActiveBss(3),
                          mdhcUlMultipleTx(4)}

WmanIf2eArqAckType ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Specifies the ARQ ACK type supported by the MS."
        REFERENCE
            "Subclause 11.7.23 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {selectiveAck(0),
                          cumulativeAck(1),
                          cumWithSelAck(2),
                          cumWithBlockSeqAck(3)}

WmanIf2eMacHeaderSupp ::= TEXTUAL-CONVENTION
        STATUS      current
        DESCRIPTION
            "Indicates whether or not the MS and BS support various
             types of MAC header and extended subheaders. A bit
             value of 0 indicates 'not supported', while 1 indicates
             'supported'.

             Bits 8-10: parameters of SDU_SN extended subheader that
                 represent the period of SDU_SN transmission for
                 connection with ARQ disabled = once every 2^p MAC
                 PDUs."
        REFERENCE
            "Subclause 11.7.25 in IEEE Std 802.16e-2005"
        SYNTAX      BITS {bwReqUlTxPowerReport(0),
                          bwReqCinrReport(1),
                          cqichAlloationReq(2),
                          phyChannelReport(3),
                          bwReqUlSleepCntl(4),
                          snReport(5),
                          feedbackReport(6),
                          sduSn(7),
                          sdnSnPeriod0(8),
                          sdnSnPeriod1(9),
                          sdnSnPeriod2(10),
                          dlSleepControl(11),
                          feedbackRequest(12),
                          mimcModeFeedback(13),
                          ulTxPowerReport(14),
                          miniFeedback(15),
                          snRequest(16),
                          shortPduSn(17),
                          longPduSn(18)}
```

2.10 wmanIf2eBsSsReqCapabilitiesTable Change

[Insert the following ASN.1 notation:]

```
wmanIf2eBsSsReqCapabilitiesTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF WmanIf2eBsSsReqCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table augments wmanIf2BsRegisteredSsTable to include
             new capabilities as introduced in IEEE 802.16e 2005
             standard."
        ::= { wmanIf2BsCapabilities 5 }

wmanIf2eBsSsReqCapabilitiesEntry OBJECT-TYPE
        SYNTAX      WmanIf2eBsSsReqCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table provides one row for each MS that has been
             registered in the BS. This table augments the table
             wmanIf2BsRegisteredSsTable."
        AUGMENTS { wmanIf2BsRegisteredSsEntry }
        ::= { wmanIf2eBsSsReqCapabilitiesTable 1 }

WmanIf2eBsSsReqCapabilitiesEntry ::= SEQUENCE {
        wmanIf2eBsSsReqCapDownlinkCidSupport    WmanIf2eNumOfCid,
        wmanIf2eBsSsReqCapPackingSupport        WmanIf2ePackingSupport,
        wmanIf2eBsSsReqCapExtendedRtpsSupport   WmanIf2eExtRtpsSupport,
        wmanIf2eBsSsReqCapMaxNumBurstToMs       INTEGER,
        wmanIf2eBsSsReqCapIpAddrAllocMethod     WmanIf2eIpAllocMethod,
        wmanIf2eBsSsReqCapHandoverSupported     WmanIf2eHandoverType,
        wmanIf2eBsSsReqCapHoProcessTimer        Unsigned32,
        wmanIf2eBsSsReqCapIdleModeTimeout       Unsigned32,
        wmanIf2eBsSsReqCapArqAckType            WmanIf2eArqAckType,
        wmanIf2eBsSsReqCapMacHeader             WmanIf2eMacHeaderSupp}

wmanIf2eBsSsReqCapDownlinkCidSupport OBJECT-TYPE
        SYNTAX      WmanIf2eNumOfCid
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
           "This object shows the number of Downlink CIDs the SS can
            support."
        ::= { wmanIf2eBsSsReqCapabilitiesEntry 1 }

wmanIf2eBsSsReqCapPackingSupport OBJECT-TYPE
        SYNTAX      WmanIf2ePackingSupport
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
           "Indicates the availability of MS support for Packing."
        REFERENCE
            "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
        ::= { wmanIf2eBsSsReqCapabilitiesEntry 2 }

wmanIf2eBsSsReqCapExtendedRtpsSupport OBJECT-TYPE
        SYNTAX      WmanIf2eExtRtpsSupport
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
           "Indicates the availability of MS support for extended
            rtPs."
```

```
            REFERENCE
                "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 3 }

    wmanIf2eBsSsReqCapMaxNumBurstToMs OBJECT-TYPE
            SYNTAX      INTEGER (1..16)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Maximum number of bursts transmitted concurrently to the MS
                , including all bursts without CID or with CIDs matching
                 the MS's CIDs."
            REFERENCE
                "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 4 }

    wmanIf2eBsSsReqCapIpAddrAllocMethod OBJECT-TYPE
            SYNTAX      WmanIf2eIpAllocMethod
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates the method of allocating IP address for the
                 secondary management connection."
            REFERENCE
                "Subclause 11.7.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 5 }

    wmanIf2eBsSsReqCapHandoverSupported OBJECT-TYPE
            SYNTAX      WmanIf2eHandoverType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates what type(s) of Handover the BS or MS supports."
            REFERENCE
                "Subclause 11.7.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 6 }

    wmanIf2eBsSsReqCapHoProcessTimer OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "frames"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The duration in frames the MS shall wait until receipt of
                 the next unsolicited network re-entry MAC management
                 message as indicated in the HO Process Optimization
                 element of the RNG-RSP message."
            REFERENCE
                "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 7 }

    wmanIf2eBsSsReqCapIdleModeTimeout OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "seconds"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Max time interval between MS Idle Mode Location Updates."
            REFERENCE
                "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
            DEFVAL         { 4096 }
            ::= { wmanIf2eBsSsReqCapabilitiesEntry 8 }

    wmanIf2eBsSsReqCapArqAckType OBJECT-TYPE
```

```
        SYNTAX      WmanIf2eArqAckType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The value of this parameter specifies the ARQ ACK type
             supported by the MS."
        REFERENCE
            "Subclause 11.7.23 in IEEE Std 802.16e-2005"
        ::= { wmanIf2eBsSsReqCapabilitiesEntry 9 }

wmanIf2eBsSsReqCapMacHeader OBJECT-TYPE
        SYNTAX      WmanIf2eMacHeaderSupp
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "Indicates whether or not the MS and BS support various
             types of MAC header and extended subheaders."
        REFERENCE
            "Subclause 11.7.25 in IEEE Std 802.16e-2005"
        ::= { wmanIf2eBsSsReqCapabilitiesEntry 10 }

wmanIf2eBsSsRspCapabilitiesTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF WmanIf2eBsSsRspCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table contains the basic capability information of SSs
             that have been negotiated and agreed between BS and SS via
             RNG-REQ/RSP, SBC-REQ/RSP and REG-REQ/RSP messages.
             This table augments the wmanIf2BsRegisteredSsTable."
        REFERENCE
            "Subclause 6.3.2.3.7 in IEEE Std 802.16-2004"
        ::= { wmanIf2BsCapabilities 6 }

wmanIf2eBsSsRspCapabilitiesEntry OBJECT-TYPE
        SYNTAX      WmanIf2eBsSsRspCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table provides one row for each SS that has been
             registered in the BS. This table augments the
             wmanIf2BsRegisteredSsTable. "
        AUGMENTS { wmanIf2BsRegisteredSsEntry }
        ::= { wmanIf2eBsSsRspCapabilitiesTable 1 }

WmanIf2eBsSsRspCapabilitiesEntry ::= SEQUENCE {
        wmanIf2eBsSsRspCapDownlinkCidSupport    WmanIf2eNumOfCid,
        wmanIf2eBsSsRspCapPackingSupport        WmanIf2ePackingSupport,
        wmanIf2eBsSsRspCapExtendedRtpsSupport   WmanIf2eExtRtpsSupport,
        wmanIf2eBsSsRspCapMaxNumBurstToMs       INTEGER,
        wmanIf2eBsSsRspCapIpAddrAllocMethod     WmanIf2eIpAllocMethod,
        wmanIf2eBsSsRspCapHandoverSupported     WmanIf2eHandoverType,
        wmanIf2eBsSsRspCapHoProcessTimer        Unsigned32,
        wmanIf2eBsSsRspCapIdleModeTimeout       Unsigned32,
        wmanIf2eBsSsRspCapArqAckType            WmanIf2eArqAckType,
        wmanIf2eBsSsRspCapMacHeader             WmanIf2eMacHeaderSupp}

wmanIf2eBsSsRspCapDownlinkCidSupport OBJECT-TYPE
        SYNTAX      WmanIf2eNumOfCid
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This object shows the number of Downlink CIDs the SS can
             support."
```

```
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 1 }

    wmanIf2eBsSsRspCapPackingSupport OBJECT-TYPE
            SYNTAX      WmanIf2ePackingSupport
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates the availability of MS support for Packing."
            REFERENCE
                "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 2 }

    wmanIf2eBsSsRspCapExtendedRtpsSupport OBJECT-TYPE
            SYNTAX      WmanIf2eExtRtpsSupport
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates the availability of MS support for extended
                 rtPs."
            REFERENCE
                "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 3 }

    wmanIf2eBsSsRspCapMaxNumBurstToMs OBJECT-TYPE
            SYNTAX      INTEGER (1..16)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Maximum number of bursts transmitted concurrently to the MS
                 , including all bursts without CID or with CIDs matching
                 the MS CIDs."
            REFERENCE
                "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 4 }

    wmanIf2eBsSsRspCapIpAddrAllocMethod OBJECT-TYPE
            SYNTAX      WmanIf2eIpAllocMethod
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates the method of allocating IP address for the
                 secondary management connection."
            REFERENCE
                "Subclause 11.7.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 5 }

    wmanIf2eBsSsRspCapHandoverSupported OBJECT-TYPE
            SYNTAX      WmanIf2eHandoverType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Indicates what type(s) of Handover the BS or MS supports."
            REFERENCE
                "Subclause 11.7.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 6 }

    wmanIf2eBsSsRspCapHoProcessTimer OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "frames"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The duration in frames the MS shall wait until receipt of
                 the next unsolicited network re-entry MAC management
```

```
                message as indicated in the HO Process Optimization
                element of the RNG-RSP message."
            REFERENCE
                "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 7 }

    wmanIf2eBsSsRspCapIdleModeTimeout OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "seconds"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Max time interval between MS Idle Mode Location Updates."
            REFERENCE
                "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
            DEFVAL         { 4096 }
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 8 }

    wmanIf2eBsSsRspCapArqAckType OBJECT-TYPE
            SYNTAX      WmanIf2eArqAckType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The value of this parameter specifies the ARQ ACK type
                 supported by the MS."
            REFERENCE
                "Subclause 11.7.23 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 9 }

    wmanIf2eBsSsRspCapMacHeader OBJECT-TYPE
            SYNTAX      WmanIf2eMacHeaderSupp
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates whether or not the MS and BS support various
                 types of MAC header and extended subheaders."
            REFERENCE
                "Subclause 11.7.25 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsSsRspCapabilitiesEntry 10 }

    wmanIf2eBsBasicCapabilitiesTable OBJECT-TYPE
            SYNTAX      SEQUENCE OF WmanIf2eBsBasicCapabilitiesEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table contains the basic capabilities of the BS as
                 implemented in BS hardware and software. These capabilities
                 along with the configuration for them
                 (wmanIf2eBsCapabilitiesConfigTable) are used for
    negotiation
                 of basic capabilities with SS using RNG-RSP, SBC-RSP and
                 REG-RSP messages. The negotiated capabilities are obtained
                 by interSubclause of SS raw reported capabilities, BS raw
                 capabilities and BS configured capabilities. The objects in
                 the table have read-only access. The table is maintained
                 by BS."
            ::= { wmanIf2BsCapabilities 7 }

    wmanIf2eBsBasicCapabilitiesEntry OBJECT-TYPE
            SYNTAX      WmanIf2eBsBasicCapabilitiesEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table provides one row for each BS sector and is
```

```
             indexed by ifIndex."
         INDEX { ifIndex }
         ::= { wmanIf2eBsBasicCapabilitiesTable 1 }

WmanIf2eBsBasicCapabilitiesEntry ::= SEQUENCE {
         wmanIf2eBsCapDownlinkCidSupport         WmanIf2eNumOfCid,
         wmanIf2eBsCapPackingSupport             WmanIf2ePackingSupport,
         wmanIf2eBsCapExtendedRtpsSupport        WmanIf2eExtRtpsSupport,
         wmanIf2eBsCapMaxNumBurstToMs            INTEGER,
         wmanIf2eBsCapIpAddrAllocMethod          WmanIf2eIpAllocMethod,
         wmanIf2eBsCapHandoverSupported          WmanIf2eHandoverType,
         wmanIf2eBsCapHoProcessTimer             Unsigned32,
         wmanIf2eBsCapIdleModeTimeout            Unsigned32,
         wmanIf2eBsCapArqAckType                 WmanIf2eArqAckType,
         wmanIf2eBsCapMacHeader                  WmanIf2eMacHeaderSupp}

wmanIf2eBsCapDownlinkCidSupport OBJECT-TYPE
         SYNTAX      WmanIf2eNumOfCid
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "This object shows the number of Downlink CIDs the SS can
              support."
         ::= { wmanIf2eBsBasicCapabilitiesEntry 1 }

wmanIf2eBsCapPackingSupport OBJECT-TYPE
         SYNTAX      WmanIf2ePackingSupport
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "Indicates the availability of MS support for Packing."
         REFERENCE
             "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
         ::= { wmanIf2eBsBasicCapabilitiesEntry 2 }

wmanIf2eBsCapExtendedRtpsSupport OBJECT-TYPE
         SYNTAX      WmanIf2eExtRtpsSupport
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "Indicates the availability of MS support for extended
              rtPs."
         REFERENCE
             "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
         ::= { wmanIf2eBsBasicCapabilitiesEntry 3 }

wmanIf2eBsCapMaxNumBurstToMs OBJECT-TYPE
         SYNTAX      INTEGER (1..16)
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "Maximum number of bursts transmitted concurrently to the MS
              , including all bursts without CID or with CIDs matching
              the MS CIDs."
         REFERENCE
             "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
         ::= { wmanIf2eBsBasicCapabilitiesEntry 4 }

wmanIf2eBsCapIpAddrAllocMethod OBJECT-TYPE
         SYNTAX      WmanIf2eIpAllocMethod
         MAX-ACCESS  read-only
         STATUS      current
         DESCRIPTION
             "Indicates the method of allocating IP address for the
```

```
                secondary management connection."
            REFERENCE
                "Subclause 11.7.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsBasicCapabilitiesEntry 5 }

    wmanIf2eBsCapHandoverSupported OBJECT-TYPE
            SYNTAX      WmanIf2eHandoverType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates what type(s) of Handover the BS or MS supports."
            REFERENCE
                "Subclause 11.7.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsBasicCapabilitiesEntry 6 }

    wmanIf2eBsCapHoProcessTimer OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "frames"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The duration in frames the MS shall wait until receipt of
                 the next unsolicited network re-entry MAC management
                 message as indicated in the HO Process Optimization
                 element of the RNG-RSP message."
            REFERENCE
                "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsBasicCapabilitiesEntry 7 }

    wmanIf2eBsCapIdleModeTimeout OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "seconds"
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Max time interval between MS Idle Mode Location Updates."
            REFERENCE
                "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
            DEFVAL         { 4096 }
            ::= { wmanIf2eBsBasicCapabilitiesEntry 8 }

    wmanIf2eBsCapArqAckType OBJECT-TYPE
            SYNTAX      WmanIf2eArqAckType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The value of this parameter specifies the ARQ ACK type
                 supported by the MS."
            REFERENCE
                "Subclause 11.7.23 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsBasicCapabilitiesEntry 9 }

    wmanIf2eBsCapMacHeader OBJECT-TYPE
            SYNTAX      WmanIf2eMacHeaderSupp
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates whether or not the MS and BS support various
                 types of MAC header and extended subheaders."
            REFERENCE
                "Subclause 11.7.25 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsBasicCapabilitiesEntry 10 }

    wmanIf2eBsCapabilitiesConfigTable OBJECT-TYPE
```

```
            SYNTAX      SEQUENCE OF WmanIf2eBsCapabilitiesConfigEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table contains the configuration for basic
                 capabilities of BS. The table is intended to be used to
                 restrict the Capabilities implemented by BS, for example in
                 order to comply with local regulatory requirements. The BS
                 should use the configuration along with the implemented
                 Capabilities (wmanIf2eBsBasicCapabilitiesTable) for
                 negotiation of basic capabilities with SS using RNG-RSP,
                 SBC-RSP and REG-RSP messages. The negotiated capabilities
                 are obtained by interSubclause of SS reported capabilities,
                 BS raw capabilities and BS configured capabilities. The
                 objects in the table have read-write access. The rows are
                 created by BS as a copy of wmanIf2eBsBasicCapabilitiesTable
                 and can be modified by NMS."
            ::= { wmanIf2BsCapabilities 8 }

    wmanIf2eBsCapabilitiesConfigEntry OBJECT-TYPE
            SYNTAX      WmanIf2eBsCapabilitiesConfigEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table provides one row for each BS sector and is
                 indexed by ifIndex."
            INDEX { ifIndex }
            ::= { wmanIf2eBsCapabilitiesConfigTable 1 }

    WmanIf2eBsCapabilitiesConfigEntry ::= SEQUENCE {
            wmanIf2eBsCapCfgDownlinkCidSupport      WmanIf2eNumOfCid,
            wmanIf2eBsCapCfgPackingSupport          WmanIf2ePackingSupport,
            wmanIf2eBsCapCfgExtendedRtpsSupport     WmanIf2eExtRtpsSupport,
            wmanIf2eBsCapCfgMaxNumBurstToMs         INTEGER,
            wmanIf2eBsCapCfgIpAddrAllocMethod       WmanIf2eIpAllocMethod,
            wmanIf2eBsCapCfgHandoverSupported       WmanIf2eHandoverType,
            wmanIf2eBsCapCfgHoProcessTimer          Unsigned32,
            wmanIf2eBsCapCfgIdleModeTimeout         Unsigned32,
            wmanIf2eBsCapCfgArqAckType              WmanIf2eArqAckType,
            wmanIf2eBsCapCfgMacHeader               WmanIf2eMacHeaderSupp}

    wmanIf2eBsCapCfgDownlinkCidSupport OBJECT-TYPE
            SYNTAX      WmanIf2eNumOfCid
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This object shows the number of Downlink CIDs the SS can
                 support."
            ::= { wmanIf2eBsCapabilitiesConfigEntry 1 }

    wmanIf2eBsCapCfgPackingSupport OBJECT-TYPE
            SYNTAX      WmanIf2ePackingSupport
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "Indicates the availability of MS support for Packing."
            REFERENCE
                "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 2 }

    wmanIf2eBsCapCfgExtendedRtpsSupport OBJECT-TYPE
            SYNTAX      WmanIf2eExtRtpsSupport
            MAX-ACCESS  read-write
            STATUS      current
```

```
            DESCRIPTION
                "Indicates the availability of MS support for extended
                 rtPs."
            REFERENCE
                "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 3 }

    wmanIf2eBsCapCfgMaxNumBurstToMs OBJECT-TYPE
            SYNTAX      INTEGER (1..16)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "Maximum number of bursts transmitted concurrently to the MS
                 , including all bursts without CID or with CIDs matching
                 the MS CIDs."
            REFERENCE
                "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 4 }

    wmanIf2eBsCapCfgIpAddrAllocMethod OBJECT-TYPE
            SYNTAX      WmanIf2eIpAllocMethod
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "Indicates the method of allocating IP address for the
                 secondary management connection."
            REFERENCE
                "Subclause 11.7.11 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 5 }

    wmanIf2eBsCapCfgHandoverSupported OBJECT-TYPE
            SYNTAX      WmanIf2eHandoverType
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "Indicates what type(s) of Handover the BS or MS supports."
            REFERENCE
                "Subclause 11.7.12 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 6 }

    wmanIf2eBsCapCfgHoProcessTimer OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "frames"
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "The duration in frames the MS shall wait until receipt of
                 the next unsolicited network re-entry MAC management
                 message as indicated in the HO Process Optimization
                 element of the RNG-RSP message."
            REFERENCE
                "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
            ::= { wmanIf2eBsCapabilitiesConfigEntry 7 }

    wmanIf2eBsCapCfgIdleModeTimeout OBJECT-TYPE
            SYNTAX      Unsigned32
            UNITS       "seconds"
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "Max time interval between MS Idle Mode Location Updates."
            REFERENCE
                "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
            DEFVAL         { 4096 }
```

```
        ::= { wmanIf2eBsCapabilitiesConfigEntry 8 }

wmanIf2eBsCapCfgArqAckType OBJECT-TYPE
        SYNTAX      WmanIf2eArqAckType
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "The value of this parameter specifies the ARQ ACK type
             supported by the MS."
        REFERENCE
            "Subclause 11.7.23 in IEEE Std 802.16e-2005"
        ::= { wmanIf2eBsCapabilitiesConfigEntry 9 }

wmanIf2eBsCapCfgMacHeader OBJECT-TYPE
        SYNTAX      WmanIf2eMacHeaderSupp
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "Indicates whether or not the MS and BS support various
             types of MAC header and extended subheaders."
        REFERENCE
            "Subclause 11.7.25 in IEEE Std 802.16e-2005"
        ::= { wmanIf2eBsCapabilitiesConfigEntry 10 }
```

2.11 wmanIf2BsMsOfdmaReqCapabilitiesTable Change

[Replace the wmanIf2BsMsOfdmaReqCapabilitiesTable, wmanIf2BsMsOfdmaRspCapabilitiesTable, wmanIf2BsOfdmaCapabilitiesTable, wmanIf2BsOfdmaCapabilitiesConfigTable as the following:]

```
wmanIf2BsMsOfdmaReqCapabilitiesTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF WmanIf2BsMsOfdmaReqCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table contains the basic capability information,
             specific to OFDMA Phy, of MSs that have been reported by
             MSs to BS using RNG-REQ, SBC-REQ and REG-REQ messages.
             Entries in this table should be created when an MS
             registers with a BS."
        ::= { wmanIf2BsOfdmaPhy 5 }

wmanIf2BsMsOfdmaReqCapabilitiesEntry OBJECT-TYPE
        SYNTAX      WmanIf2BsMsOfdmaReqCapabilitiesEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "This table provides one row for each MS that has been
             registered in the BS. This table augments the table
             wmanIf2BsRegisteredSsTable."
        AUGMENTS { wmanIf2BsRegisteredSsEntry }
        ::= { wmanIf2BsMsOfdmaReqCapabilitiesTable 1 }

WmanIf2BsMsOfdmaReqCapabilitiesEntry ::= SEQUENCE {
        wmanIf2BsMsOfdmaReqCapFftSizes          WmanIf2OfdmaFftSizes,
        wmanIf2BsMsOfdmaReqCapDemodulator       WmanIf2OfdmaMsDeModType,
        wmanIf2BsMsOfdmaReqCapModulator         WmanIf2OfdmaMsModType,
        wmanIf2eBsMsOfdmaReqCapNoHarqChannel    Unsigned32,
        wmanIf2BsMsOfdmaReqCapPermutation       WmanIf2OfdmaPermutation,
        wmanIf2eBsMsOfdmaReqCapMobilityFeature  WmanIf2eOfdmaMobility,
        wmanIf2eBsMsOfdmaReqCapMaxMacLevelDlFm  WmanIf2eMaxMacLevel,
        wmanIf2eBsMsOfdmaReqCapMaxMacLevelUlFm  WmanIf2eMaxMacLevel,
```

```
        wmanIf2eBsMsOfdmaReqCapDemMimo          WmanIf2eOfdmaDemMimo,
        wmanIf2eBsMsOfdmaReqCapMimoCapability   WmanIf2eOfdmaMimoCap,
        wmanIf2eBsMsOfdmaReqCapUlMimo           WmanIf2eOfdmaUlMimo,
        wmanIf2eBsMsOfdmaReqCapPrivateMap       WmanIf2eOfdmaPrivMap,
        wmanIf2eBsMsOfdmaReqCapPrivateMapChain  INTEGER,
        wmanIf2eBsMsOfdmaReqCapAasCapability    WmanIf2eOfdmaAasCap,
        wmanIf2eBsMsOfdmaReqCapCinrMesurement   WmanIf2eOfdmaCinrCap,
        wmanIf2eBsMsOfdmaReqCapUlPowerControl   WmanIf2eOfdmaUlPower,
        wmanIf2eBsMsOfdmaReqCapMapCapability    WmanIf2eOfdmaMapCap,
        wmanIf2eBsMsOfdmaReqCapUlControlChannel WmanIf2eOfdmaUlCntlCh,
        wmanIf2eBsMsOfdmaReqCapCistCapability   WmanIf2eOfdmaMsCistCap,
        wmanIf2eBsMsOfdmaReqCapSoundigRspTime   INTEGER,
        wmanIf2eBsMsOfdmaReqCapMaxSoundigInstr  INTEGER,
        wmanIf2eBsMsOfdmaReqCapMaxUlHarqBurst   INTEGER,
        wmanIf2eBsMsOfdmaReqCapMaxDlHarqBurst   INTEGER,
        wmanIf2eBsMsOfdmaReqCapModMimo          WmanIf2eOfdmaModMimo,
        wmanIf2eBsMsOfdmaReqCapSdmaPilot        WmanIf2eSdmaPilotCap,
        wmanIf2eBsMsOfdmaReqCapMultipleBurst    WmanIf2eMultiBurst,
        wmanIf2eBsMsOfdmaReqCapIncrHarqBuffer   WmanIf2eIncrHarqBuf,
        wmanIf2eBsMsOfdmaReqCapIncrDlHarqBuffer INTEGER,
        wmanIf2eBsMsOfdmaReqCapIncrUlHarqBuffer INTEGER,
        wmanIf2eBsMsOfdmaReqCapChaseHarqBuffer  WmanIf2eChaseHarqBuf,
        wmanIf2eBsMsOfdmaReqCapChaseDlHarqBuf   INTEGER,
        wmanIf2eBsMsOfdmaReqCapChaseUlHarqBuf   INTEGER}

wmanIf2BsMsOfdmaReqCapFftSizes OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaFftSizes
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the FFT sizes supported by MS."
        ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 1 }

wmanIf2BsMsOfdmaReqCapDemodulator OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaMsDeModType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different demodulator options
             supported by MS for downlink."
        ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 2 }

wmanIf2BsMsOfdmaReqCapModulator OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaMsModType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different modulator options
             supported by MS for uplink."
        ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 3 }

wmanIf2eBsMsOfdmaReqCapNoHarqChannel OBJECT-TYPE
        SYNTAX      Unsigned32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field specifies the number of uplink H-ARQ
             channels (n) the SS supports, where n = 1..16.
             The value of this object should be 0..15."
        ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 4 }

wmanIf2BsMsOfdmaReqCapPermutation OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaPermutation
        MAX-ACCESS  read-only
```

```
            STATUS      current
            DESCRIPTION
                "This field indicates the OFDMA MS Permutation support."
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 5 }

    wmanIf2eBsMsOfdmaReqCapMobilityFeature OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMobility
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The field indicates whether or not the MS supports
                 mobility hand-over, Sleepmode, and Idle-mode."
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 6 }

    wmanIf2eBsMsOfdmaReqCapMaxMacLevelDlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per DL frame."
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 7 }

    wmanIf2eBsMsOfdmaReqCapMaxMacLevelUlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per UL frame."
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 8 }

    wmanIf2eBsMsOfdmaReqCapDemMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaDemMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different MIMO options supported
                 by a WirelessMAN-OFDMA PHY SS in the downlink."
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 9 }

    wmanIf2eBsMsOfdmaReqCapMimoCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMimoCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA MS
                 demodulator."
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 10 }

    wmanIf2eBsMsOfdmaReqCapUlMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates different MIMO options supported
                 by a OFDMA PHY SS in the uplink"
            REFERENCE
```

```
                "Subclause 11.8.3.7.6 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 11 }

    wmanIf2eBsMsOfdmaReqCapPrivateMap OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaPrivMap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates AAS private map parameters
                 supported by a OFDMA SS"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 12 }

    wmanIf2eBsMsOfdmaReqCapPrivateMapChain OBJECT-TYPE
            SYNTAX      INTEGER (0..3)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates how many parallel private map
                 chains can be supported by an SS.
                    0:    no limit
                    1..3: maximum concurrent private map chains"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 13 }

    wmanIf2eBsMsOfdmaReqCapAasCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaAasCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates different AAS options
                 supported by a OFDMA PHY SS in the downlink"
            REFERENCE
                "Subclause 11.8.3.7.8 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 14 }

    wmanIf2eBsMsOfdmaReqCapCinrMesurement OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaCinrCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the CINR measurement capability
                 supported by a OFDMA PHY SS in the downlink."
            REFERENCE
                "Subclause 11.8.3.7.9 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 15 }

    wmanIf2eBsMsOfdmaReqCapUlPowerControl OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlPower
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the power control options
                 supported by a OFDMA PHY SS for uplink transmission."
            REFERENCE
                "Subclause 11.8.3.7.11 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 16 }

    wmanIf2eBsMsOfdmaReqCapMapCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMapCap
            MAX-ACCESS  read-only
            STATUS      current
```

```
            DESCRIPTION
                "This field indicates the different MAP options supported
                 by a OFDMA PHY SS"
            REFERENCE
                "Subclause 11.8.3.7.11 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 17 }

    wmanIf2eBsMsOfdmaReqCapUlControlChannel OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlCntlCh
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different uplink control channels
                 supported by a OFDMA PHY SS."
            REFERENCE
                "Subclause 11.8.3.7.13 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 18 }

    wmanIf2eBsMsOfdmaReqCapCistCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMsCistCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MS capability of supporting CSIT
                 (uplink sounding)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 19 }

    wmanIf2eBsMsOfdmaReqCapSoundigRspTime OBJECT-TYPE
            SYNTAX      INTEGER (0..7)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 3..5 of 'OFDMA MS CSIT
                 capability' TLV indicates the time needed for SS to respond
                 to a sounding command transmitted by the BS
                     Bit 3..5
                         000   0.5ms
                         001   0.75ms
                         010   1ms
                         011   1.25ms
                         100   1.5ms
                         101   min(2ms, Next Frame)
                         110   min(5ms, Next Frame)
                         111   Next Frame"
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 20 }

    wmanIf2eBsMsOfdmaReqCapMaxSoundigInstr OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 6..9 of 'OFDMA MS CSIT
                 capability' TLV indicates the maximum number of
                 simultaneous sounding instructions (0 = unlimited)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 21 }

    wmanIf2eBsMsOfdmaReqCapMaxUlHarqBurst OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
```

```
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'Maximum number of
                 burst per frame capability' TLV indicates the maximum
                 number of UL HARQ burst allocations per HARQ enabled MS
                 per UL subframe.
                     Value 0..7  = 1..8 maximum HARQ bursts
                           8..15 = 1..8 maximum HARQ bursts, but may
                                   include one non-HARQ burst"
            REFERENCE
                "Subclause 11.8.3.7.15 in IEEE 802.16e"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 22 }

    wmanIf2eBsMsOfdmaReqCapMaxDlHarqBurst OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 4..7 of 'Maximum number of
                 burst per frame capability' TLV indicates the maximum
                 number of DL HARQ burst allocations per HARQ enabled MS
                 per DL subframe.
                     Value 0..15  = 1..16 maximum HARQ bursts"
            REFERENCE
                "Subclause 11.8.3.7.15 in IEEE 802.16e"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 23 }

    wmanIf2eBsMsOfdmaReqCapModMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaModMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA SS
                 modulator."
            REFERENCE
                "Subclause 11.8.3.7.16 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 24 }

    wmanIf2eBsMsOfdmaReqCapSdmaPilot OBJECT-TYPE
            SYNTAX      WmanIf2eSdmaPilotCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the SDMA pilot pattern support
                 for AMC zone."
            REFERENCE
                "Subclause 11.8.3.7.17 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 25 }

    wmanIf2eBsMsOfdmaReqCapMultipleBurst OBJECT-TYPE
            SYNTAX      WmanIf2eMultiBurst
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates whether multiple FEC types are
                 supported in DL/UL burst profiles."
            REFERENCE
                "Subclause 11.8.3.7.18 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 26 }

    wmanIf2eBsMsOfdmaReqCapIncrHarqBuffer OBJECT-TYPE
```

```
            SYNTAX      WmanIf2eIncrHarqBuf
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for NEP/NSCH
                 based incremental redundancy CTC in downlink and uplink
                 transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 27 }

    wmanIf2eBsMsOfdmaReqCapIncrDlHarqBuffer OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of DL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 28 }

    wmanIf2eBsMsOfdmaReqCapIncrUlHarqBuffer OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..11 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of UL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 29 }

    wmanIf2eBsMsOfdmaReqCapChaseHarqBuffer OBJECT-TYPE
            SYNTAX      WmanIf2eChaseHarqBuf
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for
                 DIUC/duration based HARQ methods (Chase combining and
                 CC-IR)in downlink and uplink transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 30 }

    wmanIf2eBsMsOfdmaReqCapChaseDlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..5 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates DL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 31 }

    wmanIf2eBsMsOfdmaReqCapChaseUlHarqBuf OBJECT-TYPE
```

```
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..13 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates UL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 32 }

    wmanIf2BsMsOfdmaRspCapabilitiesTable OBJECT-TYPE
            SYNTAX      SEQUENCE OF WmanIf2BsMsOfdmaRspCapabilitiesEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table contains the basic capability information,
                 specific to OFDMA Phy, of MSs that have been reported by
                 MSs to BS using RNG-REQ, SBC-REQ and REG-REQ messages.
                 Entries in this table should be created when an MS
                 registers with a BS."
            ::= { wmanIf2BsOfdmaPhy 6 }

    wmanIf2BsMsOfdmaRspCapabilitiesEntry OBJECT-TYPE
            SYNTAX      WmanIf2BsMsOfdmaRspCapabilitiesEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table provides one row for each MS that has been
                 registered in the BS. This table augments the table
                 wmanIf2BsRegisteredSsTable."
            AUGMENTS { wmanIf2BsRegisteredSsEntry }
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesTable 1 }

    WmanIf2BsMsOfdmaRspCapabilitiesEntry ::= SEQUENCE {
            wmanIf2BsMsOfdmaRspCapFftSizes          WmanIf2OfdmaFftSizes,
            wmanIf2BsMsOfdmaRspCapDemodulator       WmanIf2OfdmaMsDeModType,
            wmanIf2BsMsOfdmaRspCapModulator         WmanIf2OfdmaMsModType,
            wmanIf2BsMsOfdmaRspCapNoHarqChannel     Unsigned32,
            wmanIf2BsMsOfdmaRspCapPermutation       WmanIf2OfdmaPermutation,
            wmanIf2eBsMsOfdmaRspCapMobilityFeature  WmanIf2eOfdmaMobility,
            wmanIf2eBsMsOfdmaRspCapMaxMacLevelDlFm  WmanIf2eMaxMacLevel,
            wmanIf2eBsMsOfdmaRspCapMaxMacLevelUlFm  WmanIf2eMaxMacLevel,
            wmanIf2eBsMsOfdmaRspCapDemMimo          WmanIf2eOfdmaDemMimo,
            wmanIf2eBsMsOfdmaRspCapMimoCapability   WmanIf2eOfdmaMimoCap,
            wmanIf2eBsMsOfdmaRspCapUlMimo           WmanIf2eOfdmaUlMimo,
            wmanIf2eBsMsOfdmaRspCapPrivateMap       WmanIf2eOfdmaPrivMap,
            wmanIf2eBsMsOfdmaRspCapPrivateMap       WmanIf2eOfdmaPrivMap,
            wmanIf2eBsMsOfdmaRspCapPrivateMapChain  INTEGER,
            wmanIf2eBsMsOfdmaRspCapAasCapability    WmanIf2eOfdmaAasCap,
            wmanIf2eBsMsOfdmaRspCapCinrMesurement   WmanIf2eOfdmaCinrCap,
            wmanIf2eBsMsOfdmaRspCapUlPowerControl   WmanIf2eOfdmaUlPower,
            wmanIf2eBsMsOfdmaRspCapMapCapability    WmanIf2eOfdmaMapCap,
            wmanIf2eBsMsOfdmaRspCapUlControlChannel WmanIf2eOfdmaUlCntlCh,
            wmanIf2eBsMsOfdmaRspCapCistCapability   WmanIf2eOfdmaMsCistCap,
            wmanIf2eBsMsOfdmaRspCapSoundigRspTime   INTEGER,
            wmanIf2eBsMsOfdmaRspCapMaxSoundigInstr  INTEGER,
            wmanIf2eBsMsOfdmaRspCapMaxUlHarqBurst   INTEGER,
            wmanIf2eBsMsOfdmaRspCapMaxDlHarqBurst   INTEGER,
            wmanIf2eBsMsOfdmaRspCapModMimo          WmanIf2eOfdmaModMimo,
            wmanIf2eBsMsOfdmaRspCapSdmaPilot        WmanIf2eSdmaPilotCap,
            wmanIf2eBsMsOfdmaRspCapMultipleBurst    WmanIf2eMultiBurst,
            wmanIf2eBsMsOfdmaRspCapIncrHarqBuffer   WmanIf2eIncrHarqBuf,
            wmanIf2eBsMsOfdmaRspCapIncrDlHarqBuffer INTEGER,
```

```
        wmanIf2eBsMsOfdmaRspCapIncrUlHarqBuffer INTEGER,
        wmanIf2eBsMsOfdmaRspCapChaseHarqBuffer  WmanIf2eChaseHarqBuf,
        wmanIf2eBsMsOfdmaRspCapChaseDlHarqBuf   INTEGER,
        wmanIf2eBsMsOfdmaRspCapChaseUlHarqBuf   INTEGER}

wmanIf2BsMsOfdmaRspCapFftSizes OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaFftSizes
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the FFT sizes negotiated with the
             MS."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 1 }

wmanIf2BsMsOfdmaRspCapDemodulator OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaMsDeModType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different demodulator options
             negotiated for MS for downlink."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 2 }

wmanIf2BsMsOfdmaRspCapModulator OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaMsModType
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different modulator options
             negotiated for MS for uplink."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 3 }

wmanIf2BsMsOfdmaRspCapNoHarqChannel OBJECT-TYPE
        SYNTAX      Unsigned32
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field specifies the number of uplink H-ARQ
             channels (n) the SS supports, where n = 1..16.
             The value of this object should be 0..15."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 4 }

wmanIf2BsMsOfdmaRspCapPermutation OBJECT-TYPE
        SYNTAX      WmanIf2OfdmaPermutation
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the OFDMA MS Permutation support
             negotiated for MS."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 5 }

wmanIf2eBsMsOfdmaRspCapMobilityFeature OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaMobility
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The field indicates the mobility hand-over, Sleepmode,
             and Idle-mode negotiated for MS."
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 6 }

wmanIf2eBsMsOfdmaRspCapMaxMacLevelDlFm OBJECT-TYPE
        SYNTAX      WmanIf2eMaxMacLevel
        MAX-ACCESS  read-only
        STATUS      current
```

```
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per DL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 7 }

    wmanIf2eBsMsOfdmaRspCapMaxMacLevelUlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per UL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 8 }

    wmanIf2eBsMsOfdmaRspCapDemMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaDemMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different MIMO options supported
                 by a WirelessMAN-OFDMA PHY SS in the downlink."
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 9 }

    wmanIf2eBsMsOfdmaRspCapMimoCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMimoCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA MS
                 demodulator."
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 10 }

    wmanIf2eBsMsOfdmaRspCapUlMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates different MIMO options supported
                 by a OFDMA PHY SS in the uplink"
            REFERENCE
                "Subclause 11.8.3.7.6 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 11 }

    wmanIf2eBsMsOfdmaRspCapPrivateMap OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaPrivMap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates AAS private map parameters
                 supported by a OFDMA SS"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 12 }
```

```
wmanIf2eBsMsOfdmaRspCapPrivateMapChain OBJECT-TYPE
        SYNTAX      INTEGER (0..3)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates how many parallel private map
             chains can be supported by an SS.
                0:    no limit
                1..3: maximum concurrent private map chains"
        REFERENCE
            "Subclause 11.8.3.7.7 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 13 }

wmanIf2eBsMsOfdmaRspCapAasCapability OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaAasCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates different AAS options
             supported by a OFDMA PHY SS in the downlink"
        REFERENCE
            "Subclause 11.8.3.7.8 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 14 }

wmanIf2eBsMsOfdmaRspCapCinrMesurement OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaCinrCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the CINR measurement capability
             supported by a OFDMA PHY SS in the downlink."
        REFERENCE
            "Subclause 11.8.3.7.9 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 15 }

wmanIf2eBsMsOfdmaRspCapUlPowerControl OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaUlPower
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the power control options
             supported by a OFDMA PHY SS for uplink transmission."
        REFERENCE
            "Subclause 11.8.3.7.11 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 16 }

wmanIf2eBsMsOfdmaRspCapMapCapability OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaMapCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different MAP options supported
             by a OFDMA PHY SS"
        REFERENCE
            "Subclause 11.8.3.7.11 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 17 }

wmanIf2eBsMsOfdmaRspCapUlControlChannel OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaUlCntlCh
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different uplink control channels
             supported by a OFDMA PHY SS."
```

```
            REFERENCE
                "Subclause 11.8.3.7.13 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 18 }

    wmanIf2eBsMsOfdmaRspCapCistCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMsCistCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MS capability of supporting CSIT
                 (uplink sounding)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 19 }

    wmanIf2eBsMsOfdmaRspCapSoundigRspTime OBJECT-TYPE
            SYNTAX      INTEGER (0..7)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 3..5 of 'OFDMA MS CSIT
                 capability' TLV indicates the time needed for SS to respond
                 to a sounding command transmitted by the BS
                     Bit 3..5
                         000   0.5ms
                         001   0.75ms
                         010   1ms
                         011   1.25ms
                         100   1.5ms
                         101   min(2ms, Next Frame)
                         110   min(5ms, Next Frame)
                         111   Next Frame"
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 20 }

    wmanIf2eBsMsOfdmaRspCapMaxSoundigInstr OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 6..9 of 'OFDMA MS CSIT
                 capability' TLV indicates the maximum number of
                 simultaneous sounding instructions (0 = unlimited)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 21 }

    wmanIf2eBsMsOfdmaRspCapMaxUlHarqBurst OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'Maximum number of
                 burst per frame capability' TLV indicates the maximum
                 number of UL HARQ burst allocations per HARQ enabled MS
                 per UL subframe.
                     Value 0..7  = 1..8 maximum HARQ bursts
                           8..15 = 1..8 maximum HARQ bursts, but may
                                   include one non-HARQ burst"
            REFERENCE
                "Subclause 11.8.3.7.15 in IEEE 802.16e"
            DEFVAL      { 0 }
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 22 }
```

```
wmanIf2eBsMsOfdmaRspCapMaxDlHarqBurst OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 4..7 of 'Maximum number of
             burst per frame capability' TLV indicates the maximum
             number of DL HARQ burst allocations per HARQ enabled MS
             per DL subframe.
                 Value 0..15  = 1..16 maximum HARQ bursts"
        REFERENCE
            "Subclause 11.8.3.7.15 in IEEE 802.16e"
        DEFVAL      { 0 }
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 23 }

wmanIf2eBsMsOfdmaRspCapModMimo OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaModMimo
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the MIMO capability of OFDMA SS
             modulator."
        REFERENCE
            "Subclause 11.8.3.7.16 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 24 }

wmanIf2eBsMsOfdmaRspCapSdmaPilot OBJECT-TYPE
        SYNTAX      WmanIf2eSdmaPilotCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the SDMA pilot pattern support
             for AMC zone."
        REFERENCE
            "Subclause 11.8.3.7.17 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 25 }

wmanIf2eBsMsOfdmaRspCapMultipleBurst OBJECT-TYPE
        SYNTAX      WmanIf2eMultiBurst
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates whether multiple FEC types are
             supported in DL/UL burst profiles."
        REFERENCE
            "Subclause 11.8.3.7.18 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 26 }

wmanIf2eBsMsOfdmaRspCapIncrHarqBuffer OBJECT-TYPE
        SYNTAX      WmanIf2eIncrHarqBuf
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the maximal number of data
             bits the SS is able to use for buffering for NEP/NSCH
             based incremental redundancy CTC in downlink and uplink
             transmissions."
        REFERENCE
            "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
        ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 27 }

wmanIf2eBsMsOfdmaRspCapIncrDlHarqBuffer OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
```

```
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of DL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 28 }

    wmanIf2eBsMsOfdmaRspCapIncrUlHarqBuffer OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..11 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of UL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 29 }

    wmanIf2eBsMsOfdmaRspCapChaseHarqBuffer OBJECT-TYPE
            SYNTAX      WmanIf2eChaseHarqBuf
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for
                 DIUC/duration based HARQ methods (Chase combining and
                 CC-IR)in downlink and uplink transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 30 }

    wmanIf2eBsMsOfdmaRspCapChaseDlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..5 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates DL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 31 }

    wmanIf2eBsMsOfdmaRspCapChaseUlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..13 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates UL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 32 }

    wmanIf2BsOfdmaCapabilitiesTable OBJECT-TYPE
            SYNTAX      SEQUENCE OF WmanIf2BsOfdmaCapabilitiesEntry
            MAX-ACCESS  not-accessible
```

```
            STATUS      current
            DESCRIPTION
                "This table contains the basic capabilities, specific to
                 OFDMA Phy, of the BS as implemented in BS hardware and
                 software. These capabilities along with the configuration
                 for them (wmanIf2BsOfdmaCapabilitiesConfigTable) are used
                 for negotiation of basic capabilities with SS using
                 RNG-RSP, SBC-RSP and REG-RSP messages. The negotiated
                 capabilities are obtained by interSubclause of MS raw
                 reported capabilities, BS raw capabilities and BS
                 configured capabilities. The objects in the table have
                 read-only access. The table is maintained by BS."
            ::= { wmanIf2BsOfdmaPhy 7 }

    wmanIf2BsOfdmaCapabilitiesEntry OBJECT-TYPE
            SYNTAX      WmanIf2BsOfdmaCapabilitiesEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table provides one row for each BS sector and is
                 indexed by ifIndex."
            INDEX { ifIndex }
            ::= { wmanIf2BsOfdmaCapabilitiesTable 1 }

    WmanIf2BsOfdmaCapabilitiesEntry ::= SEQUENCE {
            wmanIf2BsOfdmaCapFftSizes                WmanIf2OfdmaFftSizes,
            wmanIf2BsOfdmaCapDemodulator             WmanIf2OfdmaMsDeModType,
            wmanIf2BsOfdmaCapModulator               WmanIf2OfdmaMsModType,
            wmanIf2BsOfdmaCapNoHarqChannel           Unsigned32,
            wmanIf2BsOfdmaCapPermutation             WmanIf2OfdmaPermutation,
            wmanIf2eBsOfdmaCapMobilityFeature        WmanIf2eOfdmaMobility,
            wmanIf2eBsOfdmaCapMaxMacLevelDlFm        WmanIf2eMaxMacLevel,
            wmanIf2eBsOfdmaCapMaxMacLevelUlFm        WmanIf2eMaxMacLevel,
            wmanIf2eBsOfdmaCapDemMimo                WmanIf2eOfdmaDemMimo,
            wmanIf2eBsOfdmaCapMimoCapability         WmanIf2eOfdmaMimoCap,
            wmanIf2eBsOfdmaCapUlMimo                 WmanIf2eOfdmaUlMimo,
            wmanIf2eBsOfdmaCapPrivateMap             WmanIf2eOfdmaPrivMap,
            wmanIf2eBsOfdmaCapPrivateMapChain        INTEGER,
            wmanIf2eBsOfdmaCapAasCapability          WmanIf2eOfdmaAasCap,
            wmanIf2eBsOfdmaCapCinrMesurement         WmanIf2eOfdmaCinrCap,
            wmanIf2eBsOfdmaCapUlPowerControl         WmanIf2eOfdmaUlPower,
            wmanIf2eBsOfdmaCapMapCapability          WmanIf2eOfdmaMapCap,
            wmanIf2eBsOfdmaCapUlControlChannel       WmanIf2eOfdmaUlCntlCh,
            wmanIf2eBsOfdmaCapCistCapability         WmanIf2eOfdmaMsCistCap,
            wmanIf2eBsOfdmaCapSoundigRspTime         INTEGER,
            wmanIf2eBsOfdmaCapMaxSoundigInstr        INTEGER,
            wmanIf2eBsOfdmaCapMaxUlHarqBurst         INTEGER,
            wmanIf2eBsOfdmaCapMaxDlHarqBurst         INTEGER,
            wmanIf2eBsOfdmaCapModMimo                WmanIf2eOfdmaModMimo,
            wmanIf2eBsOfdmaCapSdmaPilot              WmanIf2eSdmaPilotCap,
            wmanIf2eBsOfdmaCapMultipleBurst          WmanIf2eMultiBurst,
            wmanIf2eBsOfdmaCapIncrHarqBuffer         WmanIf2eIncrHarqBuf,
            wmanIf2eBsOfdmaCapIncrDlHarqBuffer       INTEGER,
            wmanIf2eBsOfdmaCapIncrUlHarqBuffer       INTEGER,
            wmanIf2eBsOfdmaCapChaseHarqBuffer        WmanIf2eChaseHarqBuf,
            wmanIf2eBsOfdmaCapChaseDlHarqBuf         INTEGER,
            wmanIf2eBsOfdmaCapChaseUlHarqBuf         INTEGER}

    wmanIf2BsOfdmaCapFftSizes OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaFftSizes
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the FFT sizes supported by BS."
```

```
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 1 }

    wmanIf2BsOfdmaCapDemodulator OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaMsDeModType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different demodulator options
                 supported by BS."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 2 }

    wmanIf2BsOfdmaCapModulator OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaMsModType
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different modulator options
                 supported by BS."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 3 }

    wmanIf2BsOfdmaCapNoHarqChannel OBJECT-TYPE
            SYNTAX      Unsigned32
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field specifies the number of uplink H-ARQ
                 channels (n) the SS supports, where n = 1..16.
                 The value of this object should be 0..15."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 4 }

    wmanIf2BsOfdmaCapPermutation OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaPermutation
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the OFDMA MS Permutation support
                 supported by BS."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 5 }

    wmanIf2eBsOfdmaCapMobilityFeature OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMobility
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "The field indicates the mobility hand-over, Sleepmode,
                 and Idle-mode supported by BS."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 6 }

    wmanIf2eBsOfdmaCapMaxMacLevelDlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per DL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 7 }

    wmanIf2eBsOfdmaCapMaxMacLevelUlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
```

```
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per UL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 8 }

    wmanIf2eBsOfdmaCapDemMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaDemMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the different MIMO options supported
                 by a WirelessMAN-OFDMA PHY SS in the downlink."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 9 }

    wmanIf2eBsOfdmaCapMimoCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMimoCap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA MS
                 demodulator."
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 10 }

    wmanIf2eBsOfdmaCapUlMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlMimo
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates different MIMO options supported
                 by a OFDMA PHY SS in the uplink"
            REFERENCE
                "Subclause 11.8.3.7.6 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 11 }

    wmanIf2eBsOfdmaCapPrivateMap OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaPrivMap
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates AAS private map parameters
                 supported by a OFDMA SS"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 12 }

    wmanIf2eBsOfdmaCapPrivateMapChain OBJECT-TYPE
            SYNTAX      INTEGER (0..3)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates how many parallel private map
                 chains can be supported by an SS.
                    0:    no limit
                    1..3: maximum concurrent private map chains"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 13 }
```

```
wmanIf2eBsOfdmaCapAasCapability OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaAasCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates different AAS options
             supported by a OFDMA PHY SS in the downlink"
        REFERENCE
            "Subclause 11.8.3.7.8 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 14 }

wmanIf2eBsOfdmaCapCinrMesurement OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaCinrCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the CINR measurement capability
             supported by a OFDMA PHY SS in the downlink."
        REFERENCE
            "Subclause 11.8.3.7.9 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 15 }

wmanIf2eBsOfdmaCapUlPowerControl OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaUlPower
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the power control options
             supported by a OFDMA PHY SS for uplink transmission."
        REFERENCE
            "Subclause 11.8.3.7.11 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 16 }

wmanIf2eBsOfdmaCapMapCapability OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaMapCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different MAP options supported
             by a OFDMA PHY SS"
        REFERENCE
            "Subclause 11.8.3.7.11 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 17 }

wmanIf2eBsOfdmaCapUlControlChannel OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaUlCntlCh
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the different uplink control channels
             supported by a OFDMA PHY SS."
        REFERENCE
            "Subclause 11.8.3.7.13 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 18 }

wmanIf2eBsOfdmaCapCistCapability OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaMsCistCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the MS capability of supporting CSIT
             (uplink sounding)."
        REFERENCE
```

```
            "Subclause 11.8.3.7.14 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 19 }

wmanIf2eBsOfdmaCapSoundigRspTime OBJECT-TYPE
        SYNTAX      INTEGER (0..7)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 3..5 of 'OFDMA MS CSIT
             capability' TLV indicates the time needed for SS to respond
             to a sounding command transmitted by the BS
                 Bit 3..5
                     000   0.5ms
                     001   0.75ms
                     010   1ms
                     011   1.25ms
                     100   1.5ms
                     101   min(2ms, Next Frame)
                     110   min(5ms, Next Frame)
                     111   Next Frame"
        REFERENCE
            "Subclause 11.8.3.7.14 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 20 }

wmanIf2eBsOfdmaCapMaxSoundigInstr OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 6..9 of 'OFDMA MS CSIT
             capability' TLV indicates the maximum number of
             simultaneous sounding instructions (0 = unlimited)."
        REFERENCE
            "Subclause 11.8.3.7.14 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 21 }

wmanIf2eBsOfdmaCapMaxUlHarqBurst OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 0..3 of 'Maximum number of
             burst per frame capability' TLV indicates the maximum
             number of UL HARQ burst allocations per HARQ enabled MS
             per UL subframe.
                 Value 0..7  = 1..8 maximum HARQ bursts
                       8..15 = 1..8 maximum HARQ bursts, but may
                               include one non-HARQ burst"
        REFERENCE
            "Subclause 11.8.3.7.15 in IEEE 802.16e"
        DEFVAL      { 0 }
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 22 }

wmanIf2eBsOfdmaCapMaxDlHarqBurst OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 4..7 of 'Maximum number of
             burst per frame capability' TLV indicates the maximum
             number of DL HARQ burst allocations per HARQ enabled MS
             per DL subframe.
                 Value 0..15  = 1..16 maximum HARQ bursts"
        REFERENCE
```

```
            "Subclause 11.8.3.7.15 in IEEE 802.16e"
        DEFVAL      { 0 }
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 23 }

wmanIf2eBsOfdmaCapModMimo OBJECT-TYPE
        SYNTAX      WmanIf2eOfdmaModMimo
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the MIMO capability of OFDMA SS
             modulator."
        REFERENCE
            "Subclause 11.8.3.7.16 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 24 }

wmanIf2eBsOfdmaCapSdmaPilot OBJECT-TYPE
        SYNTAX      WmanIf2eSdmaPilotCap
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the SDMA pilot pattern support
             for AMC zone."
        REFERENCE
            "Subclause 11.8.3.7.17 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 25 }

wmanIf2eBsOfdmaCapMultipleBurst OBJECT-TYPE
        SYNTAX      WmanIf2eMultiBurst
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates whether multiple FEC types are
             supported in DL/UL burst profiles."
        REFERENCE
            "Subclause 11.8.3.7.18 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 26 }

wmanIf2eBsOfdmaCapIncrHarqBuffer OBJECT-TYPE
        SYNTAX      WmanIf2eIncrHarqBuf
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field indicates the maximal number of data
             bits the SS is able to use for buffering for NEP/NSCH
             based incremental redundancy CTC in downlink and uplink
             transmissions."
        REFERENCE
            "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 27 }

wmanIf2eBsOfdmaCapIncrDlHarqBuffer OBJECT-TYPE
        SYNTAX      INTEGER (0..15)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "This field derived from bit 0..3 of 'HARQ incremental
             redundancy buffer capability' TLV indicates the NEP value
             of DL HARQ buffering capability for incremental redundancy
             CTC."
        REFERENCE
            "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
        ::= { wmanIf2BsOfdmaCapabilitiesEntry 28 }

wmanIf2eBsOfdmaCapIncrUlHarqBuffer OBJECT-TYPE
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```
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..11 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of UL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 29 }

    wmanIf2eBsOfdmaCapChaseHarqBuffer OBJECT-TYPE
            SYNTAX      WmanIf2eChaseHarqBuf
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for
                 DIUC/duration based HARQ methods (Chase combining and
                 CC-IR)in downlink and uplink transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 30 }

    wmanIf2eBsOfdmaCapChaseDlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..5 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates DL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 31 }

    wmanIf2eBsOfdmaCapChaseUlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-only
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..13 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates UL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesEntry 32 }

    wmanIf2BsOfdmaCapabilitiesConfigTable OBJECT-TYPE
            SYNTAX      SEQUENCE OF WmanIf2BsOfdmaCapabilitiesConfigEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table contains the configuration for basic
                 capabilities of BS, specific to OFDMA Phy. The table is
                 intended to be used to restrict the Capabilities
                 implemented by BS, for example in order to comply with
                 local regulatory requirements. The BS should use the
                 configuration along with the implemented Capabilities
                 (wmanIf2BsOfdmaPhyTable) for negotiation of basic
                 capabilities with SS using RNG-RSP, SBC-RSP and REG-RSP
                 messages. The negotiated capabilities are obtained by
                 interSubclause of MS reported capabilities, BS raw
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                capabilities and BS configured capabilities. The objects
                in the table have read-write access. The rows are created
                by BS as a copy of wmanIf2BsBasicCapabilitiesTable
                and can be modified by NMS."
            ::= { wmanIf2BsOfdmaPhy 8 }

    wmanIf2BsOfdmaCapabilitiesConfigEntry OBJECT-TYPE
            SYNTAX      WmanIf2BsOfdmaCapabilitiesConfigEntry
            MAX-ACCESS  not-accessible
            STATUS      current
            DESCRIPTION
                "This table provides one row for each BS sector and is
                 indexed by ifIndex."
            INDEX { ifIndex }
            ::= { wmanIf2BsOfdmaCapabilitiesConfigTable 1 }

    WmanIf2BsOfdmaCapabilitiesConfigEntry ::= SEQUENCE {
            wmanIf2BsOfdmaCapCfgFftSizes            WmanIf2OfdmaFftSizes,
            wmanIf2BsOfdmaCapCfgDemodulator         WmanIf2OfdmaMsDeModType,
            wmanIf2BsOfdmaCapCfgModulator           WmanIf2OfdmaMsModType,
            wmanIf2BsOfdmaCapCfgNoHarqChannel       Unsigned32,
            wmanIf2BsOfdmaCapCfgPermutation         WmanIf2OfdmaPermutation,
            wmanIf2eBsOfdmaCapCfgMobilityFeature    WmanIf2eOfdmaMobility,
            wmanIf2eBsOfdmaCapCfgMaxMacLevelDlFm    WmanIf2eMaxMacLevel,
            wmanIf2eBsOfdmaCapCfgMaxMacLevelUlFm    WmanIf2eMaxMacLevel,
            wmanIf2eBsOfdmaCapCfgDemMimo            WmanIf2eOfdmaDemMimo,
            wmanIf2eBsOfdmaCapCfgMimoCapability     WmanIf2eOfdmaMimoCap,
            wmanIf2eBsOfdmaCapCfgUlMimo             WmanIf2eOfdmaUlMimo,
            wmanIf2eBsOfdmaCapCfgPrivateMap         WmanIf2eOfdmaPrivMap,
            wmanIf2eBsOfdmaCapCfgPrivateMapChain    INTEGER,
            wmanIf2eBsOfdmaCapCfgAasCapability      WmanIf2eOfdmaAasCap,
            wmanIf2eBsOfdmaCapCfgCinrMesurement     WmanIf2eOfdmaCinrCap,
            wmanIf2eBsOfdmaCapCfgUlPowerControl     WmanIf2eOfdmaUlPower,
            wmanIf2eBsOfdmaCapCfgMapCapability      WmanIf2eOfdmaMapCap,
            wmanIf2eBsOfdmaCapCfgUlControlChannel   WmanIf2eOfdmaUlCntlCh,
            wmanIf2eBsOfdmaCapCfgCistCapability     WmanIf2eOfdmaMsCistCap,
            wmanIf2eBsOfdmaCapCfgSoundigRspTime     INTEGER,
            wmanIf2eBsOfdmaCapCfgMaxSoundigInstr    INTEGER,
            wmanIf2eBsOfdmaCapCfgMaxUlHarqBurst     INTEGER,
            wmanIf2eBsOfdmaCapCfgMaxDlHarqBurst     INTEGER,
            wmanIf2eBsOfdmaCapCfgModMimo            WmanIf2eOfdmaModMimo,
            wmanIf2eBsOfdmaCapCfgSdmaPilot          WmanIf2eSdmaPilotCap,
            wmanIf2eBsOfdmaCapCfgMultipleBurst      WmanIf2eMultiBurst,
            wmanIf2eBsOfdmaCapCfgIncrHarqBuffer     WmanIf2eIncrHarqBuf,
            wmanIf2eBsOfdmaCapCfgIncrDlHarqBuffer   INTEGER,
            wmanIf2eBsOfdmaCapCfgIncrUlHarqBuffer   INTEGER,
            wmanIf2eBsOfdmaCapCfgChaseHarqBuffer    WmanIf2eChaseHarqBuf,
            wmanIf2eBsOfdmaCapCfgChaseDlHarqBuf     INTEGER,
            wmanIf2eBsOfdmaCapCfgChaseUlHarqBuf     INTEGER}

    wmanIf2BsOfdmaCapCfgFftSizes OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaFftSizes
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the FFT sizes configured for the BS."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 1 }

    wmanIf2BsOfdmaCapCfgDemodulator OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaMsDeModType
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the different demodulator options
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                configured for the BS."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 2 }

    wmanIf2BsOfdmaCapCfgModulator OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaMsModType
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the different modulator options
                 configured for the BS."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 3 }

    wmanIf2BsOfdmaCapCfgNoHarqChannel OBJECT-TYPE
            SYNTAX      Unsigned32
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field specifies the number of uplink H-ARQ
                 channels (n) the SS supports, where n = 1..16.
                 The value of this object should be 0..15."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 4 }

    wmanIf2BsOfdmaCapCfgPermutation OBJECT-TYPE
            SYNTAX      WmanIf2OfdmaPermutation
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the OFDMA MS Permutation support
                 configured for the BS."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 5 }

    wmanIf2eBsOfdmaCapCfgMobilityFeature OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMobility
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "The field indicates the mobility hand-over, Sleepmode,
                 and Idle-mode configured for the BS."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 6 }

    wmanIf2eBsOfdmaCapCfgMaxMacLevelDlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per DL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 7 }

    wmanIf2eBsOfdmaCapCfgMaxMacLevelUlFm OBJECT-TYPE
            SYNTAX      WmanIf2eMaxMacLevel
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
               "Maximum amount of MAC level data the MS is capable of
                processing per UL frame. A value of 0 indicates such
                limitation does not exist, except the limitation of
                the physical medium"
            REFERENCE
```

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                "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 8 }

    wmanIf2eBsOfdmaCapCfgDemMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaDemMimo
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the different MIMO options supported
                 by a WirelessMAN-OFDMA PHY SS in the downlink."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 9 }

    wmanIf2eBsOfdmaCapCfgMimoCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMimoCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA MS
                 demodulator."
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 10 }

    wmanIf2eBsOfdmaCapCfgUlMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlMimo
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates different MIMO options supported
                 by a OFDMA PHY SS in the uplink"
            REFERENCE
                "Subclause 11.8.3.7.6 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 11 }

    wmanIf2eBsOfdmaCapCfgPrivateMap OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaPrivMap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates AAS private map parameters
                 supported by a OFDMA SS"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 12 }

    wmanIf2eBsOfdmaCapCfgPrivateMapChain OBJECT-TYPE
            SYNTAX      INTEGER (0..3)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates how many parallel private map
                 chains can be supported by an SS.
                    0:    no limit
                    1..3: maximum concurrent private map chains"
            REFERENCE
                "Subclause 11.8.3.7.7 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 13 }

    wmanIf2eBsOfdmaCapCfgAasCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaAasCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates different AAS options
                 supported by a OFDMA PHY SS in the downlink"
```

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            REFERENCE
                "Subclause 11.8.3.7.8 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 14 }

    wmanIf2eBsOfdmaCapCfgCinrMesurement OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaCinrCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the CINR measurement capability
                 supported by a OFDMA PHY SS in the downlink."
            REFERENCE
                "Subclause 11.8.3.7.9 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 15 }

    wmanIf2eBsOfdmaCapCfgUlPowerControl OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlPower
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the power control options
                 supported by a OFDMA PHY SS for uplink transmission."
            REFERENCE
                "Subclause 11.8.3.7.11 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 16 }

    wmanIf2eBsOfdmaCapCfgMapCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMapCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the different MAP options supported
                 by a OFDMA PHY SS"
            REFERENCE
                "Subclause 11.8.3.7.11 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 17 }

    wmanIf2eBsOfdmaCapCfgUlControlChannel OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaUlCntlCh
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the different uplink control channels
                 supported by a OFDMA PHY SS."
            REFERENCE
                "Subclause 11.8.3.7.13 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 18 }

    wmanIf2eBsOfdmaCapCfgCistCapability OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaMsCistCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the MS capability of supporting CSIT
                 (uplink sounding)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 19 }

    wmanIf2eBsOfdmaCapCfgSoundigRspTime OBJECT-TYPE
            SYNTAX      INTEGER (0..7)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
```

```
                "This field derived from bit 3..5 of 'OFDMA MS CSIT
                 capability' TLV indicates the time needed for SS to respond
                 to a sounding command transmitted by the BS
                     Bit 3..5
                         000   0.5ms
                         001   0.75ms
                         010   1ms
                         011   1.25ms
                         100   1.5ms
                         101   min(2ms, Next Frame)
                         110   min(5ms, Next Frame)
                         111   Next Frame"
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 20 }

    wmanIf2eBsOfdmaCapCfgMaxSoundigInstr OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 6..9 of 'OFDMA MS CSIT
                 capability' TLV indicates the maximum number of
                 simultaneous sounding instructions (0 = unlimited)."
            REFERENCE
                "Subclause 11.8.3.7.14 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 21 }

    wmanIf2eBsOfdmaCapCfgMaxUlHarqBurst OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'Maximum number of
                 burst per frame capability' TLV indicates the maximum
                 number of UL HARQ burst allocations per HARQ enabled MS
                 per UL subframe.
                     Value 0..7  = 1..8 maximum HARQ bursts
                           8..15 = 1..8 maximum HARQ bursts, but may
                                   include one non-HARQ burst"
            REFERENCE
                "Subclause 11.8.3.7.15 in IEEE 802.16e"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 22 }

    wmanIf2eBsOfdmaCapCfgMaxDlHarqBurst OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 4..7 of 'Maximum number of
                 burst per frame capability' TLV indicates the maximum
                 number of DL HARQ burst allocations per HARQ enabled MS
                 per DL subframe.
                     Value 0..15  = 1..16 maximum HARQ bursts"
            REFERENCE
                "Subclause 11.8.3.7.15 in IEEE 802.16e"
            DEFVAL      { 0 }
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 23 }

    wmanIf2eBsOfdmaCapCfgModMimo OBJECT-TYPE
            SYNTAX      WmanIf2eOfdmaModMimo
            MAX-ACCESS  read-write
            STATUS      current
```

```
            DESCRIPTION
                "This field indicates the MIMO capability of OFDMA SS
                 modulator."
            REFERENCE
                "Subclause 11.8.3.7.16 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 24 }

    wmanIf2eBsOfdmaCapCfgSdmaPilot OBJECT-TYPE
            SYNTAX      WmanIf2eSdmaPilotCap
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the SDMA pilot pattern support
                 for AMC zone."
            REFERENCE
                "Subclause 11.8.3.7.17 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 25 }

    wmanIf2eBsOfdmaCapCfgMultipleBurst OBJECT-TYPE
            SYNTAX      WmanIf2eMultiBurst
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates whether multiple FEC types are
                 supported in DL/UL burst profiles."
            REFERENCE
                "Subclause 11.8.3.7.18 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 26 }

    wmanIf2eBsOfdmaCapCfgIncrHarqBuffer OBJECT-TYPE
            SYNTAX      WmanIf2eIncrHarqBuf
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for NEP/NSCH
                 based incremental redundancy CTC in downlink and uplink
                 transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 27 }

    wmanIf2eBsOfdmaCapCfgIncrDlHarqBuffer OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..3 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of DL HARQ buffering capability for incremental redundancy
                 CTC."
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 28 }

    wmanIf2eBsOfdmaCapCfgIncrUlHarqBuffer OBJECT-TYPE
            SYNTAX      INTEGER (0..15)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..11 of 'HARQ incremental
                 redundancy buffer capability' TLV indicates the NEP value
                 of UL HARQ buffering capability for incremental redundancy
                 CTC."
```

```
            REFERENCE
                "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 29 }

    wmanIf2eBsOfdmaCapCfgChaseHarqBuffer OBJECT-TYPE
            SYNTAX      WmanIf2eChaseHarqBuf
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field indicates the maximal number of data
                 bits the SS is able to use for buffering for
                 DIUC/duration based HARQ methods (Chase combining and
                 CC-IR)in downlink and uplink transmissions."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 30 }

    wmanIf2eBsOfdmaCapCfgChaseDlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 0..5 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates DL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 31 }

    wmanIf2eBsOfdmaCapCfgChaseUlHarqBuf OBJECT-TYPE
            SYNTAX      INTEGER (0..63)
            MAX-ACCESS  read-write
            STATUS      current
            DESCRIPTION
                "This field derived from bit 8..13 of 'HARQ Chase combining
                 and CC-IR buffer capability' indicates UL HARQ buffering
                 capability for chase combining (K)."
            REFERENCE
                "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 32 }
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