

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Adding new REG/SBC capabilities to wman2IfMib	
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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

1

2. Introduction

2

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

5 2. wmanIfMib change Proposal

5

6 2.1 wman2IfBsCps Change

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8 15.2.1.1.2 wman2IfBsCps

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9 *[Replace Fig 20 with the following:]*

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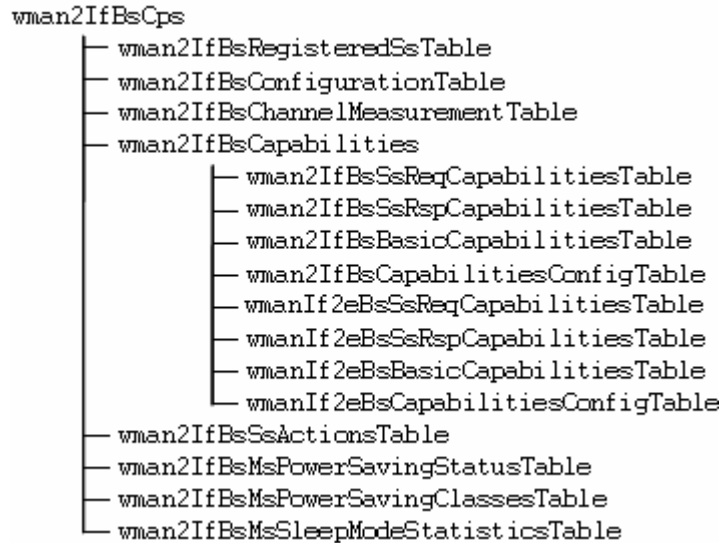


Figure 20—wman2IfBsCps Structure

33 15.2.1.1.2.4 wman2IfBsCps

34 *[Insert the following new subclauses:]*

35

36 15.2.1.1.2.4.5 wmanIf2eBsSsReqCapabilitiesTable

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

39

40

41

41 15.2.1.1.2.4.6 wmanIf2eBsSsRspCapabilitiesTable

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

3

4 **15.2.1.1.2.4.7 wmanIf2eBsBasicCapabilitiesTable**

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

7

8 **15.2.1.1.2.4.8 wmanIf2eBsCapabilitiesConfigTable**

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

11

12 **15.2.2 ASN.1 Definitions of 802.16 MIB for SNMP**

13 **2.2 Wman2IfNumOfUplinkCid Change**

14

15 [\[Insert the following ASN.1 notation:\]](#)

16

```
17 Wman2IfNumOfUplinkCid ::= TEXTUAL-CONVENTION
18     STATUS      current
19     DESCRIPTION
20         "The object of this type shows the number of Uplink CIDs
21         the SS can support."
22     REFERENCE
23         "Subclause 11.7.4 in IEEE Std 802.16-2004"
24     SYNTAX      INTEGER (2..65535)
25
```

26 **2.3 Wman2IfOfdmFftSizes Change**

27 [\[Change Wman2IfOfdmFftSizes from:\]](#)

28

```
29 Wman2IfOfdmFftSizes ::= TEXTUAL-CONVENTION
30     STATUS      current
31     DESCRIPTION
32         "This field indicates the FFT sizes supported by the SS/MS.
33         It is used for describing OFDM or OFDMA capabilities,
34         depending on context. For each FFT size, a bit value of 0
35         indicates 'not supported' while 1 indicates 'supported'."
36     REFERENCE
37         "Subclause 11.8.3.7.1 in IEEE 802.16e-2005"
38     SYNTAX      BITS {fft256(0),
39                    fft2048(1),
40                    fft128(2),
41                    fft512(3),
42                    fft1024(4)}
43
```

44

44 [\[To:\]](#)

45

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

```

1           "Subclause 11.8.3.6.1 in IEEE 802.16-2004"
2     SYNTAX     BITS {fft256(0),
3                 fft2048(1)}
4

```

5 2.4 Wman2IfOfdmSsDeModType Change

6 [\[Changes from:\]](#)

```

7
8     Wman2IfOfdmSsDeModType ::= TEXTUAL-CONVENTION
9         STATUS     current
10        DESCRIPTION
11            "This field indicates the different demodulator options
12            supported by a WirelessMAN-OFDM PHY SS for downlink. This
13            field is not used for other PHY specifications. A bit
14            value of 0 indicates 'not supported' while 1 indicates
15            'supported'."
16        REFERENCE
17            "Subclause 11.8.3.6.2 in IEEE Std 802.16-2004"
18        SYNTAX     BITS {qam64(0),
19                        btc(1),
20                        ctc(2),
21                        stc(3),
22                        aac(4)}
23

```

```

24     Wman2IfOfdmSsModType ::= TEXTUAL-CONVENTION
25         STATUS     current
26        DESCRIPTION
27            "This field indicates the different modulator options
28            supported by a WirelessMAN-OFDM PHY SS for uplink. This
29            field is not used for other PHY specifications. A bit
30            value of 0 indicates 'not supported' while 1 indicates
31            'supported'."
32        REFERENCE
33            "Subclause 11.8.3.6.3 in IEEE Std 802.16-2004"
34        SYNTAX     BITS {qam64(0),
35                        btc(1),
36                        ctc(2),
37                        subchannellization(3),
38                        focusedCtBwReq(4)}
39

```

40 [\[To:\]](#)

```

41
42     WmanIf2OfdmSsDeModType ::= TEXTUAL-CONVENTION
43         STATUS     current
44        DESCRIPTION
45            "This field indicates the different demodulator options
46            supported by a WirelessMAN-OFDM PHY SS for downlink. This
47            field is not used for other PHY specifications. A bit
48            value of 0 indicates 'not supported' while 1 indicates
49            'supported'."
50        REFERENCE
51            "Subclause 11.8.3.6.2 in IEEE Std 802.16e-2005"
52        SYNTAX     BITS {qam64(0),
53                        btc(1),
54                        ctc(2),
55                        stc(3),
56                        aas(4),
57                        subchannelization(5)}
58
59     WmanIf2OfdmSsModType ::= TEXTUAL-CONVENTION
60         STATUS     current

```

```

1      DESCRIPTION
2          "This field indicates the different modulator options
3          supported by a WirelessMAN-OFDM PHY SS for uplink. This
4          field is not used for other PHY specifications. A bit
5          value of 0 indicates 'not supported' while 1 indicates
6          'supported'."
7      REFERENCE
8          "Subclause 11.8.3.6.3 in IEEE Std 802.16e-2005"
9      SYNTAX      BITS {gam64(0),
10                  btc(1),
11                  ctc(2),
12                  subchannellization(3),
13                  focusedCtBwReq(4),
14                  ulCyclicDelay(5)}
15

```

16 2.5 WmanIf2eOfdmPrivMap Change

```

17      [Insert the following ASN.1 notation:]
18
19      WmanIf2eOfdmPrivMap ::= TEXTUAL-CONVENTION
20          STATUS      current
21          DESCRIPTION
22              "This field indicates if the private map parameters
23              is supported. A bit value of 0 indicates
24              'not supported' while 1 indicates 'supported'."
25          REFERENCE
26              "Subclause 11.8.3.6.6 in IEEE Std 802.16e-2005"
27          SYNTAX      BITS {regularMap(0),
28                  compressedMap(1)}
29
30      WmanIf2eOfdmUlPower ::= TEXTUAL-CONVENTION
31          STATUS      current
32          DESCRIPTION
33              "This field indicates the uplink power control options
34              supported by a WirelessMAN-OFDM PHY SS for uplink
35              transmission. A bit value of 0 indicates
36              'not supported' while 1 indicates 'supported'."
37          REFERENCE
38              "Subclause 11.8.3.7.10 in IEEE Std 802.16e-2005"
39          SYNTAX      BITS {ulOpenLoopPwrCntl(0),
40                  ulAasPreamblePwrCntl(1)}
41
42      WmanIf2OfdmaFftSizes ::= TEXTUAL-CONVENTION
43          STATUS      current
44          DESCRIPTION
45              "This field indicates the FFT sizes supported by the SS/MS.
46              For each FFT size, a bit value of 0 indicates 'not
47              supported' while 1 indicates 'supported'."
48          REFERENCE
49              "Subclause 11.8.3.7.1 in IEEE 802.16e-2005"
50          SYNTAX      BITS {fft256(0),
51                  fft2048(1),
52                  fft128(2),
53                  fft512(3),
54                  fft1024(4)}
55

```

56 2.6 Wman2IfOfdmaMsDeModType Change

```

57      [Changes from:]
58
59      Wman2IfOfdmaMsDeModType ::= TEXTUAL-CONVENTION

```

```

1      STATUS      current
2      DESCRIPTION
3          "This field indicates the different demodulator options
4          supported by a WirelessMAN-OFDMA PHY SS for downlink.
5          A bit value of 0 indicates 'not supported' while 1
6          indicates 'supported'."
7      REFERENCE
8          "Subclause 11.8.3.7.2 in IEEE 802.16e"
9      SYNTAX      BITS {qam64(0),
10                  btc(1),
11                  ctc(2),
12                  stc(3),
13                  aasDiversityMapScan(4),
14                  harqChase(5),
15                  harqCtcIr(6),
16                  reserved(7),
17                  harqCcIr(8),
18                  ldpc(9)}
19
20      Wman2IfOfdmaPermutation ::= TEXTUAL-CONVENTION
21          STATUS      current
22          DESCRIPTION
23              "This field indicates the OFDMA SS Permutation support
24              A bit value of 0 indicates 'not supported' while 1
25              indicates 'supported'."
26          REFERENCE
27              "Subclause 11.8.3.7.5 in IEEE 802.16e"
28          SYNTAX      BITS {optionalPuscSupport(0),
29                  optionalFuscSupport(1),
30                  amcOneBySixSupport(2),
31                  amcTwoByThreeSupport(3),
32                  amcThreeByTwoSupport(4),
33                  amcSupportWithHarqMap(5),
34                  tusc1Support(6),
35                  tusc2(7)}
36
37      [To:]
38
39      WmanIf2OfdmaMsDeModType ::= TEXTUAL-CONVENTION
40          STATUS      current
41          DESCRIPTION
42              "This field indicates the different demodulator options
43              supported by a WirelessMAN-OFDMA PHY SS for downlink.
44              A bit value of 0 indicates 'not supported' while 1
45              indicates 'supported'."
46          REFERENCE
47              "Subclause 11.8.3.7.2 in IEEE Std 802.16e-2005"
48          SYNTAX      BITS {qam64(0),
49                  btc(1),
50                  ctc(2),
51                  stc(3),
52                  ccWithInterleacer(4),
53                  harqChase(5),
54                  harqCtcIr(6),
55                  reserved(7),
56                  harqCcIr(8),
57                  ldpc(9),
58                  dedicatedPilots(10)}
59
60
61      WmanIf2OfdmaPermutation ::= TEXTUAL-CONVENTION
62          STATUS      current
63          DESCRIPTION
64              "This field indicates the OFDMA SS Permutation support

```

```

1           A bit value of 0 indicates 'not supported' while 1
2           indicates 'supported'."
3     REFERENCE
4       "Subclause 11.8.3.7.4 in IEEE 802.16e"
5     SYNTAX     BITS {optionalPuscSupport (0),
6                 optionalFuscSupport (1),
7                 amcOneBySixSupport (2),
8                 amcTwoByThreeSupport (3),
9                 amcThreeByTwoSupport (4),
10                amcSupportWithHarqMap (5),
11                tusc1Support (6),
12                tusc2Support (7) }
13

```

14 2.7 WmanIf2eOfdmaDemMimo Change

15 [\[Insert the following ASN.1 notation:\]](#)

```

16
17 WmanIf2eOfdmaDemMimo ::= TEXTUAL-CONVENTION
18     STATUS     current
19     DESCRIPTION
20         "This field indicates the MIMO capability of OFDMA MS
21         demodulator. A bit value of 0 indicates 'not supported'
22         while 1 indicates 'supported'."
23     REFERENCE
24         "Subclause 11.8.3.7.5 in IEEE 802.16e"
25     SYNTAX     BITS {twoAntStcMatrixA (0),
26                 twoAntStcMatrixBVCoding (1),
27                 twoAntStcMatrixBHCoding (2),
28                 fourAntStcMatrixA (3),
29                 fourAntStcMatrixBVCoding (4),
30                 fourAntStcMatrixBHCoding (5),
31                 fourAntStcMatrixCVCoding (6),
32                 fourAntStcMatrixCHCodingt (7) }
33
34 WmanIf2eOfdmaMimoCap ::= TEXTUAL-CONVENTION
35     STATUS     current
36     DESCRIPTION
37         "This field indicates the MIMO capability of
38         OFDMA MS demodulator."
39     REFERENCE
40         "Subclause 11.8.3.7.5 in IEEE 802.16e"
41     SYNTAX     BITS {twoAntStcMatrixA (0),
42                 twoAntStcMatrixBVCoding (1),
43                 fourRxAntenna (2),
44                 fourAntStcMatrixA (3),
45                 fourAntStcMatrixBVCoding (4),
46                 fourAntStcMatrixBHCoding (5),
47                 fourAntStcMatrixCVCoding (6),
48                 fourAntStcMatrixCHCodingt (7),
49                 threeAntStcMatrixA (8),
50                 threeAntStcMatrixB (9),
51                 threeAntStcMatrixCVCoding (10),
52                 threeAntStcMatrixCHCodingt (11),
53                 calculatingPrecodingWeight (12),
54                 adaptiveRateControl (13),
55                 calculatingChannelMatrix (14),
56                 antennaGrouping (15),
57                 antennaSelection (16),
58                 codebookBasedPrecoding (17),
59                 longTermPrecoding (18),
60                 mimoMidamble (19) }
61
62 WmanIf2eOfdmaUlMimo ::= TEXTUAL-CONVENTION

```



```

1      STATUS      current
2      DESCRIPTION
3          "This field indicates the different MIMO options supported
4          by a WirelessMAN-OFDMA PHY SS in the uplink.
5          A bit value of 0 indicates 'not supported' while 1
6          indicates 'supported'."
7      REFERENCE
8          "Subclause 11.8.3.7.6 in IEEE 802.16e"
9      SYNTAX      BITS {twoAntStd(0),
10                  twoAntSmVCoding(1),
11                  oneAntCooperativeSm(2)}
12
13      WmanIf2eOfdmaPrivMap ::= TEXTUAL-CONVENTION
14          STATUS      current
15          DESCRIPTION
16              "This field indicates the AAS private map parameters
17              supported by a WirelessMAN-OFDMA SS. A bit value of
18              0 indicates 'not supported' while 1 indicates
19              'supported'."
20          REFERENCE
21              "Subclause 11.8.3.7.7 in IEEE Std 802.16e-2005"
22          SYNTAX      BITS {harqMap(0),
23                  privMap(1),
24                  reducedPrivMap(2),
25                  privMapChainEnable(3),
26                  privMapDlFrameOffset(4),
27                  privMapUlFrameOffset(5)}
28
29      WmanIf2eOfdmaAasCap ::= TEXTUAL-CONVENTION
30          STATUS      current
31          DESCRIPTION
32              "This field indicates the different AAS options
33              supported by a WirelessMAN-OFDMA PHY SS in the
34              downlink. A bit value of 0 indicates 'not supported'
35              while 1 indicates 'supported' for most bits."
36          REFERENCE
37              "Subclause 11.8.3.7.8 in IEEE Std 802.16e-2005"
38          SYNTAX      BITS {aasZone(0),
39                  aasDiversityMapScan(1),
40                  aasFbckRsp(2),
41                  dlAasPreamble(3),
42                  ulAasPreamble(4)}
43
44      WmanIf2eOfdmaCinrCap ::= TEXTUAL-CONVENTION
45          STATUS      current
46          DESCRIPTION
47              "This field indicates the CINR measurement capability
48              supported by a WirelessMAN-OFDMA PHY SS in the
49              downlink. A bit value of 0 indicates 'not supported'
50              while 1 indicates 'supported'."
51          REFERENCE
52              "Subclause 11.8.3.7.9 in IEEE Std 802.16e-2005"
53          SYNTAX      BITS {phyCinrPreamble(0),
54                  phyCinrPilotSubc(1),
55                  phyCinrDataSubc(2),
56                  effectiveCinrPreamble(3),
57                  effectiveCinrPilotSubc(4),
58                  effectiveCinrDataSubc(5),
59                  twoCqiChannel(6),
60                  freqSelectivityReport(7)}
61
62      WmanIf2eOfdmaUlPower ::= TEXTUAL-CONVENTION
63          STATUS      current
64          DESCRIPTION

```

```

1           "This field indicates the power control options
2           supported by a WirelessMAN-OFDMA PHY SS for uplink
3           transmission. A bit value of 0 indicates
4           'not supported' while 1 indicates 'supported'."
5   REFERENCE
6           "Subclause 11.8.3.7.11 in IEEE Std 802.16e-2005"
7   SYNTAX   BITS {ulOpenLoopPwrCntl(0),
8             ulAasPreamblePwrCntl(1)}
9
10  WmanIf2eOfdmaMapCap ::= TEXTUAL-CONVENTION
11     STATUS     current
12     DESCRIPTION
13         "This field indicates the different MAP options supported
14         by a WirelessMAN-OFDMA PHY SS. A bit value of 0
15         indicates 'not supported' while 1 indicates 'supported'."
16     REFERENCE
17         "Subclause 11.8.3.7.12 in IEEE Std 802.16e-2005"
18     SYNTAX   BITS {harqMap(0),
19             extendedHarqIe(1),
20             subMapFor1stZone(2),
21             subMapForOtherZone(3),
22             dlRegionDefinition(4)}
23
24  WmanIf2eOfdmaUlCntlCh ::= TEXTUAL-CONVENTION
25     STATUS     current
26     DESCRIPTION
27         "This field indicates different uplink control channels
28         supported by a WirelessMAN-OFDMA PHY SS. A bit value
29         of 0 indicates 'not supported' while 1 indicates
30         'supported'."
31     REFERENCE
32         "Subclause 11.8.3.7.13 in IEEE Std 802.16e-2005"
33     SYNTAX   BITS {threeBitMimoFastFeedback(0),
34             enhancedFastFeedback(1),
35             ulAck(2),
36             reserved(3),
37             uepFastFeedback(4),
38             fastDlMeasurementFeedback(5),
39             priSecFastFeedback(6),
40             diucCqiFastFeedback(7)}
41
42  WmanIf2eOfdmaMsCistCap ::= TEXTUAL-CONVENTION
43     STATUS     current
44     DESCRIPTION
45         "This field indicates MS capability of supporting CSIT
46         (uplink sounding). A bit value of 0 indicates 'not
47         supported' while 1 indicates 'supported'."
48     REFERENCE
49         "Subclause 11.8.3.7.14 in IEEE Std 802.16e-2005"
50     SYNTAX   BITS {csitTypeA(0),
51             csitTypeB(1),
52             powerAssignment(2),
53             noP9Or18ForCsitTypeA(10),
54             csitNotSupported(11)}
55
56  WmanIf2eOfdmaModMimo ::= TEXTUAL-CONVENTION
57     STATUS     current
58     DESCRIPTION
59         "This field indicates the MIMO capability of OFDMA SS
60         modulator. A bit value of 0 indicates 'not supported'
61         while 1 indicates 'supported'"
62     REFERENCE
63         "Subclause 11.8.3.7.16 in IEEE Std 802.16e-2005"
64     SYNTAX   BITS {twoTxAntenna(0),

```

```

1          txDiversity(1),
2          spatialMultiplexing(2),
3          beamforming(3),
4          adaptiveRateControl(4),
5          singleAntenna(5),
6          twoAntenna(6) }
7
8 WmanIf2eSdmaPilotCap ::= TEXTUAL-CONVENTION
9     STATUS      current
10    DESCRIPTION
11        "This field indicates SDMA pilot pattern support for
12         AMC zone."
13    REFERENCE
14        "Subclause 11.8.3.7.17 in IEEE Std 802.16e-2005"
15    SYNTAX      INTEGER {noSupport(0),
16                  sdmaPilotAandB(1),
17                  allSdmaPilotPatterns(2) }
18
19 WmanIf2eMultiBurst ::= TEXTUAL-CONVENTION
20     STATUS      current
21    DESCRIPTION
22        "This field indicates whether multiple FEC types are
23         supported in DL/UL burst profiles. A bit value of 0
24         indicates 'not supported' while 1 indicates
25         'supported'"
26    REFERENCE
27        "Subclause 11.8.3.7.18 in IEEE Std 802.16e-2005"
28    SYNTAX      INTEGER {dlWithMultiFecType(0),
29                  ulWithMultiFecType(1) }
30
31 WmanIf2eIncrHarqBuf ::= TEXTUAL-CONVENTION
32     STATUS      current
33    DESCRIPTION
34        "This field indicates the aggregation flag control for
35         buffering for NEP/NSCH based incremental redundancy CTC
36         in DL and UL transmissions.
37
38         Bit      4: Aggregation Flag for DL
39                 0 = the number of bits is counted separately
40                 for each channel
41                 1 = buffering capability may be shared between
42                 channels
43
44         Bit      12: Aggregation Flag for UL
45                 0 = the number of bits is counted separately
46                 for each channel
47                 1 = buffering capability may be shared between
48                 channels"
49    REFERENCE
50        "Subclause 11.8.3.7.19.1 in IEEE Std 802.16e-2005"
51    SYNTAX      INTEGER {dlAggFlag(4),
52                  ulAggFlag(12) }
53
54 WmanIf2eChaseHarqBuf ::= TEXTUAL-CONVENTION
55     STATUS      current
56    DESCRIPTION
57        "This field indicates the Aggregation Flag control for
58         buffering of DIUC/duration based HARQ methods (Chase
59         combining and CC-IR) in downlink and uplink transmissions.
60
61         Bit      6: Aggregation Flag for DL
62                 0 = the number of bits is counted separately
63                 for each channel
64                 1 = buffering capability may be shared between

```

```

1           channels
2
3           Bit    14: Aggregation Flag for UL
4                   0 = the number of bits is counted separately
5                   for each channel
6                   1 = buffering capability may be shared between
7                   channels"
8           REFERENCE
9           "Subclause 11.8.3.7.19.2 in IEEE Std 802.16e-2005"
10          SYNTAX    INTEGER {dlAggFlag(6),
11                   ulAggFlag(14)}
12
13

```

14 2.8 Wman2PsClassType Change

15 [\[Changes from:\]](#)

```

16
17 Wman2PsClassType ::= TEXTUAL-CONVENTION
18     STATUS         current
19     DESCRIPTION
20     "The types of power saving classes."
21     REFERENCE
22     "Table 374a in IEEE Std 802.16e-2005"
23     SYNTAX         INTEGER {powerSavingClassTypeI(1),
24                         powerSavingClassTypeII(2),
25                         powerSavingClassTypeIII(3)}
26
27 Wman2PsClassCidDirection ::= TEXTUAL-CONVENTION
28     STATUS         current
29     DESCRIPTION
30     "The direction of power saving class's CIDs.
31     0b00 = Unspecified. Each CID has its own direction
32     assign in its connection creation. Can be
33     DL, UL, or both (in the case of management
34     connections).
35     0b01 = Downlink direction only.
36     0b10 = Uplink direction only."
37     REFERENCE
38     "Subclause 6.3.2.3.44 in IEEE Std 802.16e-2005"
39     SYNTAX         INTEGER {unspecified(0),
40                         downlink(1),
41                         uplink(2)}
42

```

43 [\[To:\]](#)

```

44
45 WmanIf2ePsClassType ::= TEXTUAL-CONVENTION
46     STATUS         current
47     DESCRIPTION
48     "The types of power saving classes."
49     REFERENCE
50     "Table 374a in IEEE Std 802.16e-2005"
51     SYNTAX         INTEGER {powerSavingClassTypeI(1),
52                         powerSavingClassTypeII(2),
53                         powerSavingClassTypeIII(3)}
54
55 WmanIf2ePsClassCidDir ::= TEXTUAL-CONVENTION
56     STATUS         current
57     DESCRIPTION
58     "The direction of power saving class's CIDs.
59     0b00 = Unspecified. Each CID has its own direction
60     assign in its connection creation. Can be
61     DL, UL, or both (in the case of management

```

```

1         connections).
2         0b01 = Downlink direction only.
3         0b10 = Uplink direction only."
4     REFERENCE
5         "Subclause 6.3.2.3.44 in IEEE Std 802.16e-2005"
6     SYNTAX     INTEGER {unspecified(0),
7                 downlink(1),
8                 uplink(2)}
9

```

10 2.9 WmanIf2eMaxMacLevel Change

11 [\[Insert the following ASN.1 notation:\]](#)

```

12
13 WmanIf2eMaxMacLevel ::= TEXTUAL-CONVENTION
14     STATUS     current
15     DESCRIPTION
16         "maximum amount of MAC level data including MAC headers
17         and HARQ retransmission bursts the MS is capable of
18         processing in the DL/UL part of a single MAC frame."
19     REFERENCE
20         "Subclause 11.7.8.10 in IEEE Std 802.16e-2005"
21     SYNTAX     INTEGER (0..65535)
22
23 WmanIf2ePackingSupport ::= TEXTUAL-CONVENTION
24     STATUS     current
25     DESCRIPTION
26         "Indicates the availability of MS support for Packing"
27     REFERENCE
28         "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
29     SYNTAX     INTEGER {noPackingSupport(0),
30                 packingSupported(1)}
31
32 WmanIf2eExtRtppsSupport ::= TEXTUAL-CONVENTION
33     STATUS     current
34     DESCRIPTION
35         "Indicates the availability of MS support for Extended
36         rtPS."
37     REFERENCE
38         "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
39     SYNTAX     INTEGER {noExtendedRtppsSupport(0),
40                 extendedRtppsSupported(1)}
41
42 WmanIf2eIpAllocMethod ::= TEXTUAL-CONVENTION
43     STATUS     current
44     DESCRIPTION
45         "Indicates the method of allocating IP address for the
46         secondary management connection. A bit value of 0
47         indicates 'not supported' while 1 indicates 'supported'."
48     REFERENCE
49         "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
50     SYNTAX     BITS {dhcp(0),
51                 mobileIpv4(1),
52                 dhcpV6(2),
53                 ipv6Autoconfig(3)}
54
55 WmanIf2eHandoverType ::= TEXTUAL-CONVENTION
56     STATUS     current
57     DESCRIPTION
58         "Indicates what type(s) of Handover the BS and the MS
59         supports.
60         bit#0: when it is set to 1, MDHO/FBSS HO not supported.
61         the BS shall ignore all other bits.
62         bit#1: when it is set to 1, FBSS/MDHO DL RF Combining

```

```

1           is supported with monitoring MAPs from active BSs
2       bit#2: when it is set to 1, MDHO DL soft Combining is
3           supported with monitoring single MAP from
4           anchor BS
5       bit#3: when it is set to 1, MDHO DL soft combining is
6           supported with monitoring MAPs from active BSs
7       bit#3: when it is set to 1, MDHO UL Multiple
8           transmission is supported"
9
10      REFERENCE
11          "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
12      SYNTAX      BITS {mdhcFbssHoNotSpported(0),
13                    mdhcFbssDlMapsFromActiveBss(1),
14                    mdhcDlMapFromAnchorBs(2),
15                    mdhcDlMapsFromActiveBss(3),
16                    mdhcUlMultipleTx(4)}
17
18      WmanIf2eArqAckType ::= TEXTUAL-CONVENTION
19          STATUS      current
20          DESCRIPTION
21              "Specifies the ARQ ACK type supported by the MS."
22          REFERENCE
23              "Subclause 11.7.23 in IEEE Std 802.16e-2005"
24          SYNTAX      BITS {selectiveAck(0),
25                    cumulativeAck(1),
26                    cumWithSelAck(2),
27                    cumWithBlockSeqAck(3)}
28
29      WmanIf2eMacHeaderSupp ::= TEXTUAL-CONVENTION
30          STATUS      current
31          DESCRIPTION
32              "Indicates whether or not the MS and BS support various
33              types of MAC header and extended subheaders. A bit
34              value of 0 indicates 'not supported', while 1 indicates
35              'supported'.
36
37              Bits 8-10: parameters of SDU SN extended subheader that
38              represent the period of SDU SN transmission for
39              connection with ARQ disabled = once every 2^p MAC
40              PDUs."
41          REFERENCE
42              "Subclause 11.7.25 in IEEE Std 802.16e-2005"
43          SYNTAX      BITS {bwReqUlTxPowerReport(0),
44                    bwReqCinrReport(1),
45                    cqichAlloationReq(2),
46                    phyChannelReport(3),
47                    bwReqUlSleepCntl(4),
48                    snReport(5),
49                    feedbackReport(6),
50                    sduSn(7),
51                    sdnSnPeriod0(8),
52                    sdnSnPeriod1(9),
53                    sdnSnPeriod2(10),
54                    dlSleepControl(11),
55                    feedbackRequest(12),
56                    mimcModeFeedback(13),
57                    ulTxPowerReport(14),
58                    miniFeedback(15),
59                    snRequest(16),
60                    shortPduSn(17),
61                    longPduSn(18)}

```

2.10 wmanIf2eBsSsReqCapabilitiesTable Change

[Insert the following ASN.1 notation:]

```

1  wmanIf2eBsSsReqCapabilitiesTable OBJECT-TYPE
2      SYNTAX      SEQUENCE OF WmanIf2eBsSsReqCapabilitiesEntry
3      MAX-ACCESS  not-accessible
4      STATUS      current
5      DESCRIPTION
6          "This table augments wmanIf2BsRegisteredSsTable to include
7          new capabilities as introduced in IEEE 802.16e 2005
8          standard."
9      ::= { wmanIf2BsCapabilities 5 }
10
11  wmanIf2eBsSsReqCapabilitiesEntry OBJECT-TYPE
12      SYNTAX      WmanIf2eBsSsReqCapabilitiesEntry
13      MAX-ACCESS  not-accessible
14      STATUS      current
15      DESCRIPTION
16          "This table provides one row for each MS that has been
17          registered in the BS. This table augments the table
18          wmanIf2BsRegisteredSsTable."
19      AUGMENTS { wmanIf2BsRegisteredSsEntry }
20      ::= { wmanIf2eBsSsReqCapabilitiesTable 1 }
21
22  WmanIf2eBsSsReqCapabilitiesEntry ::= SEQUENCE {
23      wmanIf2eBsSsReqCapDownlinkCidSupport      WmanIf2eNumOfCid,
24      wmanIf2eBsSsReqCapPackingSupport          WmanIf2ePackingSupport,
25      wmanIf2eBsSsReqCapExtendedRtptsSupport    WmanIf2eExtRtptsSupport,
26      wmanIf2eBsSsReqCapMaxNumBurstToMs        INTEGER,
27      wmanIf2eBsSsReqCapIpAddrAllocMethod      WmanIf2eIpAllocMethod,
28      wmanIf2eBsSsReqCapHandoverSupported       WmanIf2eHandoverType,
29      wmanIf2eBsSsReqCapHoProcessTimer         Unsigned32,
30      wmanIf2eBsSsReqCapIdleModeTimeout        Unsigned32,
31      wmanIf2eBsSsReqCapArgAckType             WmanIf2eArgAckType,
32      wmanIf2eBsSsReqCapMacHeader              WmanIf2eMacHeaderSupp}
33
34  wmanIf2eBsSsReqCapDownlinkCidSupport OBJECT-TYPE
35      SYNTAX      WmanIf2eNumOfCid
36      MAX-ACCESS  read-only
37      STATUS      current
38      DESCRIPTION
39          "This object shows the number of Downlink CIDs the SS can
40          support."
41      ::= { wmanIf2eBsSsReqCapabilitiesEntry 1 }
42
43  wmanIf2eBsSsReqCapPackingSupport OBJECT-TYPE
44      SYNTAX      WmanIf2ePackingSupport
45      MAX-ACCESS  read-only
46      STATUS      current
47      DESCRIPTION
48          "Indicates the availability of MS support for Packing."
49      REFERENCE
50          "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
51      ::= { wmanIf2eBsSsReqCapabilitiesEntry 2 }
52
53  wmanIf2eBsSsReqCapExtendedRtptsSupport OBJECT-TYPE
54      SYNTAX      WmanIf2eExtRtptsSupport
55      MAX-ACCESS  read-only
56      STATUS      current
57      DESCRIPTION
58          "Indicates the availability of MS support for extended
59          rtPs."
60

```

```

1      REFERENCE
2      "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
3      ::= { wmanIf2eBsSsReqCapabilitiesEntry 3 }
4
5      wmanIf2eBsSsReqCapMaxNumBurstToMs OBJECT-TYPE
6      SYNTAX      INTEGER (1..16)
7      MAX-ACCESS  read-only
8      STATUS      current
9      DESCRIPTION
10     "Maximum number of bursts transmitted concurrently to the MS
11     , including all bursts without CID or with CIDs matching
12     the MS's CIDs."
13     REFERENCE
14     "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
15     ::= { wmanIf2eBsSsReqCapabilitiesEntry 4 }
16
17     wmanIf2eBsSsReqCapIpAddrAllocMethod OBJECT-TYPE
18     SYNTAX      WmanIf2eIpAllocMethod
19     MAX-ACCESS  read-only
20     STATUS      current
21     DESCRIPTION
22     "Indicates the method of allocating IP address for the
23     secondary management connection."
24     REFERENCE
25     "Subclause 11.7.11 in IEEE Std 802.16e-2005"
26     ::= { wmanIf2eBsSsReqCapabilitiesEntry 5 }
27
28     wmanIf2eBsSsReqCapHandoverSupported OBJECT-TYPE
29     SYNTAX      WmanIf2eHandoverType
30     MAX-ACCESS  read-only
31     STATUS      current
32     DESCRIPTION
33     "Indicates what type(s) of Handover the BS or MS supports."
34     REFERENCE
35     "Subclause 11.7.12 in IEEE Std 802.16e-2005"
36     ::= { wmanIf2eBsSsReqCapabilitiesEntry 6 }
37
38     wmanIf2eBsSsReqCapHoProcessTimer OBJECT-TYPE
39     SYNTAX      Unsigned32
40     UNITS       "frames"
41     MAX-ACCESS  read-only
42     STATUS      current
43     DESCRIPTION
44     "The duration in frames the MS shall wait until receipt of
45     the next unsolicited network re-entry MAC management
46     message as indicated in the HO Process Optimization
47     element of the RNG-RSP message."
48     REFERENCE
49     "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
50     ::= { wmanIf2eBsSsReqCapabilitiesEntry 7 }
51
52     wmanIf2eBsSsReqCapIdleModeTimeout OBJECT-TYPE
53     SYNTAX      Unsigned32
54     UNITS       "seconds"
55     MAX-ACCESS  read-only
56     STATUS      current
57     DESCRIPTION
58     "Max time interval between MS Idle Mode Location Updates."
59     REFERENCE
60     "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
61     DEFVAL     { 4096 }
62     ::= { wmanIf2eBsSsReqCapabilitiesEntry 8 }
63
64     wmanIf2eBsSsReqCapArqAckType OBJECT-TYPE

```



```

1      SYNTAX      WmanIf2eArqAckType
2      MAX-ACCESS  read-only
3      STATUS      current
4      DESCRIPTION
5          "The value of this parameter specifies the ARQ ACK type
6           supported by the MS."
7      REFERENCE
8          "Subclause 11.7.23 in IEEE Std 802.16e-2005"
9      ::= { wmanIf2eBsSsReqCapabilitiesEntry 9 }
10
11     wmanIf2eBsSsReqCapMacHeader OBJECT-TYPE
12         SYNTAX      WmanIf2eMacHeaderSupp
13         MAX-ACCESS  read-only
14         STATUS      current
15         DESCRIPTION
16             "Indicates whether or not the MS and BS support various
17              types of MAC header and extended subheaders."
18         REFERENCE
19             "Subclause 11.7.25 in IEEE Std 802.16e-2005"
20         ::= { wmanIf2eBsSsReqCapabilitiesEntry 10 }
21
22     wmanIf2eBsSsRspCapabilitiesTable OBJECT-TYPE
23         SYNTAX      SEQUENCE OF WmanIf2eBsSsRspCapabilitiesEntry
24         MAX-ACCESS  not-accessible
25         STATUS      current
26         DESCRIPTION
27             "This table contains the basic capability information of SSs
28              that have been negotiated and agreed between BS and SS via
29              RNG-REQ/RSP, SBC-REQ/RSP and REG-REQ/RSP messages.
30              This table augments the wmanIf2BsRegisteredSsTable."
31         REFERENCE
32             "Subclause 6.3.2.3.7 in IEEE Std 802.16-2004"
33         ::= { wmanIf2BsCapabilities 6 }
34
35     wmanIf2eBsSsRspCapabilitiesEntry OBJECT-TYPE
36         SYNTAX      WmanIf2eBsSsRspCapabilitiesEntry
37         MAX-ACCESS  not-accessible
38         STATUS      current
39         DESCRIPTION
40             "This table provides one row for each SS that has been
41              registered in the BS. This table augments the
42              wmanIf2BsRegisteredSsTable. "
43         AUGMENTS { wmanIf2BsRegisteredSsEntry }
44         ::= { wmanIf2eBsSsRspCapabilitiesTable 1 }
45
46     WmanIf2eBsSsRspCapabilitiesEntry ::= SEQUENCE {
47         wmanIf2eBsSsRspCapDownlinkCidSupport  WmanIf2eNumOfCid,
48         wmanIf2eBsSsRspCapPackingSupport      WmanIf2ePackingSupport,
49         wmanIf2eBsSsRspCapExtendedRtptsSupport WmanIf2eExtRtptsSupport,
50         wmanIf2eBsSsRspCapMaxNumBurstToMs    INTEGER,
51         wmanIf2eBsSsRspCapIpAddrAllocMethod  WmanIf2eIpAllocMethod,
52         wmanIf2eBsSsRspCapHandoverSupported  WmanIf2eHandoverType,
53         wmanIf2eBsSsRspCapHoProcessTimer     Unsigned32,
54         wmanIf2eBsSsRspCapIdleModeTimeout    Unsigned32,
55         wmanIf2eBsSsRspCapArqAckType         WmanIf2eArqAckType,
56         wmanIf2eBsSsRspCapMacHeader          WmanIf2eMacHeaderSupp}
57
58     wmanIf2eBsSsRspCapDownlinkCidSupport OBJECT-TYPE
59         SYNTAX      WmanIf2eNumOfCid
60         MAX-ACCESS  read-only
61         STATUS      current
62         DESCRIPTION
63             "This object shows the number of Downlink CIDs the SS can
64              support."

```

```

1         ::= { wmanIf2eBsSsRspCapabilitiesEntry 1 }
2
3 wmanIf2eBsSsRspCapPackingSupport OBJECT-TYPE
4     SYNTAX      WmanIf2ePackingSupport
5     MAX-ACCESS  read-only
6     STATUS      current
7     DESCRIPTION
8         "Indicates the availability of MS support for Packing."
9     REFERENCE
10        "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
11        ::= { wmanIf2eBsSsRspCapabilitiesEntry 2 }
12
13 wmanIf2eBsSsRspCapExtendedRtPsSupport OBJECT-TYPE
14     SYNTAX      WmanIf2eExtRtPsSupport
15     MAX-ACCESS  read-only
16     STATUS      current
17     DESCRIPTION
18         "Indicates the availability of MS support for extended
19         rtPs."
20     REFERENCE
21        "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
22        ::= { wmanIf2eBsSsRspCapabilitiesEntry 3 }
23
24 wmanIf2eBsSsRspCapMaxNumBurstToMs OBJECT-TYPE
25     SYNTAX      INTEGER (1..16)
26     MAX-ACCESS  read-only
27     STATUS      current
28     DESCRIPTION
29         "Maximum number of bursts transmitted concurrently to the MS
30         , including all bursts without CID or with CIDs matching
31         the MS CIDs."
32     REFERENCE
33        "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
34        ::= { wmanIf2eBsSsRspCapabilitiesEntry 4 }
35
36 wmanIf2eBsSsRspCapIpAddrAllocMethod OBJECT-TYPE
37     SYNTAX      WmanIf2eIpAllocMethod
38     MAX-ACCESS  read-only
39     STATUS      current
40     DESCRIPTION
41         "Indicates the method of allocating IP address for the
42         secondary management connection."
43     REFERENCE
44        "Subclause 11.7.11 in IEEE Std 802.16e-2005"
45        ::= { wmanIf2eBsSsRspCapabilitiesEntry 5 }
46
47 wmanIf2eBsSsRspCapHandoverSupported OBJECT-TYPE
48     SYNTAX      WmanIf2eHandoverType
49     MAX-ACCESS  read-only
50     STATUS      current
51     DESCRIPTION
52         "Indicates what type(s) of Handover the BS or MS supports."
53     REFERENCE
54        "Subclause 11.7.12 in IEEE Std 802.16e-2005"
55        ::= { wmanIf2eBsSsRspCapabilitiesEntry 6 }
56
57 wmanIf2eBsSsRspCapHoProcessTimer OBJECT-TYPE
58     SYNTAX      Unsigned32
59     UNITS       "frames"
60     MAX-ACCESS  read-only
61     STATUS      current
62     DESCRIPTION
63         "The duration in frames the MS shall wait until receipt of
64         the next unsolicited network re-entry MAC management

```

```

1         message as indicated in the HO Process Optimization
2         element of the RNG-RSP message."
3     REFERENCE
4         "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
5     ::= { wmanIf2eBsSsRspCapabilitiesEntry 7 }
6
7     wmanIf2eBsSsRspCapIdleModeTimeout OBJECT-TYPE
8         SYNTAX      Unsigned32
9         UNITS       "seconds"
10        MAX-ACCESS  read-only
11        STATUS      current
12        DESCRIPTION
13            "Max time interval between MS Idle Mode Location Updates."
14        REFERENCE
15            "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
16        DEFVAL     { 4096 }
17        ::= { wmanIf2eBsSsRspCapabilitiesEntry 8 }
18
19        wmanIf2eBsSsRspCapArqAckType OBJECT-TYPE
20        SYNTAX      WmanIf2eArqAckType
21        MAX-ACCESS  read-only
22        STATUS      current
23        DESCRIPTION
24            "The value of this parameter specifies the ARQ ACK type
25            supported by the MS."
26        REFERENCE
27            "Subclause 11.7.23 in IEEE Std 802.16e-2005"
28        ::= { wmanIf2eBsSsRspCapabilitiesEntry 9 }
29
30        wmanIf2eBsSsRspCapMacHeader OBJECT-TYPE
31        SYNTAX      WmanIf2eMacHeaderSupp
32        MAX-ACCESS  read-only
33        STATUS      current
34        DESCRIPTION
35            "Indicates whether or not the MS and BS support various
36            types of MAC header and extended subheaders."
37        REFERENCE
38            "Subclause 11.7.25 in IEEE Std 802.16e-2005"
39        ::= { wmanIf2eBsSsRspCapabilitiesEntry 10 }
40
41        wmanIf2eBsBasicCapabilitiesTable OBJECT-TYPE
42        SYNTAX      SEQUENCE OF WmanIf2eBsBasicCapabilitiesEntry
43        MAX-ACCESS  not-accessible
44        STATUS      current
45        DESCRIPTION
46            "This table contains the basic capabilities of the BS as
47            implemented in BS hardware and software. These capabilities
48            along with the configuration for them
49            (wmanIf2eBsCapabilitiesConfigTable) are used for
50        negotiation
51            of basic capabilities with SS using RNG-RSP, SBC-RSP and
52            REG-RSP messages. The negotiated capabilities are obtained
53            by interSubclause of SS raw reported capabilities, BS raw
54            capabilities and BS configured capabilities. The objects in
55            the table have read-only access. The table is maintained
56            by BS."
57        ::= { wmanIf2BsCapabilities 7 }
58
59        wmanIf2eBsBasicCapabilitiesEntry OBJECT-TYPE
60        SYNTAX      WmanIf2eBsBasicCapabilitiesEntry
61        MAX-ACCESS  not-accessible
62        STATUS      current
63        DESCRIPTION
64            "This table provides one row for each BS sector and is

```

```

1         indexed by ifIndex."
2     INDEX { ifIndex }
3     ::= { wmanIf2eBsBasicCapabilitiesTable 1 }
4
5     WmanIf2eBsBasicCapabilitiesEntry ::= SEQUENCE {
6         wmanIf2eBsCapDownlinkCidSupport      WmanIf2eNumOfCid,
7         wmanIf2eBsCapPackingSupport          WmanIf2ePackingSupport,
8         wmanIf2eBsCapExtendedRtptsSupport    WmanIf2eExtRtptsSupport,
9         wmanIf2eBsCapMaxNumBurstToMs         INTEGER,
10        wmanIf2eBsCapIpAddrAllocMethod       WmanIf2eIpAllocMethod,
11        wmanIf2eBsCapHandoverSupported       WmanIf2eHandoverType,
12        wmanIf2eBsCapHoProcessTimer          Unsigned32,
13        wmanIf2eBsCapIdleModeTimeout         Unsigned32,
14        wmanIf2eBsCapArqAckType              WmanIf2eArqAckType,
15        wmanIf2eBsCapMacHeader                WmanIf2eMacHeaderSupp}
16
17    wmanIf2eBsCapDownlinkCidSupport OBJECT-TYPE
18        SYNTAX      WmanIf2eNumOfCid
19        MAX-ACCESS  read-only
20        STATUS      current
21        DESCRIPTION
22            "This object shows the number of Downlink CIDs the SS can
23             support."
24        ::= { wmanIf2eBsBasicCapabilitiesEntry 1 }
25
26    wmanIf2eBsCapPackingSupport OBJECT-TYPE
27        SYNTAX      WmanIf2ePackingSupport
28        MAX-ACCESS  read-only
29        STATUS      current
30        DESCRIPTION
31            "Indicates the availability of MS support for Packing."
32        REFERENCE
33            "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
34        ::= { wmanIf2eBsBasicCapabilitiesEntry 2 }
35
36    wmanIf2eBsCapExtendedRtptsSupport OBJECT-TYPE
37        SYNTAX      WmanIf2eExtRtptsSupport
38        MAX-ACCESS  read-only
39        STATUS      current
40        DESCRIPTION
41            "Indicates the availability of MS support for extended
42             rtPs."
43        REFERENCE
44            "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
45        ::= { wmanIf2eBsBasicCapabilitiesEntry 3 }
46
47    wmanIf2eBsCapMaxNumBurstToMs OBJECT-TYPE
48        SYNTAX      INTEGER (1..16)
49        MAX-ACCESS  read-only
50        STATUS      current
51        DESCRIPTION
52            "Maximum number of bursts transmitted concurrently to the MS
53             , including all bursts without CID or with CIDs matching
54             the MS CIDs."
55        REFERENCE
56            "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
57        ::= { wmanIf2eBsBasicCapabilitiesEntry 4 }
58
59    wmanIf2eBsCapIpAddrAllocMethod OBJECT-TYPE
60        SYNTAX      WmanIf2eIpAllocMethod
61        MAX-ACCESS  read-only
62        STATUS      current
63        DESCRIPTION
64            "Indicates the method of allocating IP address for the

```

```

1         secondary management connection."
2     REFERENCE
3         "Subclause 11.7.11 in IEEE Std 802.16e-2005"
4     ::= { wmanIf2eBsBasicCapabilitiesEntry 5 }
5
6     wmanIf2eBsCapHandoverSupported OBJECT-TYPE
7         SYNTAX      WmanIf2eHandoverType
8         MAX-ACCESS  read-only
9         STATUS      current
10        DESCRIPTION
11            "Indicates what type(s) of Handover the BS or MS supports."
12        REFERENCE
13            "Subclause 11.7.12 in IEEE Std 802.16e-2005"
14        ::= { wmanIf2eBsBasicCapabilitiesEntry 6 }
15
16        wmanIf2eBsCapHoProcessTimer OBJECT-TYPE
17            SYNTAX      Unsigned32
18            UNITS       "frames"
19            MAX-ACCESS  read-only
20            STATUS      current
21            DESCRIPTION
22                "The duration in frames the MS shall wait until receipt of
23                the next unsolicited network re-entry MAC management
24                message as indicated in the HO Process Optimization
25                element of the RNG-RSP message."
26            REFERENCE
27                "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
28            ::= { wmanIf2eBsBasicCapabilitiesEntry 7 }
29
30        wmanIf2eBsCapIdleModeTimeout OBJECT-TYPE
31            SYNTAX      Unsigned32
32            UNITS       "seconds"
33            MAX-ACCESS  read-only
34            STATUS      current
35            DESCRIPTION
36                "Max time interval between MS Idle Mode Location Updates."
37            REFERENCE
38                "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
39            DEFVAL      { 4096 }
40            ::= { wmanIf2eBsBasicCapabilitiesEntry 8 }
41
42        wmanIf2eBsCapArqAckType OBJECT-TYPE
43            SYNTAX      WmanIf2eArqAckType
44            MAX-ACCESS  read-only
45            STATUS      current
46            DESCRIPTION
47                "The value of this parameter specifies the ARQ ACK type
48                supported by the MS."
49            REFERENCE
50                "Subclause 11.7.23 in IEEE Std 802.16e-2005"
51            ::= { wmanIf2eBsBasicCapabilitiesEntry 9 }
52
53        wmanIf2eBsCapMacHeader OBJECT-TYPE
54            SYNTAX      WmanIf2eMacHeaderSupp
55            MAX-ACCESS  read-only
56            STATUS      current
57            DESCRIPTION
58                "Indicates whether or not the MS and BS support various
59                types of MAC header and extended subheaders."
60            REFERENCE
61                "Subclause 11.7.25 in IEEE Std 802.16e-2005"
62            ::= { wmanIf2eBsBasicCapabilitiesEntry 10 }
63
64        wmanIf2eBsCapabilitiesConfigTable OBJECT-TYPE

```

```

1      SYNTAX      SEQUENCE OF WmanIf2eBsCapabilitiesConfigEntry
2      MAX-ACCESS  not-accessible
3      STATUS      current
4      DESCRIPTION
5          "This table contains the configuration for basic
6           capabilities of BS. The table is intended to be used to
7           restrict the Capabilities implemented by BS, for example in
8           order to comply with local regulatory requirements. The BS
9           should use the configuration along with the implemented
10          Capabilities (wmanIf2eBsBasicCapabilitiesTable) for
11          negotiation of basic capabilities with SS using RNG-RSP,
12          SBC-RSP and REG-RSP messages. The negotiated capabilities
13          are obtained by interSubclause of SS reported capabilities,
14          BS raw capabilities and BS configured capabilities. The
15          objects in the table have read-write access. The rows are
16          created by BS as a copy of wmanIf2eBsBasicCapabilitiesTable
17          and can be modified by NMS."
18      ::= { wmanIf2BsCapabilities 8 }
19
20  wmanIf2eBsCapabilitiesConfigEntry OBJECT-TYPE
21      SYNTAX      WmanIf2eBsCapabilitiesConfigEntry
22      MAX-ACCESS  not-accessible
23      STATUS      current
24      DESCRIPTION
25          "This table provides one row for each BS sector and is
26           indexed by ifIndex."
27      INDEX { ifIndex }
28      ::= { wmanIf2eBsCapabilitiesConfigTable 1 }
29
30  WmanIf2eBsCapabilitiesConfigEntry ::= SEQUENCE {
31      wmanIf2eBsCapCfgDownlinkCidSupport      WmanIf2eNumOfCid,
32      wmanIf2eBsCapCfgPackingSupport          WmanIf2ePackingSupport,
33      wmanIf2eBsCapCfgExtendedRtpsSupport     WmanIf2eExtRtpsSupport,
34      wmanIf2eBsCapCfgMaxNumBurstToMs        INTEGER,
35      wmanIf2eBsCapCfgIpAddrAllocMethod      WmanIf2eIpAllocMethod,
36      wmanIf2eBsCapCfgHandoverSupported       WmanIf2eHandoverType,
37      wmanIf2eBsCapCfgHoProcessTimer          Unsigned32,
38      wmanIf2eBsCapCfgIdleModeTimeout        Unsigned32,
39      wmanIf2eBsCapCfgArgAckType             WmanIf2eArgAckType,
40      wmanIf2eBsCapCfgMacHeader               WmanIf2eMacHeaderSupp}
41
42  wmanIf2eBsCapCfgDownlinkCidSupport OBJECT-TYPE
43      SYNTAX      WmanIf2eNumOfCid
44      MAX-ACCESS  read-write
45      STATUS      current
46      DESCRIPTION
47          "This object shows the number of Downlink CIDs the SS can
48           support."
49      ::= { wmanIf2eBsCapabilitiesConfigEntry 1 }
50
51  wmanIf2eBsCapCfgPackingSupport OBJECT-TYPE
52      SYNTAX      WmanIf2ePackingSupport
53      MAX-ACCESS  read-only
54      STATUS      current
55      DESCRIPTION
56          "Indicates the availability of MS support for Packing."
57      REFERENCE
58          "Subclause 11.7.8.11 in IEEE Std 802.16e-2005"
59      ::= { wmanIf2eBsCapabilitiesConfigEntry 2 }
60
61  wmanIf2eBsCapCfgExtendedRtpsSupport OBJECT-TYPE
62      SYNTAX      WmanIf2eExtRtpsSupport
63      MAX-ACCESS  read-write
64      STATUS      current

```

```

1      DESCRIPTION
2          "Indicates the availability of MS support for extended
3          rtPs."
4      REFERENCE
5          "Subclause 11.7.8.12 in IEEE Std 802.16e-2005"
6          ::= { wmanIf2eBsCapabilitiesConfigEntry 3 }
7
8      wmanIf2eBsCapCfgMaxNumBurstToMs OBJECT-TYPE
9          SYNTAX      INTEGER (1..16)
10         MAX-ACCESS  read-write
11         STATUS      current
12         DESCRIPTION
13             "Maximum number of bursts transmitted concurrently to the MS
14             , including all bursts without CID or with CIDs matching
15             the MS CIDs."
16         REFERENCE
17             "Subclause 11.7.8.13 in IEEE Std 802.16e-2005"
18             ::= { wmanIf2eBsCapabilitiesConfigEntry 4 }
19
20     wmanIf2eBsCapCfgIpAddrAllocMethod OBJECT-TYPE
21         SYNTAX      WmanIf2eIpAllocMethod
22         MAX-ACCESS  read-write
23         STATUS      current
24         DESCRIPTION
25             "Indicates the method of allocating IP address for the
26             secondary management connection."
27         REFERENCE
28             "Subclause 11.7.11 in IEEE Std 802.16e-2005"
29             ::= { wmanIf2eBsCapabilitiesConfigEntry 5 }
30
31     wmanIf2eBsCapCfgHandoverSupported OBJECT-TYPE
32         SYNTAX      WmanIf2eHandoverType
33         MAX-ACCESS  read-write
34         STATUS      current
35         DESCRIPTION
36             "Indicates what type(s) of Handover the BS or MS supports."
37         REFERENCE
38             "Subclause 11.7.12 in IEEE Std 802.16e-2005"
39             ::= { wmanIf2eBsCapabilitiesConfigEntry 6 }
40
41     wmanIf2eBsCapCfgHoProcessTimer OBJECT-TYPE
42         SYNTAX      Unsigned32
43         UNITS       "frames"
44         MAX-ACCESS  read-write
45         STATUS      current
46         DESCRIPTION
47             "The duration in frames the MS shall wait until receipt of
48             the next unsolicited network re-entry MAC management
49             message as indicated in the HO Process Optimization
50             element of the RNG-RSP message."
51         REFERENCE
52             "Subclause 11.7.13.2 in IEEE Std 802.16e-2005"
53             ::= { wmanIf2eBsCapabilitiesConfigEntry 7 }
54
55     wmanIf2eBsCapCfgIdleModeTimeout OBJECT-TYPE
56         SYNTAX      Unsigned32
57         UNITS       "seconds"
58         MAX-ACCESS  read-write
59         STATUS      current
60         DESCRIPTION
61             "Max time interval between MS Idle Mode Location Updates."
62         REFERENCE
63             "Subclause 11.7.20.1 in IEEE Std 802.16e-2005"
64         DEFVAL      { 4096 }

```

```

1      ::= { wmanIf2eBsCapabilitiesConfigEntry 8 }
2
3  wmanIf2eBsCapCfgArqAckType OBJECT-TYPE
4      SYNTAX      WmanIf2eArqAckType
5      MAX-ACCESS  read-write
6      STATUS      current
7      DESCRIPTION
8          "The value of this parameter specifies the ARQ ACK type
9           supported by the MS."
10     REFERENCE
11         "Subclause 11.7.23 in IEEE Std 802.16e-2005"
12     ::= { wmanIf2eBsCapabilitiesConfigEntry 9 }
13
14  wmanIf2eBsCapCfgMacHeader OBJECT-TYPE
15     SYNTAX      WmanIf2eMacHeaderSupp
16     MAX-ACCESS  read-write
17     STATUS      current
18     DESCRIPTION
19         "Indicates whether or not the MS and BS support various
20          types of MAC header and extended subheaders."
21     REFERENCE
22         "Subclause 11.7.25 in IEEE Std 802.16e-2005"
23     ::= { wmanIf2eBsCapabilitiesConfigEntry 10 }
24
25

```

26 2.11 wmanIf2BsMsOfdmaReqCapabilitiesTable Change

27 [\[Replace the wmanIf2BsMsOfdmaReqCapabilitiesTable,](#)
28 [wmanIf2BsMsOfdmaRspCapabilitiesTable, wmanIf2BsOfdmaCapabilitiesTable,](#)
29 [wmanIf2BsOfdmaCapabilitiesConfigTable as the following:\]](#)

```

30
31  wmanIf2BsMsOfdmaReqCapabilitiesTable OBJECT-TYPE
32     SYNTAX      SEQUENCE OF WmanIf2BsMsOfdmaReqCapabilitiesEntry
33     MAX-ACCESS  not-accessible
34     STATUS      current
35     DESCRIPTION
36         "This table contains the basic capability information,
37          specific to OFDMA Phy, of MSs that have been reported by
38          MSs to BS using RNG-REQ, SBC-REQ and REG-REQ messages.
39          Entries in this table should be created when an MS
40          registers with a BS."
41     ::= { wmanIf2BsOfdmaPhy 5 }
42
43  wmanIf2BsMsOfdmaReqCapabilitiesEntry OBJECT-TYPE
44     SYNTAX      WmanIf2BsMsOfdmaReqCapabilitiesEntry
45     MAX-ACCESS  not-accessible
46     STATUS      current
47     DESCRIPTION
48         "This table provides one row for each MS that has been
49          registered in the BS. This table augments the table
50          wmanIf2BsRegisteredSsTable."
51     AUGMENTS { wmanIf2BsRegisteredSsEntry }
52     ::= { wmanIf2BsMsOfdmaReqCapabilitiesTable 1 }
53
54  WmanIf2BsMsOfdmaReqCapabilitiesEntry ::= SEQUENCE {
55      wmanIf2BsMsOfdmaReqCapFftSizes      WmanIf2OfdmaFftSizes,
56      wmanIf2BsMsOfdmaReqCapDemodulator   WmanIf2OfdmaMsDeModType,
57      wmanIf2BsMsOfdmaReqCapModulator     WmanIf2OfdmaMsModType,
58      wmanIf2eBsMsOfdmaReqCapNoHarqChannel Unsigned32,
59      wmanIf2BsMsOfdmaReqCapPermutation   WmanIf2OfdmaPermutation,
60      wmanIf2eBsMsOfdmaReqCapMobilityFeature WmanIf2eOfdmaMobility,
61      wmanIf2eBsMsOfdmaReqCapMaxMacLevelDlFm WmanIf2eMaxMacLevel,
62      wmanIf2eBsMsOfdmaReqCapMaxMacLevelUlFm WmanIf2eMaxMacLevel,

```



```

1      wmanIf2eBsMsOfdmaReqCapDemMimo           WmanIf2eOfdmaDemMimo,
2      wmanIf2eBsMsOfdmaReqCapMimoCapability    WmanIf2eOfdmaMimoCap,
3      wmanIf2eBsMsOfdmaReqCapUlMimo           WmanIf2eOfdmaUlMimo,
4      wmanIf2eBsMsOfdmaReqCapPrivateMap       WmanIf2eOfdmaPrivMap,
5      wmanIf2eBsMsOfdmaReqCapPrivateMapChain  INTEGER,
6      wmanIf2eBsMsOfdmaReqCapAasCapability    WmanIf2eOfdmaAasCap,
7      wmanIf2eBsMsOfdmaReqCapCinrMeasurement WmanIf2eOfdmaCinrCap,
8      wmanIf2eBsMsOfdmaReqCapUlPowerControl  WmanIf2eOfdmaUlPower,
9      wmanIf2eBsMsOfdmaReqCapMapCapability    WmanIf2eOfdmaMapCap,
10     wmanIf2eBsMsOfdmaReqCapUlControlChannel WmanIf2eOfdmaUlCntlCh,
11     wmanIf2eBsMsOfdmaReqCapCistCapability    WmanIf2eOfdmaMsCistCap,
12     wmanIf2eBsMsOfdmaReqCapSoundigRspTime   INTEGER,
13     wmanIf2eBsMsOfdmaReqCapMaxSoundigInstr  INTEGER,
14     wmanIf2eBsMsOfdmaReqCapMaxUlHarqBurst   INTEGER,
15     wmanIf2eBsMsOfdmaReqCapMaxDlHarqBurst   INTEGER,
16     wmanIf2eBsMsOfdmaReqCapModMimo         WmanIf2eOfdmaModMimo,
17     wmanIf2eBsMsOfdmaReqCapSdmaPilot       WmanIf2eSdmaPilotCap,
18     wmanIf2eBsMsOfdmaReqCapMultipleBurst    WmanIf2eMultiBurst,
19     wmanIf2eBsMsOfdmaReqCapIncrHarqBuffer    WmanIf2eIncrHarqBuf,
20     wmanIf2eBsMsOfdmaReqCapIncrDlHarqBuffer INTEGER,
21     wmanIf2eBsMsOfdmaReqCapIncrUlHarqBuffer INTEGER,
22     wmanIf2eBsMsOfdmaReqCapChaseHarqBuffer  WmanIf2eChaseHarqBuf,
23     wmanIf2eBsMsOfdmaReqCapChaseDlHarqBuf   INTEGER,
24     wmanIf2eBsMsOfdmaReqCapChaseUlHarqBuf   INTEGER}
25
26     wmanIf2BsMsOfdmaReqCapFftSizes OBJECT-TYPE
27         SYNTAX      WmanIf2OfdmaFftSizes
28         MAX-ACCESS  read-only
29         STATUS      current
30         DESCRIPTION
31             "This field indicates the FFT sizes supported by MS."
32         ::= { wmanIf2BsMsOfdmaReqCapCapabilitiesEntry 1 }
33
34     wmanIf2BsMsOfdmaReqCapDemodulator OBJECT-TYPE
35         SYNTAX      WmanIf2OfdmaMsDeModType
36         MAX-ACCESS  read-only
37         STATUS      current
38         DESCRIPTION
39             "This field indicates the different demodulator options
40             supported by MS for downlink."
41         ::= { wmanIf2BsMsOfdmaReqCapCapabilitiesEntry 2 }
42
43     wmanIf2BsMsOfdmaReqCapModulator OBJECT-TYPE
44         SYNTAX      WmanIf2OfdmaMsModType
45         MAX-ACCESS  read-only
46         STATUS      current
47         DESCRIPTION
48             "This field indicates the different modulator options
49             supported by MS for uplink."
50         ::= { wmanIf2BsMsOfdmaReqCapCapabilitiesEntry 3 }
51
52     wmanIf2eBsMsOfdmaReqCapNoHarqChannel OBJECT-TYPE
53         SYNTAX      Unsigned32
54         MAX-ACCESS  read-only
55         STATUS      current
56         DESCRIPTION
57             "This field specifies the number of uplink H-ARQ
58             channels (n) the SS supports, where n = 1..16.
59             The value of this object should be 0..15."
60         ::= { wmanIf2BsMsOfdmaReqCapCapabilitiesEntry 4 }
61
62     wmanIf2BsMsOfdmaReqCapPermutation OBJECT-TYPE
63         SYNTAX      WmanIf2OfdmaPermutation
64         MAX-ACCESS  read-only

```

```

1      STATUS      current
2      DESCRIPTION
3          "This field indicates the OFDMA MS Permutation support."
4      ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 5 }
5
6      wmanIf2eBsMsOfdmaReqCapMobilityFeature OBJECT-TYPE
7          SYNTAX      WmanIf2eOfdmaMobility
8          MAX-ACCESS  read-only
9          STATUS      current
10         DESCRIPTION
11             "The field indicates whether or not the MS supports
12             mobility hand-over, Sleepmode, and Idle-mode."
13         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 6 }
14
15         wmanIf2eBsMsOfdmaReqCapMaxMacLevelDlFm OBJECT-TYPE
16             SYNTAX      WmanIf2eMaxMacLevel
17             MAX-ACCESS  read-only
18             STATUS      current
19             DESCRIPTION
20                 "Maximum amount of MAC level data the MS is capable of
21                 processing per DL frame."
22             REFERENCE
23                 "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
24             DEFVAL      { 0 }
25             ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 7 }
26
27         wmanIf2eBsMsOfdmaReqCapMaxMacLevelUlFm OBJECT-TYPE
28             SYNTAX      WmanIf2eMaxMacLevel
29             MAX-ACCESS  read-only
30             STATUS      current
31             DESCRIPTION
32                 "Maximum amount of MAC level data the MS is capable of
33                 processing per UL frame."
34             REFERENCE
35                 "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
36             DEFVAL      { 0 }
37             ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 8 }
38
39         wmanIf2eBsMsOfdmaReqCapDemMimo OBJECT-TYPE
40             SYNTAX      WmanIf2eOfdmaDemMimo
41             MAX-ACCESS  read-only
42             STATUS      current
43             DESCRIPTION
44                 "This field indicates the different MIMO options supported
45                 by a WirelessMAN-OFDMA PHY SS in the downlink."
46             ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 9 }
47
48         wmanIf2eBsMsOfdmaReqCapMimoCapability OBJECT-TYPE
49             SYNTAX      WmanIf2eOfdmaMimoCap
50             MAX-ACCESS  read-only
51             STATUS      current
52             DESCRIPTION
53                 "This field indicates the MIMO capability of OFDMA MS
54                 demodulator."
55             ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 10 }
56
57         wmanIf2eBsMsOfdmaReqCapUlMimo OBJECT-TYPE
58             SYNTAX      WmanIf2eOfdmaUlMimo
59             MAX-ACCESS  read-only
60             STATUS      current
61             DESCRIPTION
62                 "This field indicates different MIMO options supported
63                 by a OFDMA PHY SS in the uplink"
64             REFERENCE

```

```

1         "Subclause 11.8.3.7.6 in IEEE 802.16e"
2         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 11 }
3
4 wmanIf2eBsMsOfdmaReqCapPrivateMap OBJECT-TYPE
5     SYNTAX      WmanIf2eOfdmaPrivMap
6     MAX-ACCESS  read-only
7     STATUS      current
8     DESCRIPTION
9         "This field indicates AAS private map parameters
10        supported by a OFDMA SS"
11    REFERENCE
12        "Subclause 11.8.3.7.7 in IEEE 802.16e"
13    ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 12 }
14
15 wmanIf2eBsMsOfdmaReqCapPrivateMapChain OBJECT-TYPE
16    SYNTAX      INTEGER (0..3)
17    MAX-ACCESS  read-only
18    STATUS      current
19    DESCRIPTION
20        "This field indicates how many parallel private map
21        chains can be supported by an SS.
22        0:    no limit
23        1..3: maximum concurrent private map chains"
24    REFERENCE
25        "Subclause 11.8.3.7.7 in IEEE 802.16e"
26    ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 13 }
27
28 wmanIf2eBsMsOfdmaReqCapAasCapability OBJECT-TYPE
29    SYNTAX      WmanIf2eOfdmaAasCap
30    MAX-ACCESS  read-only
31    STATUS      current
32    DESCRIPTION
33        "This field indicates different AAS options
34        supported by a OFDMA PHY SS in the downlink"
35    REFERENCE
36        "Subclause 11.8.3.7.8 in IEEE 802.16e"
37    ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 14 }
38
39 wmanIf2eBsMsOfdmaReqCapCinrMeasurement OBJECT-TYPE
40    SYNTAX      WmanIf2eOfdmaCinrCap
41    MAX-ACCESS  read-only
42    STATUS      current
43    DESCRIPTION
44        "This field indicates the CINR measurement capability
45        supported by a OFDMA PHY SS in the downlink."
46    REFERENCE
47        "Subclause 11.8.3.7.9 in IEEE 802.16e"
48    ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 15 }
49
50 wmanIf2eBsMsOfdmaReqCapUlPowerControl OBJECT-TYPE
51    SYNTAX      WmanIf2eOfdmaUlPower
52    MAX-ACCESS  read-only
53    STATUS      current
54    DESCRIPTION
55        "This field indicates the power control options
56        supported by a OFDMA PHY SS for uplink transmission."
57    REFERENCE
58        "Subclause 11.8.3.7.11 in IEEE 802.16e"
59    ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 16 }
60
61 wmanIf2eBsMsOfdmaReqCapMapCapability OBJECT-TYPE
62    SYNTAX      WmanIf2eOfdmaMapCap
63    MAX-ACCESS  read-only
64    STATUS      current

```

```

1      DESCRIPTION
2          "This field indicates the different MAP options supported
3          by a OFDMA PHY SS"
4      REFERENCE
5          "Subclause 11.8.3.7.11 in IEEE 802.16e"
6          ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 17 }
7
8      wmanIf2eBsMsOfdmaReqCapUlControlChannel OBJECT-TYPE
9          SYNTAX      WmanIf2eOfdmaUlCntlCh
10         MAX-ACCESS  read-only
11         STATUS      current
12         DESCRIPTION
13             "This field indicates the different uplink control channels
14             supported by a OFDMA PHY SS."
15         REFERENCE
16             "Subclause 11.8.3.7.13 in IEEE 802.16e"
17             ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 18 }
18
19     wmanIf2eBsMsOfdmaReqCapCistCapability OBJECT-TYPE
20         SYNTAX      WmanIf2eOfdmaMsCistCap
21         MAX-ACCESS  read-only
22         STATUS      current
23         DESCRIPTION
24             "This field indicates the MS capability of supporting CSIT
25             (uplink sounding)."

```

```

1      MAX-ACCESS  read-only
2      STATUS      current
3      DESCRIPTION
4          "This field derived from bit 0..3 of 'Maximum number of
5          burst per frame capability' TLV indicates the maximum
6          number of UL HARQ burst allocations per HARQ enabled MS
7          per UL subframe.
8              Value 0..7 = 1..8 maximum HARQ bursts
9              8..15 = 1..8 maximum HARQ bursts, but may
10             include one non-HARQ burst"
11     REFERENCE
12         "Subclause 11.8.3.7.15 in IEEE 802.16e"
13     DEFVAL      { 0 }
14     ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 22 }
15
16 wmanIf2eBsMsOfdmaReqCapMaxDlHarqBurst OBJECT-TYPE
17     SYNTAX      INTEGER (0..15)
18     MAX-ACCESS  read-only
19     STATUS      current
20     DESCRIPTION
21         "This field derived from bit 4..7 of 'Maximum number of
22         burst per frame capability' TLV indicates the maximum
23         number of DL HARQ burst allocations per HARQ enabled MS
24         per DL subframe.
25             Value 0..15 = 1..16 maximum HARQ bursts"
26     REFERENCE
27         "Subclause 11.8.3.7.15 in IEEE 802.16e"
28     DEFVAL      { 0 }
29     ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 23 }
30
31 wmanIf2eBsMsOfdmaReqCapModMimo OBJECT-TYPE
32     SYNTAX      WmanIf2eOfdmaModMimo
33     MAX-ACCESS  read-only
34     STATUS      current
35     DESCRIPTION
36         "This field indicates the MIMO capability of OFDMA SS
37         modulator."
38     REFERENCE
39         "Subclause 11.8.3.7.16 in IEEE 802.16e"
40     ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 24 }
41
42 wmanIf2eBsMsOfdmaReqCapSdmaPilot OBJECT-TYPE
43     SYNTAX      WmanIf2eSdmaPilotCap
44     MAX-ACCESS  read-only
45     STATUS      current
46     DESCRIPTION
47         "This field indicates the SDMA pilot pattern support
48         for AMC zone."
49     REFERENCE
50         "Subclause 11.8.3.7.17 in IEEE 802.16e"
51     ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 25 }
52
53 wmanIf2eBsMsOfdmaReqCapMultipleBurst OBJECT-TYPE
54     SYNTAX      WmanIf2eMultiBurst
55     MAX-ACCESS  read-only
56     STATUS      current
57     DESCRIPTION
58         "This field indicates whether multiple FEC types are
59         supported in DL/UL burst profiles."
60     REFERENCE
61         "Subclause 11.8.3.7.18 in IEEE 802.16e"
62     ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 26 }
63
64 wmanIf2eBsMsOfdmaReqCapIncrHarqBuffer OBJECT-TYPE

```

```

1      SYNTAX      WmanIf2eIncrHarqBuf
2      MAX-ACCESS  read-only
3      STATUS      current
4      DESCRIPTION
5          "This field indicates the maximal number of data
6           bits the SS is able to use for buffering for NEP/NSCH
7           based incremental redundancy CTC in downlink and uplink
8           transmissions."
9      REFERENCE
10         "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
11         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 27 }
12
13  wmanIf2eBsMsOfdmaReqCapIncrDlHarqBuffer OBJECT-TYPE
14      SYNTAX      INTEGER (0..15)
15      MAX-ACCESS  read-only
16      STATUS      current
17      DESCRIPTION
18         "This field derived from bit 0..3 of 'HARQ incremental
19          redundancy buffer capability' TLV indicates the NEP value
20          of DL HARQ buffering capability for incremental redundancy
21          CTC."
22      REFERENCE
23         "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
24         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 28 }
25
26  wmanIf2eBsMsOfdmaReqCapIncrUlHarqBuffer OBJECT-TYPE
27      SYNTAX      INTEGER (0..15)
28      MAX-ACCESS  read-only
29      STATUS      current
30      DESCRIPTION
31         "This field derived from bit 8..11 of 'HARQ incremental
32          redundancy buffer capability' TLV indicates the NEP value
33          of UL HARQ buffering capability for incremental redundancy
34          CTC."
35      REFERENCE
36         "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
37         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 29 }
38
39  wmanIf2eBsMsOfdmaReqCapChaseHarqBuffer OBJECT-TYPE
40      SYNTAX      WmanIf2eChaseHarqBuf
41      MAX-ACCESS  read-only
42      STATUS      current
43      DESCRIPTION
44         "This field indicates the maximal number of data
45          bits the SS is able to use for buffering for
46          DIUC/duration based HARQ methods (Chase combining and
47          CC-IR) in downlink and uplink transmissions."
48      REFERENCE
49         "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
50         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 30 }
51
52  wmanIf2eBsMsOfdmaReqCapChaseDlHarqBuf OBJECT-TYPE
53      SYNTAX      INTEGER (0..63)
54      MAX-ACCESS  read-only
55      STATUS      current
56      DESCRIPTION
57         "This field derived from bit 0..5 of 'HARQ Chase combining
58          and CC-IR buffer capability' indicates DL HARQ buffering
59          capability for chase combining (K)."
60      REFERENCE
61         "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
62         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 31 }
63
64  wmanIf2eBsMsOfdmaReqCapChaseUlHarqBuf OBJECT-TYPE

```

```

1      SYNTAX      INTEGER (0..63)
2      MAX-ACCESS  read-only
3      STATUS      current
4      DESCRIPTION
5          "This field derived from bit 8..13 of 'HARQ Chase combining
6          and CC-IR buffer capability' indicates UL HARQ buffering
7          capability for chase combining (K)."
```

REFERENCE

```

9          "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
10         ::= { wmanIf2BsMsOfdmaReqCapabilitiesEntry 32 }
11
12 wmanIf2BsMsOfdmaRspCapabilitiesTable OBJECT-TYPE
13     SYNTAX      SEQUENCE OF WmanIf2BsMsOfdmaRspCapabilitiesEntry
14     MAX-ACCESS  not-accessible
15     STATUS      current
16     DESCRIPTION
17         "This table contains the basic capability information,
18         specific to OFDMA Phy, of MSs that have been reported by
19         MSs to BS using RNG-REQ, SBC-REQ and REG-REQ messages.
20         Entries in this table should be created when an MS
21         registers with a BS."
22     ::= { wmanIf2BsOfdmaPhy 6 }
23
24 wmanIf2BsMsOfdmaRspCapabilitiesEntry OBJECT-TYPE
25     SYNTAX      WmanIf2BsMsOfdmaRspCapabilitiesEntry
26     MAX-ACCESS  not-accessible
27     STATUS      current
28     DESCRIPTION
29         "This table provides one row for each MS that has been
30         registered in the BS. This table augments the table
31         wmanIf2BsRegisteredSsTable."
32     AUGMENTS { wmanIf2BsRegisteredSsEntry }
33     ::= { wmanIf2BsMsOfdmaRspCapabilitiesTable 1 }
34
35 WmanIf2BsMsOfdmaRspCapabilitiesEntry ::= SEQUENCE {
36     wmanIf2BsMsOfdmaRspCapFftSizes          WmanIf2OfdmaFftSizes,
37     wmanIf2BsMsOfdmaRspCapDemodulator       WmanIf2OfdmaMsDeModType,
38     wmanIf2BsMsOfdmaRspCapModulator         WmanIf2OfdmaMsModType,
39     wmanIf2BsMsOfdmaRspCapNoHarqChannel     Unsigned32,
40     wmanIf2BsMsOfdmaRspCapPermutation      WmanIf2OfdmaPermutation,
41     wmanIf2eBsMsOfdmaRspCapMobilityFeature WmanIf2eOfdmaMobility,
42     wmanIf2eBsMsOfdmaRspCapMaxMacLevelDlFm WmanIf2eMaxMacLevel,
43     wmanIf2eBsMsOfdmaRspCapMaxMacLevelUlFm WmanIf2eMaxMacLevel,
44     wmanIf2eBsMsOfdmaRspCapDemMimo         WmanIf2eOfdmaDemMimo,
45     wmanIf2eBsMsOfdmaRspCapMimoCapability  WmanIf2eOfdmaMimoCap,
46     wmanIf2eBsMsOfdmaRspCapUlMimo         WmanIf2eOfdmaUlMimo,
47     wmanIf2eBsMsOfdmaRspCapPrivateMap     WmanIf2eOfdmaPrivMap,
48     wmanIf2eBsMsOfdmaRspCapPrivateMap     WmanIf2eOfdmaPrivMap,
49     wmanIf2eBsMsOfdmaRspCapPrivateMapChain INTEGER,
50     wmanIf2eBsMsOfdmaRspCapAasCapability  WmanIf2eOfdmaAasCap,
51     wmanIf2eBsMsOfdmaRspCapCinrMeasurement WmanIf2eOfdmaCinrCap,
52     wmanIf2eBsMsOfdmaRspCapUlPowerControl WmanIf2eOfdmaUlPower,
53     wmanIf2eBsMsOfdmaRspCapMapCapability  WmanIf2eOfdmaMapCap,
54     wmanIf2eBsMsOfdmaRspCapUlControlChannel WmanIf2eOfdmaUlCntlCh,
55     wmanIf2eBsMsOfdmaRspCapCistCapability WmanIf2eOfdmaMsCistCap,
56     wmanIf2eBsMsOfdmaRspCapSoundigRspTime INTEGER,
57     wmanIf2eBsMsOfdmaRspCapMaxSoundigInstr INTEGER,
58     wmanIf2eBsMsOfdmaRspCapMaxUlHarqBurst INTEGER,
59     wmanIf2eBsMsOfdmaRspCapMaxDlHarqBurst INTEGER,
60     wmanIf2eBsMsOfdmaRspCapModMimo       WmanIf2eOfdmaModMimo,
61     wmanIf2eBsMsOfdmaRspCapSdmaPilot     WmanIf2eSdmaPilotCap,
62     wmanIf2eBsMsOfdmaRspCapMultipleBurst WmanIf2eMultiBurst,
63     wmanIf2eBsMsOfdmaRspCapIncrHarqBuffer WmanIf2eIncrHarqBuf,
64     wmanIf2eBsMsOfdmaRspCapIncrDlHarqBuffer INTEGER,
```

```

1          wmanIf2eBsMsOfdmaRspCapIncrUlHarqBuffer INTEGER,
2          wmanIf2eBsMsOfdmaRspCapChaseHarqBuffer WmanIf2eChaseHarqBuf,
3          wmanIf2eBsMsOfdmaRspCapChaseDlHarqBuf  INTEGER,
4          wmanIf2eBsMsOfdmaRspCapChaseUlHarqBuf  INTEGER}
5
6  wmanIf2BsMsOfdmaRspCapFftSizes OBJECT-TYPE
7      SYNTAX      WmanIf2OfdmaFftSizes
8      MAX-ACCESS  read-only
9      STATUS      current
10     DESCRIPTION
11         "This field indicates the FFT sizes negotiated with the
12         MS."
13     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 1 }
14
15  wmanIf2BsMsOfdmaRspCapDemodulator OBJECT-TYPE
16      SYNTAX      WmanIf2OfdmaMsDeModType
17      MAX-ACCESS  read-only
18      STATUS      current
19      DESCRIPTION
20         "This field indicates the different demodulator options
21         negotiated for MS for downlink."
22     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 2 }
23
24  wmanIf2BsMsOfdmaRspCapModulator OBJECT-TYPE
25      SYNTAX      WmanIf2OfdmaMsModType
26      MAX-ACCESS  read-only
27      STATUS      current
28      DESCRIPTION
29         "This field indicates the different modulator options
30         negotiated for MS for uplink."
31     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 3 }
32
33  wmanIf2BsMsOfdmaRspCapNoHarqChannel OBJECT-TYPE
34      SYNTAX      Unsigned32
35      MAX-ACCESS  read-only
36      STATUS      current
37      DESCRIPTION
38         "This field specifies the number of uplink H-ARQ
39         channels (n) the SS supports, where n = 1..16.
40         The value of this object should be 0..15."
41     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 4 }
42
43  wmanIf2BsMsOfdmaRspCapPermutation OBJECT-TYPE
44      SYNTAX      WmanIf2OfdmaPermutation
45      MAX-ACCESS  read-only
46      STATUS      current
47      DESCRIPTION
48         "This field indicates the OFDMA MS Permutation support
49         negotiated for MS."
50     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 5 }
51
52  wmanIf2eBsMsOfdmaRspCapMobilityFeature OBJECT-TYPE
53      SYNTAX      WmanIf2eOfdmaMobility
54      MAX-ACCESS  read-only
55      STATUS      current
56      DESCRIPTION
57         "The field indicates the mobility hand-over, Sleepmode,
58         and Idle-mode negotiated for MS."
59     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 6 }
60
61  wmanIf2eBsMsOfdmaRspCapMaxMacLevelDlFm OBJECT-TYPE
62      SYNTAX      WmanIf2eMaxMacLevel
63      MAX-ACCESS  read-only
64      STATUS      current

```



```

1      DESCRIPTION
2          "Maximum amount of MAC level data the MS is capable of
3          processing per DL frame. A value of 0 indicates such
4          limitation does not exist, except the limitation of
5          the physical medium"
6      REFERENCE
7          "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
8      DEFVAL      { 0 }
9      ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 7 }
10
11     wmanIf2eBsMsOfdmaRspCapMaxMacLevelUlFm OBJECT-TYPE
12         SYNTAX      WmanIf2eMaxMacLevel
13         MAX-ACCESS  read-only
14         STATUS      current
15         DESCRIPTION
16             "Maximum amount of MAC level data the MS is capable of
17             processing per UL frame. A value of 0 indicates such
18             limitation does not exist, except the limitation of
19             the physical medium"
20         REFERENCE
21             "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
22         DEFVAL      { 0 }
23         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 8 }
24
25     wmanIf2eBsMsOfdmaRspCapDemMimo OBJECT-TYPE
26         SYNTAX      WmanIf2eOfdmaDemMimo
27         MAX-ACCESS  read-only
28         STATUS      current
29         DESCRIPTION
30             "This field indicates the different MIMO options supported
31             by a WirelessMAN-OFDMA PHY SS in the downlink."
32         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 9 }
33
34     wmanIf2eBsMsOfdmaRspCapMimoCapability OBJECT-TYPE
35         SYNTAX      WmanIf2eOfdmaMimoCap
36         MAX-ACCESS  read-only
37         STATUS      current
38         DESCRIPTION
39             "This field indicates the MIMO capability of OFDMA MS
40             demodulator."
41         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 10 }
42
43     wmanIf2eBsMsOfdmaRspCapUlMimo OBJECT-TYPE
44         SYNTAX      WmanIf2eOfdmaUlMimo
45         MAX-ACCESS  read-only
46         STATUS      current
47         DESCRIPTION
48             "This field indicates different MIMO options supported
49             by a OFDMA PHY SS in the uplink"
50         REFERENCE
51             "Subclause 11.8.3.7.6 in IEEE 802.16e"
52         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 11 }
53
54     wmanIf2eBsMsOfdmaRspCapPrivateMap OBJECT-TYPE
55         SYNTAX      WmanIf2eOfdmaPrivMap
56         MAX-ACCESS  read-only
57         STATUS      current
58         DESCRIPTION
59             "This field indicates AAS private map parameters
60             supported by a OFDMA SS"
61         REFERENCE
62             "Subclause 11.8.3.7.7 in IEEE 802.16e"
63         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 12 }
64

```

```

1  wmanIf2eBsMsOfdmaRspCapPrivateMapChain OBJECT-TYPE
2      SYNTAX          INTEGER (0..3)
3      MAX-ACCESS      read-only
4      STATUS          current
5      DESCRIPTION
6          "This field indicates how many parallel private map
7          chains can be supported by an SS.
8              0:    no limit
9              1..3: maximum concurrent private map chains"
10     REFERENCE
11         "Subclause 11.8.3.7.7 in IEEE 802.16e"
12     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 13 }
13
14  wmanIf2eBsMsOfdmaRspCapAasCapability OBJECT-TYPE
15      SYNTAX          WmanIf2eOfdmaAasCap
16      MAX-ACCESS      read-only
17      STATUS          current
18      DESCRIPTION
19          "This field indicates different AAS options
20          supported by a OFDMA PHY SS in the downlink."
21     REFERENCE
22         "Subclause 11.8.3.7.8 in IEEE 802.16e"
23     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 14 }
24
25  wmanIf2eBsMsOfdmaRspCapCinrMeasurement OBJECT-TYPE
26      SYNTAX          WmanIf2eOfdmaCinrCap
27      MAX-ACCESS      read-only
28      STATUS          current
29      DESCRIPTION
30          "This field indicates the CINR measurement capability
31          supported by a OFDMA PHY SS in the downlink."
32     REFERENCE
33         "Subclause 11.8.3.7.9 in IEEE 802.16e"
34     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 15 }
35
36  wmanIf2eBsMsOfdmaRspCapUlPowerControl OBJECT-TYPE
37      SYNTAX          WmanIf2eOfdmaUlPower
38      MAX-ACCESS      read-only
39      STATUS          current
40      DESCRIPTION
41          "This field indicates the power control options
42          supported by a OFDMA PHY SS for uplink transmission."
43     REFERENCE
44         "Subclause 11.8.3.7.11 in IEEE 802.16e"
45     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 16 }
46
47  wmanIf2eBsMsOfdmaRspCapMapCapability OBJECT-TYPE
48      SYNTAX          WmanIf2eOfdmaMapCap
49      MAX-ACCESS      read-only
50      STATUS          current
51      DESCRIPTION
52          "This field indicates the different MAP options supported
53          by a OFDMA PHY SS"
54     REFERENCE
55         "Subclause 11.8.3.7.11 in IEEE 802.16e"
56     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 17 }
57
58  wmanIf2eBsMsOfdmaRspCapUlControlChannel OBJECT-TYPE
59      SYNTAX          WmanIf2eOfdmaUlCntlCh
60      MAX-ACCESS      read-only
61      STATUS          current
62      DESCRIPTION
63          "This field indicates the different uplink control channels
64          supported by a OFDMA PHY SS."

```

```

1      REFERENCE
2      "Subclause 11.8.3.7.13 in IEEE 802.16e"
3      ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 18 }
4
5      wmanIf2eBsMsOfdmaRspCapCistCapability OBJECT-TYPE
6      SYNTAX      WmanIf2eOfdmaMsCistCap
7      MAX-ACCESS  read-only
8      STATUS      current
9      DESCRIPTION
10     "This field indicates the MS capability of supporting CSIT
11     (uplink sounding)."
```

12	REFERENCE
13	"Subclause 11.8.3.7.14 in IEEE 802.16e"
14	::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 19 }
15	
16	wmanIf2eBsMsOfdmaRspCapSoundigRspTime OBJECT-TYPE
17	SYNTAX INTEGER (0..7)
18	MAX-ACCESS read-only
19	STATUS current
20	DESCRIPTION
21	"This field derived from bit 3..5 of 'OFDMA MS CSIT
22	capability' TLV indicates the time needed for SS to respond
23	to a sounding command transmitted by the BS
24	Bit 3..5
25	000 0.5ms
26	001 0.75ms
27	010 1ms
28	011 1.25ms
29	100 1.5ms
30	101 min(2ms, Next Frame)
31	110 min(5ms, Next Frame)
32	111 Next Frame"
33	REFERENCE
34	"Subclause 11.8.3.7.14 in IEEE 802.16e"
35	::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 20 }
36	
37	wmanIf2eBsMsOfdmaRspCapMaxSoundigInstr OBJECT-TYPE
38	SYNTAX INTEGER (0..15)
39	MAX-ACCESS read-only
40	STATUS current
41	DESCRIPTION
42	"This field derived from bit 6..9 of 'OFDMA MS CSIT
43	capability' TLV indicates the maximum number of
44	simultaneous sounding instructions (0 = unlimited)."
45	REFERENCE
46	"Subclause 11.8.3.7.14 in IEEE 802.16e"
47	::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 21 }
48	
49	wmanIf2eBsMsOfdmaRspCapMaxUlHarqBurst OBJECT-TYPE
50	SYNTAX INTEGER (0..15)
51	MAX-ACCESS read-only
52	STATUS current
53	DESCRIPTION
54	"This field derived from bit 0..3 of 'Maximum number of
55	burst per frame capability' TLV indicates the maximum
56	number of UL HARQ burst allocations per HARQ enabled MS
57	per UL subframe.
58	Value 0..7 = 1..8 maximum HARQ bursts
59	8..15 = 1..8 maximum HARQ bursts, but may
60	include one non-HARQ burst"
61	REFERENCE
62	"Subclause 11.8.3.7.15 in IEEE 802.16e"
63	DEFVAL { 0 }
64	::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 22 }

```

1
2 wmanIf2eBsMsOfdmaRspCapMaxDlHarqBurst OBJECT-TYPE
3     SYNTAX          INTEGER (0..15)
4     MAX-ACCESS      read-only
5     STATUS           current
6     DESCRIPTION
7         "This field derived from bit 4..7 of 'Maximum number of
8         burst per frame capability' TLV indicates the maximum
9         number of DL HARQ burst allocations per HARQ enabled MS
10        per DL subframe.
11        Value 0..15 = 1..16 maximum HARQ bursts"
12    REFERENCE
13        "Subclause 11.8.3.7.15 in IEEE 802.16e"
14    DEFVAL          { 0 }
15    ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 23 }
16
17 wmanIf2eBsMsOfdmaRspCapModMimo OBJECT-TYPE
18     SYNTAX          WmanIf2eOfdmaModMimo
19     MAX-ACCESS      read-only
20     STATUS           current
21     DESCRIPTION
22         "This field indicates the MIMO capability of OFDMA SS
23         modulator."
24    REFERENCE
25        "Subclause 11.8.3.7.16 in IEEE 802.16e"
26    ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 24 }
27
28 wmanIf2eBsMsOfdmaRspCapSdmaPilot OBJECT-TYPE
29     SYNTAX          WmanIf2eSdmaPilotCap
30     MAX-ACCESS      read-only
31     STATUS           current
32     DESCRIPTION
33         "This field indicates the SDMA pilot pattern support
34         for AMC zone."
35    REFERENCE
36        "Subclause 11.8.3.7.17 in IEEE 802.16e"
37    ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 25 }
38
39 wmanIf2eBsMsOfdmaRspCapMultipleBurst OBJECT-TYPE
40     SYNTAX          WmanIf2eMultiBurst
41     MAX-ACCESS      read-only
42     STATUS           current
43     DESCRIPTION
44         "This field indicates whether multiple FEC types are
45         supported in DL/UL burst profiles."
46    REFERENCE
47        "Subclause 11.8.3.7.18 in IEEE 802.16e"
48    ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 26 }
49
50 wmanIf2eBsMsOfdmaRspCapIncrHarqBuffer OBJECT-TYPE
51     SYNTAX          WmanIf2eIncrHarqBuf
52     MAX-ACCESS      read-only
53     STATUS           current
54     DESCRIPTION
55         "This field indicates the maximal number of data
56         bits the SS is able to use for buffering for NEP/NSCH
57         based incremental redundancy CTC in downlink and uplink
58         transmissions."
59    REFERENCE
60        "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
61    ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 27 }
62
63 wmanIf2eBsMsOfdmaRspCapIncrDlHarqBuffer OBJECT-TYPE
64     SYNTAX          INTEGER (0..15)

```

```

1      MAX-ACCESS    read-only
2      STATUS        current
3      DESCRIPTION
4          "This field derived from bit 0..3 of 'HARQ incremental
5          redundancy buffer capability' TLV indicates the NEP value
6          of DL HARQ buffering capability for incremental redundancy
7          CTC."
8      REFERENCE
9          "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
10     ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 28 }
11
12     wmanIf2eBsMsOfdmaRspCapIncrUlHarqBuffer OBJECT-TYPE
13         SYNTAX      INTEGER (0..15)
14         MAX-ACCESS  read-only
15         STATUS      current
16         DESCRIPTION
17             "This field derived from bit 8..11 of 'HARQ incremental
18             redundancy buffer capability' TLV indicates the NEP value
19             of UL HARQ buffering capability for incremental redundancy
20             CTC."
21         REFERENCE
22             "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
23         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 29 }
24
25     wmanIf2eBsMsOfdmaRspCapChaseHarqBuffer OBJECT-TYPE
26         SYNTAX      WmanIf2eChaseHarqBuf
27         MAX-ACCESS  read-only
28         STATUS      current
29         DESCRIPTION
30             "This field indicates the maximal number of data
31             bits the SS is able to use for buffering for
32             DIUC/duration based HARQ methods (Chase combining and
33             CC-IR) in downlink and uplink transmissions."
34         REFERENCE
35             "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
36         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 30 }
37
38     wmanIf2eBsMsOfdmaRspCapChaseDlHarqBuf OBJECT-TYPE
39         SYNTAX      INTEGER (0..63)
40         MAX-ACCESS  read-only
41         STATUS      current
42         DESCRIPTION
43             "This field derived from bit 0..5 of 'HARQ Chase combining
44             and CC-IR buffer capability' indicates DL HARQ buffering
45             capability for chase combining (K)."
46         REFERENCE
47             "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
48         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 31 }
49
50     wmanIf2eBsMsOfdmaRspCapChaseUlHarqBuf OBJECT-TYPE
51         SYNTAX      INTEGER (0..63)
52         MAX-ACCESS  read-only
53         STATUS      current
54         DESCRIPTION
55             "This field derived from bit 8..13 of 'HARQ Chase combining
56             and CC-IR buffer capability' indicates UL HARQ buffering
57             capability for chase combining (K)."
58         REFERENCE
59             "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
60         ::= { wmanIf2BsMsOfdmaRspCapabilitiesEntry 32 }
61
62     wmanIf2BsOfdmaCapabilitiesTable OBJECT-TYPE
63         SYNTAX      SEQUENCE OF WmanIf2BsOfdmaCapabilitiesEntry
64         MAX-ACCESS  not-accessible

```

```

1      STATUS      current
2      DESCRIPTION
3          "This table contains the basic capabilities, specific to
4          OFDMA Phy, of the BS as implemented in BS hardware and
5          software. These capabilities along with the configuration
6          for them (wmanIf2BsOfdmaCapabilitiesConfigTable) are used
7          for negotiation of basic capabilities with SS using
8          RNG-RSP, SBC-RSP and REG-RSP messages. The negotiated
9          capabilities are obtained by interSubclause of MS raw
10         reported capabilities, BS raw capabilities and BS
11         configured capabilities. The objects in the table have
12         read-only access. The table is maintained by BS."
13     ::= { wmanIf2BsOfdmaPhy 7 }
14
15     wmanIf2BsOfdmaCapabilitiesEntry OBJECT-TYPE
16         SYNTAX      WmanIf2BsOfdmaCapabilitiesEntry
17         MAX-ACCESS  not-accessible
18         STATUS      current
19         DESCRIPTION
20             "This table provides one row for each BS sector and is
21             indexed by ifIndex."
22         INDEX { ifIndex }
23     ::= { wmanIf2BsOfdmaCapabilitiesTable 1 }
24
25     WmanIf2BsOfdmaCapabilitiesEntry ::= SEQUENCE {
26         wmanIf2BsOfdmaCapFftSizes      WmanIf2OfdmaFftSizes,
27         wmanIf2BsOfdmaCapDemodulator   WmanIf2OfdmaMsDeModType,
28         wmanIf2BsOfdmaCapModulator     WmanIf2OfdmaMsModType,
29         wmanIf2BsOfdmaCapNoHarqChannel Unsigned32,
30         wmanIf2BsOfdmaCapPermutation   WmanIf2OfdmaPermutation,
31         wmanIf2eBsOfdmaCapMobilityFeature WmanIf2eOfdmaMobility,
32         wmanIf2eBsOfdmaCapMaxMacLevelDlFm WmanIf2eMaxMacLevel,
33         wmanIf2eBsOfdmaCapMaxMacLevelUlFm WmanIf2eMaxMacLevel,
34         wmanIf2eBsOfdmaCapDemMimo      WmanIf2eOfdmaDemMimo,
35         wmanIf2eBsOfdmaCapMimoCapability WmanIf2eOfdmaMimoCap,
36         wmanIf2eBsOfdmaCapUlMimo      WmanIf2eOfdmaUlMimo,
37         wmanIf2eBsOfdmaCapPrivateMap   WmanIf2eOfdmaPrivMap,
38         wmanIf2eBsOfdmaCapPrivateMapChain INTEGER,
39         wmanIf2eBsOfdmaCapAasCapability WmanIf2eOfdmaAasCap,
40         wmanIf2eBsOfdmaCapCinrMeasurement WmanIf2eOfdmaCinrCap,
41         wmanIf2eBsOfdmaCapUlPowerControl WmanIf2eOfdmaUlPower,
42         wmanIf2eBsOfdmaCapMapCapability WmanIf2eOfdmaMapCap,
43         wmanIf2eBsOfdmaCapUlControlChannel WmanIf2eOfdmaUlCntlCh,
44         wmanIf2eBsOfdmaCapCistCapability WmanIf2eOfdmaMsCistCap,
45         wmanIf2eBsOfdmaCapSoundigRspTime INTEGER,
46         wmanIf2eBsOfdmaCapMaxSoundigInstr INTEGER,
47         wmanIf2eBsOfdmaCapMaxUlHarqBurst INTEGER,
48         wmanIf2eBsOfdmaCapMaxDlHarqBurst INTEGER,
49         wmanIf2eBsOfdmaCapModMimo      WmanIf2eOfdmaModMimo,
50         wmanIf2eBsOfdmaCapSdmaPilot    WmanIf2eSdmaPilotCap,
51         wmanIf2eBsOfdmaCapMultipleBurst WmanIf2eMultiBurst,
52         wmanIf2eBsOfdmaCapIncrHarqBuffer WmanIf2eIncrHarqBuf,
53         wmanIf2eBsOfdmaCapIncrDlHarqBuffer INTEGER,
54         wmanIf2eBsOfdmaCapIncrUlHarqBuffer INTEGER,
55         wmanIf2eBsOfdmaCapChaseHarqBuffer WmanIf2eChaseHarqBuf,
56         wmanIf2eBsOfdmaCapChaseDlHarqBuf INTEGER,
57         wmanIf2eBsOfdmaCapChaseUlHarqBuf INTEGER}
58
59     wmanIf2BsOfdmaCapFftSizes OBJECT-TYPE
60         SYNTAX      WmanIf2OfdmaFftSizes
61         MAX-ACCESS  read-only
62         STATUS      current
63         DESCRIPTION
64             "This field indicates the FFT sizes supported by BS."

```

```

1         ::= { wmanIf2BsOfdmaCapabilitiesEntry 1 }
2
3     wmanIf2BsOfdmaCapDemodulator OBJECT-TYPE
4         SYNTAX      WmanIf2OfdmaMsDeModType
5         MAX-ACCESS  read-only
6         STATUS      current
7         DESCRIPTION
8             "This field indicates the different demodulator options
9             supported by BS."
10        ::= { wmanIf2BsOfdmaCapabilitiesEntry 2 }
11
12    wmanIf2BsOfdmaCapModulator OBJECT-TYPE
13        SYNTAX      WmanIf2OfdmaMsModType
14        MAX-ACCESS  read-only
15        STATUS      current
16        DESCRIPTION
17            "This field indicates the different modulator options
18            supported by BS."
19        ::= { wmanIf2BsOfdmaCapabilitiesEntry 3 }
20
21    wmanIf2BsOfdmaCapNoHarqChannel OBJECT-TYPE
22        SYNTAX      Unsigned32
23        MAX-ACCESS  read-only
24        STATUS      current
25        DESCRIPTION
26            "This field specifies the number of uplink H-ARQ
27            channels (n) the SS supports, where n = 1..16.
28            The value of this object should be 0..15."
29        ::= { wmanIf2BsOfdmaCapabilitiesEntry 4 }
30
31    wmanIf2BsOfdmaCapPermutation OBJECT-TYPE
32        SYNTAX      WmanIf2OfdmaPermutation
33        MAX-ACCESS  read-only
34        STATUS      current
35        DESCRIPTION
36            "This field indicates the OFDMA MS Permutation support
37            supported by BS."
38        ::= { wmanIf2BsOfdmaCapabilitiesEntry 5 }
39
40    wmanIf2eBsOfdmaCapMobilityFeature OBJECT-TYPE
41        SYNTAX      WmanIf2eOfdmaMobility
42        MAX-ACCESS  read-only
43        STATUS      current
44        DESCRIPTION
45            "The field indicates the mobility hand-over, Sleepmode,
46            and Idle-mode supported by BS."
47        ::= { wmanIf2BsOfdmaCapabilitiesEntry 6 }
48
49    wmanIf2eBsOfdmaCapMaxMacLevelDlFm OBJECT-TYPE
50        SYNTAX      WmanIf2eMaxMacLevel
51        MAX-ACCESS  read-only
52        STATUS      current
53        DESCRIPTION
54            "Maximum amount of MAC level data the MS is capable of
55            processing per DL frame. A value of 0 indicates such
56            limitation does not exist, except the limitation of
57            the physical medium"
58        REFERENCE
59            "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
60        DEFVAL      { 0 }
61        ::= { wmanIf2BsOfdmaCapabilitiesEntry 7 }
62
63    wmanIf2eBsOfdmaCapMaxMacLevelUlFm OBJECT-TYPE
64        SYNTAX      WmanIf2eMaxMacLevel

```

```

1      MAX-ACCESS  read-only
2      STATUS      current
3      DESCRIPTION
4          "Maximum amount of MAC level data the MS is capable of
5           processing per UL frame. A value of 0 indicates such
6           limitation does not exist, except the limitation of
7           the physical medium"
8      REFERENCE
9          "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
10     DEFVAL      { 0 }
11     ::= { wmanIf2BsOfdmaCapabilitiesEntry 8 }
12
13     wmanIf2eBsOfdmaCapDemMimo OBJECT-TYPE
14         SYNTAX      WmanIf2eOfdmaDemMimo
15         MAX-ACCESS  read-only
16         STATUS      current
17         DESCRIPTION
18             "This field indicates the different MIMO options supported
19              by a WirelessMAN-OFDMA PHY SS in the downlink."
20         ::= { wmanIf2BsOfdmaCapabilitiesEntry 9 }
21
22     wmanIf2eBsOfdmaCapMimoCapability OBJECT-TYPE
23         SYNTAX      WmanIf2eOfdmaMimoCap
24         MAX-ACCESS  read-only
25         STATUS      current
26         DESCRIPTION
27             "This field indicates the MIMO capability of OFDMA MS
28              demodulator."
29         ::= { wmanIf2BsOfdmaCapabilitiesEntry 10 }
30
31     wmanIf2eBsOfdmaCapUlMimo OBJECT-TYPE
32         SYNTAX      WmanIf2eOfdmaUlMimo
33         MAX-ACCESS  read-only
34         STATUS      current
35         DESCRIPTION
36             "This field indicates different MIMO options supported
37              by a OFDMA PHY SS in the uplink"
38         REFERENCE
39             "Subclause 11.8.3.7.6 in IEEE 802.16e"
40         ::= { wmanIf2BsOfdmaCapabilitiesEntry 11 }
41
42     wmanIf2eBsOfdmaCapPrivateMap OBJECT-TYPE
43         SYNTAX      WmanIf2eOfdmaPrivMap
44         MAX-ACCESS  read-only
45         STATUS      current
46         DESCRIPTION
47             "This field indicates AAS private map parameters
48              supported by a OFDMA SS"
49         REFERENCE
50             "Subclause 11.8.3.7.7 in IEEE 802.16e"
51         ::= { wmanIf2BsOfdmaCapabilitiesEntry 12 }
52
53     wmanIf2eBsOfdmaCapPrivateMapChain OBJECT-TYPE
54         SYNTAX      INTEGER (0..3)
55         MAX-ACCESS  read-only
56         STATUS      current
57         DESCRIPTION
58             "This field indicates how many parallel private map
59              chains can be supported by an SS.
60              0:    no limit
61              1..3: maximum concurrent private map chains"
62         REFERENCE
63             "Subclause 11.8.3.7.7 in IEEE 802.16e"
64         ::= { wmanIf2BsOfdmaCapabilitiesEntry 13 }

```



```

1
2 wmanIf2eBsOfdmaCapAasCapability OBJECT-TYPE
3     SYNTAX      WmanIf2eOfdmaAasCap
4     MAX-ACCESS  read-only
5     STATUS      current
6     DESCRIPTION
7         "This field indicates different AAS options
8         supported by a OFDMA PHY SS in the downlink"
9     REFERENCE
10        "Subclause 11.8.3.7.8 in IEEE 802.16e"
11        ::= { wmanIf2BsOfdmaCapabilitiesEntry 14 }
12
13 wmanIf2eBsOfdmaCapCinrMeasurement OBJECT-TYPE
14     SYNTAX      WmanIf2eOfdmaCinrCap
15     MAX-ACCESS  read-only
16     STATUS      current
17     DESCRIPTION
18        "This field indicates the CINR measurement capability
19        supported by a OFDMA PHY SS in the downlink."
20     REFERENCE
21        "Subclause 11.8.3.7.9 in IEEE 802.16e"
22        ::= { wmanIf2BsOfdmaCapabilitiesEntry 15 }
23
24 wmanIf2eBsOfdmaCapUlPowerControl OBJECT-TYPE
25     SYNTAX      WmanIf2eOfdmaUlPower
26     MAX-ACCESS  read-only
27     STATUS      current
28     DESCRIPTION
29        "This field indicates the power control options
30        supported by a OFDMA PHY SS for uplink transmission."
31     REFERENCE
32        "Subclause 11.8.3.7.11 in IEEE 802.16e"
33        ::= { wmanIf2BsOfdmaCapabilitiesEntry 16 }
34
35 wmanIf2eBsOfdmaCapMapCapability OBJECT-TYPE
36     SYNTAX      WmanIf2eOfdmaMapCap
37     MAX-ACCESS  read-only
38     STATUS      current
39     DESCRIPTION
40        "This field indicates the different MAP options supported
41        by a OFDMA PHY SS"
42     REFERENCE
43        "Subclause 11.8.3.7.11 in IEEE 802.16e"
44        ::= { wmanIf2BsOfdmaCapabilitiesEntry 17 }
45
46 wmanIf2eBsOfdmaCapUlControlChannel OBJECT-TYPE
47     SYNTAX      WmanIf2eOfdmaUlCntlCh
48     MAX-ACCESS  read-only
49     STATUS      current
50     DESCRIPTION
51        "This field indicates the different uplink control channels
52        supported by a OFDMA PHY SS."
53     REFERENCE
54        "Subclause 11.8.3.7.13 in IEEE 802.16e"
55        ::= { wmanIf2BsOfdmaCapabilitiesEntry 18 }
56
57 wmanIf2eBsOfdmaCapCistCapability OBJECT-TYPE
58     SYNTAX      WmanIf2eOfdmaMsCistCap
59     MAX-ACCESS  read-only
60     STATUS      current
61     DESCRIPTION
62        "This field indicates the MS capability of supporting CSIT
63        (uplink sounding)."

```

```

1         "Subclause 11.8.3.7.14 in IEEE 802.16e"
2         ::= { wmanIf2BsOfdmaCapabilitiesEntry 19 }
3
4 wmanIf2eBsOfdmaCapSoundigRspTime OBJECT-TYPE
5     SYNTAX      INTEGER (0..7)
6     MAX-ACCESS  read-only
7     STATUS      current
8     DESCRIPTION
9         "This field derived from bit 3..5 of 'OFDMA MS CSIT
10        capability' TLV indicates the time needed for SS to respond
11        to a sounding command transmitted by the BS
12        Bit 3..5
13            000    0.5ms
14            001    0.75ms
15            010    1ms
16            011    1.25ms
17            100    1.5ms
18            101    min(2ms, Next Frame)
19            110    min(5ms, Next Frame)
20            111    Next Frame"
21     REFERENCE
22         "Subclause 11.8.3.7.14 in IEEE 802.16e"
23     ::= { wmanIf2BsOfdmaCapabilitiesEntry 20 }
24
25 wmanIf2eBsOfdmaCapMaxSoundigInstr OBJECT-TYPE
26     SYNTAX      INTEGER (0..15)
27     MAX-ACCESS  read-only
28     STATUS      current
29     DESCRIPTION
30         "This field derived from bit 6..9 of 'OFDMA MS CSIT
31        capability' TLV indicates the maximum number of
32        simultaneous sounding instructions (0 = unlimited)."

```

```

1         "Subclause 11.8.3.7.15 in IEEE 802.16e"
2     DEFVAL        { 0 }
3     ::= { wmanIf2BsOfdmaCapabilitiesEntry 23 }
4
5     wmanIf2eBsOfdmaCapModMimo OBJECT-TYPE
6         SYNTAX      WmanIf2eOfdmaModMimo
7         MAX-ACCESS  read-only
8         STATUS      current
9         DESCRIPTION
10            "This field indicates the MIMO capability of OFDMA SS
11             modulator."
12         REFERENCE
13            "Subclause 11.8.3.7.16 in IEEE 802.16e"
14         ::= { wmanIf2BsOfdmaCapabilitiesEntry 24 }
15
16     wmanIf2eBsOfdmaCapSdmaPilot OBJECT-TYPE
17         SYNTAX      WmanIf2eSdmaPilotCap
18         MAX-ACCESS  read-only
19         STATUS      current
20         DESCRIPTION
21            "This field indicates the SDMA pilot pattern support
22             for AMC zone."
23         REFERENCE
24            "Subclause 11.8.3.7.17 in IEEE 802.16e"
25         ::= { wmanIf2BsOfdmaCapabilitiesEntry 25 }
26
27     wmanIf2eBsOfdmaCapMultipleBurst OBJECT-TYPE
28         SYNTAX      WmanIf2eMultiBurst
29         MAX-ACCESS  read-only
30         STATUS      current
31         DESCRIPTION
32            "This field indicates whether multiple FEC types are
33             supported in DL/UL burst profiles."
34         REFERENCE
35            "Subclause 11.8.3.7.18 in IEEE 802.16e"
36         ::= { wmanIf2BsOfdmaCapabilitiesEntry 26 }
37
38     wmanIf2eBsOfdmaCapIncrHarqBuffer OBJECT-TYPE
39         SYNTAX      WmanIf2eIncrHarqBuf
40         MAX-ACCESS  read-only
41         STATUS      current
42         DESCRIPTION
43            "This field indicates the maximal number of data
44             bits the SS is able to use for buffering for NEP/NSCH
45             based incremental redundancy CTC in downlink and uplink
46             transmissions."
47         REFERENCE
48            "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
49         ::= { wmanIf2BsOfdmaCapabilitiesEntry 27 }
50
51     wmanIf2eBsOfdmaCapIncrDlHarqBuffer OBJECT-TYPE
52         SYNTAX      INTEGER (0..15)
53         MAX-ACCESS  read-only
54         STATUS      current
55         DESCRIPTION
56            "This field derived from bit 0..3 of 'HARQ incremental
57             redundancy buffer capability' TLV indicates the NEP value
58             of DL HARQ buffering capability for incremental redundancy
59             CTC."
60         REFERENCE
61            "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
62         ::= { wmanIf2BsOfdmaCapabilitiesEntry 28 }
63
64     wmanIf2eBsOfdmaCapIncrUlHarqBuffer OBJECT-TYPE

```

```

1      SYNTAX      INTEGER (0..15)
2      MAX-ACCESS  read-only
3      STATUS      current
4      DESCRIPTION
5          "This field derived from bit 8..11 of 'HARQ incremental
6          redundancy buffer capability' TLV indicates the NEP value
7          of UL HARQ buffering capability for incremental redundancy
8          CTC."
9      REFERENCE
10         "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
11         ::= { wmanIf2BsOfdmaCapabilitiesEntry 29 }
12
13 wmanIf2eBsOfdmaCapChaseHarqBuffer OBJECT-TYPE
14     SYNTAX      WmanIf2eChaseHarqBuf
15     MAX-ACCESS  read-only
16     STATUS      current
17     DESCRIPTION
18         "This field indicates the maximal number of data
19         bits the SS is able to use for buffering for
20         DIUC/duration based HARQ methods (Chase combining and
21         CC-IR) in downlink and uplink transmissions."
22     REFERENCE
23         "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
24         ::= { wmanIf2BsOfdmaCapabilitiesEntry 30 }
25
26 wmanIf2eBsOfdmaCapChaseDlHarqBuf OBJECT-TYPE
27     SYNTAX      INTEGER (0..63)
28     MAX-ACCESS  read-only
29     STATUS      current
30     DESCRIPTION
31         "This field derived from bit 0..5 of 'HARQ Chase combining
32         and CC-IR buffer capability' indicates DL HARQ buffering
33         capability for chase combining (K)."
34     REFERENCE
35         "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
36         ::= { wmanIf2BsOfdmaCapabilitiesEntry 31 }
37
38 wmanIf2eBsOfdmaCapChaseUlHarqBuf OBJECT-TYPE
39     SYNTAX      INTEGER (0..63)
40     MAX-ACCESS  read-only
41     STATUS      current
42     DESCRIPTION
43         "This field derived from bit 8..13 of 'HARQ Chase combining
44         and CC-IR buffer capability' indicates UL HARQ buffering
45         capability for chase combining (K)."
46     REFERENCE
47         "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
48         ::= { wmanIf2BsOfdmaCapabilitiesEntry 32 }
49
50 wmanIf2BsOfdmaCapabilitiesConfigTable OBJECT-TYPE
51     SYNTAX      SEQUENCE OF WmanIf2BsOfdmaCapabilitiesConfigEntry
52     MAX-ACCESS  not-accessible
53     STATUS      current
54     DESCRIPTION
55         "This table contains the configuration for basic
56         capabilities of BS, specific to OFDMA Phy. The table is
57         intended to be used to restrict the Capabilities
58         implemented by BS, for example in order to comply with
59         local regulatory requirements. The BS should use the
60         configuration along with the implemented Capabilities
61         (wmanIf2BsOfdmaPhyTable) for negotiation of basic
62         capabilities with SS using RNG-RSP, SBC-RSP and REG-RSP
63         messages. The negotiated capabilities are obtained by
64         interSubclause of MS reported capabilities, BS raw

```

```

1         capabilities and BS configured capabilities. The objects
2         in the table have read-write access. The rows are created
3         by BS as a copy of wmanIf2BsBasicCapabilitiesTable
4         and can be modified by NMS."
5     ::= { wmanIf2BsOfdmaPhy 8 }
6
7 wmanIf2BsOfdmaCapabilitiesConfigEntry OBJECT-TYPE
8     SYNTAX      WmanIf2BsOfdmaCapabilitiesConfigEntry
9     MAX-ACCESS  not-accessible
10    STATUS      current
11    DESCRIPTION
12        "This table provides one row for each BS sector and is
13         indexed by ifIndex."
14    INDEX { ifIndex }
15    ::= { wmanIf2BsOfdmaCapabilitiesConfigTable 1 }
16
17 WmanIf2BsOfdmaCapabilitiesConfigEntry ::= SEQUENCE {
18     wmanIf2BsOfdmaCapCfgFftSizes      WmanIf2OfdmaFftSizes,
19     wmanIf2BsOfdmaCapCfgDemodulator   WmanIf2OfdmaMsDeModType,
20     wmanIf2BsOfdmaCapCfgModulator     WmanIf2OfdmaMsModType,
21     wmanIf2BsOfdmaCapCfgNoHarqChannel Unsigned32,
22     wmanIf2BsOfdmaCapCfgPermutation   WmanIf2OfdmaPermutation,
23     wmanIf2eBsOfdmaCapCfgMobilityFeature WmanIf2eOfdmaMobility,
24     wmanIf2eBsOfdmaCapCfgMaxMacLevelDlFm WmanIf2eMaxMacLevel,
25     wmanIf2eBsOfdmaCapCfgMaxMacLevelUlFm WmanIf2eMaxMacLevel,
26     wmanIf2eBsOfdmaCapCfgDemMimo      WmanIf2eOfdmaDemMimo,
27     wmanIf2eBsOfdmaCapCfgMimoCapability WmanIf2eOfdmaMimoCap,
28     wmanIf2eBsOfdmaCapCfgUlMimo       WmanIf2eOfdmaUlMimo,
29     wmanIf2eBsOfdmaCapCfgPrivateMap    WmanIf2eOfdmaPrivMap,
30     wmanIf2eBsOfdmaCapCfgPrivateMapChain INTEGER,
31     wmanIf2eBsOfdmaCapCfgAasCapability WmanIf2eOfdmaAasCap,
32     wmanIf2eBsOfdmaCapCfgCinrMeasurement WmanIf2eOfdmaCinrCap,
33     wmanIf2eBsOfdmaCapCfgUlPowerControl WmanIf2eOfdmaUlPower,
34     wmanIf2eBsOfdmaCapCfgMapCapability WmanIf2eOfdmaMapCap,
35     wmanIf2eBsOfdmaCapCfgUlControlChannel WmanIf2eOfdmaUlCntlCh,
36     wmanIf2eBsOfdmaCapCfgCistCapability WmanIf2eOfdmaMsCistCap,
37     wmanIf2eBsOfdmaCapCfgSoundigRspTime INTEGER,
38     wmanIf2eBsOfdmaCapCfgMaxSoundigInstr INTEGER,
39     wmanIf2eBsOfdmaCapCfgMaxUlHarqBurst INTEGER,
40     wmanIf2eBsOfdmaCapCfgMaxDlHarqBurst INTEGER,
41     wmanIf2eBsOfdmaCapCfgModMimo      WmanIf2eOfdmaModMimo,
42     wmanIf2eBsOfdmaCapCfgSdmaPilot     WmanIf2eSdmaPilotCap,
43     wmanIf2eBsOfdmaCapCfgMultipleBurst WmanIf2eMultiBurst,
44     wmanIf2eBsOfdmaCapCfgIncrHarqBuffer WmanIf2eIncrHarqBuf,
45     wmanIf2eBsOfdmaCapCfgIncrDlHarqBuffer INTEGER,
46     wmanIf2eBsOfdmaCapCfgIncrUlHarqBuffer INTEGER,
47     wmanIf2eBsOfdmaCapCfgChaseHarqBuffer WmanIf2eChaseHarqBuf,
48     wmanIf2eBsOfdmaCapCfgChaseDlHarqBuf INTEGER,
49     wmanIf2eBsOfdmaCapCfgChaseUlHarqBuf INTEGER}
50
51 wmanIf2BsOfdmaCapCfgFftSizes OBJECT-TYPE
52     SYNTAX      WmanIf2OfdmaFftSizes
53     MAX-ACCESS  read-write
54     STATUS      current
55     DESCRIPTION
56         "This field indicates the FFT sizes configured for the BS."
57     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 1 }
58
59 wmanIf2BsOfdmaCapCfgDemodulator OBJECT-TYPE
60     SYNTAX      WmanIf2OfdmaMsDeModType
61     MAX-ACCESS  read-write
62     STATUS      current
63     DESCRIPTION
64         "This field indicates the different demodulator options

```

```

1         configured for the BS."
2         ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 2 }
3
4 wmanIf2BsOfdmaCapCfgModulator OBJECT-TYPE
5     SYNTAX      WmanIf2OfdmaMsModType
6     MAX-ACCESS  read-write
7     STATUS      current
8     DESCRIPTION
9         "This field indicates the different modulator options
10        configured for the BS."
11        ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 3 }
12
13 wmanIf2BsOfdmaCapCfgNoHarqChannel OBJECT-TYPE
14     SYNTAX      Unsigned32
15     MAX-ACCESS  read-write
16     STATUS      current
17     DESCRIPTION
18         "This field specifies the number of uplink H-ARQ
19        channels (n) the SS supports, where n = 1..16.
20        The value of this object should be 0..15."
21        ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 4 }
22
23 wmanIf2BsOfdmaCapCfgPermutation OBJECT-TYPE
24     SYNTAX      WmanIf2OfdmaPermutation
25     MAX-ACCESS  read-write
26     STATUS      current
27     DESCRIPTION
28         "This field indicates the OFDMA MS Permutation support
29        configured for the BS."
30        ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 5 }
31
32 wmanIf2eBsOfdmaCapCfgMobilityFeature OBJECT-TYPE
33     SYNTAX      WmanIf2eOfdmaMobility
34     MAX-ACCESS  read-write
35     STATUS      current
36     DESCRIPTION
37         "The field indicates the mobility hand-over, Sleepmode,
38        and Idle-mode configured for the BS."
39        ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 6 }
40
41 wmanIf2eBsOfdmaCapCfgMaxMacLevelDlFm OBJECT-TYPE
42     SYNTAX      WmanIf2eMaxMacLevel
43     MAX-ACCESS  read-write
44     STATUS      current
45     DESCRIPTION
46         "Maximum amount of MAC level data the MS is capable of
47        processing per DL frame. A value of 0 indicates such
48        limitation does not exist, except the limitation of
49        the physical medium"
50     REFERENCE
51         "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
52     DEFVAL      { 0 }
53     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 7 }
54
55 wmanIf2eBsOfdmaCapCfgMaxMacLevelUlFm OBJECT-TYPE
56     SYNTAX      WmanIf2eMaxMacLevel
57     MAX-ACCESS  read-write
58     STATUS      current
59     DESCRIPTION
60         "Maximum amount of MAC level data the MS is capable of
61        processing per UL frame. A value of 0 indicates such
62        limitation does not exist, except the limitation of
63        the physical medium"
64     REFERENCE

```

```

1         "Subclause 11.7.8.10.1 in IEEE Std 802.16e-2005"
2     DEFVAL        { 0 }
3     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 8 }
4
5     wmanIf2eBsOfdmaCapCfgDemMimo OBJECT-TYPE
6         SYNTAX      WmanIf2eOfdmaDemMimo
7         MAX-ACCESS  read-write
8         STATUS      current
9         DESCRIPTION
10            "This field indicates the different MIMO options supported
11             by a WirelessMAN-OFDMA PHY SS in the downlink."
12            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 9 }
13
14     wmanIf2eBsOfdmaCapCfgMimoCapability OBJECT-TYPE
15         SYNTAX      WmanIf2eOfdmaMimoCap
16         MAX-ACCESS  read-write
17         STATUS      current
18         DESCRIPTION
19            "This field indicates the MIMO capability of OFDMA MS
20             demodulator."
21            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 10 }
22
23     wmanIf2eBsOfdmaCapCfgUlMimo OBJECT-TYPE
24         SYNTAX      WmanIf2eOfdmaUlMimo
25         MAX-ACCESS  read-write
26         STATUS      current
27         DESCRIPTION
28            "This field indicates different MIMO options supported
29             by a OFDMA PHY SS in the uplink"
30         REFERENCE
31            "Subclause 11.8.3.7.6 in IEEE 802.16e"
32            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 11 }
33
34     wmanIf2eBsOfdmaCapCfgPrivateMap OBJECT-TYPE
35         SYNTAX      WmanIf2eOfdmaPrivMap
36         MAX-ACCESS  read-write
37         STATUS      current
38         DESCRIPTION
39            "This field indicates AAS private map parameters
40             supported by a OFDMA SS"
41         REFERENCE
42            "Subclause 11.8.3.7.7 in IEEE 802.16e"
43            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 12 }
44
45     wmanIf2eBsOfdmaCapCfgPrivateMapChain OBJECT-TYPE
46         SYNTAX      INTEGER (0..3)
47         MAX-ACCESS  read-write
48         STATUS      current
49         DESCRIPTION
50            "This field indicates how many parallel private map
51             chains can be supported by an SS.
52             0: no limit
53             1..3: maximum concurrent private map chains"
54         REFERENCE
55            "Subclause 11.8.3.7.7 in IEEE 802.16e"
56            ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 13 }
57
58     wmanIf2eBsOfdmaCapCfgAasCapability OBJECT-TYPE
59         SYNTAX      WmanIf2eOfdmaAasCap
60         MAX-ACCESS  read-write
61         STATUS      current
62         DESCRIPTION
63            "This field indicates different AAS options
64             supported by a OFDMA PHY SS in the downlink"

```

```

1      REFERENCE
2      "Subclause 11.8.3.7.8 in IEEE 802.16e"
3      ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 14 }
4
5  wmanIf2eBsOfdmaCapCfgCinrMeasurement OBJECT-TYPE
6      SYNTAX      WmanIf2eOfdmaCinrCap
7      MAX-ACCESS  read-write
8      STATUS      current
9      DESCRIPTION
10     "This field indicates the CINR measurement capability
11     supported by a OFDMA PHY SS in the downlink."
12     REFERENCE
13     "Subclause 11.8.3.7.9 in IEEE 802.16e"
14     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 15 }
15
16  wmanIf2eBsOfdmaCapCfgUlPowerControl OBJECT-TYPE
17      SYNTAX      WmanIf2eOfdmaULPower
18      MAX-ACCESS  read-write
19      STATUS      current
20      DESCRIPTION
21     "This field indicates the power control options
22     supported by a OFDMA PHY SS for uplink transmission."
23     REFERENCE
24     "Subclause 11.8.3.7.11 in IEEE 802.16e"
25     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 16 }
26
27  wmanIf2eBsOfdmaCapCfgMapCapability OBJECT-TYPE
28      SYNTAX      WmanIf2eOfdmaMapCap
29      MAX-ACCESS  read-write
30      STATUS      current
31      DESCRIPTION
32     "This field indicates the different MAP options supported
33     by a OFDMA PHY SS"
34     REFERENCE
35     "Subclause 11.8.3.7.11 in IEEE 802.16e"
36     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 17 }
37
38  wmanIf2eBsOfdmaCapCfgUlControlChannel OBJECT-TYPE
39      SYNTAX      WmanIf2eOfdmaULCntlCh
40      MAX-ACCESS  read-write
41      STATUS      current
42      DESCRIPTION
43     "This field indicates the different uplink control channels
44     supported by a OFDMA PHY SS."
45     REFERENCE
46     "Subclause 11.8.3.7.13 in IEEE 802.16e"
47     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 18 }
48
49  wmanIf2eBsOfdmaCapCfgCistCapability OBJECT-TYPE
50      SYNTAX      WmanIf2eOfdmaMsCistCap
51      MAX-ACCESS  read-write
52      STATUS      current
53      DESCRIPTION
54     "This field indicates the MS capability of supporting CSIT
55     (uplink sounding)."

```



```

1         "This field derived from bit 3..5 of 'OFDMA MS CSIT
2         capability' TLV indicates the time needed for SS to respond
3         to a sounding command transmitted by the BS
4         Bit 3..5
5             000    0.5ms
6             001    0.75ms
7             010    1ms
8             011    1.25ms
9             100    1.5ms
10            101    min(2ms, Next Frame)
11            110    min(5ms, Next Frame)
12            111    Next Frame"
13     REFERENCE
14         "Subclause 11.8.3.7.14 in IEEE 802.16e"
15     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 20 }
16
17 wmanIf2eBsOfdmaCapCfgMaxSoundigInstr OBJECT-TYPE
18     SYNTAX      INTEGER (0..15)
19     MAX-ACCESS  read-write
20     STATUS      current
21     DESCRIPTION
22         "This field derived from bit 6..9 of 'OFDMA MS CSIT
23         capability' TLV indicates the maximum number of
24         simultaneous sounding instructions (0 = unlimited)."

```

```

1      DESCRIPTION
2          "This field indicates the MIMO capability of OFDMA SS
3          modulator."
4      REFERENCE
5          "Subclause 11.8.3.7.16 in IEEE 802.16e"
6          ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 24 }
7
8      wmanIf2eBsOfdmaCapCfgSdmaPilot OBJECT-TYPE
9          SYNTAX      WmanIf2eSdmaPilotCap
10         MAX-ACCESS  read-write
11         STATUS      current
12         DESCRIPTION
13             "This field indicates the SDMA pilot pattern support
14             for AMC zone."
15         REFERENCE
16             "Subclause 11.8.3.7.17 in IEEE 802.16e"
17             ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 25 }
18
19         wmanIf2eBsOfdmaCapCfgMultipleBurst OBJECT-TYPE
20             SYNTAX      WmanIf2eMultiBurst
21             MAX-ACCESS  read-write
22             STATUS      current
23             DESCRIPTION
24                 "This field indicates whether multiple FEC types are
25                 supported in DL/UL burst profiles."
26             REFERENCE
27                 "Subclause 11.8.3.7.18 in IEEE 802.16e"
28                 ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 26 }
29
30         wmanIf2eBsOfdmaCapCfgIncrHarqBuffer OBJECT-TYPE
31             SYNTAX      WmanIf2eIncrHarqBuf
32             MAX-ACCESS  read-write
33             STATUS      current
34             DESCRIPTION
35                 "This field indicates the maximal number of data
36                 bits the SS is able to use for buffering for NEP/NSCH
37                 based incremental redundancy CTC in downlink and uplink
38                 transmissions."
39             REFERENCE
40                 "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
41                 ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 27 }
42
43         wmanIf2eBsOfdmaCapCfgIncrDlHarqBuffer OBJECT-TYPE
44             SYNTAX      INTEGER (0..15)
45             MAX-ACCESS  read-write
46             STATUS      current
47             DESCRIPTION
48                 "This field derived from bit 0..3 of 'HARQ incremental
49                 redundancy buffer capability' TLV indicates the NEP value
50                 of DL HARQ buffering capability for incremental redundancy
51                 CTC."
52             REFERENCE
53                 "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
54                 ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 28 }
55
56         wmanIf2eBsOfdmaCapCfgIncrUlHarqBuffer OBJECT-TYPE
57             SYNTAX      INTEGER (0..15)
58             MAX-ACCESS  read-write
59             STATUS      current
60             DESCRIPTION
61                 "This field derived from bit 8..11 of 'HARQ incremental
62                 redundancy buffer capability' TLV indicates the NEP value
63                 of UL HARQ buffering capability for incremental redundancy
64                 CTC."

```

```

1      REFERENCE
2      "Subclause 11.8.3.7.19.1 in IEEE 802.16e"
3      ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 29 }
4
5      wmanIf2eBsOfdmaCapCfgChaseHarqBuffer OBJECT-TYPE
6      SYNTAX      WmanIf2eChaseHarqBuf
7      MAX-ACCESS  read-write
8      STATUS      current
9      DESCRIPTION
10     "This field indicates the maximal number of data
11     bits the SS is able to use for buffering for
12     DIUC/duration based HARQ methods (Chase combining and
13     CC-IR) in downlink and uplink transmissions."
14     REFERENCE
15     "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
16     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 30 }
17
18     wmanIf2eBsOfdmaCapCfgChaseDlHarqBuf OBJECT-TYPE
19     SYNTAX      INTEGER (0..63)
20     MAX-ACCESS  read-write
21     STATUS      current
22     DESCRIPTION
23     "This field derived from bit 0..5 of 'HARQ Chase combining
24     and CC-IR buffer capability' indicates DL HARQ buffering
25     capability for chase combining (K)."
26     REFERENCE
27     "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
28     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 31 }
29
30     wmanIf2eBsOfdmaCapCfgChaseUlHarqBuf OBJECT-TYPE
31     SYNTAX      INTEGER (0..63)
32     MAX-ACCESS  read-write
33     STATUS      current
34     DESCRIPTION
35     "This field derived from bit 8..13 of 'HARQ Chase combining
36     and CC-IR buffer capability' indicates UL HARQ buffering
37     capability for chase combining (K)."
38     REFERENCE
39     "Subclause 11.8.3.7.19.2 in IEEE 802.16e"
40     ::= { wmanIf2BsOfdmaCapabilitiesConfigEntry 32 }
41
42
43
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