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

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3   This contribution proposes ASN.1 code in wmanIf2Mib and wmanIf2mMib to new TLVs in 11.8
4   SBC-REQ/RSP management message encodings

2. Proposed changes

5

2.1 ASN.1 Code Changes

6

13.2 ASN.1 Definitions of MIB Modules

7

13.2.3 wmanIf2Mib

8

9   [Add the following code to WMAN-IF2-MIB:]
10
11   ```
12   -- XXX
13   WmanIf2AuthPolicy ::= TEXTUAL-CONVENTION
14   STATUS   current
15   DESCRIPTION
16   "This field indicates authorization policy used by the MS and
17   BS to negotiate and synchronize.
18   A bit 0 - 'not supported'
19   1 - 'supported'"
20   REFERENCE
21   "Subclause 11.8.4.2 in IEEE Std 802.16e-2005"
22   SYNTAX   BITS {rsaBasedAuthInitNtwkEntry(0),
23   eapBasedAuthInitNtwkEntry(1),
24   authenEapBasedAuthInitNtwkEntry(2),
25   reserved0(3),
26   rsaBasedAuthReentry(4),
27   eapBasedAuthReentry(5),
28   authenEapBasedAuthReentry(6),
29   reserved1(7)}
30
31   -- XXX
32   WmanIf2MacMode ::= TEXTUAL-CONVENTION
33   STATUS   current
34   DESCRIPTION
35   "This field indicates a MAC (Message Authentication Code)
36   mode that MS supports. Both MS and BS shall determine and
37   use a MAC mode.
38   A bit 0 - 'not supported'
39   1 - 'supported'"
40   REFERENCE
41   "Subclause 11.8.4.3 in IEEE Std 802.16e-2005"
42   SYNTAX   BITS {hmac(0),
43   cmac(1),
44   sixtyfourBitShortHmaca(2),
45   eightyBitShortHmaca(3),
46   nintysixBitShortHmaca(4)}
47
48   -- XXX
49   WmanIf2ExtCapability ::= TEXTUAL-CONVENTION
50   STATUS   current
51   DESCRIPTION
52   "This field indicates the extended subheader format
   ```
```

```
 1                    support.
 2                    A bit 0 - 'not supported'
 3                          1 - 'supported'"
 4               REFERENCE
 5                   "Subclause 11.8.6 in IEEE Std 802.16e-2005"
 6               SYNTAX      BITS {extSubheader(0)}
 7
 8
 9    wmanIf2BsSsReqCapabilitiesTable OBJECT-TYPE
10           SYNTAX      SEQUENCE OF WmanIf2BsSsReqCapabilitiesEntry
11           MAX-ACCESS  not-accessible
12           STATUS      current
13           DESCRIPTION
14               "This table contains the basic capability information of SSs
15                that have been reported by SSs to BS using RNG-REQ, SBC-REQ
16                and REG-REQ messages. Entries in this table should be
17                created when an SS registers with a BS."
18           ::= { wmanIf2BsCapabilities 1 }
19
20    wmanIf2BsSsReqCapabilitiesEntry OBJECT-TYPE
21           SYNTAX      WmanIf2BsSsReqCapabilitiesEntry
22           MAX-ACCESS  not-accessible
23           STATUS      current
24           DESCRIPTION
25               "This table provides one row for each SS that has been
26                registered in the BS. This table augments the table
27                wmanIf2BsRegisteredSsTable."
28           AUGMENTS { wmanIf2BsRegisteredSsEntry }
29           ::= { wmanIf2BsSsReqCapabilitiesTable 1 }
30
31    WmanIf2BsSsReqCapabilitiesEntry ::= SEQUENCE {
32           wmanIf2BsSsReqCapUplinkCidSupport       WmanIf2NumOfCid,
33           wmanIf2BsSsReqCapArqSupport             WmanIf2ArqSupportType,
34           wmanIf2BsSsReqCapDsxFlowControl         WmanIf2MaxDsxFlowType,
35           wmanIf2BsSsReqCapMacCrcSupport          WmanIf2MacCrcSupport,
36           wmanIf2BsSsReqCapMcaFlowControl         WmanIf2MaxMcaFlowType,
37           wmanIf2BsSsReqCapMcpGroupCidSupport     WmanIf2MaxMcpGroupCid,
38           wmanIf2BsSsReqCapPkmFlowControl         WmanIf2MaxPkmFlowType,
39           wmanIf2BsSsReqCapAuthPolicyControl      WmanIf2AuthPolicyType,
40           wmanIf2BsSsReqCapMaxNumOfSupportedSA    WmanIf2MaxNumOfSaType,
41           wmanIf2BsSsReqCapIpVersion              WmanIf2IpVersionType,
42           wmanIf2BsSsReqCapMacCsSupportBitMap     WmanIf2MacCsBitMap,
43           wmanIf2BsSsReqCapMaxNumOfClassifier     WmanIf2MaxClassifiers,
44           wmanIf2BsSsReqCapPhsSupport             WmanIf2PhsSupportType,
45           wmanIf2BsSsReqCapBandwidthAllocSupport  WmanIf2BwAllocSupport,
46           wmanIf2BsSsReqCapPduConstruction        WmanIf2PduConstruction,
47           wmanIf2BsSsReqCapTtgTransitionGap       WmanIf2SsTransitionGap,
48           wmanIf2BsSsReqCapRtgTransitionGap       WmanIf2SsTransitionGap,
49           wmanIf2BsSsReqCapDownlinkCidSupport     WmanIf2NumOfCid,
50           wmanIf2BsSsReqCapPackingSupport         WmanIf2PackingSupport,
51           wmanIf2BsSsReqCapExtendedRtpsSupport    WmanIf2ExtRtpsSupport,
52           wmanIf2BsSsReqCapMaxNumBurstToMs        INTEGER,
53           wmanIf2BsSsReqCapIpAddrAllocMethod      WmanIf2IpAllocMethod,
54           wmanIf2BsSsReqCapArqAckType             WmanIf2ArqAckType,
55           wmanIf2BsSsReqCapMacHeader              WmanIf2MacHeaderSupp,
56           wmanIf2BsSsReqCapMaxMacLevelDlFrame     WmanIf2MaxMacLevel,
57           wmanIf2BsSsReqCapMaxMacLevelUlFrame     WmanIf2MaxMacLevel,
58           wmanIf2BsSsReqCapPkmVersion             WmanIf2PkmVersion,
59           wmanIf2BsSsReqCapAuthPolicy             WmanIf2AuthPolicy,
60           wmanIf2BsSsReqCapMacMode                WmanIf2MacMode,
61           wmanIf2BsSsReqCapPnWindowSize           INTEGER,
62           wmanIf2BsSsReqCapExtCapability          WmanIf2ExtCapability}
63
64    -- XXX
```

```
1    wmanIf2BsSsReqCapPkmVersion OBJECT-TYPE
2            SYNTAX      WmanIf2PkmVersion
3            MAX-ACCESS  read-only
4            STATUS      current
5            DESCRIPTION
6               "Indicates a PKM version that SS or BS supports."
7            REFERENCE
8                "Subclause 11.8.4.1 in IEEE Std 802.16e-2005"
9            ::= { wmanIf2BsSsReqCapabilitiesEntry 27 }
10
11   -- XXX
12   wmanIf2BsSsReqCapAuthPolicy OBJECT-TYPE
13           SYNTAX      WmanIf2AuthPolicy
14           MAX-ACCESS  read-only
15           STATUS      current
16           DESCRIPTION
17              "indicates authorization policy used by the MS and BS to
18               negotiate and synchronize."
19           REFERENCE
20               "Subclause 11.8.4.2 in IEEE Std 802.16e-2005"
21           ::= { wmanIf2BsSsReqCapabilitiesEntry 28 }
22
23   -- XXX
24   wmanIf2BsSsReqCapMacMode OBJECT-TYPE
25           SYNTAX      WmanIf2MacMode
26           MAX-ACCESS  read-only
27           STATUS      current
28           DESCRIPTION
29              "indicates a MAC (Message Authentication Code) mode that MS
30               supports."
31           REFERENCE
32               "Subclause 11.8.4.3 in IEEE Std 802.16e-2005"
33           ::= { wmanIf2BsSsReqCapabilitiesEntry 29 }
34
35   -- XXX
36   wmanIf2BsSsReqCapPnWindowSize OBJECT-TYPE
37           SYNTAX      INTEGER (0 .. 65535)
38           MAX-ACCESS  read-only
39           STATUS      current
40           DESCRIPTION
41              "Specifies the size capability of the receiver PN window for
42               SAs and management connections. The receiver shall track
43               PNs within this window to prevent replay attacks (see
44               7.5.1.2.4)."
45           REFERENCE
46               "Subclause 11.8.4.4 in IEEE Std 802.16e-2005"
47           ::= { wmanIf2BsSsReqCapabilitiesEntry 30 }
48
49   -- XXX
50   wmanIf2BsSsReqCapExtCapability OBJECT-TYPE
51           SYNTAX      WmanIf2ExtCapability
52           MAX-ACCESS  read-only
53           STATUS      current
54           DESCRIPTION
55              "indicates the extended subheader format support."
56           REFERENCE
57               "Subclause 11.8.6 in IEEE Std 802.16e-2005"
58           ::= { wmanIf2BsSsReqCapabilitiesEntry 31 }
59
60   wmanIf2BsSsRspCapabilitiesTable OBJECT-TYPE
61           SYNTAX      SEQUENCE OF WmanIf2BsSsRspCapabilitiesEntry
62           MAX-ACCESS  not-accessible
63           STATUS      current
64           DESCRIPTION
```

```
1                    "This table contains the basic capability information of SSs
2                     that have been negotiated and agreed between BS and SS via
3                     RNG-REQ/RSP, SBC-REQ/RSP and REG-REQ/RSP messages.
4                     This table augments the wmanIf2BsRegisteredSsTable."
5             REFERENCE
6                 "Subclause 6.3.2.3.7 in IEEE Std 802.16-2004"
7             ::= { wmanIf2BsCapabilities 2 }
8
9    wmanIf2BsSsRspCapabilitiesEntry OBJECT-TYPE
10           SYNTAX       WmanIf2BsSsRspCapabilitiesEntry
11           MAX-ACCESS   not-accessible
12           STATUS       current
13           DESCRIPTION
14               "This table provides one row for each SS that has been
15                registered in the BS. This table augments the
16                wmanIf2BsRegisteredSsTable. "
17           AUGMENTS { wmanIf2BsRegisteredSsEntry }
18           ::= { wmanIf2BsSsRspCapabilitiesTable 1 }
19
20   WmanIf2BsSsRspCapabilitiesEntry ::= SEQUENCE {
21           wmanIf2BsSsRspCapUplinkCidSupport         WmanIf2NumOfCid,
22           wmanIf2BsSsRspCapArqSupport               WmanIf2ArqSupportType,
23           wmanIf2BsSsRspCapDsxFlowControl           WmanIf2MaxDsxFlowType,
24           wmanIf2BsSsRspCapMacCrcSupport            WmanIf2MacCrcSupport,
25           wmanIf2BsSsRspCapMcaFlowControl           WmanIf2MaxMcaFlowType,
26           wmanIf2BsSsRspCapMcpGroupCidSupport       WmanIf2MaxMcpGroupCid,
27           wmanIf2BsSsRspCapPkmFlowControl           WmanIf2MaxPkmFlowType,
28           wmanIf2BsSsRspCapAuthPolicyControl        WmanIf2AuthPolicyType,
29           wmanIf2BsSsRspCapMaxNumOfSupportedSA      WmanIf2MaxNumOfSaType,
30           wmanIf2BsSsRspCapIpVersion                WmanIf2IpVersionType,
31           wmanIf2BsSsRspCapMacCsSupportBitMap       WmanIf2MacCsBitMap,
32           wmanIf2BsSsRspCapMaxNumOfClassifier       WmanIf2MaxClassifiers,
33           wmanIf2BsSsRspCapPhsSupport               WmanIf2PhsSupportType,
34           wmanIf2BsSsRspCapBandwidthAllocSupport    WmanIf2BwAllocSupport,
35           wmanIf2BsSsRspCapPduConstruction          WmanIf2PduConstruction,
36           wmanIf2BsSsRspCapTtgTransitionGap         WmanIf2SsTransitionGap,
37           wmanIf2BsSsRspCapRtgTransitionGap         WmanIf2SsTransitionGap,
38           wmanIf2BsSsRspCapDownlinkCidSupport       WmanIf2NumOfCid,
39           wmanIf2BsSsRspCapPackingSupport           WmanIf2PackingSupport,
40           wmanIf2BsSsRspCapExtendedRtpsSupport      WmanIf2ExtRtpsSupport,
41           wmanIf2BsSsRspCapMaxNumBurstToMs          INTEGER,
42           wmanIf2BsSsRspCapIpAddrAllocMethod        WmanIf2IpAllocMethod,
43           wmanIf2BsSsRspCapArqAckType               WmanIf2ArqAckType,
44           wmanIf2BsSsRspCapMacHeader                WmanIf2MacHeaderSupp,
45           wmanIf2BsSsRspCapMaxMacLevelDlFrame       WmanIf2MaxMacLevel,
46           wmanIf2BsSsRspCapMaxMacLevelUlFrame       WmanIf2MaxMacLevel,
47           wmanIf2BsSsRspCapNumOfProvisionedSf       Unsigned32,
48           wmanIf2BsSsRspCapPkmVersion               WmanIf2PkmVersion,
49           wmanIf2BsSsRspCapAuthPolicy               WmanIf2AuthPolicy,
50           wmanIf2BsSsRspCapMacMode                  WmanIf2MacMode,
51           wmanIf2BsSsRspCapPnWindowSize             INTEGER,
52           wmanIf2BsSsRspCapExtCapability            WmanIf2ExtCapability}
53
54   -- XXX
55   wmanIf2BsSsRspCapPkmVersion OBJECT-TYPE
56           SYNTAX       WmanIf2PkmVersion
57           MAX-ACCESS   read-only
58           STATUS       current
59           DESCRIPTION
60               "Indicates a PKM version that SS or BS supports."
61           REFERENCE
62               "Subclause 11.8.4.1 in IEEE Std 802.16e-2005"
63           ::= { wmanIf2BsSsRspCapabilitiesEntry 28 }
64
```

```
1      -- XXX
2      wmanIf2BsSsRspCapAuthPolicy OBJECT-TYPE
3              SYNTAX     WmanIf2AuthPolicy
4              MAX-ACCESS  read-only
5              STATUS      current
6              DESCRIPTION
7                  "indicates authorization policy used by the MS and BS to
8                  negotiate and synchronize."
9              REFERENCE
10                 "Subclause 11.8.4.2 in IEEE Std 802.16e-2005"
11             ::= { wmanIf2BsSsRspCapabilitiesEntry 29 }
12
13     -- XXX
14     wmanIf2BsSsRspCapMacMode OBJECT-TYPE
15             SYNTAX     WmanIf2MacMode
16             MAX-ACCESS  read-only
17             STATUS      current
18             DESCRIPTION
19                 "indicates a MAC (Message Authentication Code) mode that MS
20                 supports."
21             REFERENCE
22                 "Subclause 11.8.4.3 in IEEE Std 802.16e-2005"
23             ::= { wmanIf2BsSsRspCapabilitiesEntry 30 }
24
25     -- XXX
26     wmanIf2BsSsRspCapPnWindowSize OBJECT-TYPE
27             SYNTAX      INTEGER (0 .. 65535)
28             MAX-ACCESS  read-only
29             STATUS      current
30             DESCRIPTION
31                 "Specifies the size capability of the receiver PN window for
32                 SAs and management connections. The receiver shall track
33                 PNs within this window to prevent replay attacks (see
34                 7.5.1.2.4)."
35             REFERENCE
36                 "Subclause 11.8.4.4 in IEEE Std 802.16e-2005"
37             ::= { wmanIf2BsSsRspCapabilitiesEntry 31 }
38
39     -- XXX
40     wmanIf2BsSsRspCapExtCapability OBJECT-TYPE
41             SYNTAX     WmanIf2ExtCapability
42             MAX-ACCESS  read-only
43             STATUS      current
44             DESCRIPTION
45                 "indicates the extended subheader format support."
46             REFERENCE
47                 "Subclause 11.8.6 in IEEE Std 802.16e-2005"
48             ::= { wmanIf2BsSsRspCapabilitiesEntry 32 }
49
50     wmanIf2BsBasicCapabilitiesTable OBJECT-TYPE
51             SYNTAX      SEQUENCE OF WmanIf2BsBasicCapabilitiesEntry
52             MAX-ACCESS  not-accessible
53             STATUS      current
54             DESCRIPTION
55                 "This table contains the basic capabilities of the BS as
56                  implemented in BS hardware and software. These capabilities
57                  along with the configuration for them
58                  (wmanIf2BsCapabilitiesConfigTable) are used for negotiation
59                  of basic capabilities with SS using RNG-RSP, SBC-RSP and
60                  REG-RSP messages. The negotiated capabilities are obtained
61                  by interSubclause of SS raw reported capabilities, BS raw
62                  capabilities and BS configured capabilities. The objects in
63                  the table have read-only access. The table is maintained
64                  by BS."
```

```
1                 ::= { wmanIf2BsCapabilities 3 }
2
3     wmanIf2BsBasicCapabilitiesEntry OBJECT-TYPE
4             SYNTAX      WmanIf2BsBasicCapabilitiesEntry
5             MAX-ACCESS  not-accessible
6             STATUS      current
7             DESCRIPTION
8                 "This table provides one row for each BS sector and is
9                  indexed by ifIndex."
10            INDEX { ifIndex }
11            ::= { wmanIf2BsBasicCapabilitiesTable 1 }
12
13    WmanIf2BsBasicCapabilitiesEntry ::= SEQUENCE {
14            wmanIf2BsCapUplinkCidSupport          WmanIf2NumOfCid,
15            wmanIf2BsCapArqSupport                WmanIf2ArqSupportType,
16            wmanIf2BsCapDsxFlowControl            WmanIf2MaxDsxFlowType,
17            wmanIf2BsCapMacCrcSupport             WmanIf2MacCrcSupport,
18            wmanIf2BsCapMcaFlowControl            WmanIf2MaxMcaFlowType,
19            wmanIf2BsCapMcpGroupCidSupport        WmanIf2MaxMcpGroupCid,
20            wmanIf2BsCapPkmFlowControl            WmanIf2MaxPkmFlowType,
21            wmanIf2BsCapAuthPolicyControl         WmanIf2AuthPolicyType,
22            wmanIf2BsCapMaxNumOfSupportedSA       WmanIf2MaxNumOfSaType,
23            wmanIf2BsCapIpVersion                 WmanIf2IpVersionType,
24            wmanIf2BsCapMacCsSupportBitMap        WmanIf2MacCsBitMap,
25            wmanIf2BsCapMaxNumOfClassifier        WmanIf2MaxClassifiers,
26            wmanIf2BsCapPhsSupport                WmanIf2PhsSupportType,
27            wmanIf2BsCapBandwidthAllocSupport     WmanIf2BwAllocSupport,
28            wmanIf2BsCapPduConstruction           WmanIf2PduConstruction,
29            wmanIf2BsCapTtgTransitionGap          WmanIf2SsTransitionGap,
30            wmanIf2BsCapRtgTransitionGap          WmanIf2SsTransitionGap,
31            wmanIf2BsCapDownlinkCidSupport        WmanIf2NumOfCid,
32            wmanIf2BsCapPackingSupport            WmanIf2PackingSupport,
33            wmanIf2BsCapExtendedRtpsSupport       WmanIf2ExtRtpsSupport,
34            wmanIf2BsCapMaxNumBurstToMs           INTEGER,
35            wmanIf2BsCapIpAddrAllocMethod         WmanIf2IpAllocMethod,
36            wmanIf2BsCapArqAckType                WmanIf2ArqAckType,
37            wmanIf2BsCapMacHeader                 WmanIf2MacHeaderSupp,
38            wmanIf2BsCapMaxMacLevelDlFrame        WmanIf2MaxMacLevel,
39            wmanIf2BsCapMaxMacLevelUlFrame        WmanIf2MaxMacLevel,
40            wmanIf2BsCapNumOfProvisionedSf        Unsigned32,
41            wmanIf2BsCapPkmVersion                WmanIf2PkmVersion,
42            wmanIf2BsCapAuthPolicy                WmanIf2AuthPolicy,
43            wmanIf2BsCapMacMode                   WmanIf2MacMode,
44            wmanIf2BsCapPnWindowSize              INTEGER,
45            wmanIf2BsCapExtCapability             WmanIf2ExtCapability}
46
47    -- XXX
48    wmanIf2BsCapPkmVersion OBJECT-TYPE
49            SYNTAX      WmanIf2PkmVersion
50            MAX-ACCESS  read-only
51            STATUS      current
52            DESCRIPTION
53                "Indicates a PKM version that SS or BS supports."
54            REFERENCE
55                "Subclause 11.8.4.1 in IEEE Std 802.16e-2005"
56            ::= { wmanIf2BsBasicCapabilitiesEntry 28 }
57
58    -- XXX
59    wmanIf2BsCapAuthPolicy OBJECT-TYPE
60            SYNTAX      WmanIf2AuthPolicy
61            MAX-ACCESS  read-only
62            STATUS      current
63            DESCRIPTION
64                "indicates authorization policy used by the MS and BS to
```

```
 1                     negotiate and synchronize."
 2              REFERENCE
 3                  "Subclause 11.8.4.2 in IEEE Std 802.16e-2005"
 4              ::= { wmanIf2BsBasicCapabilitiesEntry 29 }
 5
 6      -- XXX
 7      wmanIf2BsCapMacMode OBJECT-TYPE
 8              SYNTAX      WmanIf2MacMode
 9              MAX-ACCESS  read-only
10              STATUS      current
11              DESCRIPTION
12                  "indicates a MAC (Message Authentication Code) mode that MS
13                  supports."
14              REFERENCE
15                  "Subclause 11.8.4.3 in IEEE Std 802.16e-2005"
16              ::= { wmanIf2BsBasicCapabilitiesEntry 30 }
17
18      -- XXX
19      wmanIf2BsCapPnWindowSize OBJECT-TYPE
20              SYNTAX      INTEGER (0 .. 65535)
21              MAX-ACCESS  read-only
22              STATUS      current
23              DESCRIPTION
24                  "Specifies the size capability of the receiver PN window for
25                  SAs and management connections. The receiver shall track
26                  PNs within this window to prevent replay attacks (see
27                  7.5.1.2.4)."
28              REFERENCE
29                  "Subclause 11.8.4.4 in IEEE Std 802.16e-2005"
30              ::= { wmanIf2BsBasicCapabilitiesEntry 31 }
31
32      -- XXX
33      wmanIf2BsCapExtCapability OBJECT-TYPE
34              SYNTAX      WmanIf2ExtCapability
35              MAX-ACCESS  read-only
36              STATUS      current
37              DESCRIPTION
38                  "indicates the extended subheader format support."
39              REFERENCE
40                  "Subclause 11.8.6 in IEEE Std 802.16e-2005"
41              ::= { wmanIf2BsBasicCapabilitiesEntry 32 }
42
43      wmanIf2BsCapabilitiesConfigTable OBJECT-TYPE
44              SYNTAX      SEQUENCE OF WmanIf2BsCapabilitiesConfigEntry
45              MAX-ACCESS  not-accessible
46              STATUS      current
47              DESCRIPTION
48                  "This table contains the configuration for basic
49                   capabilities of BS. The table is intended to be used to
50                   restrict the Capabilities implemented by BS, for example in
51                   order to comply with local regulatory requirements. The BS
52                   should use the configuration along with the implemented
53                   Capabilities (wmanIf2BsBasicCapabilitiesTable) for
54                   negotiation of basic capabilities with SS using RNG-RSP,
55                   SBC-RSP and REG-RSP messages. The negotiated capabilities
56                   are obtained by interSubclause of SS reported capabilities,
57                   BS raw capabilities and BS configured capabilities. The
58                   objects in the table have read-write access. The rows are
59                   created by BS as a copy of wmanIf2BsBasicCapabilitiesTable
60                   and can be modified by NMS."
61              ::= { wmanIf2BsCapabilities 4 }
62
63      wmanIf2BsCapabilitiesConfigEntry OBJECT-TYPE
64              SYNTAX      WmanIf2BsCapabilitiesConfigEntry
```

9

```
 1              MAX-ACCESS  not-accessible
 2              STATUS      current
 3              DESCRIPTION
 4                  "This table provides one row for each BS sector and is
 5                   indexed by ifIndex."
 6              INDEX { ifIndex }
 7              ::= { wmanIf2BsCapabilitiesConfigTable 1 }
 8
 9    WmanIf2BsCapabilitiesConfigEntry ::= SEQUENCE {
10           wmanIf2BsCapCfgUplinkCidSupport       WmanIf2NumOfCid,
11           wmanIf2BsCapCfgArqSupport             WmanIf2ArqSupportType,
12           wmanIf2BsCapCfgDsxFlowControl         WmanIf2MaxDsxFlowType,
13           wmanIf2BsCapCfgMacCrcSupport          WmanIf2MacCrcSupport,
14           wmanIf2BsCapCfgMcaFlowControl         WmanIf2MaxMcaFlowType,
15           wmanIf2BsCapCfgMcpGroupCidSupport     WmanIf2MaxMcpGroupCid,
16           wmanIf2BsCapCfgPkmFlowControl         WmanIf2MaxPkmFlowType,
17           wmanIf2BsCapCfgAuthPolicyControl      WmanIf2AuthPolicyType,
18           wmanIf2BsCapCfgMaxNumOfSupportedSA    WmanIf2MaxNumOfSaType,
19           wmanIf2BsCapCfgIpVersion              WmanIf2IpVersionType,
20           wmanIf2BsCapCfgMacCsSupportBitMap     WmanIf2MacCsBitMap,
21           wmanIf2BsCapCfgMaxNumOfClassifier     WmanIf2MaxClassifiers,
22           wmanIf2BsCapCfgPhsSupport             WmanIf2PhsSupportType,
23           wmanIf2BsCapCfgBandwidthAllocSupport  WmanIf2BwAllocSupport,
24           wmanIf2BsCapCfgPduConstruction        WmanIf2PduConstruction,
25           wmanIf2BsCapCfgTtgTransitionGap       WmanIf2SsTransitionGap,
26           wmanIf2BsCapCfgRtgTransitionGap       WmanIf2SsTransitionGap,
27           wmanIf2BsCapCfgDownlinkCidSupport     WmanIf2NumOfCid,
28           wmanIf2BsCapCfgPackingSupport         WmanIf2PackingSupport,
29           wmanIf2BsCapCfgExtendedRtpsSupport    WmanIf2ExtRtpsSupport,
30           wmanIf2BsCapCfgMaxNumBurstToMs        INTEGER,
31           wmanIf2BsCapCfgIpAddrAllocMethod      WmanIf2IpAllocMethod,
32           wmanIf2BsCapCfgArqAckType             WmanIf2ArqAckType,
33           wmanIf2BsCapCfgMacHeader              WmanIf2MacHeaderSupp,
34           wmanIf2BsCapCfgMaxMacLevelDlFrame     WmanIf2MaxMacLevel,
35           wmanIf2BsCapCfgMaxMacLevelUlFrame     WmanIf2MaxMacLevel,
36           wmanIf2BsCapCfgNumOfProvisionedSf     Unsigned32,
37           wmanIf2BsCapCfgPkmVersion             WmanIf2PkmVersion,
38           wmanIf2BsCapCfgAuthPolicy             WmanIf2AuthPolicy,
39           wmanIf2BsCapCfgMacMode                WmanIf2MacMode,
40           wmanIf2BsCapCfgPnWindowSize           INTEGER,
41           wmanIf2BsCapCfgExtCapability          WmanIf2ExtCapability}
42    -- XXX
43    wmanIf2BsCapCfgPkmVersion OBJECT-TYPE
44           SYNTAX      WmanIf2PkmVersion
45           MAX-ACCESS  read-only
46           STATUS      current
47           DESCRIPTION
48              "Indicates a PKM version that SS or BS supports."
49           REFERENCE
50              "Subclause 11.8.4.1 in IEEE Std 802.16e-2005"
51           ::= { wmanIf2BsCapabilitiesConfigEntry 28 }
52
53    -- XXX
54    wmanIf2BsCapCfgAuthPolicy OBJECT-TYPE
55           SYNTAX      WmanIf2AuthPolicy
56           MAX-ACCESS  read-only
57           STATUS      current
58           DESCRIPTION
59              "indicates authorization policy used by the MS and BS to
60               negotiate and synchronize."
61           REFERENCE
62              "Subclause 11.8.4.2 in IEEE Std 802.16e-2005"
63           ::= { wmanIf2BsCapabilitiesConfigEntry 29 }
64
```

```
1      -- XXX
2      wmanIf2BsCapCfgMacMode OBJECT-TYPE
3              SYNTAX      WmanIf2MacMode
4              MAX-ACCESS  read-only
5              STATUS      current
6              DESCRIPTION
7                 "indicates a MAC (Message Authentication Code) mode that MS
8                  supports."
9              REFERENCE
10                 "Subclause 11.8.4.3 in IEEE Std 802.16e-2005"
11             ::= { wmanIf2BsCapabilitiesConfigEntry 30 }
12
13     -- XXX
14     wmanIf2BsCapCfgPnWindowSize OBJECT-TYPE
15             SYNTAX      INTEGER (0 .. 65535)
16             MAX-ACCESS  read-only
17             STATUS      current
18             DESCRIPTION
19                 "Specifies the size capability of the receiver PN window for
20                  SAs and management connections. The receiver shall track
21                  PNs within this window to prevent replay attacks (see
22                  7.5.1.2.4)."
23             REFERENCE
24                 "Subclause 11.8.4.4 in IEEE Std 802.16e-2005"
25             ::= { wmanIf2BsCapabilitiesConfigEntry 31 }
26
27     -- XXX
28     wmanIf2BsCapCfgExtCapability OBJECT-TYPE
29             SYNTAX      WmanIf2ExtCapability
30             MAX-ACCESS  read-only
31             STATUS      current
32             DESCRIPTION
33                 "indicates the extended subheader format support."
34             REFERENCE
35                 "Subclause 11.8.6 in IEEE Std 802.16e-2005"
36             ::= { wmanIf2BsCapabilitiesConfigEntry 32 }
37
38
```

13.2.4 wmanIf2mMib

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


```
43     -- XXX
44     WmanIf2mPowerSaveType ::= TEXTUAL-CONVENTION
45             STATUS      current
46             DESCRIPTION
47                 "For MS supporting sleep mode, this parameter defines the
48                  capability of the MS supporting different power save
49                  class types in sleep mode.
50                  A bit 0 - 'not supported'
51                        1 - 'supported'"
52             REFERENCE
53                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
54             SYNTAX      BITS {psClassTypeI(0),
55                               psClassTypeII(1),
56                               psClassTypeIII(2)}
57
58     -- XXX
59     WmanIf2mHoTrigMatrix ::= TEXTUAL-CONVENTION
60             STATUS      current
61             DESCRIPTION
62                 "This field indicates trigger metrics that MS or BS
```

```
1                     supports.
2                     A bit 0 - 'not supported'
3                           1 - 'supported'"
4               REFERENCE
5                   "Subclause 11.8.7 in IEEE Std 802.16e-2005"
6               SYNTAX      BITS {bsCinrMean(0),
7                                 bsRssiMean(1),
8                                 relativeDelay(2),
9                                 bsRoundTripDelay(3)}
10
11   -- XXX
12   WmanIf2mAssociationTyp ::= TEXTUAL-CONVENTION
13           STATUS      current
14           DESCRIPTION
15               "This field indicates the association level supported by
16               the MS or the BS. If a bit is set to '1', then MS or BS
17               indicates support at the respective association type and
18               level. The MS may associate according to arrangements by
19               the BS at levels up to and including the one for which
20               the MS has indicated support."
21           REFERENCE
22               "Subclause 11.8.8 in IEEE Std 802.16e-2005"
23           SYNTAX      BITS {scanWoAssociation(0),
24                             scanOrAssocWoCoordination(1),
25                             assocWithCoordination(2),
26                             ntwkAssistAssociation(3),
27                             directAssociation(4)}
28
29   wmanIf2mBsSsReqCapabilitiesTable OBJECT-TYPE
30           SYNTAX      SEQUENCE OF WmanIf2mBsSsReqCapabilitiesEntry
31           MAX-ACCESS  not-accessible
32           STATUS      current
33           DESCRIPTION
34               "This table contains the SS's capabilities that are necessary
35                for supporting mobility. SS reports these capabilities in
36                the REG-REQ messages."
37           REFERENCE
38               "Subclause 6.3.2.3.7 in IEEE Std 802.16e-2005"
39           ::= { wmanIf2mBsCapabilities 1 }
40
41   wmanIf2mBsSsReqCapabilitiesEntry OBJECT-TYPE
42           SYNTAX      WmanIf2mBsSsReqCapabilitiesEntry
43           MAX-ACCESS  not-accessible
44           STATUS      current
45           DESCRIPTION
46               "This table provides one row for each SS that has entered and
47                registered into the BS. The primary index is the ifIndex
48                with an ifType of ieee80216WMAN, indicating the BS sector
49                with which the SS is associated. wmanIf2mBsSsMacAddress
50                identifies the SS being registered."
51           INDEX { ifIndex, wmanIf2mBsSsMacAddress }
52           ::= { wmanIf2mBsSsReqCapabilitiesTable 1 }
53
54   WmanIf2mBsSsReqCapabilitiesEntry ::= SEQUENCE {
55           wmanIf2mBsSsMacAddress                  MacAddress,
56           wmanIf2mBsSsReqCapHandoverSupported     WmanIf2mHandoverType,
57           wmanIf2mBsSsReqCapHoProcessTimer        Unsigned32,
58           wmanIf2mBsSsReqCapMobilityFeature       WmanIf2mOfdmaMobility,
59           wmanIf2mBsSsReqCapSleepRecoveryTime     Unsigned32,
60           wmanIf2mBsSsReqCapPreviousIpAddr        OCTET STRING,
61           wmanIf2mBsSsReqCapIdleModeTimeout       Unsigned32,
62           wmanIf2mBsSsReqCapHoConnProcessTime     Unsigned32,
63           wmanIf2mBsSsReqCapHoTekProcessTime      Unsigned32,
64           wmanIf2mBsSsReqCapPowerSavingType       WmanIf2mPowerSaveType,
```

```
1                 wmanIf2mBsSsReqCapNumOfPsClassIandII      INTEGER,
2                 wmanIf2mBsSsReqCapNumOfPsClassIII         INTEGER,
3                 wmanIf2mBsSsReqCapHoTrigMatrix            WmanIf2mHoTrigMatrix,
4                 wmanIf2mBsSsReqCapAssociationType         WmanIf2mAssociationTyp}
5
6       -- XXX
7       wmanIf2mBsSsReqCapPowerSavingType OBJECT-TYPE
8               SYNTAX      WmanIf2mPowerSaveType
9               MAX-ACCESS  read-only
10              STATUS      current
11              DESCRIPTION
12                  "For MS supporting sleep mode, this parameter defines the
13                   capability of the MS supporting different power save
14                   class types in sleep mode."
15              REFERENCE
16                  "Subclause 11.8.5 in IEEE Std 802.16e-2005"
17              ::= { wmanIf2mBsSsReqCapabilitiesEntry 10 }
18
19      -- XXX
20      wmanIf2mBsSsReqCapNumOfPsClassIandII OBJECT-TYPE
21              SYNTAX      INTEGER (0 .. 7)
22              MAX-ACCESS  read-only
23              STATUS      current
24              DESCRIPTION
25                  "Number of power save class instances supported from class
26                   types 1 and 2."
27              REFERENCE
28                  "Subclause 11.8.5 in IEEE Std 802.16e-2005"
29              ::= { wmanIf2mBsSsReqCapabilitiesEntry 11 }
30
31      -- XXX
32      wmanIf2mBsSsReqCapNumOfPsClassIII OBJECT-TYPE
33              SYNTAX      INTEGER (0 .. 7)
34              MAX-ACCESS  read-only
35              STATUS      current
36              DESCRIPTION
37                  "Number of power save class instances supported from class
38                   types 3."
39              REFERENCE
40                  "Subclause 11.8.5 in IEEE Std 802.16e-2005"
41              ::= { wmanIf2mBsSsReqCapabilitiesEntry 12 }
42
43      -- XXX
44      wmanIf2mBsSsReqCapHoTrigMatrix OBJECT-TYPE
45              SYNTAX      WmanIf2mHoTrigMatrix
46              MAX-ACCESS  read-only
47              STATUS      current
48              DESCRIPTION
49                  "Indicates trigger metrics that MS or BS supports."
50              REFERENCE
51                  "Subclause 11.8.7 in IEEE Std 802.16e-2005"
52              ::= { wmanIf2mBsSsReqCapabilitiesEntry 13 }
53
54      -- XXX
55      wmanIf2mBsSsReqCapAssociationType OBJECT-TYPE
56              SYNTAX      WmanIf2mAssociationTyp
57              MAX-ACCESS  read-only
58              STATUS      current
59              DESCRIPTION
60                  "Indicates the association level supported by the MS or the
61                   BS."
62              REFERENCE
63                  "Subclause 11.8.8 in IEEE Std 802.16e-2005"
64              ::= { wmanIf2mBsSsReqCapabilitiesEntry 14 }
```

```
1
2    wmanIf2mBsSsRspCapabilitiesTable OBJECT-TYPE
3            SYNTAX      SEQUENCE OF WmanIf2mBsSsRspCapabilitiesEntry
4            MAX-ACCESS  not-accessible
5            STATUS      current
6            DESCRIPTION
7                "This table contains the SS's capabilities that are necessary
8                 for supporting mobility. BS acknowledges the capabilities in
9                 the REG-RSP message in response to REG-REQ messages."
10           REFERENCE
11               "Subclause 6.3.2.3.7 in IEEE Std 802.16e-2005"
12           ::= { wmanIf2mBsCapabilities 2 }
13
14   wmanIf2mBsSsRspCapabilitiesEntry OBJECT-TYPE
15           SYNTAX      WmanIf2mBsSsRspCapabilitiesEntry
16           MAX-ACCESS  not-accessible
17           STATUS      current
18           DESCRIPTION
19               "This table provides one row for each SS that has entered and
20                registered into the BS. The primary index is the ifIndex
21                with an ifType of ieee80216WMAN, indicating the BS sector
22                with which the SS is associated. wmanIf2mBsSsMacAddress
23                identifies the SS being registered."
24           INDEX { ifIndex, wmanIf2mBsSsMacAddress }
25           ::= { wmanIf2mBsSsRspCapabilitiesTable 1 }
26
27   WmanIf2mBsSsRspCapabilitiesEntry ::= SEQUENCE {
28           wmanIf2mBsSsRspCapHandoverSupported   WmanIf2mHandoverType,
29           wmanIf2mBsSsRspCapRetrainTime         Unsigned32,
30           wmanIf2mBsSsRspCapHoProcessTimer      Unsigned32,
31           wmanIf2mBsSsRspCapRetransmissionTimer Unsigned32,
32           wmanIf2mBsSsRspCapMobilityFeature     WmanIf2mOfdmaMobility,
33           wmanIf2mBsSsRspCapNewSaid             Integer32,
34           wmanIf2mBsSsRspCapOldSaid             Integer32,
35           wmanIf2mBsSsRspCapIdleModeTimeout     Unsigned32,
36           wmanIf2mBsSsRspCapHoConnProcessTime   Unsigned32,
37           wmanIf2mBsSsRspCapHoTekProcessTime    Unsigned32,
38           wmanIf2mBsSsRspCapPowerSavingType     WmanIf2mPowerSaveType,
39           wmanIf2mBsSsRspCapNumOfPsClassIandII  INTEGER,
40           wmanIf2mBsSsRspCapNumOfPsClassIII     INTEGER,
41           wmanIf2mBsSsRspCapHoTrigMatrix        WmanIf2mHoTrigMatrix,
42           wmanIf2mBsSsRspCapAssociationType     WmanIf2mAssociationTyp}
43
44   -- XXX
45   wmanIf2mBsSsRspCapPowerSavingType OBJECT-TYPE
46           SYNTAX      WmanIf2mPowerSaveType
47           MAX-ACCESS  read-only
48           STATUS      current
49           DESCRIPTION
50               "For MS supporting sleep mode, this parameter defines the
51                capability of the MS supporting different power save
52                class types in sleep mode."
53           REFERENCE
54               "Subclause 11.8.5 in IEEE Std 802.16e-2005"
55           ::= { wmanIf2mBsSsRspCapabilitiesEntry 11 }
56
57   -- XXX
58   wmanIf2mBsSsRspCapNumOfPsClassIandII OBJECT-TYPE
59           SYNTAX      INTEGER (0 .. 7)
60           MAX-ACCESS  read-only
61           STATUS      current
62           DESCRIPTION
63               "Number of power save class instances supported from class
64                types 1 and 2."
```

```
1              REFERENCE
2                   "Subclause 11.8.5 in IEEE Std 802.16e-2005"
3              ::= { wmanIf2mBsSsRspCapabilitiesEntry 12 }
4
5      -- XXX
6      wmanIf2mBsSsRspCapNumOfPsClassIII OBJECT-TYPE
7              SYNTAX      INTEGER (0 .. 7)
8              MAX-ACCESS  read-only
9              STATUS      current
10             DESCRIPTION
11                  "Number of power save class instances supported from class
12                   types 3."
13             REFERENCE
14                  "Subclause 11.8.5 in IEEE Std 802.16e-2005"
15             ::= { wmanIf2mBsSsRspCapabilitiesEntry 13 }
16
17     -- XXX
18     wmanIf2mBsSsRspCapHoTrigMatrix OBJECT-TYPE
19             SYNTAX      WmanIf2mHoTrigMatrix
20             MAX-ACCESS  read-only
21             STATUS      current
22             DESCRIPTION
23                  "Indicates trigger metrics that MS or BS supports."
24             REFERENCE
25                  "Subclause 11.8.7 in IEEE Std 802.16e-2005"
26             ::= { wmanIf2mBsSsRspCapabilitiesEntry 14 }
27
28     -- XXX
29     wmanIf2mBsSsRspCapAssociationType OBJECT-TYPE
30             SYNTAX      WmanIf2mAssociationTyp
31             MAX-ACCESS  read-only
32             STATUS      current
33             DESCRIPTION
34                  "Indicates the association level supported by the MS or the
35                   BS."
36             REFERENCE
37                  "Subclause 11.8.8 in IEEE Std 802.16e-2005"
38             ::= { wmanIf2mBsSsRspCapabilitiesEntry 15 }
39
40     wmanIf2mBsBasicCapabilitiesTable OBJECT-TYPE
41             SYNTAX      SEQUENCE OF WmanIf2mBsBasicCapabilitiesEntry
42             MAX-ACCESS  not-accessible
43             STATUS      current
44             DESCRIPTION
45                  "This table contains the basic capabilities of the BS as
46                   implemented in BS hardware and software. These capabilities
47                   along with the configuration for them
48                   (wmanIf2mBsCapabilitiesConfigTable) are used for negotiation
49                   of basic capabilities with SS using RNG-RSP, SBC-RSP and
50                   REG-RSP messages. The negotiated capabilities are obtained
51                   by interSubclause of SS raw reported capabilities, BS raw
52                   capabilities and BS configured capabilities. The objects in
53                   the table have read-only access. The table is maintained
54                   by BS."
55             ::= { wmanIf2mBsCapabilities 3 }
56
57     wmanIf2mBsBasicCapabilitiesEntry OBJECT-TYPE
58             SYNTAX      WmanIf2mBsBasicCapabilitiesEntry
59             MAX-ACCESS  not-accessible
60             STATUS      current
61             DESCRIPTION
62                  "This table provides one row for each BS sector and is
63                   indexed by ifIndex."
64             INDEX { ifIndex }
```

```
1              ::= { wmanIf2mBsBasicCapabilitiesTable 1 }
2
3     WmanIf2mBsBasicCapabilitiesEntry ::= SEQUENCE {
4              wmanIf2mBsCapHandoverSupported          WmanIf2mHandoverType,
5              wmanIf2mBsCapRetrainTime                Unsigned32,
6              wmanIf2mBsCapHoProcessTimer             Unsigned32,
7              wmanIf2mBsCapRetransmissionTimer        Unsigned32,
8              wmanIf2mBsCapMobilityFeature            WmanIf2mOfdmaMobility,
9              wmanIf2mBsCapIdleModeTimeout            Unsigned32,
10             wmanIf2mBsCapHoConnProcessTime          Unsigned32,
11             wmanIf2mBsCapHoTekProcessTime           Unsigned32,
12             wmanIf2mBsCapPowerSavingType            WmanIf2mPowerSaveType,
13             wmanIf2mBsCapNumOfPsClassIandII         INTEGER,
14             wmanIf2mBsCapNumOfPsClassIII            INTEGER,
15             wmanIf2mBsCapHoTrigMatrix               WmanIf2mHoTrigMatrix,
16             wmanIf2mBsCapAssociationType            WmanIf2mAssociationTyp}
17
18    -- XXX
19    wmanIf2mBsCapPowerSavingType OBJECT-TYPE
20             SYNTAX      WmanIf2mPowerSaveType
21             MAX-ACCESS  read-only
22             STATUS      current
23             DESCRIPTION
24                 "For MS supporting sleep mode, this parameter defines the
25                  capability of the MS supporting different power save
26                  class types in sleep mode."
27             REFERENCE
28                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
29             ::= { wmanIf2mBsBasicCapabilitiesEntry 9 }
30
31    -- XXX
32    wmanIf2mBsCapNumOfPsClassIandII OBJECT-TYPE
33             SYNTAX      INTEGER (0 .. 7)
34             MAX-ACCESS  read-only
35             STATUS      current
36             DESCRIPTION
37                 "Number of power save class instances supported from class
38                  types 1 and 2."
39             REFERENCE
40                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
41             ::= { wmanIf2mBsBasicCapabilitiesEntry 10 }
42
43    -- XXX
44    wmanIf2mBsCapNumOfPsClassIII OBJECT-TYPE
45             SYNTAX      INTEGER (0 .. 7)
46             MAX-ACCESS  read-only
47             STATUS      current
48             DESCRIPTION
49                 "Number of power save class instances supported from class
50                  types 3."
51             REFERENCE
52                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
53             ::= { wmanIf2mBsBasicCapabilitiesEntry 11 }
54
55    -- XXX
56    wmanIf2mBsCapHoTrigMatrix OBJECT-TYPE
57             SYNTAX      WmanIf2mHoTrigMatrix
58             MAX-ACCESS  read-only
59             STATUS      current
60             DESCRIPTION
61                 "Indicates trigger metrics that MS or BS supports."
62             REFERENCE
63                 "Subclause 11.8.7 in IEEE Std 802.16e-2005"
64             ::= { wmanIf2mBsBasicCapabilitiesEntry 12 }
```

```
1
2      -- XXX
3      wmanIf2mBsCapAssociationType OBJECT-TYPE
4              SYNTAX      WmanIf2mAssociationTyp
5              MAX-ACCESS  read-only
6              STATUS      current
7              DESCRIPTION
8                  "Indicates the association level supported by the MS or the
9                   BS."
10             REFERENCE
11                  "Subclause 11.8.8 in IEEE Std 802.16e-2005"
12             ::= { wmanIf2mBsBasicCapabilitiesEntry 13 }
13
14     wmanIf2mBsCapabilitiesConfigTable OBJECT-TYPE
15             SYNTAX      SEQUENCE OF WmanIf2mBsCapabilitiesConfigEntry
16             MAX-ACCESS  not-accessible
17             STATUS      current
18             DESCRIPTION
19                  "This table contains the configuration for basic
20                   capabilities of BS. The table is intended to be used to
21                   restrict the Capabilities implemented by BS, for example in
22                   order to comply with local regulatory requirements. The BS
23                   should use the configuration along with the implemented
24                   Capabilities (wmanIf2mBsBasicCapabilitiesTable) for
25                   negotiation of basic capabilities with SS using RNG-RSP,
26                   SBC-RSP and REG-RSP messages. The negotiated capabilities
27                   are obtained by interSubclause of SS reported capabilities,
28                   BS raw capabilities and BS configured capabilities. The
29                   objects in the table have read-write access. The rows are
30                   created by BS as a copy of wmanIf2mBsBasicCapabilitiesTable
31                   and can be modified by NMS."
32             ::= { wmanIf2mBsCapabilities 4 }
33
34     wmanIf2mBsCapabilitiesConfigEntry OBJECT-TYPE
35             SYNTAX      WmanIf2mBsCapabilitiesConfigEntry
36             MAX-ACCESS  not-accessible
37             STATUS      current
38             DESCRIPTION
39                  "This table provides one row for each BS sector and is
40                   indexed by ifIndex."
41             INDEX { ifIndex }
42             ::= { wmanIf2mBsCapabilitiesConfigTable 1 }
43
44     WmanIf2mBsCapabilitiesConfigEntry ::= SEQUENCE {
45             wmanIf2mBsCapCfgHandoverSupported      WmanIf2mHandoverType,
46             wmanIf2mBsCapCfgRetrainTime            Unsigned32,
47             wmanIf2mBsCapCfgHoProcessTimer         Unsigned32,
48             wmanIf2mBsCapCfgRetransmissionTimer    Unsigned32,
49             wmanIf2mBsCapCfgMobilityFeature        WmanIf2mOfdmaMobility,
50             wmanIf2mBsCapCfgIdleModeTimeout        Unsigned32,
51             wmanIf2mBsCapCfgHoConnProcessTime      Unsigned32,
52             wmanIf2mBsCapCfgHoTekProcessTime       Unsigned32,
53             wmanIf2mBsCapCfgPowerSavingType        WmanIf2mPowerSaveType,
54             wmanIf2mBsCapCfgNumOfPsClassIandII     INTEGER,
55             wmanIf2mBsCapCfgNumOfPsClassIII        INTEGER,
56             wmanIf2mBsCapCfgHoTrigMatrix           WmanIf2mHoTrigMatrix,
57             wmanIf2mBsCapCfgAssociationType        WmanIf2mAssociationTyp}
58
59     -- XXX
60     wmanIf2mBsCapCfgPowerSavingType OBJECT-TYPE
61             SYNTAX      WmanIf2mPowerSaveType
62             MAX-ACCESS  read-only
63             STATUS      current
64             DESCRIPTION
```

17

```
 1                    "For MS supporting sleep mode, this parameter defines the
 2                     capability of the MS supporting different power save
 3                     class types in sleep mode."
 4             REFERENCE
 5                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
 6             ::= { wmanIf2mBsCapabilitiesConfigEntry 9 }
 7
 8     -- XXX
 9     wmanIf2mBsCapCfgNumOfPsClassIandII OBJECT-TYPE
10             SYNTAX      INTEGER (0 .. 7)
11             MAX-ACCESS  read-only
12             STATUS      current
13             DESCRIPTION
14                 "Number of power save class instances supported from class
15                  types 1 and 2."
16             REFERENCE
17                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
18             ::= { wmanIf2mBsCapabilitiesConfigEntry 10 }
19
20     -- XXX
21     wmanIf2mBsCapCfgNumOfPsClassIII OBJECT-TYPE
22             SYNTAX      INTEGER (0 .. 7)
23             MAX-ACCESS  read-only
24             STATUS      current
25             DESCRIPTION
26                 "Number of power save class instances supported from class
27                  types 3."
28             REFERENCE
29                 "Subclause 11.8.5 in IEEE Std 802.16e-2005"
30             ::= { wmanIf2mBsCapabilitiesConfigEntry 11 }
31
32     -- XXX
33     wmanIf2mBsCapCfgHoTrigMatrix OBJECT-TYPE
34             SYNTAX      WmanIf2mHoTrigMatrix
35             MAX-ACCESS  read-only
36             STATUS      current
37             DESCRIPTION
38                 "Indicates trigger metrics that MS or BS supports."
39             REFERENCE
40                 "Subclause 11.8.7 in IEEE Std 802.16e-2005"
41             ::= { wmanIf2mBsCapabilitiesConfigEntry 12 }
42
43     -- XXX
44     wmanIf2mBsCapCfgAssociationType OBJECT-TYPE
45             SYNTAX      WmanIf2mAssociationTyp
46             MAX-ACCESS  read-only
47             STATUS      current
48             DESCRIPTION
49                 "Indicates the association level supported by the MS or the
50                  BS."
51             REFERENCE
52                 "Subclause 11.8.8 in IEEE Std 802.16e-2005"
53             ::= { wmanIf2mBsCapabilitiesConfigEntry 13 }
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