

Project	IEEE 802.20 Working Group on Mobile Broadband Wireless Access	
Title	Proposed Text for 802.20 Enhanced MIB Chapter – Wideband Mode	
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Re:	IEEE 802.20 Enhanced MIB Chapter – Wideband Mode	
Abstract	This contribution proposes a draft enhanced MIB chapter for IEEE 802.20 Wideband Mode. Enhancements include the use of REFERENCES clauses for read-create and read-only objects, SECURITY clauses for read-create objects, as requested during the 802.20 sponsor ballot. This contribution combines the materials submitted previously in C802.20-08/10 and C802.20-08/06 to produce a complete draft MIB chapter.	
Purpose	For consideration and approval of 802.20.	
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17 MAC and PHY MIB

1.1 Overview

This chapter defines a Management Information Base (MIB) module for managing the MAC and PHY. For a detailed overview of the documents that describe the current Internet-Standard Management Framework, please refer to Section 7 of IETF RFC 3410.

Managed objects are accessed via a virtual information store, termed the Management Information Base or MIB. MIB objects are generally accessed through the Simple Network Management Protocol (SNMP). Objects in the MIB are defined using the mechanisms specified in the Structure of Management Information (SMI). The MIB module specified here is compliant to the SMIV2, which is described in IETF STD 58, RFC 2578, RFC 2579, and RFC 2580.

1.2 MIB Structure

The MIB structure is based on the architecture reference model in **Error! Reference source not found.** and the layering architecture for the air interface in **Error! Reference source not found.** The MIB object is composed of two groups:

- dot20An: This group contains managed objects defined for the access network.
- dot20Cmn: This group contains managed objects defined for the access network and the access terminal.

1.3 Security Considerations

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this section are to be interpreted as described in BCP 14, RFC 2119 [RFC2119].

This MIB relates to a system which will provide mobile broadband wireless access. As such, improper manipulation of the objects represented by this MIB may result in denial of service to a large number of end-users.

The MIB objects in the Dot20AnChannelBandsEntry SEQUENCE contain 8 objects used to set the frequency band of the transmitting base station. An administrator should take great care to include only authorized, licensed channel bands in the table. Failure to take these measures might cause a base station to violate local regulatory laws (e.g. FCC licensing in the USA) by transmitting power into unauthorized channels in the country where the base station is deployed.

The Dot20AnTransmitPower OBJECT sets the power for the base station in dBm. Unauthorized access to this object may allow an attacker to boost power and violate local regulatory laws (e.g.

1 FCC licensing in the USA) by transmitting excessive power into a licensed band. This may also lead
2 to excessive sideband emissions in adjacent bands.

3 The Dot20AnNeighborListEntry SEQUENCE defines information about adjacent sectors that is
4 broadcast by the overhead channels of a base station. Terminals functioning in any sector may read
5 the overhead channels from other sectors, including those whose MIB may have become
6 compromised or corrupted due to unauthorized access. Such terminals may therefore incorporate
7 incorrect handoff information into their databases of potential sectors for handoff. Thus,
8 unauthorized access of the MIB in one sector, can affect the performance and handoff characteristics
9 of terminals operating correctly in adjacent sectors.

10 There are no MIB objects that could allow a user to increase their access rights to system service
11 levels. None of the readable objects in this MIB module (i.e., objects with a MAX-ACCESS other
12 than not-accessible) may be considered capable of revealing sensitive or vulnerable personal
13 information. This MIB is not capable of revealing user information that could violate privacy laws.

14 There are no MIB objects that could be used to turn off or change the security parameter
15 configuration of an 802.20 access node. The presence or absence of security (encryption,
16 authentication) is controlled by the session state record for each individual user, and cannot be
17 modified by an attacker accessing the MIB.

18 SNMP versions prior to SNMPv3 did not include adequate security. Even if the network itself is
19 secure (for example by using IPsec), there is no control as to who on the secure network is allowed to
20 access and GET/SET (read/change/create/delete) the objects in this MIB module.

21 It is RECOMMENDED that implementers consider the security features as provided by the SNMPv3
22 framework (see [RFC3410], section 8), including full support for the SNMPv3 cryptographic
23 mechanisms (for authentication and privacy).

24 Further, deployment of SNMP versions prior to SNMPv3 is NOT RECOMMENDED. Instead, it is
25 RECOMMENDED to deploy SNMPv3 and to enable cryptographic security. It is then a
26 customer/operator responsibility to ensure that the SNMP entity giving access to an instance of this
27 MIB module is properly configured to give access to the objects only to those principals (users) that
28 have legitimate rights to indeed GET or SET (change/create/delete) them.

30 1.4 IANA Considerations

31 No IANA actions are required by this document.

33 1.5 Definition

```
34
35 IEEE802dot20-MIB DEFINITIONS ::= BEGIN
36
37 IMPORTS
38     ifIndex
39     FROM IF-MIB
40     MODULE-COMPLIANCE, OBJECT-GROUP
```

```

1      FROM SNMPv2-CONF
2      Counter32, Counter64, Integer32, MODULE-IDENTITY, OBJECT-IDENTITY,
3      OBJECT-TYPE, transmission
4      FROM SNMPv2-SMI
5      RowPointer, RowStatus, TEXTUAL-CONVENTION, TruthValue
6      FROM SNMPv2-TC
7      ;
8
9  ieee802dot20 MODULE-IDENTITY
10     LAST-UPDATED "200805301948Z" -- May 30, 2008
11     ORGANIZATION
12         "IEEE 802.20"
13     CONTACT-INFO
14         "Contact: IEEE 802.20 Working Group
15         Postal:
16
17         Tel:
18         Fax:
19         E-mail: "
20     DESCRIPTION
21         "The MIB module for IEEE 802.20 entities.
22         (The transmission oid used for this MIB needs to be updated
23         when a valid one is obtained from IANA along with the new
24         802.20 ifType)"
25     ::= { transmission 9999 }
26
27 Dot20AnChannelBandsEntry ::= SEQUENCE
28 {
29     dot20AnChannelBandIndex      Integer32,
30     dot20AnSystemType            Integer32,
31     dot20AnBandClass             Integer32,
32     dot20AnChannelNumber         Integer32,
33     dot20AnHalfDuplexSupported   TruthValue,
34     dot20AnReverseChannelBandClass Integer32,
35     dot20AnReverseChannelNumber   Integer32,
36     dot20AnCyclicPrefixLength    Integer32,
37     dot20AnFFTSize              Integer32,
38     dot20AnCNumGuardSubcarriers   Integer32,
39     dot20AnChannelBandShortId     Integer32,
40     dot20AnChannelBandAccessHashMask Integer32,
41     dot20AnChannelBandStatus      RowStatus
42 }
43
44 Dot20AnIdleStateStatsEntry ::= SEQUENCE
45 {
46     dot20AnAccessAttemptCounts    Counter32,
47     dot20AnAccessAttemptFailCounts Counter32,
48     dot20AnPageAttemptCounts      Counter32,
49     dot20AnPageFailureCounts      Counter32
50 }
51
52 Dot20AnNeighborListEntry ::= SEQUENCE
53 {
54     dot20AnNeighborIndex          Integer32,
55     dot20AnNeighborSectorPointer  RowPointer,
56     dot20AnNeighborRowStatus     RowStatus
57 }
58
59 Dot20AnNeighborSectorsEntry ::= SEQUENCE
60 {
61     dot20AnNeighborSectorIndex    Integer32,
62     dot20AnNeighborPilotID        Integer32,
63     dot20AnNeighborEffTransmitPower Integer32,
64     dot20AnNeighborChannelBandRef Integer32,
65     dot20AnNeighborChannelShortID Integer32,
66     dot20AnNeighborSameANAsPrimSect TruthValue,
67     dot20AnNeighborSectorPilotGrpId Integer32,
68     dot20AnNeighborSynchGroupId   Integer32,

```

```

1      dot20AnNeighborSectorCellGroupId Integer32,
2      dot20AnNeighborSectorStatus     RowStatus
3  }
4
5  Dot20AnOtherTechNghbrsEntry ::= SEQUENCE
6  {
7      dot20AnOtherTechnologyIndex      Integer32,
8      dot20AnTechnologyType            Integer32,
9      dot20AnTechNghbrListLength      Integer32,
10     dot20AnTechnologyNeighborList    OCTET STRING,
11     dot20AnOtherTechNghbrRowStatus   RowStatus
12 }
13
14 Dot20AnSecondaryRegZoneCodeEntry ::= SEQUENCE
15 {
16     dot20AnSecondaryRegZoneCodeIndex Integer32,
17     dot20AnSecRegZoneCode           Integer32,
18     dot20AnSecondaryRegZoneRowStatus RowStatus
19 }
20
21 Dot20AnSectorCdmaSubSegEntry ::= SEQUENCE
22 {
23     dot20AnInterlaceId              Integer32,
24     dot20AnCdmaSubSegmentNum        Integer32,
25     dot20AnSectorCdmaSubSegRowStatus RowStatus
26 }
27
28 Dot20AnSectorConfigEntry ::= SEQUENCE
29 {
30     dot20AnTotalNumSubcarriers       Integer32,
31     dot20AnNumGuardSubcarriers       Integer32,
32     dot20AnFlSubzoneSize            Integer32,
33     dot20AnResourceChannelMuxMode    Integer32,
34     dot20AnNumDRCHSubzones          Integer32,
35     dot20AnFLReservedInterlaces     INTEGER,
36     dot20AnNumFLReservedSubzones    Integer32,
37     dot20AnCpichHoppingMode         Integer32,
38     dot20AnNumEffectiveAntennas     Integer32,
39     dot20AnNumCommonSegmentHopPorts Integer32,
40     dot20AnNumLABSegments           Integer32,
41     dot20AnMinScchResourceIndex     Integer32,
42     dot20AnSinglePAForXCarriers     Integer32,
43     dot20AnFlSdmaNumSubtrees        Integer32,
44     dot20AnFDPICHCodeOffsetSubtree0 Integer32,
45     dot20AnFDPICHCodeOffsetSubtree1 Integer32,
46     dot20AnFDPICHCodeOffsetSubtree2 Integer32,
47     dot20AnFDPICHCodeOffsetSubtree3 Integer32,
48     dot20AnNumCmnPilotTxAnt         Integer32,
49     dot20AnModSymbolsPerQPSKLAB     Integer32,
50     dot20AnUseDrchForFlcs           Integer32,
51     dot20AnEnableExpandedQPCH      TruthValue,
52     dot20AnSectorConfigRowStatus    RowStatus
53 }
54
55 Dot20AnSectorExtChanInfoEntry ::= SEQUENCE
56 {
57     dot20AnPilotID                  Integer32,
58     dot20AnHalfDuplexModeSupported  TruthValue,
59     dot20AnFACKBandwidthFactor      Integer32,
60     dot20AnSFNCellID               Integer32,
61     dot20AnCellNullID              Integer32,
62     dot20AnMaxNumSharedLABs         Integer32,
63     dot20AnMaxNumLABs               Integer32,
64     dot20AnMax16QamScchBlocks       Integer32,
65     dot20AnPdCabResSharingEnabled   TruthValue,
66     dot20AnNumAckableLABs           Integer32,
67     dot20An16QamScchT2PRatio       INTEGER,
68     dot20AnEffectiveTransmitPower   Integer32,

```

```

1      dot20AnAssignmentAckHARQTx      Integer32,
2      dot20AnCQIPilotTransmitPower    Integer32,
3      dot20AnCommonPilotTransmitPower Integer32,
4      dot20AnCDMAInterlacesBitmap     Integer32,
5      dot20AnNumOdcchReports           Integer32,
6      dot20AnNumRLCdmaSubsegments      Integer32,
7      dot20AnRackBandwidthFactor       Integer32,
8      dot20AnRlNumSdmaDimensions       Integer32,
9      dot20AnRlDpichCodeOffsetSubtree0 Integer32,
10     dot20AnRlDpichCodeOffsetSubtree1 Integer32,
11     dot20AnRlDpichCodeOffsetSubtree2 Integer32,
12     dot20AnRlDpichCodeOffsetSubtree3 Integer32,
13     dot20AnRlSubzoneSize              Integer32,
14     dot20AnSilenceIntervalPeriod     Integer32,
15     dot20AnSilenceIntervalDuration   Integer32,
16     dot20AnNumSilenceIntervalSubzone Integer32,
17     dot20AnAckInterferenceOffset     Integer32,
18     dot20AnMacIdRange                 INTEGER,
19     dot20AnFlPcReportInterval         Integer32,
20     dot20AnFlPqiReportInterval        Integer32,
21     dot20AnFlIotReportInterval        Integer32,
22     dot20AnFastIoTEnabled             TruthValue,
23     dot20AnFastOSIEnabled             TruthValue,
24     dot20AnRabEnabled                 TruthValue,
25     dot20AnOsiResponseMode           INTEGER,
26     dot20AnSlowInterferenceOffset     Integer32,
27     dot20AnCtrlAccessOffset           Integer32,
28     dot20AnRlAuxPilotPower            Integer32,
29     dot20AnReqQoSPowerBoost           Integer32,
30     dot20AnErasureTargetCtoI0         Integer32,
31     dot20AnErasureTargetCtoI1         Integer32,
32     dot20AnErasureTargetCtoI2         Integer32,
33     dot20AnErasureTargetCtoI3         Integer32,
34     dot20AnAccessCycleDuration        Integer32,
35     dot20AnMaxProbesPerSequence       Integer32,
36     dot20AnProbeRampUpStepSize        Integer32,
37     dot20AnPilotThreshold1            Integer32,
38     dot20AnPilotThreshold2            Integer32,
39     dot20AnOpenLoopAdjust             Integer32,
40     dot20AnAccessRetryPersistence0    Integer32,
41     dot20AnAccessRetryPersistence1    Integer32,
42     dot20AnAccessRetryPersistence2    Integer32,
43     dot20AnAccessRetryPersistence3    Integer32,
44     dot20AnAccessRetryPersistence4    Integer32,
45     dot20AnAccessRetryPersistence5    Integer32,
46     dot20AnAccessRetryPersistence6    Integer32,
47     dot20AnAccessRetryPersistence7    Integer32,
48     dot20AnSectorExtChanRowStatus     RowStatus
49 }
50
51 Dot20AnSectorGrpResSetsEntry ::= SEQUENCE
52 {
53     dot20AnResourceSetId               Integer32,
54     dot20AnResourceSetBitmap           Integer32,
55     dot20AnBRCHSubzoneCyclingEnabled   TruthValue,
56     dot20AnResourceSetSubZoneSpacing   Integer32,
57     dot20AnNumResourceSubzones         Integer32,
58     dot20AnResourceSubzoneOffset       Integer32,
59     dot20AnResourceSetRowStatus        RowStatus
60 }
61
62 Dot20AnSectorIpsiEntry ::= SEQUENCE
63 {
64     dot20AnIpsiIndex                   Integer32,
65     dot20AnSupportedIpsi               Integer32,
66     dot20AnIpsiRowStatus               RowStatus
67 }
68

```

```
1 Dot20AnSectorParamEntry ::= SEQUENCE
2 {
3     dot20AnMobileCountryCode    Integer32,
4     dot20AnMobileNetworkCode    Integer32,
5     dot20AnSectorID             OCTET STRING,
6     dot20AnChannelBandRef       Integer32,
7     dot20AnLatitude             Integer32,
8     dot20AnLongitude            Integer32,
9     dot20AnLeapSeconds          Integer32,
10    dot20AnLocalTimeOffset      Integer32,
11    dot20AnPrimaryRegZoneCode   Integer32,
12    dot20AnAnGroupId            Integer32,
13    dot20AnPilotGroupId         Integer32,
14    dot20AnSynchronousGroupId   Integer32,
15    dot20AnCellGroupId          Integer32,
16    dot20AnSectorParamRowStatus RowStatus
17 }
18
19 Dot20AnSectorToIfIndexEntry ::= SEQUENCE
20 {
21     dot20AnIfChannelBandRef Integer32
22 }
23
24 Dot20CmnAuthStatsEntry ::= SEQUENCE
25 {
26     dot20CmnAuthFailureCounts Counter64,
27     dot20CmnAuthSuccessCounts Counter64
28 }
29
30 Dot20CmnLMACPacketStatsEntry ::= SEQUENCE
31 {
32     dot20CmnPacketFormatIndex Integer32,
33     dot20CmnARQAttemptsIndex  Integer32,
34     dot20CmnFwdTxPacketCounts Counter64,
35     dot20CmnRevRxPacketCounts Counter64
36 }
37
38 Dot20CmnLMACStatsEntry ::= SEQUENCE
39 {
40     dot20CmnFLABCounts        Counter64,
41     dot20CmnRLABCounts        Counter64,
42     dot20CmnAccessGrantCounts Counter64
43 }
44
45 Dot20CmnQmpStatsEntry ::= SEQUENCE
46 {
47     dot20CmnActiveReservationsCounts Counter64,
48     dot20CmnIdleReservationsCounts  Counter64,
49     dot20CmnReservationOpenCounts   Counter64,
50     dot20CmnReservationCloseCounts  Counter64,
51     dot20CmnReservationFailCounts   Counter64
52 }
53
54 Dot20CmnRlpStatsEntry ::= SEQUENCE
55 {
56     dot20CmnStreamId           Integer32,
57     dot20CmnRlpTxBytes         Counter64,
58     dot20CmnRlpReTxBytes       Counter64,
59     dot20CmnRlpTxDropBytes     Counter64,
60     dot20CmnRlpTxStatus        Counter64,
61     dot20CmnRlpRxBytes         Counter64,
62     dot20CmnRlpRxStatus        Counter64,
63     dot20CmnRlpTxPackets       Counter64,
64     dot20CmnRlpReTxPackets     Counter64,
65     dot20CmnRlpTxrDropPackets  Counter64,
66     dot20CmnRlpRxPackets       Counter64,
67     dot20CmnRlpTxNAKTimeouts   Counter64,
68     dot20CmnRlpTxACKTimeouts   Counter64
```



```

1  }
2
3  dot20An OBJECT-IDENTITY
4      STATUS      current
5      DESCRIPTION
6          "AN specific configuration and statistics."
7      ::= { ieee802dot20 1 }
8
9  dot20AnMac OBJECT-IDENTITY
10     STATUS      current
11     DESCRIPTION
12         "MAC layer objects"
13     ::= { dot20An 1 }
14
15  dot20AnConnectionControl OBJECT IDENTIFIER ::= { dot20AnMac 3 }
16
17  dot20AnIdleState OBJECT IDENTIFIER ::= { dot20AnConnectionControl 1 }
18
19  dot20AnIdleStateStatsTable OBJECT-TYPE
20     SYNTAX      SEQUENCE OF Dot20AnIdleStateStatsEntry
21     MAX-ACCESS  not-accessible
22     STATUS      current
23     DESCRIPTION
24         "This table provides one row of Idle State protocol statistics
25         per 802.20 interface (i.e. sector for a specific ChannelBand)
26         and carrier."
27     ::= { dot20AnIdleState 1 }
28
29  dot20AnIdleStateStatsEntry OBJECT-TYPE
30     SYNTAX      Dot20AnIdleStateStatsEntry
31     MAX-ACCESS  not-accessible
32     STATUS      current
33     DESCRIPTION
34         "An Entry (conceptual row) in the IdleStateStats table. This
35         table is indexed by ifIndex and CarrierID. ifIndex: Each IEEE
36         802.20 interface (uniquely identified by SectorID) is
37         represented by an ifEntry. In the case of a multicarrier
38         Sector, the carrierID indentifies one specific carrier."
39     REFERENCE
40         "IEEE Std. 802.20-2008, Subclause 8.4 (Access Channel MAC
41         Protocol)"
42     INDEX
43         { ifIndex }
44     ::= { dot20AnIdleStateStatsTable 1 }
45
46  dot20AnAccessAttemptCounts OBJECT-TYPE
47     SYNTAX      Counter32
48     MAX-ACCESS  read-only
49     STATUS      current
50     DESCRIPTION
51         "Number of Access Attempts among all Terminals"
52     REFERENCE
53         "IEEE Std. 802.20-2008, Subclause 8.4.5.5.2,
54         (Access Channel MAC Protocol / AN Requirements)"
55     ::= { dot20AnIdleStateStatsEntry 1 }
56
57  dot20AnAccessAttemptFailCounts OBJECT-TYPE
58     SYNTAX      Counter32
59     MAX-ACCESS  read-only
60     STATUS      current
61     DESCRIPTION
62         "Number of Failed Access Attempts among all Terminals.
63         Incremented when access RLAB is not used by a terminal."
64     REFERENCE
65         "IEEE Std. 802.20-2008, Subclause 11.5.4.3.2 (BindATI), and
66         Subclause 11.2.4.6.2.1 (issuing ConnectedState.Deactivate)"
67     ::= { dot20AnIdleStateStatsEntry 2 }
68

```

```

1 dot20AnPageAttemptCounts OBJECT-TYPE
2     SYNTAX Counter32
3     MAX-ACCESS read-only
4     STATUS current
5     DESCRIPTION
6         "Number of Page Attempts"
7     REFERENCE
8         "IEEE Std. 802.20-2008, Subclause 8.3.5.8 (TX and RX of F-QPCH
9         Physical Layer), and Table 208 (RouteOpenRequestReason encoding)"
10    ::= { dot20AnIdleStateStatsEntry 3 }
11
12 dot20AnPageFailureCounts OBJECT-TYPE
13     SYNTAX Counter32
14     MAX-ACCESS read-only
15     STATUS current
16     DESCRIPTION
17         "Number of Failed Page Attempts"
18     REFERENCE
19         "IEEE Std. 802.20-2008, Subclause 8.3.5.8 (TX and RX of F-QPCH
20         Physical Layer), and Table 208 (RouteOpenRequestReason encoding)"
21    ::= { dot20AnIdleStateStatsEntry 4 }
22
23 dot20AnOverheadMessages OBJECT IDENTIFIER ::= { dot20AnConnectionControl 4 }
24
25 dot20AnSectorConfigTable OBJECT-TYPE
26     SYNTAX SEQUENCE OF Dot20AnSectorConfigEntry
27     MAX-ACCESS not-accessible
28     STATUS current
29     DESCRIPTION
30         "This table provides one row per 802.20 interface, i.e. sector
31         for a specific ChannelBand. This table's attributes specify the
32         configuration of the corresponding sector, and can be used to
33         populate fields in SystemInfo block and QuickChannelInfo
34         message, which are transmitted by the Overhead Messages Protocol."
35    ::= { dot20AnOverheadMessages 1 }
36
37 dot20AnSectorConfigEntry OBJECT-TYPE
38     SYNTAX Dot20AnSectorConfigEntry
39     MAX-ACCESS not-accessible
40     STATUS current
41     DESCRIPTION
42         "An Entry (conceptual row) in the SectorConfig table. This
43         table is indexed by IfIndex. ifIndex: Each IEEE 802.20
44         interface (uniquely identified by SectorID) is represented by
45         an ifEntry."
46     REFERENCE
47         "IEEE Std. 802.20-2008, Subclause 11.6 (Overhead Messages Protocol)"
48     INDEX
49         { ifIndex }
50    ::= { dot20AnSectorConfigTable 1 }
51
52 dot20AnTotalNumSubcarriers OBJECT-TYPE
53     SYNTAX Integer32 (0..7)
54     MAX-ACCESS read-write
55     STATUS current
56     DESCRIPTION
57         "This parameter takes the value 2^(7+n), where n is the
58         value of the 3 bit field. This field is not be set to a
59         value of 5 or above."
60     REFERENCE
61         "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
62    ::= { dot20AnSectorConfigEntry 29 }
63
64 dot20AnNumGuardSubcarriers OBJECT-TYPE
65     SYNTAX Integer32 (0..7)
66     MAX-ACCESS read-write
67     STATUS current
68     DESCRIPTION

```

```

1         "This attribute determines the number of guard subcarriers
2         as defined in 802.20 Physical layer specification."
3     REFERENCE
4         "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
5     ::= { dot20AnSectorConfigEntry 30 }
6
7     dot20AnFlSubzoneSize OBJECT-TYPE
8     SYNTAX      Integer32 (0..1)
9     MAX-ACCESS  read-write
10    STATUS      current
11    DESCRIPTION
12        "This field determines the number of subzones on the
13        forward link. If n=0, this parameter is set to 64 and if
14        n=1, this parameter is set to 128."
15    REFERENCE
16        "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
17    ::= { dot20AnSectorConfigEntry 31 }
18
19    dot20AnResourceChannelMuxMode OBJECT-TYPE
20    SYNTAX      Integer32 (0..1)
21    MAX-ACCESS  read-write
22    STATUS      current
23    DESCRIPTION
24        "This field determines the number of subzones on the
25        forward link. If n=0, this parameter is set to 64 and if
26        n=1, this parameter is set to 128."
27    REFERENCE
28        "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo Block)"
29    ::= { dot20AnSectorConfigEntry 32 }
30
31    dot20AnNumDRCHSubzones OBJECT-TYPE
32    SYNTAX      Integer32
33    MAX-ACCESS  read-write
34    STATUS      current
35    DESCRIPTION
36        "This field takes values between 0 and N_FFT/64 - 1"
37    REFERENCE
38        "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo Block)"
39    ::= { dot20AnSectorConfigEntry 33 }
40
41    dot20AnFLReservedInterlaces OBJECT-TYPE
42    SYNTAX      INTEGER {
43        zero(1),
44        zeroToOne(2),
45        zeroToTwo(3),
46        zeroToThree(4),
47        zeroToFour(5),
48        zeroToFive(6),
49        zeroToSix(7),
50        zeroToSeven(8),
51        zeroAndThree(9),
52        zeroAndSix(10),
53        zeroTwoAndFour(11),
54        zeroTwoFourAndSix(12),
55        reserved(13),
56        reserved2(14),
57        reserved3(15),
58        none(16)
59    }
60    MAX-ACCESS  read-write
61    STATUS      current
62    DESCRIPTION
63        "This attribute determines which interlaces contain
64        reserved bandwidth on the forward link."
65    REFERENCE
66        "IEEE Std. 802.20-2008, Table 193 (Interpretation of FL
67        Reserved Interlaces), Subclause 11.6.5.2"
68    ::= { dot20AnSectorConfigEntry 34 }

```

```

1
2 dot20AnNumFLReservedSubzones OBJECT-TYPE
3     SYNTAX      Integer32 (0..15)
4     MAX-ACCESS  read-write
5     STATUS      current
6     DESCRIPTION
7         "This field determines the number of subzones that are reserved
8         on each interlace that contains reserved bandwidth"
9     REFERENCE
10        "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
11        ::= { dot20AnSectorConfigEntry 35 }
12
13 dot20AnCpichHoppingMode OBJECT-TYPE
14     SYNTAX      Integer32 (0..1)
15     MAX-ACCESS  read-write
16     STATUS      current
17     DESCRIPTION
18        "This field is set to 0 for deterministic, and 1 for
19        random hopping"
20     REFERENCE
21        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
22        ::= { dot20AnSectorConfigEntry 36 }
23
24 dot20AnNumEffectiveAntennas OBJECT-TYPE
25     SYNTAX      Integer32 (1..8)
26     MAX-ACCESS  read-write
27     STATUS      current
28     DESCRIPTION
29        "This attribute determines the effective number of
30        antennas."
31     REFERENCE
32        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
33        ::= { dot20AnSectorConfigEntry 37 }
34
35 dot20AnNumCommonSegmentHopPorts OBJECT-TYPE
36     SYNTAX      Integer32 (0..7)
37     MAX-ACCESS  read-write
38     STATUS      current
39     DESCRIPTION
40        "This attribute determines the number of common segment
41        hop ports encoded as described in the AIS."
42     REFERENCE
43        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
44        ::= { dot20AnSectorConfigEntry 38 }
45
46 dot20AnNumLABSegments OBJECT-TYPE
47     SYNTAX      Integer32 (0..7)
48     MAX-ACCESS  read-write
49     STATUS      current
50     DESCRIPTION
51        "This field indicates the number of LABSegments."
52     REFERENCE
53        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
54        ::= { dot20AnSectorConfigEntry 39 }
55
56 dot20AnMinScchResourceIndex OBJECT-TYPE
57     SYNTAX      Integer32 (0..31)
58     MAX-ACCESS  read-write
59     STATUS      current
60     DESCRIPTION
61        "This parameter is in units of N_FFT/32 resources, and spans
62        from 0 to N_FFT -1"
63     REFERENCE
64        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
65        ::= { dot20AnSectorConfigEntry 40 }
66
67 dot20AnSinglePAForXCarriers OBJECT-TYPE
68     SYNTAX      Integer32 (0..1)

```

```
1     MAX-ACCESS    read-write
2     STATUS        current
3     DESCRIPTION
4         "This field determines the structure of F-BPICH"
5     REFERENCE
6         "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
7     ::= { dot20AnSectorConfigEntry 41 }
8
9     dot20AnFlSdmaNumSubtrees OBJECT-TYPE
10    SYNTAX         Integer32 (1..4)
11    MAX-ACCESS    read-write
12    STATUS        current
13    DESCRIPTION
14        "This field determines the number of sub-trees on the
15        forward link."
16    REFERENCE
17        "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
18    ::= { dot20AnSectorConfigEntry 42 }
19
20    dot20AnFDPICHCodeOffsetSubtree0 OBJECT-TYPE
21    SYNTAX         Integer32 (0..3)
22    MAX-ACCESS    read-write
23    STATUS        current
24    DESCRIPTION
25        "This field is set to the corresponding value for subtree
26        0. This subtree is always present, and is therefore not
27        described in the overhead channels."
28    REFERENCE
29        "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
30        Pilot Channel)"
31    ::= { dot20AnSectorConfigEntry 43 }
32
33    dot20AnFDPICHCodeOffsetSubtree1 OBJECT-TYPE
34    SYNTAX         Integer32 (0..3)
35    MAX-ACCESS    read-write
36    STATUS        current
37    DESCRIPTION
38        "This field is set to the corresponding value for subtree
39        1"
40    REFERENCE
41        "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
42        Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
43    ::= { dot20AnSectorConfigEntry 44 }
44
45    dot20AnFDPICHCodeOffsetSubtree2 OBJECT-TYPE
46    SYNTAX         Integer32 (0..3)
47    MAX-ACCESS    read-write
48    STATUS        current
49    DESCRIPTION
50        "This field is set to the corresponding value for subtree
51        2"
52    REFERENCE
53        "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
54        Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
55    ::= { dot20AnSectorConfigEntry 45 }
56
57    dot20AnFDPICHCodeOffsetSubtree3 OBJECT-TYPE
58    SYNTAX         Integer32 (0..3)
59    MAX-ACCESS    read-write
60    STATUS        current
61    DESCRIPTION
62        "This field is set to the corresponding value for subtree
63        3"
64    REFERENCE
65        "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
66        Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
67    ::= { dot20AnSectorConfigEntry 46 }
68
```

```

1 dot20AnNumCmnPilotTxAnt OBJECT-TYPE
2     SYNTAX      Integer32 (1..4)
3     MAX-ACCESS  read-write
4     STATUS      current
5     DESCRIPTION
6         "This attribute determines the number of common pilot
7         transmit antennas. See NumEffectiveAntennas in spec."
8     REFERENCE
9         "IEEE Std. 802.20-2008, Subclause 5.4.1.3.3.1.1 (Forward
10        Common Pilot Channel Subcarriers), and Subclause 11.6.5.3
11        (QuickChannelInfo Block)"
12     ::= { dot20AnSectorConfigEntry 47 }
13
14 dot20AnModSymbolsPerQPSKLAB OBJECT-TYPE
15     SYNTAX      Integer32 (0..4)
16     MAX-ACCESS  read-write
17     STATUS      current
18     DESCRIPTION
19         "This field determines the number of modulation symbols
20         for each block carried by the F-SCCH"
21     REFERENCE
22         "IEEE Std. 802.20-2008, Table 189 (Interpretation of
23         ModulationSymbolsPerQPSKLAB)"
24     ::= { dot20AnSectorConfigEntry 48 }
25
26 dot20AnUseDrchForFlcs OBJECT-TYPE
27     SYNTAX      Integer32 (0..1)
28     MAX-ACCESS  read-write
29     STATUS      current
30     DESCRIPTION
31         "This field determines the hopping pattern on the FLCS"
32     REFERENCE
33         "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo
34         Block)"
35     ::= { dot20AnSectorConfigEntry 49 }
36
37 dot20AnEnableExpandedQPCH OBJECT-TYPE
38     SYNTAX      TruthValue
39     MAX-ACCESS  read-write
40     STATUS      current
41     DESCRIPTION
42         "This field determines the number of packets delivered to
43         the Physical Layer by the MAC Layer"
44     REFERENCE
45         "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo
46         Block)"
47     ::= { dot20AnSectorConfigEntry 50 }
48
49 dot20AnSectorConfigRowStatus OBJECT-TYPE
50     SYNTAX      RowStatus
51     MAX-ACCESS  read-create
52     STATUS      current
53     DESCRIPTION
54         "The status column used for creating, modifying, and deleting
55         instances of the columnar objects in the SectorConfig Table. If
56         the implementer of this MIB has chosen not to implement
57         'dynamic assignment' of sectors, this attribute is not useful
58         and should return noSuchName upon SNMP request."
59     DEFVAL      { active }
60     ::= { dot20AnSectorConfigEntry 78 }
61
62 dot20AnSectorExtChanInfoTable OBJECT-TYPE
63     SYNTAX      SEQUENCE OF Dot20AnSectorExtChanInfoEntry
64     MAX-ACCESS  not-accessible
65     STATUS      current
66     DESCRIPTION
67         "This table provides one row per 802.20 interface, i.e. sector
68         for a specific ChannelBand. This table's attributes specify the

```

```

1         configuration of the corresponding sector, and can be used to
2         populate fields in extendedChannelInfo message."
3     ::= { dot20AnOverheadMessages 2 }
4
5 dot20AnSectorExtChanInfoEntry OBJECT-TYPE
6     SYNTAX      Dot20AnSectorExtChanInfoEntry
7     MAX-ACCESS  not-accessible
8     STATUS      current
9     DESCRIPTION
10        "An Entry (conceptual row) in the SectorExtChanInfo table. This
11        table is indexed by IfIndex. ifIndex: Each IEEE 802.20
12        interface (uniquely identified by SectorID) is represented by
13        an ifEntry. The Extended Channel Info is transmitted by the
14        Overhead Messages Protocol."
15     REFERENCE
16        "IEEE Std. 802.20-2008, Subclause 11.6.5.4 (ExtendedChannelInfo)"
17     INDEX
18        { ifIndex }
19     ::= { dot20AnSectorExtChanInfoTable 1 }
20
21 dot20AnPilotID OBJECT-TYPE
22     SYNTAX      Integer32 (0..1023)
23     MAX-ACCESS  read-write
24     STATUS      current
25     DESCRIPTION
26        "This attribute is set to the PilotID of the sector."
27     REFERENCE
28        "IEEE Std. 802.20-2008, Subclause 5.3.2.1 (PilotPN and PilotPhase)"
29     ::= { dot20AnSectorExtChanInfoEntry 1 }
30
31 dot20AnHalfDuplexModeSupported OBJECT-TYPE
32     SYNTAX      TruthValue
33     MAX-ACCESS  read-write
34     STATUS      current
35     DESCRIPTION
36        "This attribute is set to True if the access network
37        supports half duplex terminals, and is set to False
38        otherwise. If half-duplex terminals are supported, the access
39        network should assign MAC IDs and channel assignments in a
40        manner that enables half-duplex terminal operation. A
41        half-duplex access terminal is not required to monitor forward
42        link transmissions on a PHY Frame where it is scheduled to make
43        a reverse link transmission."
44     REFERENCE
45        "IEEE Std. 802.20-2008, Subclause 7.7.5.4 (MACResourceAssignment)"
46     ::= { dot20AnSectorExtChanInfoEntry 2 }
47
48 dot20AnFACKBandwidthFactor OBJECT-TYPE
49     SYNTAX      Integer32 (1..4)
50     MAX-ACCESS  read-write
51     STATUS      current
52     DESCRIPTION
53        "Forward Acknowledgement channel (FACK) bandwidth factor"
54     REFERENCE
55        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
56     ::= { dot20AnSectorExtChanInfoEntry 3 }
57
58 dot20AnSFNCellID OBJECT-TYPE
59     SYNTAX      Integer32 (0..511)
60     MAX-ACCESS  read-write
61     STATUS      current
62     DESCRIPTION
63        "This field determines the ID of the single frequency network
64        cell (for BCMCS)"
65     REFERENCE
66        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup),
67        and Subclause 5.2.3.2.2 (SFNCellID and SFNPhase)"
68     ::= { dot20AnSectorExtChanInfoEntry 5 }

```

```
1
2 dot20AnCellNullID OBJECT-TYPE
3   SYNTAX      Integer32 (0..511)
4   MAX-ACCESS  read-write
5   STATUS      current
6   DESCRIPTION
7     "Cell Null Id"
8   REFERENCE
9     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
10  ::= { dot20AnSectorExtChanInfoEntry 6 }
11
12 dot20AnMaxNumSharedLABs OBJECT-TYPE
13   SYNTAX      Integer32 (1..4)
14   MAX-ACCESS  read-write
15   STATUS      current
16   DESCRIPTION
17     "This field determines the maximum number of shared LABs
18     that are transmitted by this sector"
19   REFERENCE
20     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
21  ::= { dot20AnSectorExtChanInfoEntry 7 }
22
23 dot20AnMaxNumLABs OBJECT-TYPE
24   SYNTAX      Integer32 (0..63)
25   MAX-ACCESS  read-write
26   STATUS      current
27   DESCRIPTION
28     "This field is set to the Maximum number of LABs that can
29     be transmitted by this sector"
30   REFERENCE
31     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
32  ::= { dot20AnSectorExtChanInfoEntry 9 }
33
34 dot20AnMax16QamScchBlocks OBJECT-TYPE
35   SYNTAX      Integer32 (0..15)
36   MAX-ACCESS  read-write
37   STATUS      current
38   DESCRIPTION
39     "This field is set to the maximum number of 16-QAM blocks
40     that may be transmitted by the access network"
41   REFERENCE
42     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
43  ::= { dot20AnSectorExtChanInfoEntry 10 }
44
45 dot20AnPdCabResSharingEnabled OBJECT-TYPE
46   SYNTAX      TruthValue
47   MAX-ACCESS  read-write
48   STATUS      current
49   DESCRIPTION
50     "This field determines if resource sharing using PDCABs is
51     enabled"
52   REFERENCE
53     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
54  ::= { dot20AnSectorExtChanInfoEntry 11 }
55
56 dot20AnNumAckableLABs OBJECT-TYPE
57   SYNTAX      Integer32 (0..7)
58   MAX-ACCESS  read-write
59   STATUS      current
60   DESCRIPTION
61     "This field is set to the number of LABs on SCCH that the
62     access terminal is to acknowledge"
63   REFERENCE
64     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
65  ::= { dot20AnSectorExtChanInfoEntry 12 }
66
67 dot20An16QamScchT2PRatio OBJECT-TYPE
68   SYNTAX      INTEGER {
```



```

1      minusSevenDb(1),
2      minusFourDb(2),
3      zeroDb(3),
4      minusTenDb(4)
5  }
6  MAX-ACCESS    read-write
7  STATUS        current
8  DESCRIPTION
9      "16 Qam Scch T2P Ratio"
10 REFERENCE
11     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
12 ::= { dot20AnSectorExtChanInfoEntry 13 }
13
14 dot20AnEffectiveTransmitPower OBJECT-TYPE
15     SYNTAX      Integer32 (0..63)
16     MAX-ACCESS  read-write
17     STATUS      current
18     DESCRIPTION
19         "This attribute is set to the effective transmit power of the
20          sector in units of dBm"
21     REFERENCE
22         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
23     ::= { dot20AnSectorExtChanInfoEntry 14 }
24
25 dot20AnAssignmentAckHARQTx OBJECT-TYPE
26     SYNTAX      Integer32 (0..7)
27     MAX-ACCESS  read-write
28     STATUS      current
29     DESCRIPTION
30         "The value 0 indicates that no ACK is sent in response to an
31          assignment. The rules for interpreting other values of this
32          field are provided in the MAC Layer. The value 7 is reserved"
33     REFERENCE
34         "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
35          (ReverseChannelGroup)"
36     ::= { dot20AnSectorExtChanInfoEntry 15 }
37
38 dot20AnCQIPilotTransmitPower OBJECT-TYPE
39     SYNTAX      Integer32 (0..15)
40     MAX-ACCESS  read-write
41     STATUS      current
42     DESCRIPTION
43         "The field determines the power spectral density of the F-CQIPICH
44          relative to the reference transmit power density defined by the
45          Physical
46          Layer. This parameter may take the value (-4 + n*0.5) dB."
47     REFERENCE
48         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
49     ::= { dot20AnSectorExtChanInfoEntry 16 }
50
51 dot20AnCommonPilotTransmitPower OBJECT-TYPE
52     SYNTAX      Integer32 (0..15)
53     MAX-ACCESS  read-write
54     STATUS      current
55     DESCRIPTION
56         "The attribute's value noted n determines the power
57          spectral density of the F-CPICH during the FL PHY frame
58          relative to the F-ACQCH. The pilot power density is equal
59          to (-4 + n*0.5) dB."
60     REFERENCE
61         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
62     ::= { dot20AnSectorExtChanInfoEntry 17 }
63
64 dot20AnCDMAInterlacesBitmap OBJECT-TYPE
65     SYNTAX      Integer32 (0..255)
66     MAX-ACCESS  read-write
67     STATUS      current
68     DESCRIPTION

```

```

1         "The j'th bit of this field is set to 1 if interlace i
2         contains a Reverse Link CDMA Segment. Here j is assumed to range
3         from 0 through 7, and an interlace i is the set of PHY Frames
4         that satisfy PHY Frame Index mod 8 = i"
5     REFERENCE
6         "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
7         (ReverseChannelGroup)"
8     ::= { dot20AnSectorExtChanInfoEntry 18 }
9
10    dot20AnNumOdcchReports OBJECT-TYPE
11        SYNTAX      Integer32 (0..31)
12        MAX-ACCESS  read-write
13        STATUS      current
14        DESCRIPTION
15            "Num ODCCH reports, specified in units of 16"
16        REFERENCE
17            "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
18            (ReverseChannelGroup)"
19        ::= { dot20AnSectorExtChanInfoEntry 27 }
20
21    dot20AnNumRLCdmaSubsegments OBJECT-TYPE
22        SYNTAX      Integer32 (1..16)
23        MAX-ACCESS  read-write
24        STATUS      current
25        DESCRIPTION
26            "This field determines the number of RLCdmaSubsegments on
27            this sector."
28        REFERENCE
29            "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
30            (ReverseChannelGroup)"
31        ::= { dot20AnSectorExtChanInfoEntry 28 }
32
33    dot20AnRackBandwidthFactor OBJECT-TYPE
34        SYNTAX      Integer32 (0..3)
35        MAX-ACCESS  read-write
36        STATUS      current
37        DESCRIPTION
38            "This parameter is set to 2^n, where n is the value of
39            the two bit field."
40        REFERENCE
41            "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
42            (ReverseChannelGroup)"
43        ::= { dot20AnSectorExtChanInfoEntry 30 }
44
45    dot20AnRlNumSdmaDimensions OBJECT-TYPE
46        SYNTAX      Integer32 (1..4)
47        MAX-ACCESS  read-write
48        STATUS      current
49        DESCRIPTION
50            "This field determines the number of spatial dimensions on
51            the reverse link."
52        REFERENCE
53            "IEEE Std. 802.20-2008, Table 196 (ReverseChannel Group), and
54            Subclause 11.6.5.4.2 (ReverseChannelGroup)"
55        ::= { dot20AnSectorExtChanInfoEntry 31 }
56
57    dot20AnRlDpichCodeOffsetSubtree0 OBJECT-TYPE
58        SYNTAX      Integer32 (0..3)
59        MAX-ACCESS  read-write
60        STATUS      current
61        DESCRIPTION
62            "This field is set to the code offset for tree 0"
63        REFERENCE
64            "IEEE Std. 802.20-2008, Table 195 (ForwardChannel Group), and
65            Subclause 11.6.5.4.1 (ForwardChannelGroup)"
66        ::= { dot20AnSectorExtChanInfoEntry 32 }
67
68    dot20AnRlDpichCodeOffsetSubtree1 OBJECT-TYPE

```

```

1      SYNTAX      Integer32 (0..3)
2      MAX-ACCESS  read-write
3      STATUS      current
4      DESCRIPTION
5          "This field is set to the code offset for tree 1"
6      REFERENCE
7          "IEEE Std. 802.20-2008, Table 195 (ForwardChannel Group), and
8          Subclause 11.6.5.4.1 (ForwardChannelGroup)"
9      ::= { dot20AnSectorExtChanInfoEntry 33 }
10
11     dot20AnRlDpichCodeOffsetSubtree2 OBJECT-TYPE
12     SYNTAX      Integer32 (0..3)
13     MAX-ACCESS  read-write
14     STATUS      current
15     DESCRIPTION
16         "This field is set to the code offset for tree 2"
17     REFERENCE
18         "IEEE Std. 802.20-2008, Table 195 (ForwardChannel Group), and
19         Subclause 11.6.5.4.1 (ForwardChannelGroup)"
20     ::= { dot20AnSectorExtChanInfoEntry 34 }
21
22     dot20AnRlDpichCodeOffsetSubtree3 OBJECT-TYPE
23     SYNTAX      Integer32 (0..3)
24     MAX-ACCESS  read-write
25     STATUS      current
26     DESCRIPTION
27         "This field is set to the code offset for tree 3"
28     REFERENCE
29         "IEEE Std. 802.20-2008, Table 195 (ForwardChannel Group), and
30         Subclause 11.6.5.4.1 (ForwardChannelGroup)"
31     ::= { dot20AnSectorExtChanInfoEntry 35 }
32
33     dot20AnRlSubzoneSize OBJECT-TYPE
34     SYNTAX      Integer32 (0..1)
35     MAX-ACCESS  read-write
36     STATUS      current
37     DESCRIPTION
38         "This field determines the size of subzones on the reverse
39         link. If n=0, this parameter takes the value 64 and if
40         n=1, this parameter takes the value 128"
41     REFERENCE
42         "IEEE Std. 802.20-2008, Table 196 (ReverseChannel Group), and
43         Subclause 11.6.5.4.2 (ReverseChannelGroup)"
44     ::= { dot20AnSectorExtChanInfoEntry 36 }
45
46     dot20AnSilenceIntervalPeriod OBJECT-TYPE
47     SYNTAX      Integer32 (0..15)
48     MAX-ACCESS  read-write
49     STATUS      current
50     DESCRIPTION
51         "This field determines the period in units of super frames
52         when the silence interval repeats. The SilenceInterval takes
53         a value of 2^n super frames, where n is the value of this four
54         bit field"
55     REFERENCE
56         "IEEE Std. 802.20-2008, Table 196 (ReverseChannel Group), and
57         Subclause 11.6.5.4.2 (ReverseChannelGroup)"
58     ::= { dot20AnSectorExtChanInfoEntry 38 }
59
60     dot20AnSilenceIntervalDuration OBJECT-TYPE
61     SYNTAX      Integer32 (1..8)
62     MAX-ACCESS  read-write
63     STATUS      current
64     DESCRIPTION
65         "This field determines the duration silence interval in
66         units of 8 OFDM symbols"
67     REFERENCE
68         "IEEE Std. 802.20-2008, Table 196 (ReverseChannel Group), and

```

```

1      Subclause 11.6.5.4.2 (ReverseChannelGroup)"
2      ::= { dot20AnSectorExtChanInfoEntry 39 }
3
4  dot20AnNumSilenceIntervalSubzone OBJECT-TYPE
5      SYNTAX      Integer32 (0..15)
6      MAX-ACCESS  read-write
7      STATUS      current
8      DESCRIPTION
9          "This field specifies the set of subzones that are blanked
10         during the silence interval."
11     REFERENCE
12         "IEEE Std. 802.20-2008, Table 196 (ReverseChannel Group), and
13         Subclause 11.6.5.4.2 (ReverseChannelGroup)"
14     ::= { dot20AnSectorExtChanInfoEntry 40 }
15
16  dot20AnAckInterferenceOffset OBJECT-TYPE
17      SYNTAX      Integer32 (0..15)
18      MAX-ACCESS  read-write
19      STATUS      current
20      DESCRIPTION
21          "This field may take values in units of dB"
22     REFERENCE
23         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
24     ::= { dot20AnSectorExtChanInfoEntry 42 }
25
26  dot20AnMacIdRange OBJECT-TYPE
27      SYNTAX      INTEGER {
28          upTo63(1),
29          upTo127(2),
30          upTo255(3),
31          upTo511(4),
32          upTo1023(5),
33          upTo2047(6),
34          reserved(7),
35          upTo31(8)
36      }
37      MAX-ACCESS  read-write
38      STATUS      current
39      DESCRIPTION
40          "This field is set to indicate the range of assigned
41          MACID values in the sector. For example, a MACIDRange of 63
42          indicates that the sector has not assigned MACID values 64 and
43          above"
44     REFERENCE
45         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
46     ::= { dot20AnSectorExtChanInfoEntry 43 }
47
48  dot20AnFlPcReportInterval OBJECT-TYPE
49      SYNTAX      Integer32 (0..7)
50      MAX-ACCESS  read-write
51      STATUS      current
52      DESCRIPTION
53          "This field determines the periodicity at which power
54          control commands are sent to the access terminal. This
55          parameter may take the value 2^n, where n is the value of the
56          three bit field."
57     REFERENCE
58         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
59     ::= { dot20AnSectorExtChanInfoEntry 44 }
60
61  dot20AnFlPqiReportInterval OBJECT-TYPE
62      SYNTAX      Integer32 (0..3)
63      MAX-ACCESS  read-write
64      STATUS      current
65      DESCRIPTION
66          "This field determines the periodicity at which PQI
67          reports commands are sent by this sector. This parameter
68          takes the value 16*2^n, where n is the value of the three bit

```

```

1         field"
2     REFERENCE
3         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
4     ::= { dot20AnSectorExtChanInfoEntry 45 }
5
6     dot20AnFlIotReportInterval OBJECT-TYPE
7         SYNTAX      Integer32 (0..3)
8         MAX-ACCESS  read-write
9         STATUS      current
10        DESCRIPTION
11            "This field determines the periodicity at which IoT values
12             are sent to the access terminal. This parameter may take the
13             value 2^n, where n is the value of the three bit field"
14        REFERENCE
15            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
16        ::= { dot20AnSectorExtChanInfoEntry 46 }
17
18        dot20AnFastIoTEnabled OBJECT-TYPE
19            SYNTAX      TruthValue
20            MAX-ACCESS  read-write
21            STATUS      current
22            DESCRIPTION
23                "This field determines if the access terminal is required
24                 to read Fast IoT from this sector"
25            REFERENCE
26                "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
27            ::= { dot20AnSectorExtChanInfoEntry 47 }
28
29        dot20AnFastOSIEnabled OBJECT-TYPE
30            SYNTAX      TruthValue
31            MAX-ACCESS  read-write
32            STATUS      current
33            DESCRIPTION
34                "This field determines if the access terminal is required
35                 to read OSI from this sector"
36            REFERENCE
37                "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
38            ::= { dot20AnSectorExtChanInfoEntry 48 }
39
40        dot20AnRabEnabled OBJECT-TYPE
41            SYNTAX      TruthValue
42            MAX-ACCESS  read-write
43            STATUS      current
44            DESCRIPTION
45                "This field is set to 1 if this sector transmits RAB, and
46                 is set to 1 otherwise"
47            REFERENCE
48                "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
49            ::= { dot20AnSectorExtChanInfoEntry 49 }
50
51        dot20AnOsiResponseMode OBJECT-TYPE
52            SYNTAX      INTEGER {
53                stochastic(1),
54                deterministic(2)
55            }
56            MAX-ACCESS  read-write
57            STATUS      current
58            DESCRIPTION
59                "This field determines the type of response to OSI modes"
60            REFERENCE
61                "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
62            ::= { dot20AnSectorExtChanInfoEntry 50 }
63
64        dot20AnSlowInterferenceOffset OBJECT-TYPE
65            SYNTAX      Integer32 (0..15)
66            MAX-ACCESS  read-write
67            STATUS      current
68            DESCRIPTION

```

```

1         "This field is set in units of dB"
2     REFERENCE
3         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
4     ::= { dot20AnSectorExtChanInfoEntry 51 }
5
6     dot20AnCtrlAccessOffset OBJECT-TYPE
7         SYNTAX      Integer32 (0..3)
8         MAX-ACCESS  read-write
9         STATUS      current
10        DESCRIPTION
11            "This field determines the initial gain of the R-CQICH over the
12             R-ACH. The value of this parameter is -11+n dB, where n
13             is the value of this field"
14        REFERENCE
15            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
16        ::= { dot20AnSectorExtChanInfoEntry 52 }
17
18        dot20AnRlAuxPilotPower OBJECT-TYPE
19            SYNTAX      Integer32 (0..7)
20            MAX-ACCESS  read-write
21            STATUS      current
22            DESCRIPTION
23                "This field is determine the offset of R-AuxPICH with
24                 respect to R-PICH. This parameter may take the value 4+n."
25            REFERENCE
26                "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
27                 Attribute)"
28            ::= { dot20AnSectorExtChanInfoEntry 53 }
29
30        dot20AnReqQoSPowerBoost OBJECT-TYPE
31            SYNTAX      Integer32 (0..3)
32            MAX-ACCESS  read-write
33            STATUS      current
34            DESCRIPTION
35                "This field is in units of dB"
36            REFERENCE
37                "IEEE Std. 802.20-2008, Subclause 8.7.7.2.1 (PowerControl
38                 Attribute)"
39            ::= { dot20AnSectorExtChanInfoEntry 54 }
40
41        dot20AnErasureTargetCtoI0 OBJECT-TYPE
42            SYNTAX      Integer32 (0..15)
43            MAX-ACCESS  read-write
44            STATUS      current
45            DESCRIPTION
46                "This attribute's value noted n determines the transmit
47                 power of erasure sequences for different assignment sizes. The
48                 transmit power is equal to n-6 dB."
49            REFERENCE
50                "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
51                 Attribute)"
52            ::= { dot20AnSectorExtChanInfoEntry 55 }
53
54        dot20AnErasureTargetCtoI1 OBJECT-TYPE
55            SYNTAX      Integer32 (0..15)
56            MAX-ACCESS  read-write
57            STATUS      current
58            DESCRIPTION
59                "This attribute's value noted n determines the transmit
60                 power of erasure sequences for different assignment sizes. The
61                 transmit power is equal to n-6 dB."
62            REFERENCE
63                "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
64                 Attribute)"
65            ::= { dot20AnSectorExtChanInfoEntry 56 }
66
67        dot20AnErasureTargetCtoI2 OBJECT-TYPE
68            SYNTAX      Integer32 (0..15)

```

```

1     MAX-ACCESS    read-write
2     STATUS        current
3     DESCRIPTION
4         "This attribute's value noted n determines the transmit
5         power of erasure sequences for different assignment sizes. The
6         transmit power is equal to n-6 dB."
7     REFERENCE
8         "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
9         Attribute)"
10    ::= { dot20AnSectorExtChanInfoEntry 57 }
11
12    dot20AnErasureTargetCtoI3 OBJECT-TYPE
13        SYNTAX      Integer32 (0..15)
14        MAX-ACCESS  read-write
15        STATUS      current
16        DESCRIPTION
17            "This attribute's value noted n determines the transmit
18            power of erasure sequences for different assignment sizes. The
19            transmit power is equal to n-6 dB."
20        REFERENCE
21            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
22            Attribute)"
23        ::= { dot20AnSectorExtChanInfoEntry 58 }
24
25    dot20AnAccessCycleDuration OBJECT-TYPE
26        SYNTAX      Integer32 (0..1)
27        MAX-ACCESS  read-write
28        STATUS      current
29        DESCRIPTION
30            "This attribute determines the duration of the access
31            cycle in units of Access Opportunities (as defined by the
32            Physical Layer.)"
33        REFERENCE
34            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
35            Group)"
36        ::= { dot20AnSectorExtChanInfoEntry 59 }
37
38    dot20AnMaxProbesPerSequence OBJECT-TYPE
39        SYNTAX      Integer32 (0..7)
40        MAX-ACCESS  read-write
41        STATUS      current
42        DESCRIPTION
43            "This attribute determines the maximum number of probe
44            sequences that can be part of one access sequence. The
45            number of probes is n+2"
46        REFERENCE
47            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
48            Group)"
49        ::= { dot20AnSectorExtChanInfoEntry 60 }
50
51    dot20AnProbeRampUpStepSize OBJECT-TYPE
52        SYNTAX      Integer32 (0..3)
53        MAX-ACCESS  read-write
54        STATUS      current
55        DESCRIPTION
56            "This attribute's value noted n determines the power ramp
57            up used for probes within a probe sequence and indicates
58            a ramp up value of 2*(1+n) dB."
59        REFERENCE
60            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
61            Group)"
62        ::= { dot20AnSectorExtChanInfoEntry 61 }
63
64    dot20AnPilotThreshold1 OBJECT-TYPE
65        SYNTAX      Integer32 (0..7)
66        MAX-ACCESS  read-write
67        STATUS      current
68        DESCRIPTION

```

```

1         "This attribute's value noted n determines
2         PilotThreshold1 used by the Access Channel MAC Protocol. The
3         value is  $-10 + 2n$  dB."
4     REFERENCE
5         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
6         Group)"
7     ::= { dot20AnSectorExtChanInfoEntry 62 }
8
9     dot20AnPilotThreshold2 OBJECT-TYPE
10        SYNTAX          Integer32 (0..7)
11        MAX-ACCESS      read-write
12        STATUS          current
13        DESCRIPTION
14            "This attribute's value noted n determines
15            PilotThreshold2 used by the Access Channel MAC Protocol. The
16            value is  $-2n$  dB."
17        REFERENCE
18            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
19            Group)"
20        ::= { dot20AnSectorExtChanInfoEntry 63 }
21
22    dot20AnOpenLoopAdjust OBJECT-TYPE
23        SYNTAX          Integer32 (0..255)
24        MAX-ACCESS      read-write
25        STATUS          current
26        DESCRIPTION
27            "This attribute's value noted n determines the nominal
28            power to be used by access terminal in the open loop power
29            estimate. The value of nominal power is  $70+n$  dB."
30        REFERENCE
31            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
32            Group)"
33        ::= { dot20AnSectorExtChanInfoEntry 64 }
34
35    dot20AnAccessRetryPersistence0 OBJECT-TYPE
36        SYNTAX          Integer32 (0..7)
37        MAX-ACCESS      read-write
38        STATUS          current
39        DESCRIPTION
40            "This attribute determines the persistence probability for
41            determining access sequence backoff. If this attribute's value
42            is set to n, the access terminal will use  $2^{(-n/2)}$  as the
43            retry persistence. For n=7, the access terminal will set
44            AccessRetryPersistence to 0."
45        REFERENCE
46            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
47            Group)"
48        ::= { dot20AnSectorExtChanInfoEntry 65 }
49
50    dot20AnAccessRetryPersistence1 OBJECT-TYPE
51        SYNTAX          Integer32 (0..7)
52        MAX-ACCESS      read-write
53        STATUS          current
54        DESCRIPTION
55            "This attribute determines the persistence probability for
56            determining access sequence backoff. If this attribute's value
57            is set to n, the access terminal will use  $2^{(-n/2)}$  as the
58            retry persistence. For n=7, the access terminal will set
59            AccessRetryPersistence to 0."
60        REFERENCE
61            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
62            Group)"
63        ::= { dot20AnSectorExtChanInfoEntry 66 }
64
65    dot20AnAccessRetryPersistence2 OBJECT-TYPE
66        SYNTAX          Integer32 (0..7)
67        MAX-ACCESS      read-write
68        STATUS          current

```



```
1 DESCRIPTION
2     "This attribute determines the persistence probability for
3     determining access sequence backoff. If this attribute's value
4     is set to n, the access terminal will use 2(-n/2) as the
5     retry persistence. For n=7, the access terminal will set
6     AccessRetryPersistence to 0."
7 REFERENCE
8     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
9     Group)"
10 ::= { dot20AnSectorExtChanInfoEntry 67 }
11
12 dot20AnAccessRetryPersistence3 OBJECT-TYPE
13 SYNTAX      Integer32 (0..7)
14 MAX-ACCESS  read-write
15 STATUS      current
16 DESCRIPTION
17     "This attribute determines the persistence probability for
18     determining access sequence backoff. If this attribute's value
19     is set to n, the access terminal will use 2(-n/2) as the
20     retry persistence. For n=7, the access terminal sets
21     AccessRetryPersistence to 0."
22 REFERENCE
23     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
24     Group)"
25 ::= { dot20AnSectorExtChanInfoEntry 68 }
26
27 dot20AnAccessRetryPersistence4 OBJECT-TYPE
28 SYNTAX      Integer32 (0..7)
29 MAX-ACCESS  read-write
30 STATUS      current
31 DESCRIPTION
32     "This attribute determines the persistence probability for
33     determining access sequence backoff. If this attribute's value
34     is set to n, the access terminal will use 2(-n/2) as the
35     retry persistence. For n=7, the access terminal sets
36     AccessRetryPersistence to 0."
37 REFERENCE
38     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
39     Group)"
40 ::= { dot20AnSectorExtChanInfoEntry 69 }
41
42 dot20AnAccessRetryPersistence5 OBJECT-TYPE
43 SYNTAX      Integer32 (0..7)
44 MAX-ACCESS  read-write
45 STATUS      current
46 DESCRIPTION
47     "This attribute determines the persistence probability for
48     determining access sequence backoff. If this attribute's value
49     is set to n, the access terminal will use 2(-n/2) as the
50     retry persistence. For n=7, the access terminal sets
51     AccessRetryPersistence to 0."
52 REFERENCE
53     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
54     Group)"
55 ::= { dot20AnSectorExtChanInfoEntry 70 }
56
57 dot20AnAccessRetryPersistence6 OBJECT-TYPE
58 SYNTAX      Integer32 (0..7)
59 MAX-ACCESS  read-write
60 STATUS      current
61 DESCRIPTION
62     "This attribute determines the persistence probability for
63     determining access sequence backoff. If this attribute's value
64     is set to n, the access terminal will use 2(-n/2) as the
65     retry persistence. For n=7, the access terminal sets
66     AccessRetryPersistence to 0."
67 REFERENCE
68     "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
```

```

1         Group) "
2     ::= { dot20AnSectorExtChanInfoEntry 71 }
3
4 dot20AnAccessRetryPersistence7 OBJECT-TYPE
5     SYNTAX      Integer32 (0..7)
6     MAX-ACCESS  read-write
7     STATUS      current
8     DESCRIPTION
9         "This attribute determines the persistence probability for
10        determining access sequence backoff. If this attribute's value
11        is set to n, the access terminal will use 2^(-n/2) as the
12        retry persistence. For n=7, the access terminal sets
13        AccessRetryPersistence to 0."
14    REFERENCE
15        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
16        Group)"
17    ::= { dot20AnSectorExtChanInfoEntry 72 }
18
19 dot20AnSectorExtChanRowStatus OBJECT-TYPE
20     SYNTAX      RowStatus
21     MAX-ACCESS  read-create
22     STATUS      current
23     DESCRIPTION
24         "The status column used for creating, modifying, and deleting
25        instances of the columnar objects in the SectorExtChanInfo
26        Table. If the implementer of this MIB has chosen not to
27        implement 'dynamic assignment' of sectors, this attribute is
28        not useful and should return noSuchName upon SNMP request."
29     DEFVAL      { active }
30     ::= { dot20AnSectorExtChanInfoEntry 73 }
31
32 dot20AnSectorParamTable OBJECT-TYPE
33     SYNTAX      SEQUENCE OF Dot20AnSectorParamEntry
34     MAX-ACCESS  not-accessible
35     STATUS      current
36     DESCRIPTION
37         "This table provides one row per 802.20 carrier of a sector for
38        a specific ChannelBand. This table's attributes specify the
39        configuration of the corresponding sector and can be used to
40        populate fields in the SectorParameters message."
41     ::= { dot20AnOverheadMessages 3 }
42
43 dot20AnSectorParamEntry OBJECT-TYPE
44     SYNTAX      Dot20AnSectorParamEntry
45     MAX-ACCESS  not-accessible
46     STATUS      current
47     DESCRIPTION
48         "An Entry (conceptual row) in the SectorParam table. This table
49        is indexed by ifIndex. ifIndex: Each IEEE 802.20 interface
50        (uniquely identified by SectorID) is represented by an
51        ifEntry."
52     REFERENCE
53         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
54     INDEX
55         { ifIndex }
56     ::= { dot20AnSectorParamTable 1 }
57
58 dot20AnMobileCountryCode OBJECT-TYPE
59     SYNTAX      Integer32 (0..4096)
60     MAX-ACCESS  read-write
61     STATUS      current
62     DESCRIPTION
63         "This attribute is set to the three digit Mobile Country
64        Code associated with this sector (as specified in ITU-T
65        Recommendation E.212, Identification Plan for Land Mobile
66        Stations)."
67     REFERENCE
68         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"

```

```

1      ::= { dot20AnSectorParamEntry 1 }
2
3      dot20AnMobileNetworkCode OBJECT-TYPE
4          SYNTAX          Integer32 (0..4096)
5          MAX-ACCESS      read-write
6          STATUS          current
7          DESCRIPTION
8              "This field is set three-digit BCD (binary coded
9              decimal) encoded representation of the Mobile Network Code
10             that has been assigned to the operator."
11         REFERENCE
12             "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
13         ::= { dot20AnSectorParamEntry 2 }
14
15     dot20AnSectorID OBJECT-TYPE
16         SYNTAX          OCTET STRING (SIZE(16))
17         MAX-ACCESS      read-write
18         STATUS          current
19         DESCRIPTION
20             "Sector Address Identifier. The access network sets the
21             value of the SectorID according to the rules specified in IEEE
22             802.20 AIS. The access terminal does not assume anything about
23             the format of the SectorID other than that it uniquely
24             identifies the sector."
25         REFERENCE
26             "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
27         ::= { dot20AnSectorParamEntry 3 }
28
29     dot20AnChannelBandRef OBJECT-TYPE
30         SYNTAX          Integer32
31         MAX-ACCESS      read-write
32         STATUS          current
33         DESCRIPTION
34             "The reference to the ChannelBand defined in ChannelBands table
35             using this value as index (dot20AnChannelBandIndex)"
36         REFERENCE
37             "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters,
38             first instance), and Subclause 15.2.1 (ChannelBand Record)"
39         ::= { dot20AnSectorParamEntry 4 }
40
41     dot20AnLatitude OBJECT-TYPE
42         SYNTAX          Integer32 (-1296000..1296000)
43         MAX-ACCESS      read-write
44         STATUS          current
45         DESCRIPTION
46             "The latitude of the sector. This attribute is set to
47             this sector's latitude in units of 0.25 second, expressed as a
48             two's complement signed number with positive numbers signifying
49             North latitudes. This attribute is set to a value in the
50             range 1296000 to 1296000 inclusive (corresponding to a range of
51             -90 to +90)."

```

```

1      ::= { dot20AnSectorParamEntry 6 }
2
3  dot20AnLeapSeconds OBJECT-TYPE
4      SYNTAX          Integer32 (0..255)
5      MAX-ACCESS      read-write
6      STATUS          current
7      DESCRIPTION
8          "The number of leap seconds that have occurred since the start
9            of system time."
10     REFERENCE
11         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
12     ::= { dot20AnSectorParamEntry 7 }
13
14  dot20AnLocalTimeOffset OBJECT-TYPE
15     SYNTAX          Integer32 (0..2047)
16     MAX-ACCESS      read-write
17     STATUS          current
18     DESCRIPTION
19         "This attribute is set to the offset of the local time
20          from System Time. This value will be in units of minutes,
21          expressed as a two's complement signed number."
22     REFERENCE
23         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
24     ::= { dot20AnSectorParamEntry 8 }
25
26  dot20AnPrimaryRegZoneCode OBJECT-TYPE
27     SYNTAX          Integer32
28     MAX-ACCESS      read-write
29     STATUS          current
30     DESCRIPTION
31         "The PrimaryRegistrationZoneCode for this sector"
32     REFERENCE
33         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
34     ::= { dot20AnSectorParamEntry 9 }
35
36  dot20AnAnGroupId OBJECT-TYPE
37     SYNTAX          Integer32 (0..7)
38     MAX-ACCESS      read-write
39     STATUS          current
40     DESCRIPTION
41         "Sector's AN Group Id"
42     REFERENCE
43         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
44     ::= { dot20AnSectorParamEntry 10 }
45
46  dot20AnPilotGroupId OBJECT-TYPE
47     SYNTAX          Integer32 (0..7)
48     MAX-ACCESS      read-write
49     STATUS          current
50     DESCRIPTION
51         "Sector's Pilot Group Id"
52     REFERENCE
53         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
54     ::= { dot20AnSectorParamEntry 11 }
55
56  dot20AnSynchronousGroupId OBJECT-TYPE
57     SYNTAX          Integer32 (0..7)
58     MAX-ACCESS      read-write
59     STATUS          current
60     DESCRIPTION
61         "Sector's Synchronous Group Id"
62     REFERENCE
63         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
64     ::= { dot20AnSectorParamEntry 12 }
65
66  dot20AnCellGroupId OBJECT-TYPE
67     SYNTAX          Integer32 (0..7)
68     MAX-ACCESS      read-write

```

```

1      STATUS      current
2      DESCRIPTION
3          "Sector's Cell Group Id"
4      REFERENCE
5          "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
6      ::= { dot20AnSectorParamEntry 13 }
7
8      dot20AnSectorParamRowStatus OBJECT-TYPE
9          SYNTAX      RowStatus
10         MAX-ACCESS   read-create
11         STATUS      current
12         DESCRIPTION
13             "The status column used for creating, modifying, and deleting
14             instances of the columnar objects in the SectorParam Table. If
15             the implementer of this MIB has chosen not to implement
16             'dynamic assignment' of sectors, this attribute is not useful
17             and should return noSuchName upon SNMP request."
18         DEFVAL      { active }
19         ::= { dot20AnSectorParamEntry 14 }
20
21     dot20AnSectorGrpResSetsTable OBJECT-TYPE
22         SYNTAX      SEQUENCE OF Dot20AnSectorGrpResSetsEntry
23         MAX-ACCESS   not-accessible
24         STATUS      current
25         DESCRIPTION
26             "This table provides one row per 802.20 sector and Forward
27             Channel group resource set (see ExtendedChannelInfo message in
28             AIS)."

```

```

1      ::= { dot20AnSectorGrpResSetsEntry 2 }
2
3  dot20AnBRCHSubzoneCyclingEnabled OBJECT-TYPE
4      SYNTAX      TruthValue
5      MAX-ACCESS  read-write
6      STATUS      current
7      DESCRIPTION
8          "This field is set to 1 if BRCHSubzoneCycling is enabled
9          on this sector. For BRCH resource set with BRCHSubzoneCycling
10         disabled or DRCH resource set, the first subzone offset on all
11         interlaces where this resource set is present is set to
12         the ResourceSubzoneOffset. For BRCH resource set with
13         BRCHSubzoneCycling enabled, the offset of the first subzone
14         over each interlace is shifted cyclically. Since the offset of
15         first subzone over the lowest indexed interlace is defined by
16         ResourceSubzoneOffset, the offset of the first subzone in the
17         next interlace, where the resource set is present, is increased
18         by 1 mod NumBRCHSubzones"
19     REFERENCE
20         "IEEE Std. 802.20-2008, Subclause 11.7.5.3
21         (SupplementalConfigAssignment)"
22     ::= { dot20AnSectorGrpResSetsEntry 3 }
23
24  dot20AnResourceSetSubZoneSpacing OBJECT-TYPE
25      SYNTAX      Integer32 (0..3)
26      MAX-ACCESS  read-write
27      STATUS      current
28      DESCRIPTION
29          "This field indicates the spacing between subzones in a
30          resource set. Subzones belonging to a resource group on an
31          interlace is equally spaced, where the first subzone is
32          defined by ResourceSubzoneOffset and
33          BRCHSubzoneCyclingEnabled"
34     REFERENCE
35         "IEEE Std. 802.20-2008, Subclause 11.7.5.3
36         (SupplementalConfigAssignment)"
37     ::= { dot20AnSectorGrpResSetsEntry 4 }
38
39  dot20AnNumResourceSubzones OBJECT-TYPE
40      SYNTAX      Integer32 (0..31)
41      MAX-ACCESS  read-write
42      STATUS      current
43      DESCRIPTION
44          "This field determines the number of subzones in each
45          interlace where the resource set is present. An interlace is
46          defined as the set of frames that have the same Frame Index mod
47          InterlaceDepth, where InterlaceDepth is defined by
48          ResourceSetInterlace. This parameter takes the value n+1."
49     REFERENCE
50         "IEEE Std. 802.20-2008, Subclause 11.7.5.3
51         (SupplementalConfigAssignment)"
52     ::= { dot20AnSectorGrpResSetsEntry 5 }
53
54  dot20AnResourceSubzoneOffset OBJECT-TYPE
55      SYNTAX      Integer32 (0..31)
56      MAX-ACCESS  read-write
57      STATUS      current
58      DESCRIPTION
59          "This field is set to the first subzone on the lowest
60          indexed interlace that is part of a resource set. Interlace
61          index i is defined for the set of frames that have Frame Index
62          mod InterlaceDepth = i, where InterlaceDepth is defined by
63          ResourceSetInterlace"
64     REFERENCE
65         "IEEE Std. 802.20-2008, Subclause 11.7.5.3
66         (SupplementalConfigAssignment)"
67     ::= { dot20AnSectorGrpResSetsEntry 6 }
68

```

```

1 dot20AnResourceSetRowStatus OBJECT-TYPE
2     SYNTAX          RowStatus
3     MAX-ACCESS      read-create
4     STATUS           current
5     DESCRIPTION
6         "The status column used for creating, modifying, and deleting
7         instances of the columnar objects in the
8         SectorFwdChanGrpResourceSet Table. If the implementor of this
9         MIB has chosen not to implement 'dynamic assignment' of
10        sectors, this attribute is not useful and should return
11        noSuchName upon SNMP request."
12     DEFVAL          { active }
13     ::= { dot20AnSectorGrpResSetsEntry 7 }
14
15 dot20AnSecondaryRegZoneCodeTable OBJECT-TYPE
16     SYNTAX          SEQUENCE OF Dot20AnSecondaryRegZoneCodeEntry
17     MAX-ACCESS      not-accessible
18     STATUS           current
19     DESCRIPTION
20         "This table provides one row per 802.20 interface and per
21         secondary registration zone code."
22     ::= { dot20AnOverheadMessages 5 }
23
24 dot20AnSecondaryRegZoneCodeEntry OBJECT-TYPE
25     SYNTAX          Dot20AnSecondaryRegZoneCodeEntry
26     MAX-ACCESS      not-accessible
27     STATUS           current
28     DESCRIPTION
29         "An Entry (conceptual row) in the SecondaryRegZoneCode table,
30         which is used to trigger registration for paging. This table
31         is indexed by IfIndex and dot20AnSecondaryRegZoneCodeIndex.
32         ifIndex: Each IEEE 802.20 interface (uniquely identified by
33         SectorID) is represented by an ifEntry."
34     REFERENCE
35         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
36     INDEX
37         { ifIndex, dot20AnSecondaryRegZoneCodeIndex }
38     ::= { dot20AnSecondaryRegZoneCodeTable 1 }
39
40 dot20AnSecondaryRegZoneCodeIndex OBJECT-TYPE
41     SYNTAX          Integer32 (0..7)
42     MAX-ACCESS      not-accessible
43     STATUS           current
44     DESCRIPTION
45         "Index of the secondary registration zone code for a particular
46         sector."
47     ::= { dot20AnSecondaryRegZoneCodeEntry 1 }
48
49 dot20AnSecRegZoneCode OBJECT-TYPE
50     SYNTAX          Integer32 (0..255)
51     MAX-ACCESS      read-write
52     STATUS           current
53     DESCRIPTION
54         "One of the SecondaryRegistrationZoneCode for this sector"
55     REFERENCE
56         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
57     ::= { dot20AnSecondaryRegZoneCodeEntry 2 }
58
59 dot20AnSecondaryRegZoneRowStatus OBJECT-TYPE
60     SYNTAX          RowStatus
61     MAX-ACCESS      read-create
62     STATUS           current
63     DESCRIPTION
64         "The status column used for creating, modifying, and deleting
65         instances of the columnar objects in the SecondaryRegZoneCode
66         Table. If the implementor of this MIB has chosen not to
67         implement 'dynamic assignment' of sectors, this attribute is
68         not useful and should return noSuchName upon SNMP request."

```

```

1      DEFVAL          { active }
2      ::= { dot20AnSecondaryRegZoneCodeEntry 3 }
3
4  dot20AnSectorIpsiTable OBJECT-TYPE
5      SYNTAX          SEQUENCE OF Dot20AnSectorIpsiEntry
6      MAX-ACCESS      not-accessible
7      STATUS          current
8      DESCRIPTION
9          "This table provides one row per 802.20 interface and per
10         IPSI."
11     ::= { dot20AnOverheadMessages 6 }
12
13  dot20AnSectorIpsiEntry OBJECT-TYPE
14     SYNTAX          Dot20AnSectorIpsiEntry
15     MAX-ACCESS      not-accessible
16     STATUS          current
17     DESCRIPTION
18         "An Entry (conceptual row) in the SectorIpsi table, which is a
19         list of personalities supported by the given sector. This table
20         is indexed by IfIndex and dot20AnIpsiIndex. ifIndex: Each IEEE
21         802.20 interface (uniquely identified by SectorID) is
22         represented by an ifEntry."
23     REFERENCE
24         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
25     INDEX
26         { ifIndex }
27     ::= { dot20AnSectorIpsiTable 1 }
28
29  dot20AnIpsiIndex OBJECT-TYPE
30     SYNTAX          Integer32 (0..7)
31     MAX-ACCESS      not-accessible
32     STATUS          current
33     DESCRIPTION
34         "Index of an Ipsi supported by a particular sector."
35     ::= { dot20AnSectorIpsiEntry 1 }
36
37  dot20AnSupportedIpsi OBJECT-TYPE
38     SYNTAX          Integer32 (0..15)
39     MAX-ACCESS      read-write
40     STATUS          current
41     DESCRIPTION
42         "IPSI supported by a particular sector"
43     REFERENCE
44         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
45     ::= { dot20AnSectorIpsiEntry 2 }
46
47  dot20AnIpsiRowStatus OBJECT-TYPE
48     SYNTAX          RowStatus
49     MAX-ACCESS      read-create
50     STATUS          current
51     DESCRIPTION
52         "The status column used for creating, modifying, and deleting
53         instances of the columnar objects in the SectorIpsi Table. If
54         the implementor of this MIB has chosen not to implement
55         'dynamic assignment' of sectors, this attribute is not useful
56         and should return noSuchName upon SNMP request."
57     DEFVAL          { active }
58     ::= { dot20AnSectorIpsiEntry 3 }
59
60  dot20AnSectorCdmaSubSegTable OBJECT-TYPE
61     SYNTAX          SEQUENCE OF Dot20AnSectorCdmaSubSegEntry
62     MAX-ACCESS      not-accessible
63     STATUS          current
64     DESCRIPTION
65         "This table provides one row per 802.20 sector, interlace and
66         Reverse Channel group CDMA Sub segment (see ExtendedChannelInfo
67         message in AIS)."
68     ::= { dot20AnOverheadMessages 8 }

```



```

1
2 dot20AnSectorCdmaSubSegEntry OBJECT-TYPE
3     SYNTAX          Dot20AnSectorCdmaSubSegEntry
4     MAX-ACCESS      not-accessible
5     STATUS          current
6     DESCRIPTION
7         "An Entry (conceptual row) in the AnSectorCdmaSubSeg table.
8         This table is indexed by ifIndex, interlaceId and
9         CDMASubSegmentId."
10    REFERENCE
11        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.2 (ReverseChannelGroup)"
12    INDEX
13        { ifIndex, dot20AnInterlaceId }
14    ::= { dot20AnSectorCdmaSubSegTable 1 }
15
16 dot20AnInterlaceId OBJECT-TYPE
17     SYNTAX          Integer32 (0..7)
18     MAX-ACCESS      not-accessible
19     STATUS          current
20     DESCRIPTION
21         "Interlace Id"
22     ::= { dot20AnSectorCdmaSubSegEntry 1 }
23
24 dot20AnCdmaSubSegmentNum OBJECT-TYPE
25     SYNTAX          Integer32 (0..7)
26     MAX-ACCESS      read-write
27     STATUS          current
28     DESCRIPTION
29         "Number of reverse channel CDMA Sub segment within an interlace
30         for a particular sector."
31     REFERENCE
32        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.2 (ReverseChannelGroup)"
33     ::= { dot20AnSectorCdmaSubSegEntry 2 }
34
35 dot20AnSectorCdmaSubSegRowStatus OBJECT-TYPE
36     SYNTAX          RowStatus
37     MAX-ACCESS      read-create
38     STATUS          current
39     DESCRIPTION
40         "The status column used for creating, modifying, and deleting
41         instances of the columnar objects in the SectorCdmaSubSeg
42         Table. If the implementor of this MIB has chosen not to
43         implement 'dynamic assignment' of sectors, this attribute is
44         not useful and should return noSuchName upon SNMP request."
45     DEFVAL          { active }
46     ::= { dot20AnSectorCdmaSubSegEntry 3 }
47
48 dot20AnChannelBandsTable OBJECT-TYPE
49     SYNTAX          SEQUENCE OF Dot20AnChannelBandsEntry
50     MAX-ACCESS      not-accessible
51     STATUS          current
52     DESCRIPTION
53         "This table provides one row per 802.20 ChannelBand. This
54         table's attributes specify the ChannelBand record of a
55         particular ChannelBand which may be used for a sector defined
56         in the SectorConfig table, or by a member of the neighbor list
57         defined in NeighborSectorsTable."
58     ::= { dot20AnOverheadMessages 9 }
59
60 dot20AnChannelBandsEntry OBJECT-TYPE
61     SYNTAX          Dot20AnChannelBandsEntry
62     MAX-ACCESS      not-accessible
63     STATUS          current
64     DESCRIPTION
65         "An Entry (conceptual row) in the ChannelBands table. The
66         Channel Bands table is referenced by the NeighborSectorsTable
67         or Sector Table. This table is indexed by ChannelBandIndex."
68     REFERENCE

```

```

1         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
2         and Subclause 15.2.1 (ChannelBand Record) "
3     INDEX
4         { dot20AnChannelBandIndex }
5     ::= { dot20AnChannelBandsTable 1 }
6
7     dot20AnChannelBandIndex OBJECT-TYPE
8         SYNTAX      Integer32 (1..2147483647)
9         MAX-ACCESS  not-accessible
10        STATUS      current
11        DESCRIPTION
12            "Index of the ChannelBand within the ChannelBands table."
13        ::= { dot20AnChannelBandsEntry 1 }
14
15    dot20AnSystemType OBJECT-TYPE
16        SYNTAX      Integer32 (0..2)
17        MAX-ACCESS  read-write
18        STATUS      current
19        DESCRIPTION
20            "This attribute discriminates between the different ChannelBand
21            Records."
22        REFERENCE
23            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
24        ::= { dot20AnChannelBandsEntry 2 }
25
26    dot20AnBandClass OBJECT-TYPE
27        SYNTAX      Integer32 (0..255)
28        MAX-ACCESS  read-write
29        STATUS      current
30        DESCRIPTION
31            "This attribute is set to the band class number
32            corresponding to the frequency assignment of the ChannelBand
33            specified by this record."
34        REFERENCE
35            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
36        ::= { dot20AnChannelBandsEntry 3 }
37
38    dot20AnChannelNumber OBJECT-TYPE
39        SYNTAX      Integer32 (0..65535)
40        MAX-ACCESS  read-write
41        STATUS      current
42        DESCRIPTION
43            "This attribute is set to the Channel number
44            corresponding to the frequency assignment of the ChannelBand
45            specified by this record."
46        REFERENCE
47            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
48            and Subclause 15.2.1 (ChannelBand Record)"
49        ::= { dot20AnChannelBandsEntry 4 }
50
51    dot20AnHalfDuplexSupported OBJECT-TYPE
52        SYNTAX      TruthValue
53        MAX-ACCESS  read-write
54        STATUS      current
55        DESCRIPTION
56            "This attribute is set to a true if half duplex operation
57            is supported in this system."
58        REFERENCE
59            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
60        ::= { dot20AnChannelBandsEntry 5 }
61
62    dot20AnReverseChannelBandClass OBJECT-TYPE
63        SYNTAX      Integer32 (0..255)
64        MAX-ACCESS  read-write
65        STATUS      current
66        DESCRIPTION
67            "This attribute is set to the band class number
68            corresponding to the frequency assignment of the reverse

```

```

1         ChannelBand specified by this record."
2     REFERENCE
3         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
4         and Subclause 15.2.1 (ChannelBand Record)"
5     ::= { dot20AnChannelBandsEntry 6 }
6
7     dot20AnReverseChannelNumber OBJECT-TYPE
8     SYNTAX      Integer32 (0..65535)
9     MAX-ACCESS  read-write
10    STATUS      current
11    DESCRIPTION
12        "This attribute is set to the Channel number
13        corresponding to the frequency assignment of the Reverse
14        ChannelBand specified by this record."
15    REFERENCE
16        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
17        and Subclause 15.2.1 (ChannelBand Record)"
18    ::= { dot20AnChannelBandsEntry 7 }
19
20    dot20AnCyclicPrefixLength OBJECT-TYPE
21    SYNTAX      Integer32 (0..3)
22    MAX-ACCESS  read-write
23    STATUS      current
24    DESCRIPTION
25        "This attribute is set to the cyclic prefix length,
26        i.e. it is set to the quantity (N_CP-1) from the Physical
27        Layer."
28    REFERENCE
29        "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record),
30        and Table 165 (Specification for the u Parameter)"
31    ::= { dot20AnChannelBandsEntry 8 }
32
33    dot20AnFFTSize OBJECT-TYPE
34    SYNTAX      Integer32 (0..7)
35    MAX-ACCESS  read-write
36    STATUS      current
37    DESCRIPTION
38        "This attribute is set to log2(N_FFT/128)."

```

```

1      DESCRIPTION
2          "this attribute is set to the AccessHashingChannelMask for this
3          channel"
4      REFERENCE
5          "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
6      ::= { dot20AnChannelBandsEntry 12 }
7
8      dot20AnChannelBandStatus OBJECT-TYPE
9          SYNTAX          RowStatus
10         MAX-ACCESS      read-create
11         STATUS          current
12         DESCRIPTION
13             "The status column used for creating, modifying, and deleting
14             instances of the columnar objects in the ChannelBands Table.
15             If the implementor of this MIB has chosen not to implement
16             'dynamic assignment' of ChannelBands, this attribute is not
17             useful and should return noSuchName upon SNMP request."
18         REFERENCE
19             "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
20         DEFVAL          { active }
21         ::= { dot20AnChannelBandsEntry 13 }
22
23     dot20AnNeighborSectorsTable OBJECT-TYPE
24         SYNTAX          SEQUENCE OF Dot20AnNeighborSectorsEntry
25         MAX-ACCESS      not-accessible
26         STATUS          current
27         DESCRIPTION
28             "This table provides one row per 802.20 neighbor sector. This
29             table's attributes specify the sector parameters of a
30             particular neighbor sector which may be used as a neighbor to
31             one sector defined in the SectorConfig table."
32         ::= { dot20AnOverheadMessages 10 }
33
34     dot20AnNeighborSectorsEntry OBJECT-TYPE
35         SYNTAX          Dot20AnNeighborSectorsEntry
36         MAX-ACCESS      not-accessible
37         STATUS          current
38         DESCRIPTION
39             "An Entry (conceptual row) in the AnNeighborSectors table. This
40             table is indexed by ChannelBandIndex, NeighborSectorIndex."
41         INDEX
42             { dot20AnChannelBandIndex, dot20AnNeighborSectorIndex }
43         ::= { dot20AnNeighborSectorsTable 1 }
44
45     dot20AnNeighborSectorIndex OBJECT-TYPE
46         SYNTAX          Integer32 (1..2147483647)
47         MAX-ACCESS      not-accessible
48         STATUS          current
49         DESCRIPTION
50             "Index of the Neighbor Sector for this Neighbor Carrier within
51             the ChannelBand."
52         ::= { dot20AnNeighborSectorsEntry 1 }
53
54     dot20AnNeighborPilotID OBJECT-TYPE
55         SYNTAX          Integer32 (0..1023)
56         MAX-ACCESS      read-write
57         STATUS          current
58         DESCRIPTION
59             "This attribute is set to the PilotID of a neighboring
60             sector that the access terminal should add to its Neighbor
61             Set."
62         REFERENCE
63             "IEEE Std. 802.20-2008, Subclause 5.3.2.1 (PilotPN and PilotPhase)"
64         ::= { dot20AnNeighborSectorsEntry 2 }
65
66     dot20AnNeighborEffTransmitPower OBJECT-TYPE
67         SYNTAX          Integer32 (0..63)
68         MAX-ACCESS      read-write

```

```
1     STATUS      current
2     DESCRIPTION
3         "This attribute is set to the transmit power of the
4         sector in units of dBm."
5     REFERENCE
6         "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
7     ::= { dot20AnNeighborSectorsEntry 3 }
8
9     dot20AnNeighborChannelBandRef OBJECT-TYPE
10    SYNTAX      Integer32
11    MAX-ACCESS  read-write
12    STATUS      current
13    DESCRIPTION
14        "The reference to the ChannelBand defined in ChannelBands table
15        (dot20AnChannelBandIndex)"
16    REFERENCE
17        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
18    ::= { dot20AnNeighborSectorsEntry 4 }
19
20    dot20AnNeighborChannelShortID OBJECT-TYPE
21    SYNTAX      Integer32 (0..3)
22    MAX-ACCESS  read-write
23    STATUS      current
24    DESCRIPTION
25        "Neighbor Sector's short Channel ID"
26    REFERENCE
27        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
28    ::= { dot20AnNeighborSectorsEntry 5 }
29
30    dot20AnNeighborSameANAsPrimSect OBJECT-TYPE
31    SYNTAX      TruthValue
32    MAX-ACCESS  read-write
33    STATUS      current
34    DESCRIPTION
35        "Set true if same access network as primary sector."
36    REFERENCE
37        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
38    ::= { dot20AnNeighborSectorsEntry 6 }
39
40    dot20AnNeighborSectorPilotGrpId OBJECT-TYPE
41    SYNTAX      Integer32 (0..7)
42    MAX-ACCESS  read-write
43    STATUS      current
44    DESCRIPTION
45        "Neighbor Sector's Pilot Group Id"
46    REFERENCE
47        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
48    ::= { dot20AnNeighborSectorsEntry 7 }
49
50    dot20AnNeighborSynchGroupId OBJECT-TYPE
51    SYNTAX      Integer32 (0..7)
52    MAX-ACCESS  read-write
53    STATUS      current
54    DESCRIPTION
55        "Neighbor Sector's Synchronous Group Id"
56    REFERENCE
57        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
58    ::= { dot20AnNeighborSectorsEntry 8 }
59
60    dot20AnNeighborSectorCellGroupId OBJECT-TYPE
61    SYNTAX      Integer32 (0..7)
62    MAX-ACCESS  read-write
63    STATUS      current
64    DESCRIPTION
65        "Neighbor Sector's Cell Group Id"
66    REFERENCE
67        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
68    ::= { dot20AnNeighborSectorsEntry 9 }
```

```

1
2 dot20AnNeighborSectorStatus OBJECT-TYPE
3     SYNTAX      RowStatus
4     MAX-ACCESS  read-create
5     STATUS      current
6     DESCRIPTION
7         "The status column used for creating, modifying, and deleting
8         instances of the columnar objects in the NeighborSectors
9         Table. If the implementor of this MIB has chosen not to
10        implement 'dynamic assignment' of neighbor sectors this
11        attribute is not useful and should return noSuchName upon SNMP
12        request."
13    REFERENCE
14        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
15    DEFVAL      { active }
16    ::= { dot20AnNeighborSectorsEntry 10 }
17
18 dot20AnOtherTechNghbrsTable OBJECT-TYPE
19     SYNTAX      SEQUENCE OF Dot20AnOtherTechNghbrsEntry
20     MAX-ACCESS  not-accessible
21     STATUS      current
22     DESCRIPTION
23         "This table provides one row per other technology neighbor
24         channel. This table's attributes specify the technology type
25         and neighbor list of a particular neighbor channel which may be
26         used by one sector defined in the SectorConfig table for
27         inter-technology handoff."
28     ::= { dot20AnOverheadMessages 11 }
29
30 dot20AnOtherTechNghbrsEntry OBJECT-TYPE
31     SYNTAX      Dot20AnOtherTechNghbrsEntry
32     MAX-ACCESS  not-accessible
33     STATUS      current
34     DESCRIPTION
35         "An Entry (conceptual row) in the AnOtherTechNghbrs table. This
36         table is indexed by Sector (ifIndex) and OtherTechnologyIndex"
37     INDEX
38         { ifIndex, dot20AnOtherTechnologyIndex }
39     ::= { dot20AnOtherTechNghbrsTable 1 }
40
41 dot20AnOtherTechnologyIndex OBJECT-TYPE
42     SYNTAX      Integer32 (1..2147483647)
43     MAX-ACCESS  not-accessible
44     STATUS      current
45     DESCRIPTION
46         "The neighbor other technology entry index"
47     ::= { dot20AnOtherTechNghbrsEntry 1 }
48
49 dot20AnTechnologyType OBJECT-TYPE
50     SYNTAX      Integer32 (0..255)
51     MAX-ACCESS  read-write
52     STATUS      current
53     DESCRIPTION
54         "This attribute is set to the type of other technology.
55         Interpretation for its value should as defined in the AIS
56         spec."
57     REFERENCE
58         "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
59     ::= { dot20AnOtherTechNghbrsEntry 2 }
60
61 dot20AnTechNghbrListLength OBJECT-TYPE
62     SYNTAX      Integer32 (0..255)
63     MAX-ACCESS  read-write
64     STATUS      current
65     DESCRIPTION
66         "This attribute is set the length, in bytes, of the
67         neighbor list information for the other technology."
68     REFERENCE

```

```

1      "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
2      ::= { dot20AnOtherTechNghbrsEntry 3 }
3
4  dot20AnTechnologyNeighborList OBJECT-TYPE
5      SYNTAX      OCTET STRING (SIZE(256))
6      MAX-ACCESS  read-write
7      STATUS      current
8      DESCRIPTION
9          "This attribute is set to the neighbor list information
10         for the other technology."
11     REFERENCE
12         "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
13     ::= { dot20AnOtherTechNghbrsEntry 4 }
14
15  dot20AnOtherTechNghbrRowStatus OBJECT-TYPE
16      SYNTAX      RowStatus
17      MAX-ACCESS  read-create
18      STATUS      current
19      DESCRIPTION
20          "The status column used for creating, modifying, and deleting
21         instances of the columnar objects in the OtherTechNghbrs Table.
22         If the implementor of this MIB has chosen not to implement
23         'dynamic assignment' of other technology neighbors, this
24         attribute is not useful and should return noSuchName upon SNMP
25         request."
26      DEFVAL      { active }
27      ::= { dot20AnOtherTechNghbrsEntry 5 }
28
29  dot20AnNeighborListTable OBJECT-TYPE
30      SYNTAX      SEQUENCE OF Dot20AnNeighborListEntry
31      MAX-ACCESS  not-accessible
32      STATUS      current
33      DESCRIPTION
34          "This table defines the neighbor lists for the sectors defined
35         in the SectorConfig table. Each row in this table indexed per
36         sector (ifIndex) specifies a pointer to a neighbor sector of
37         this sector."
38      ::= { dot20AnOverheadMessages 12 }
39
40  dot20AnNeighborListEntry OBJECT-TYPE
41      SYNTAX      Dot20AnNeighborListEntry
42      MAX-ACCESS  not-accessible
43      STATUS      current
44      DESCRIPTION
45          "An Entry (conceptual row) in the AnNeighborList table. This
46         table is indexed by Sector (ifIndex) and NeighborIndex indexing
47         each neighbor sector for a particular Sector."
48      INDEX
49          { ifIndex, dot20AnNeighborIndex }
50      ::= { dot20AnNeighborListTable 1 }
51
52  dot20AnNeighborIndex OBJECT-TYPE
53      SYNTAX      Integer32 (1..32)
54      MAX-ACCESS  not-accessible
55      STATUS      current
56      DESCRIPTION
57          "This index identifies one neighbor sector for a Sector."
58      ::= { dot20AnNeighborListEntry 1 }
59
60  dot20AnNeighborSectorPointer OBJECT-TYPE
61      SYNTAX      RowPointer
62      MAX-ACCESS  read-create
63      STATUS      current
64      DESCRIPTION
65          "This attribute points to an instance of sector in SectorConfig
66         table or in NeighborSectors table. This sector is defined as a
67         neighbor of the sector identified by the ifIndex of this
68         attribute's entry."

```

```

1      ::= { dot20AnNeighborListEntry 2 }
2
3      dot20AnNeighborRowStatus OBJECT-TYPE
4          SYNTAX          RowStatus
5          MAX-ACCESS      read-create
6          STATUS          current
7          DESCRIPTION
8              "The status column used for creating, modifying, and deleting
9              instances of the columnar objects in the NeighborList Table.
10             If the implementor of this MIB has chosen not to implement
11             'dynamic assignment' of neighbor list entries this attribute is
12             not useful and should return noSuchName upon SNMP request."
13          DEFVAL          { active }
14      ::= { dot20AnNeighborListEntry 3 }
15
16      dot20AnSectorToIfIndexTable OBJECT-TYPE
17          SYNTAX          SEQUENCE OF Dot20AnSectorToIfIndexEntry
18          MAX-ACCESS      not-accessible
19          STATUS          current
20          DESCRIPTION
21              "This table can be used to find the ifIndex of an 802.20
22              interface based on its SectorID and ChannelBand information
23              (reverse mapping of the Sector Config table)."
24      ::= { dot20An 2 }
25
26      dot20AnSectorToIfIndexEntry OBJECT-TYPE
27          SYNTAX          Dot20AnSectorToIfIndexEntry
28          MAX-ACCESS      not-accessible
29          STATUS          current
30          DESCRIPTION
31              "An Entry (conceptual row) in the AnSectorToIfIndex table."
32          INDEX
33              { dot20AnSectorID, ifIndex }
34      ::= { dot20AnSectorToIfIndexTable 1 }
35
36      dot20AnIfChannelBandRef OBJECT-TYPE
37          SYNTAX          Integer32
38          MAX-ACCESS      read-write
39          STATUS          current
40          DESCRIPTION
41              "The reference to the ChannelBand defined in ChannelBands table
42              (dot20AnChannelBandIndex)"
43          REFERENCE
44              "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters,
45              first instance), and Subclause 15.2.1 (ChannelBand Record)"
46      ::= { dot20AnSectorToIfIndexEntry 1 }
47
48      dot20Cmn OBJECT-IDENTITY
49          STATUS          current
50          DESCRIPTION
51              "Common configuration and statistics."
52      ::= { ieee802dot20 2 }
53
54      dot20CmnMac OBJECT-IDENTITY
55          STATUS          current
56          DESCRIPTION
57              "MAC layer objects"
58      ::= { dot20Cmn 1 }
59
60      dot20CmnSessionControl OBJECT IDENTIFIER ::= { dot20CmnMac 1 }
61
62      dot20CmnSessionMgtProtocol OBJECT IDENTIFIER ::= { dot20CmnSessionControl 1 }
63
64      dot20CmnSessionOpenCounts OBJECT-TYPE
65          SYNTAX          Counter64
66          MAX-ACCESS      read-only
67          STATUS          current
68          DESCRIPTION

```



```

1         "Number of sessions opened"
2     REFERENCE
3         "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
4         Protocol State Diagram (Access Network))"
5     ::= { dot20CmnSessionMgtProtocol 1 }
6
7     dot20CmnSessionCloseCounts OBJECT-TYPE
8         SYNTAX      Counter64
9         MAX-ACCESS  read-only
10        STATUS      current
11        DESCRIPTION
12            "Number of sessions closed"
13        REFERENCE
14            "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
15            Protocol State Diagram (Access Network))"
16        ::= { dot20CmnSessionMgtProtocol 2 }
17
18        dot20CmnSessionFailureCounts OBJECT-TYPE
19            SYNTAX      Counter64
20            MAX-ACCESS  read-only
21            STATUS      current
22            DESCRIPTION
23                "Number of session open/close failures"
24            REFERENCE
25                "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
26                Protocol State Diagram (Access Network))"
27            ::= { dot20CmnSessionMgtProtocol 3 }
28
29        dot20CmnConnectionControl OBJECT IDENTIFIER ::= { dot20CmnMac 3 }
30
31        dot20CmnConnectedState OBJECT IDENTIFIER ::= { dot20CmnConnectionControl 1 }
32
33        dot20CmnActiveConnectionCounts OBJECT-TYPE
34            SYNTAX      Counter64
35            MAX-ACCESS  read-only
36            STATUS      current
37            DESCRIPTION
38                "Number of current active connections (in Open state.)"
39            REFERENCE
40                "IEEE Std 802.20-2008, Figures 152 and 153"
41            ::= { dot20CmnConnectedState 1 }
42
43        dot20CmnConnectionAttemptCounts OBJECT-TYPE
44            SYNTAX      Counter64
45            MAX-ACCESS  read-only
46            STATUS      current
47            DESCRIPTION
48                "Number of connection attempts (i.e. that reached BindATI state.)"
49            REFERENCE
50                "IEEE Std 802.20-2008, Figure 152 (Basic Connected State
51                Protocol State Diagram (AT)) and Figure 153 (Basic Connected
52                State Protocol State Diagram (AN))"
53            ::= { dot20CmnConnectedState 2 }
54
55        dot20CmnConnectionFailureCounts OBJECT-TYPE
56            SYNTAX      Counter64
57            MAX-ACCESS  read-only
58            STATUS      current
59            DESCRIPTION
60                "Number of connection failures during connection attempt (i.e.
61                That reached BindATI state without reaching Open state,
62                through timeout or deactivation"
63            REFERENCE
64                "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
65                State Diagram (AT)) and 153 (Connected State Protocol State
66                Diagram (AN))"
67            ::= { dot20CmnConnectedState 3 }
68

```

```

1 dot20CmnConnectionDropCounts OBJECT-TYPE
2     SYNTAX          Counter64
3     MAX-ACCESS      read-only
4     STATUS          current
5     DESCRIPTION
6         "Number of dropped connections (via a command of
7         ConnectedState.Close) after a connection has been established."
8     REFERENCE
9         "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
10        State Diagram (AT)) and 153 (Connected State Protocol State
11        Diagram (AN))"
12    ::= { dot20CmnConnectedState 4 }
13
14 dot20CmnConnectionReleaseCounts OBJECT-TYPE
15     SYNTAX          Counter64
16     MAX-ACCESS      read-only
17     STATUS          current
18     DESCRIPTION
19         "Number of connection release (Tx ConnectionClose or
20         Rx ConnectionClose) after a connection has been established."
21     REFERENCE
22         "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
23         State Diagram (AT)) and 153 (Connected State Protocol State
24         Diagram (AN))"
25    ::= { dot20CmnConnectedState 5 }
26
27 dot20CmnRadioLink OBJECT IDENTIFIER ::= { dot20CmnMac 4 }
28
29 dot20CmnRlp OBJECT IDENTIFIER ::= { dot20CmnRadioLink 2 }
30
31 dot20CmnRlpStatsTable OBJECT-TYPE
32     SYNTAX          SEQUENCE OF Dot20CmnRlpStatsEntry
33     MAX-ACCESS      not-accessible
34     STATUS          current
35     DESCRIPTION
36         "This table provides one row of Radio Link Protocol statistics
37         per 802.20 interface"
38    ::= { dot20CmnRlp 1 }
39
40 dot20CmnRlpStatsEntry OBJECT-TYPE
41     SYNTAX          Dot20CmnRlpStatsEntry
42     MAX-ACCESS      not-accessible
43     STATUS          current
44     DESCRIPTION
45         "An Entry (conceptual row) in the RlpStats table. This table is
46         indexed by IfIndex and dot20StreamId."
47     INDEX
48         { ifIndex, dot20CmnStreamId }
49    ::= { dot20CmnRlpStatsTable 1 }
50
51 dot20CmnStreamId OBJECT-TYPE
52     SYNTAX          Integer32 (0 .. 31)
53     MAX-ACCESS      not-accessible
54     STATUS          current
55     DESCRIPTION
56         "Stream Id"
57    ::= { dot20CmnRlpStatsEntry 1 }
58
59 dot20CmnRlpTxBytes OBJECT-TYPE
60     SYNTAX          Counter64
61     MAX-ACCESS      read-only
62     STATUS          current
63     DESCRIPTION
64         "Number of RLP bytes of payload transmitted"
65     REFERENCE
66         "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
67         Procedures)"
68    ::= { dot20CmnRlpStatsEntry 2 }

```

```
1
2 dot20CmnRlpReTxBytes OBJECT-TYPE
3     SYNTAX      Counter64
4     MAX-ACCESS  read-only
5     STATUS      current
6     DESCRIPTION
7         "Number of RLP bytes of payload retransmitted"
8     REFERENCE
9         "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
10        Procedures)"
11    ::= { dot20CmnRlpStatsEntry 3 }
12
13 dot20CmnRlpTxDropBytes OBJECT-TYPE
14     SYNTAX      Counter64
15     MAX-ACCESS  read-only
16     STATUS      current
17     DESCRIPTION
18         "Number of RLP bytes of dropped before transmission"
19     REFERENCE
20         "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
21        Procedures)"
22    ::= { dot20CmnRlpStatsEntry 4 }
23
24 dot20CmnRlpTxStatus OBJECT-TYPE
25     SYNTAX      Counter64
26     MAX-ACCESS  read-only
27     STATUS      current
28     DESCRIPTION
29         "Number of RLP ReceiverStatus messages transmitted"
30     REFERENCE
31         "IEEE 802.20-2008, Subclause 7.3.4.3.3.5 (ATReceiverStatus),
32        and Subclause 7.3.4.3.3.7 (ANReceiverStatus)"
33    ::= { dot20CmnRlpStatsEntry 5 }
34
35 dot20CmnRlpRxBytes OBJECT-TYPE
36     SYNTAX      Counter64
37     MAX-ACCESS  read-only
38     STATUS      current
39     DESCRIPTION
40         "Number of RLP bytes of payload received"
41    ::= { dot20CmnRlpStatsEntry 6 }
42
43 dot20CmnRlpRxStatus OBJECT-TYPE
44     SYNTAX      Counter64
45     MAX-ACCESS  read-only
46     STATUS      current
47     DESCRIPTION
48         "Number of RLP ReceiverStatus messages received"
49     REFERENCE
50         "IEEE 802.20-2008, Subclause 7.3.4.3.3.5 (ATReceiverStatus),
51        and Subclause 7.3.4.3.3.7 (ANReceiverStatus)"
52    ::= { dot20CmnRlpStatsEntry 7 }
53
54 dot20CmnRlpTxPackets OBJECT-TYPE
55     SYNTAX      Counter64
56     MAX-ACCESS  read-only
57     STATUS      current
58     DESCRIPTION
59         "Number of RLP Packets transmitted"
60     REFERENCE
61         "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
62        Procedures)"
63    ::= { dot20CmnRlpStatsEntry 8 }
64
65 dot20CmnRlpReTxPackets OBJECT-TYPE
66     SYNTAX      Counter64
67     MAX-ACCESS  read-only
68     STATUS      current
```

```
1      DESCRIPTION
2          "Number of RLP Packets retransmitted"
3      REFERENCE
4          "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
5          Procedures)"
6      ::= { dot20CmnRlpStatsEntry 9 }
7
8      dot20CmnRlpTxrDropPackets OBJECT-TYPE
9          SYNTAX      Counter64
10         MAX-ACCESS   read-only
11         STATUS      current
12         DESCRIPTION
13             "Number of RLP Packets dropped before transmission"
14         REFERENCE
15             "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
16             Procedures)"
17         ::= { dot20CmnRlpStatsEntry 10 }
18
19         dot20CmnRlpRxPackets OBJECT-TYPE
20             SYNTAX      Counter64
21             MAX-ACCESS   read-only
22             STATUS      current
23             DESCRIPTION
24                 "Number of RLP Packets received"
25             REFERENCE
26                 "IEEE Std 802.20-2008, Subclause 7.3.3.4.3 (RLP Receive
27                 Procedures)"
28             ::= { dot20CmnRlpStatsEntry 11 }
29
30         dot20CmnRlpTxNAKTimeouts OBJECT-TYPE
31             SYNTAX      Counter64
32             MAX-ACCESS   read-only
33             STATUS      current
34             DESCRIPTION
35                 "Number of NAK Timeouts"
36             REFERENCE
37                 "IEEE Std 802.20-2008, Subclause 7.3.3.4.3 (RLP Receive
38                 Procedures)"
39             ::= { dot20CmnRlpStatsEntry 12 }
40
41         dot20CmnRlpTxACKTimeouts OBJECT-TYPE
42             SYNTAX      Counter64
43             MAX-ACCESS   read-only
44             STATUS      current
45             DESCRIPTION
46                 "Number of ACK Timeouts"
47             REFERENCE
48                 "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
49                 Procedures)"
50             ::= { dot20CmnRlpStatsEntry 13 }
51
52         dot20CmnQmp OBJECT-IDENTITY
53             STATUS      current
54             DESCRIPTION
55                 "Qos Management Protocol"
56             ::= { dot20CmnRadioLink 3 }
57
58         dot20CmnQmpStatsTable OBJECT-TYPE
59             SYNTAX      SEQUENCE OF Dot20CmnQmpStatsEntry
60             MAX-ACCESS   not-accessible
61             STATUS      current
62             DESCRIPTION
63                 "This table provides one row of QMP statistics per 802.20
64                 interface"
65             ::= { dot20CmnQmp 2 }
66
67         dot20CmnQmpStatsEntry OBJECT-TYPE
68             SYNTAX      Dot20CmnQmpStatsEntry
```

```

1     MAX-ACCESS    not-accessible
2     STATUS       current
3     DESCRIPTION
4         "An Entry (conceptual row) in the QmpStats table. This table is
5         indexed by IfIndex. ifIndex: Each IEEE 802.20 interface is
6         represented by an ifEntry."
7     INDEX
8         { ifIndex }
9     ::= { dot20CmnQmpStatsTable 1 }
10
11    dot20CmnActiveReservationsCounts OBJECT-TYPE
12        SYNTAX      Counter64
13        MAX-ACCESS  read-only
14        STATUS      current
15        DESCRIPTION
16            "Number of Active (Open State) Reservations"
17        REFERENCE
18            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
19            State Diagram (AT)), and Figure 22 (Forward Link Reservation State
20            Diagram (AN))"
21        ::= { dot20CmnQmpStatsEntry 1 }
22
23    dot20CmnIdleReservationsCounts OBJECT-TYPE
24        SYNTAX      Counter64
25        MAX-ACCESS  read-only
26        STATUS      current
27        DESCRIPTION
28            "Number of Idle (Close State) Reservations"
29        REFERENCE
30            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
31            State Diagram (AT)), and Figure 22 (Forward Link Reservation State
32            Diagram (AN))"
33        ::= { dot20CmnQmpStatsEntry 2 }
34
35    dot20CmnReservationOpenCounts OBJECT-TYPE
36        SYNTAX      Counter64
37        MAX-ACCESS  read-only
38        STATUS      current
39        DESCRIPTION
40            "Number of Reservations Open requests"
41        REFERENCE
42            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
43            State Diagram (AT)), Figure 22 (Forward Link Reservation State
44            Diagram (AN), Subclause 7.2.3.3.1 (ReservationOnRequest), and
45            Subclause 7.2.3.3.6 (RevReservationOn))"
46        ::= { dot20CmnQmpStatsEntry 3 }
47
48    dot20CmnReservationCloseCounts OBJECT-TYPE
49        SYNTAX      Counter64
50        MAX-ACCESS  read-only
51        STATUS      current
52        DESCRIPTION
53            "Number of Reservations Close requests"
54        REFERENCE
55            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
56            State Diagram (AT)), Figure 22 (Forward Link Reservation State
57            Diagram (AN), Subclause 7.2.3.3.2 (ReservationOffRequest),
58            and Subclause 7.2.3.3.7 (RevReservationOn))"
59        ::= { dot20CmnQmpStatsEntry 4 }
60
61    dot20CmnReservationFailCounts OBJECT-TYPE
62        SYNTAX      Counter64
63        MAX-ACCESS  read-only
64        STATUS      current
65        DESCRIPTION
66            "Number of Failed Reservations requests"
67        REFERENCE
68            "IEEE Std 802.20-2008, Subclause 7.2.3.3.5 (ReservationReject)"

```

```

1      ::= { dot20CmnQmpStatsEntry 5 }
2
3      dot20CmnSecurity OBJECT IDENTIFIER ::= { dot20CmnMac 5 }
4
5      dot20CmnKeyExchangeProtocol OBJECT IDENTIFIER ::= { dot20CmnSecurity 1 }
6
7      dot20CmnKeyExchangeAttemptCounts OBJECT-TYPE
8          SYNTAX      Counter64
9          MAX-ACCESS   read-only
10         STATUS      current
11         DESCRIPTION
12             "Number of key exchanges attempts"
13         REFERENCE
14             "IEEE Std 802.20-2008, Subclause 10.4.5.2.1 (KeyRequest)"
15         ::= { dot20CmnKeyExchangeProtocol 1 }
16
17         dot20CmnKeyExchangeFailureCounts OBJECT-TYPE
18             SYNTAX      Counter64
19             MAX-ACCESS   read-only
20             STATUS      current
21             DESCRIPTION
22                 "Number of key exchanges failures"
23             REFERENCE
24                 "IEEE Std 802.20-2008, Subclause 10.4.5.2.4 (KeyReject)"
25             ::= { dot20CmnKeyExchangeProtocol 2 }
26
27         dot20CmnMessageIntegrityProtocol OBJECT IDENTIFIER ::= { dot20CmnSecurity 2 }
28
29         dot20CmnAuthStatsTable OBJECT-TYPE
30             SYNTAX      SEQUENCE OF Dot20CmnAuthStatsEntry
31             MAX-ACCESS   not-accessible
32             STATUS      current
33             DESCRIPTION
34                 "This table provides one row of Authentication statistics per
35                 802.20 interface (i.e. sector for a specific ChannelBand.)"
36             ::= { dot20CmnMessageIntegrityProtocol 1 }
37
38         dot20CmnAuthStatsEntry OBJECT-TYPE
39             SYNTAX      Dot20CmnAuthStatsEntry
40             MAX-ACCESS   not-accessible
41             STATUS      current
42             DESCRIPTION
43                 "Authentication statistics per 802.20 interfaces"
44             INDEX
45                 { ifIndex }
46             ::= { dot20CmnAuthStatsTable 1 }
47
48         dot20CmnAuthFailureCounts OBJECT-TYPE
49             SYNTAX      Counter64
50             MAX-ACCESS   read-only
51             STATUS      current
52             DESCRIPTION
53                 "Number of Authentication failures (i.e. failure code 0x03 for
54                 RouteOpenReject.)"
55             REFERENCE
56                 "IEEE Std 802.20-2008, Subclause 13.2.6.2.1
57                 (RouteOpenRequest), and Subclause 13.2.6.12
58                 (RouteOpenReject)"
59             ::= { dot20CmnAuthStatsEntry 1 }
60
61         dot20CmnAuthSuccessCounts OBJECT-TYPE
62             SYNTAX      Counter64
63             MAX-ACCESS   read-only
64             STATUS      current
65             DESCRIPTION
66                 "Number of successful Authentications"
67             REFERENCE
68                 "IEEE Std 802.20-2008, Subclause 13.2.6.2.1

```

```

1         (RouteOpenRequest), and Subclause 13.2.6.3
2         (RouteOpenAccept)"
3     ::= { dot20CmnAuthStatsEntry 2 }
4
5 dot20CmnLowerMAC OBJECT IDENTIFIER ::= { dot20CmnMac 6 }
6
7 dot20CmnLMACPacketStatsTable OBJECT-TYPE
8     SYNTAX      SEQUENCE OF Dot20CmnLMACPacketStatsEntry
9     MAX-ACCESS  not-accessible
10    STATUS      current
11    DESCRIPTION
12        "This table provides one row of Lower MAC protocol statistics
13        per 802.20 interface, packet format and nb of ARQ attempts
14        needed in order to successfully transmit/receive a packet."
15    ::= { dot20CmnLowerMAC 1 }
16
17 dot20CmnLMACPacketStatsEntry OBJECT-TYPE
18    SYNTAX      Dot20CmnLMACPacketStatsEntry
19    MAX-ACCESS  not-accessible
20    STATUS      current
21    DESCRIPTION
22        "An Entry (conceptual row) in the LMACPacketStats table. This
23        table is indexed by IfIndex, PacketFormatIndex and
24        ARQAttemptsIndex."
25    INDEX
26        { ifIndex, dot20CmnPacketFormatIndex, dot20CmnARQAttemptsIndex }
27    ::= { dot20CmnLMACPacketStatsTable 1 }
28
29
30 dot20CmnPacketFormatIndex OBJECT-TYPE
31    SYNTAX      Integer32 (0..15)
32    MAX-ACCESS  not-accessible
33    STATUS      current
34    DESCRIPTION
35        "The packet format index as defined in 802.20 AIS spec."
36    ::= { dot20CmnLMACPacketStatsEntry 1 }
37
38 dot20CmnARQAttemptsIndex OBJECT-TYPE
39    SYNTAX      Integer32 (0..15)
40    MAX-ACCESS  not-accessible
41    STATUS      current
42    DESCRIPTION
43        "Number of ARQ attempts that were needed in order to transmit
44        or receive a packet. Index 0 means that the packets failed to
45        be transmitted/received."
46    ::= { dot20CmnLMACPacketStatsEntry 2 }
47
48
49 dot20CmnFwdTxPacketCounts OBJECT-TYPE
50    SYNTAX      Counter64
51    MAX-ACCESS  read-only
52    STATUS      current
53    DESCRIPTION
54        "Number of transmitted packets"
55    REFERENCE
56        "IEEE Std 802.20-2008, Subclause 8.6.5.5.2.2 (F-DCH TX Associated
57        with Persistent Assignments), Subclause 8.6.5.5.2.3 (F-DCH TX
58        Associated with Non-Persistent Assignments and Residual Resource
59        Assignments), and Subclause 8.6.5.5.2.4 (F-DCH TX Associated with
60        Group Resource Assignments)"
61    ::= { dot20CmnLMACPacketStatsEntry 3 }
62
63 dot20CmnRevRxPacketCounts OBJECT-TYPE
64    SYNTAX      Counter64
65    MAX-ACCESS  read-only
66    STATUS      current
67    DESCRIPTION
68        "Number of received packets"

```

```

1     REFERENCE
2     "IEEE Std 802.20-2008,
3     Subclause 8.6.5.5.1.2.2 (AT Processing for Non-Persistent
4     Assignments),
5     Subclause 8.6.5.5.1.2.3 (AT Processing for Residual Resource
6     Assignments),
7     Subclause 8.6.5.5.1.2.4 (AT Processing for Group Resource
8     Assignments)"
9     ::= { dot20CmnLMACStatsEntry 4 }
10
11    dot20CmnLMACStatsTable OBJECT-TYPE
12        SYNTAX      SEQUENCE OF Dot20CmnLMACStatsEntry
13        MAX-ACCESS  not-accessible
14        STATUS      current
15        DESCRIPTION
16            "This table provides one row of Lower MAC protocol statistics
17            per 802.20 interface and packet formats."
18        ::= { dot20CmnLowerMAC 2 }
19
20    dot20CmnLMACStatsEntry OBJECT-TYPE
21        SYNTAX      Dot20CmnLMACStatsEntry
22        MAX-ACCESS  not-accessible
23        STATUS      current
24        DESCRIPTION
25            "An Entry (conceptual row) in the LMACStats table. This table
26            is indexed by IfIndex, PacketFormatIndex."
27        INDEX
28            { ifIndex, dot20CmnPacketFormatIndex }
29        ::= { dot20CmnLMACStatsTable 1 }
30
31    dot20CmnFLABCounts OBJECT-TYPE
32        SYNTAX      Counter64
33        MAX-ACCESS  read-only
34        STATUS      current
35        DESCRIPTION
36            "Number of Forward Link Assignment Blocks"
37        REFERENCE
38            "IEEE Std 802.20-2008, Table 44 (F-SCCH Blocks), and Subclause
39            8.5.5.4.1.2 (Framing of F-SCCH Blocks)"
40        ::= { dot20CmnLMACStatsEntry 1 }
41
42    dot20CmnRLABCounts OBJECT-TYPE
43        SYNTAX      Counter64
44        MAX-ACCESS  read-only
45        STATUS      current
46        DESCRIPTION
47            "Number of Reverse Link Assignment Block"
48        REFERENCE
49            "IEEE Std 802.20-2008, Table 44 (F-SCCH Blocks), and Subclause
50            8.5.5.4.1.2 (Framing of F-SCCH Blocks), and Subclause
51            8.5.5.3.1.1.3.3 (RLAB)"
52        ::= { dot20CmnLMACStatsEntry 2 }
53
54    dot20CmnAccessGrantCounts OBJECT-TYPE
55        SYNTAX      Counter64
56        MAX-ACCESS  read-only
57        STATUS      current
58        DESCRIPTION
59            "Number of Access Grants (the number of times the indication
60            ForwardLinkControlSegmentMAC.AccessGrantSent is raised)"
61        REFERENCE
62            "IEEE Std 802.20-2008, Subclause 8.5.5.4.1.1.3.1.1 (Procedures
63            for Sending an Access Grant)"
64        ::= { dot20CmnLMACStatsEntry 3 }
65
66    dot20Conformance OBJECT IDENTIFIER ::= { ieee802dot20 4 }
67
68    dot20Groups OBJECT IDENTIFIER ::= { dot20Conformance 1 }

```



```
1
2 dot20CmnSessionMgtPGroup OBJECT-GROUP
3   OBJECTS
4     { dot20CmnSessionCloseCounts, dot20CmnSessionFailureCounts,
5       dot20CmnSessionOpenCounts }
6   STATUS      current
7   DESCRIPTION
8     "The session management protocol statistics"
9   ::= { dot20Groups 1 }
10
11 dot20CmnKeyExchangePGroup OBJECT-GROUP
12   OBJECTS
13     { dot20CmnKeyExchangeAttemptCounts,
14       dot20CmnKeyExchangeFailureCounts }
15   STATUS      current
16   DESCRIPTION
17     "The key exchange protocol statistics"
18   ::= { dot20Groups 4 }
19
20 dot20CmnConnectedStatePGroup OBJECT-GROUP
21   OBJECTS
22     { dot20CmnActiveConnectionCounts,
23       dot20CmnConnectionAttemptCounts, dot20CmnConnectionDropCounts,
24       dot20CmnConnectionFailureCounts, dot20CmnConnectionReleaseCounts
25     }
26   STATUS      current
27   DESCRIPTION
28     "The connected state protocol statistics"
29   ::= { dot20Groups 5 }
30
31 dot20CmnRadioLinkGroup OBJECT-GROUP
32   OBJECTS
33     { dot20CmnActiveReservationsCounts,
34       dot20CmnIdleReservationsCounts, dot20CmnReservationCloseCounts,
35       dot20CmnReservationFailCounts, dot20CmnReservationOpenCounts,
36       dot20CmnRevRxPacketCounts, dot20CmnRlpReTxBytes,
37       dot20CmnRlpReTxPackets, dot20CmnRlpRxBytes,
38       dot20CmnRlpRxPackets, dot20CmnRlpRxStatus,
39       dot20CmnRlpTxACKTimeouts, dot20CmnRlpTxBytes,
40       dot20CmnRlpTxDropBytes, dot20CmnRlpTxNAKTimeouts,
41       dot20CmnRlpTxPackets, dot20CmnRlpTxStatus,
42       dot20CmnRlpTxrDropPackets }
43   STATUS      current
44   DESCRIPTION
45     "The radio link layer statistics"
46   ::= { dot20Groups 7 }
47
48 dot20CmnAuthGroup OBJECT-GROUP
49   OBJECTS
50     { dot20CmnAuthFailureCounts, dot20CmnAuthSuccessCounts }
51   STATUS      current
52   DESCRIPTION
53     "The authentication protocol statistics"
54   ::= { dot20Groups 8 }
55
56 dot20CmnLowerMACGroup OBJECT-GROUP
57   OBJECTS
58     { dot20CmnAccessGrantCounts, dot20CmnFLABCounts,
59       dot20CmnFwdTxPacketCounts, dot20CmnRLABCounts,
60       dot20CmnRevRxPacketCounts }
61   STATUS      current
62   DESCRIPTION
63     "The lower mac sublayer statistics"
64   ::= { dot20Groups 9 }
65
66 dot20AnIdleStatePGroup OBJECT-GROUP
67   OBJECTS
68     { dot20AnAccessAttemptCounts, dot20AnAccessAttemptFailCounts,
```

```

1      dot20AnPageAttemptCounts, dot20AnPageFailureCounts }
2  STATUS      current
3  DESCRIPTION
4      "The An idle state protocol statistics"
5      ::= { dot20Groups 10 }
6
7  dot20AnOverheadGroup OBJECT-GROUP
8  OBJECTS
9      { dot20An16QamScchT2PRatio, dot20AnAccessCycleDuration,
10     dot20AnAccessRetryPersistence0, dot20AnAccessRetryPersistence1,
11     dot20AnAccessRetryPersistence2, dot20AnAccessRetryPersistence3,
12     dot20AnAccessRetryPersistence4, dot20AnAccessRetryPersistence5,
13     dot20AnAccessRetryPersistence6, dot20AnAccessRetryPersistence7,
14     dot20AnAckInterferenceOffset, dot20AnAnGroupId,
15     dot20AnAssignmentAckHARQTx, dot20AnBRCHSubzoneCyclingEnabled,
16     dot20AnBandClass, dot20AnCBNumGuardSubcarriers,
17     dot20AnCDMAInterlacesBitmap, dot20AnCQIPilotTransmitPower,
18     dot20AnCdmaSubSegmentNum, dot20AnCellGroupId, dot20AnCellNullID,
19     dot20AnChannelBandAccessHashMask, dot20AnChannelBandRef,
20     dot20AnChannelBandShortId, dot20AnChannelNumber,
21     dot20AnCommonPilotTransmitPower, dot20AnCpichHoppingMode,
22     dot20AnCtrlAccessOffset, dot20AnCyclicPrefixLength,
23     dot20AnEffectiveTransmitPower, dot20AnEnableExpandedQPCH,
24     dot20AnErasureTargetCtoI0, dot20AnErasureTargetCtoI1,
25     dot20AnErasureTargetCtoI2, dot20AnErasureTargetCtoI3,
26     dot20AnFACKBandwidthFactor, dot20AnFFTSsize,
27     dot20AnFDPICHCodeOffsetSubtree0, dot20AnFDPICHCodeOffsetSubtree1,
28     dot20AnFDPICHCodeOffsetSubtree2, dot20AnFDPICHCodeOffsetSubtree3,
29     dot20AnFLReservedInterlaces, dot20AnFastIoTEnabled,
30     dot20AnFastOSIEnabled, dot20AnFlIotReportInterval,
31     dot20AnFlPcReportInterval, dot20AnFlPqiReportInterval,
32     dot20AnFlSdmaNumSubtrees, dot20AnFlSubzoneSize,
33     dot20AnHalfDuplexModeSupported, dot20AnHalfDuplexSupported,
34     dot20AnIfChannelBandRef, dot20AnLatitude, dot20AnLeapSeconds,
35     dot20AnLocalTimeOffset, dot20AnLongitude, dot20AnMacIdRange,
36     dot20AnMax16QamScchBlocks, dot20AnMaxNumLABs, dot20AnMaxNumSharedLABs,
37     dot20AnMaxProbesPerSequence, dot20AnMinScchResourceIndex,
38     dot20AnMobileCountryCode, dot20AnMobileNetworkCode,
39     dot20AnNeighborPilotID, dot20AnNeighborChannelShortID,
40     dot20AnNeighborSameANAsPrimSect, dot20AnNeighborSectorCellGroupId,
41     dot20AnNeighborSectorPilotGrpId, dot20AnNeighborChannelBandRef,
42     dot20AnNeighborSectorPointer, dot20AnNeighborSynchGroupId,
43     dot20AnNeighborEffTransmitPower, dot20AnNumAckableLABs,
44     dot20AnNumCmnPilotTxAnt, dot20AnNumCommonSegmentHopPorts,
45     dot20AnNumDRCHSubzones, dot20AnNumEffectiveAntennas,
46     dot20AnNumFLReservedSubzones,
47     dot20AnNumGuardSubcarriers, dot20AnNumLABSegments,
48     dot20AnNumOdcchReports, dot20AnNumRLCdmaSubsegments,
49     dot20AnNumResourceSubzones, dot20AnNumSilenceIntervalSubzone,
50     dot20AnOpenLoopAdjust, dot20AnOsiResponseMode,
51     dot20AnPdCabResSharingEnabled, dot20AnPilotGroupId, dot20AnPilotID,
52     dot20AnPilotThreshold1, dot20AnPilotThreshold2,
53     dot20AnPrimaryRegZoneCode, dot20AnProbeRampUpStepSize,
54     dot20AnRabEnabled, dot20AnRackBandwidthFactor,
55     dot20AnReqQoSPowerBoost, dot20AnResourceChannelMuxMode,
56     dot20AnResourceSetBitmap, dot20AnResourceSetSubZoneSpacing,
57     dot20AnResourceSubzoneOffset, dot20AnReverseChannelBandClass,
58     dot20AnReverseChannelNumber, dot20AnRlAuxPilotPower,
59     dot20AnRlDpichCodeOffsetSubtree0, dot20AnRlDpichCodeOffsetSubtree1,
60     dot20AnRlDpichCodeOffsetSubtree2, dot20AnRlDpichCodeOffsetSubtree3,
61     dot20AnRlNumSdmaDimensions, dot20AnModSymbolsPerQPSKLAB,
62     dot20AnSFNCellID, dot20AnSecRegZoneCode, dot20AnSectorID,
63     dot20AnSilenceIntervalDuration, dot20AnSilenceIntervalPeriod,
64     dot20AnSinglePAForXCarriers, dot20AnSlowInterferenceOffset,
65     dot20AnSupportedIpsi, dot20AnSynchronousGroupId, dot20AnSystemType,
66     dot20AnTechNghbrListLength, dot20AnTechnologyNeighborList,
67     dot20AnTechnologyType, dot20AnTotalNumSubcarriers,
68     dot20AnUseDrchForFlcs, dot20AnRlSubzoneSize }

```

```
1     STATUS          current
2     DESCRIPTION "The overhead messages protocol configuration"
3     ::= { dot20Groups 11 }
4
5     dot20AnOverheadGroup2 OBJECT-GROUP
6     OBJECTS
7         { dot20AnChannelBandStatus, dot20AnIpsiRowStatus,
8           dot20AnNeighborRowStatus, dot20AnNeighborSectorStatus,
9           dot20AnOtherTechNghbrRowStatus, dot20AnResourceSetRowStatus,
10          dot20AnSecondaryRegZoneRowStatus,
11          dot20AnSectorCdmaSubSegRowStatus, dot20AnSectorConfigRowStatus,
12          dot20AnSectorExtChanRowStatus, dot20AnSectorParamRowStatus }
13     STATUS          current
14     DESCRIPTION
15         "If the MIB is created with pre-configured sector list tables and
16          neighbor list tables, this Overhead Group is unnecessary. Otherwise,
17          these items are used to add rows to these tables in the MIB, so
18          that additional sectors and/or neighbors can be added after MIB
19          creation, through SNMPv2."
20     ::= { dot20Groups 12 }
21
22     dot20Compliances OBJECT IDENTIFIER ::= { dot20Conformance 2 }
23
24     dot20AnCompliance MODULE-COMPLIANCE
25     STATUS          current
26     DESCRIPTION
27         "The compliance statement for SNMPv2 entities that implement
28          the IEEE 802.20 MIB for the An."
29     MODULE          IEEE802dot20-MIB
30     MANDATORY-GROUPS
31         { dot20AnIdleStatePGroup, dot20AnOverheadGroup,
32           dot20CmnAuthGroup, dot20CmnConnectedStatePGroup,
33           dot20CmnKeyExchangePGroup, dot20CmnLowerMACGroup,
34           dot20CmnRadioLinkGroup, dot20CmnSessionMgtPGroup }
35     GROUP          dot20AnOverheadGroup2
36     DESCRIPTION
37         "This group is required only if 'dynamic assignment' of
38          rows in the OverheadGroup tables is supported."
39     ::= { dot20Compliances 1 }
40
41     END
42
```