Project	**IEEE 802.20 Working Group on Mobile Broadband Wireless Access**
Title	**Preliminary Updated Text for 802.20 Enhanced MIB Chapter – Wideband Mode**
Date Submitted	**2008-11-07**
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Re:	IEEE 802.20 Enhanced MIB Chapter – Wideband Mode
Abstract	This contribution updates the draft enhanced MIB chapter for IEEE 802.20 Wideband Mode proposed in September, 2008. Edits reflect discussions during the September meeting, and include text improvements, use of 802.20 requirements language in a consistent way, and a partial review of the REFERENCES clauses. This is a work in progress, and is for review of the working group prior to the November, 2008 meeting.
Purpose	For early review of the working group.
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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 Figure 1 ~~**Error! Reference source not found.**~~ and the layering architecture for the air interface ~~in **Error! Reference source not found.**~~Figure 2. 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~~ provides mobile broadband wireless access. As such, improper manipulation of the objects represented by this MIB ~~may~~ can 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~~ could allow an attacker to boost power and violate local regulatory laws

(e.g. FCC licensing in the USA) by transmitting excessive power into a licensed band. This ~~may~~ could also lead to excessive sideband emissions in adjacent bands.

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

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

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

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

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

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

1.4 IANA Considerations

No IANA actions are required by this document.

1.5 Definition

```
IEEE802dot20-MIB DEFINITIONS ::= BEGIN

IMPORTS
    ifIndex
```

```
        FROM IF-MIB
    MODULE-COMPLIANCE, OBJECT-GROUP
        FROM SNMPv2-CONF
    Counter32, Counter64, Integer32, MODULE-IDENTITY, OBJECT-IDENTITY,
    OBJECT-TYPE, transmission
        FROM SNMPv2-SMI
    RowPointer, RowStatus, TEXTUAL-CONVENTION, TruthValue
        FROM SNMPv2-TC
    ;

ieee802dot20 MODULE-IDENTITY
    LAST-UPDATED  "200811~~05300319481622Z~~PDT" -- ~~May~~ November ~~30~~03, 2008
    ORGANIZATION
        "IEEE 802.20"
    CONTACT-INFO
        "Contact: IEEE 802.20 Working Group
         Postal:

         Tel:
         Fax:
         E-mail:  "
    DESCRIPTION
        "The MIB module for IEEE 802.20 entities.
         (The transmission oid used for this MIB needs to be updated
         when a valid one is obtained from IANA along with the new
         802.20 ifType)"
    ::= { transmission 9999 }

Dot20AnChannelBandsEntry ::= SEQUENCE
{
    dot20AnChannelBandIndex          Integer32,
    dot20AnSystemType                Integer32,
    dot20AnBandClass                 Integer32,
    dot20AnChannelNumber             Integer32,
    dot20AnHalfDuplexSupported       TruthValue,
    dot20AnReverseChannelBandClass   Integer32,
    dot20AnReverseChannelNumber      Integer32,
    dot20AnCyclicPrefixLength        Integer32,
    dot20AnFFTSize                   Integer32,
    dot20AnCBNumGuardSubcarriers     Integer32,
    dot20AnChannelBandShortId        Integer32,
    dot20AnChannelBandAccessHashMask Integer32,
    dot20AnChannelBandStatus         RowStatus
}

Dot20AnIdleStateStatsEntry ::= SEQUENCE
{
    dot20AnAccessAttemptCounts     Counter32,
    dot20AnAccessAttemptFailCounts Counter32,
    dot20AnPageAttemptCounts       Counter32,
    dot20AnPageFailureCounts       Counter32
}

Dot20AnNeighborListEntry ::= SEQUENCE
{
    dot20AnNeighborIndex         Integer32,
    dot20AnNeighborSectorPointer RowPointer,
    dot20AnNeighborRowStatus     RowStatus
}

Dot20AnNeighborSectorsEntry ::= SEQUENCE
{
    dot20AnNeighborSectorIndex       Integer32,
    dot20AnNeighborPilotID           Integer32,
    dot20AnNeighborEffTransmitPower  Integer32,
    dot20AnNeighborChannelBandRef    Integer32,
    dot20AnNeighborChannelShortID    Integer32,
    dot20AnNeighborSameANAsPrimSect  TruthValue,
```

```
    dot20AnNeighborSectorPilotGrpId  Integer32,
    dot20AnNeighborSynchGroupId      Integer32,
    dot20AnNeighborSectorCellGroupId Integer32,
    dot20AnNeighborSectorStatus      RowStatus
}

Dot20AnOtherTechNghbrsEntry ::= SEQUENCE
{
    dot20AnOtherTechnologyIndex    Integer32,
    dot20AnTechnologyType          Integer32,
    dot20AnTechNghbrListLength     Integer32,
    dot20AnTechnologyNeighborList  OCTET STRING,
    dot20AnOtherTechNghbrRowStatus RowStatus
}

Dot20AnSecondaryRegZoneCodeEntry ::= SEQUENCE
{
    dot20AnSecondaryRegZoneCodeIndex Integer32,
    dot20AnSecRegZoneCode            Integer32,
    dot20AnSecondaryRegZoneRowStatus RowStatus
}

Dot20AnSectorCdmaSubSegEntry ::= SEQUENCE
{
    dot20AnInterlaceId               Integer32,
    dot20AnCdmaSubSegmentNum         Integer32,
    dot20AnSectorCdmaSubSegRowStatus RowStatus
}

Dot20AnSectorConfigEntry ::= SEQUENCE
{
    dot20AnTotalNumSubcarriers      Integer32,
    dot20AnNumGuardSubcarriers      Integer32,
    dot20AnFlSubzoneSize            Integer32,
    dot20AnResourceChannelMuxMode   Integer32,
    dot20AnNumDRCHSubzones          Integer32,
    dot20AnFLReservedInterlaces     INTEGER,
    dot20AnNumFLReservedSubzones    Integer32,
    dot20AnCpichHoppingMode         Integer32,
    dot20AnNumEffectiveAntennas     Integer32,
    dot20AnNumCommonSegmentHopPorts Integer32,
    dot20AnNumLABSegments           Integer32,
    dot20AnMinScchResourceIndex     Integer32,
    dot20AnSinglePAForXCarriers     Integer32,
    dot20AnFlSdmaNumSubtrees        Integer32,
    dot20AnFDPICHCodeOffsetSubtree0 Integer32,
    dot20AnFDPICHCodeOffsetSubtree1 Integer32,
    dot20AnFDPICHCodeOffsetSubtree2 Integer32,
    dot20AnFDPICHCodeOffsetSubtree3 Integer32,
    dot20AnNumCmnPilotTxAnt         Integer32,
    dot20AnModSymbolsPerQPSKLAB     Integer32,
    dot20AnUseDrchForFlcs           Integer32,
    dot20AnEnableExpandedQPCH       TruthValue,
    dot20AnSectorConfigRowStatus    RowStatus
}

Dot20AnSectorExtChanInfoEntry ::= SEQUENCE
{
    dot20AnPilotID                   Integer32,
    dot20AnHalfDuplexModeSupported   TruthValue,
    dot20AnFACKBandwidthFactor       Integer32,
    dot20AnSFNCellID                 Integer32,
    dot20AnCellNullID                Integer32,
    dot20AnMaxNumSharedLABs          Integer32,
    dot20AnMaxNumLABs                Integer32,
    dot20AnMax16QamScchBlocks        Integer32,
    dot20AnPdCabResSharingEnabled    TruthValue,
    dot20AnNumAckableLABs            Integer32,
```

```
    dot20An16QamScchT2PRatio          INTEGER,
    dot20AnEffectiveTransmitPower     Integer32,
    dot20AnAssignmentAckHARQTx        Integer32,
    dot20AnCQIPilotTransmitPower      Integer32,
    dot20AnCommonPilotTransmitPower   Integer32,
    dot20AnCDMAInterlacesBitmap       Integer32,
    dot20AnNumOdcchReports            Integer32,
    dot20AnNumRLCdmaSubsegments       Integer32,
    dot20AnRackBandwidthFactor        Integer32,
    dot20AnRlNumSdmaDimensions        Integer32,
    dot20AnRlDpichCodeOffsetSubtree0 Integer32,
    dot20AnRlDpichCodeOffsetSubtree1 Integer32,
    dot20AnRlDpichCodeOffsetSubtree2 Integer32,
    dot20AnRlDpichCodeOffsetSubtree3 Integer32,
    dot20AnRlSubzoneSize              Integer32,
    dot20AnSilenceIntervalPeriod      Integer32,
    dot20AnSilenceIntervalDuration    Integer32,
    dot20AnNumSilenceIntervalSubzone Integer32,
    dot20AnAckInterferenceOffset      Integer32,
    dot20AnMacIdRange                 INTEGER,
    dot20AnFlPcReportInterval         Integer32,
    dot20AnFlPqiReportInterval        Integer32,
    dot20AnFlIotReportInterval        Integer32,
    dot20AnFastIoTEnabled             TruthValue,
    dot20AnFastOSIEnabled             TruthValue,
    dot20AnRabEnabled                 TruthValue,
    dot20AnOsiResponseMode            INTEGER,
    dot20AnSlowInterferenceOffset     Integer32,
    dot20AnCtrlAccessOffset           Integer32,
    dot20AnRlAuxPilotPower            Integer32,
    dot20AnReqQoSPowerBoost           Integer32,
    dot20AnErasureTargetCtoI0         Integer32,
    dot20AnErasureTargetCtoI1         Integer32,
    dot20AnErasureTargetCtoI2         Integer32,
    dot20AnErasureTargetCtoI3         Integer32,
    dot20AnAccessCycleDuration        Integer32,
    dot20AnMaxProbesPerSequence       Integer32,
    dot20AnProbeRampUpStepSize        Integer32,
    dot20AnPilotThreshold1            Integer32,
    dot20AnPilotThreshold2            Integer32,
    dot20AnOpenLoopAdjust             Integer32,
    dot20AnAccessRetryPersistance0    Integer32,
    dot20AnAccessRetryPersistence1    Integer32,
    dot20AnAccessRetryPersistence2    Integer32,
    dot20AnAccessRetryPersistence3    Integer32,
    dot20AnAccessRetryPersistence4    Integer32,
    dot20AnAccessRetryPersistence5    Integer32,
    dot20AnAccessRetryPersistence6    Integer32,
    dot20AnAccessRetryPersistence7    Integer32,
    dot20AnSectorExtChanRowStatus     RowStatus
}

Dot20AnSectorGrpResSetsEntry ::= SEQUENCE
{
    dot20AnResourceSetId              Integer32,
    dot20AnResourceSetBitmap          Integer32,
    dot20AnBRCHSubzoneCyclingEnabled TruthValue,
    dot20AnResourceSetSubZoneSpacing Integer32,
    dot20AnNumResourceSubzones        Integer32,
    dot20AnResourceSubzoneOffset      Integer32,
    dot20AnResourceSetRowStatus       RowStatus
}

Dot20AnSectorIpsiEntry ::= SEQUENCE
{
    dot20AnIpsiIndex     Integer32,
    dot20AnSupportedIpsi Integer32,
    dot20AnIpsiRowStatus RowStatus
```

```
}

Dot20AnSectorParamEntry ::= SEQUENCE
{
    dot20AnMobileCountryCode    Integer32,
    dot20AnMobileNetworkCode    Integer32,
    dot20AnSectorID             OCTET STRING,
    dot20AnChannelBandRef       Integer32,
    dot20AnLatitude             Integer32,
    dot20AnLongitude            Integer32,
    dot20AnLeapSeconds          Integer32,
    dot20AnLocalTimeOffset      Integer32,
    dot20AnPrimaryRegZoneCode   Integer32,
    dot20AnAnGroupId            Integer32,
    dot20AnPilotGroupId         Integer32,
    dot20AnSynchronousGroupId   Integer32,
    dot20AnCellGroupId          Integer32,
    dot20AnSectorParamRowStatus RowStatus
}

Dot20AnSectorToIfIndexEntry ::= SEQUENCE
{
    dot20AnIfChannelBandRef Integer32
}

Dot20CmnAuthStatsEntry ::= SEQUENCE
{
    dot20CmnAuthFailureCounts Counter64,
    dot20CmnAuthSuccessCounts Counter64
}

Dot20CmnLMACPacketStatsEntry ::= SEQUENCE
{
    dot20CmnPacketFormatIndex Integer32,
    dot20CmnARQAttemptsIndex  Integer32,
    dot20CmnFwdTxPacketCounts Counter64,
    dot20CmnRevRxPacketCounts Counter64
}

Dot20CmnLMACStatsEntry ::= SEQUENCE
{
    dot20CmnFLABCounts        Counter64,
    dot20CmnRLABCounts        Counter64,
    dot20CmnAccessGrantCounts Counter64
}

Dot20CmnQmpStatsEntry ::= SEQUENCE
{
    dot20CmnActiveReservationsCounts Counter64,
    dot20CmnIdleReservationsCounts   Counter64,
    dot20CmnReservationOpenCounts    Counter64,
    dot20CmnReservationCloseCounts   Counter64,
    dot20CmnReservationFailCounts    Counter64
}

Dot20CmnRlpStatsEntry ::= SEQUENCE
{
    dot20CmnStreamId          Integer32,
    dot20CmnRlpTxBytes        Counter64,
    dot20CmnRlpReTxBytes      Counter64,
    dot20CmnRlpTxDropBytes    Counter64,
    dot20CmnRlpTxStatus       Counter64,
    dot20CmnRlpRxBytes        Counter64,
    dot20CmnRlpRxStatus       Counter64,
    dot20CmnRlpTxPackets      Counter64,
    dot20CmnRlpReTxPackets    Counter64,
    dot20CmnRlpTxrDropPackets Counter64,
    dot20CmnRlpRxPackets      Counter64,
```

```
    dot20CmnRlpTxNAKTimeouts  Counter64,
    dot20CmnRlpTxACKTimeouts  Counter64
}

dot20An OBJECT-IDENTITY
    STATUS        current
    DESCRIPTION
        "AN specific configuration and statistics."
    ::= { ieee802dot20 1 }

dot20AnMac OBJECT-IDENTITY
    STATUS        current
    DESCRIPTION
        "MAC layer objects"
    ::= { dot20An 1 }

dot20AnConnectionControl OBJECT IDENTIFIER ::= { dot20AnMac 3 }

dot20AnIdleState OBJECT IDENTIFIER ::= { dot20AnConnectionControl 1 }

dot20AnIdleStateStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnIdleStateStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of Idle State protocol statistics
         per 802.20 interface (i.e. sector for a specific ChannelBand)
         and carrier."
    ::= { dot20AnIdleState 1 }

dot20AnIdleStateStatsEntry OBJECT-TYPE
    SYNTAX        Dot20AnIdleStateStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the IdleStateStats table. This
         table is indexed by ifIndex and CarrierID(see 11.5.5.8). ifIndex:
Each IEEE
          802.20 interface (uniquely identified by SectorID) is
          represented by an ifEntry. In the case of a multicarrier
          Sector, the carrierID indentifies one specific carrier."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 8.4 (Access Channel MAC
         Protocol)"
    INDEX
        { ifIndex }
    ::= { dot20AnIdleStateStatsTable 1 }

dot20AnAccessAttemptCounts OBJECT-TYPE
    SYNTAX        Counter32
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Access Attempts among all Terminals"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 8.4.5.5.2,
         (Access Channel MAC Protocol / AN Requirements)"
    ::= { dot20AnIdleStateStatsEntry 1 }

dot20AnAccessAttemptFailCounts OBJECT-TYPE
    SYNTAX        Counter32
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Failed Access Attempts among all Terminals.
         Incremented when access RLAB is not used by a terminal."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.5.4.3.2 (BindATI), and
```

```
            Subclause 11.2.4.6.2.1 (issuing ConnectedState.Deactivate)"
        ::= { dot20AnIdleStateStatsEntry 2 }

    dot20AnPageAttemptCounts OBJECT-TYPE
        SYNTAX        Counter32
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of Page Attempts"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.3.5.8 (TX and RX of F-QPCH
            Physical Layer), and Table 208 (RouteOpenRequestReason encoding)"
        ::= { dot20AnIdleStateStatsEntry 3 }

    dot20AnPageFailureCounts OBJECT-TYPE
        SYNTAX        Counter32
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of Failed Page Attempts"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.3.5.8 (TX and RX of F-QPCH
            Physical Layer), and Table 208 358 (RouteOpenRequestReason encoding)"
        ::= { dot20AnIdleStateStatsEntry 4 }

    dot20AnOverheadMessages OBJECT IDENTIFIER ::= { dot20AnConnectionControl 4 }

    dot20AnSectorConfigTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF Dot20AnSectorConfigEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table provides one row per 802.20 interface, i.e. sector
             for a specific ChannelBand. This table's attributes specify the
             configuration of the corresponding sector, and can be used to
             populate fields in SystemInfo block and QuickChannelInfo
             message, which are transmitted by the Overhead Messages Protocol."
        ::= { dot20AnOverheadMessages 1 }

    dot20AnSectorConfigEntry OBJECT-TYPE
        SYNTAX        Dot20AnSectorConfigEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "An Entry (conceptual row) in the SectorConfig table. This
             table is indexed by IfIndex. ifIndex: Each IEEE 802.20
             interface (uniquely identified by SectorID) is represented by
             an ifEntry."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6 (Overhead Messages Protocol)"
        INDEX
            { ifIndex }
        ::= { dot20AnSectorConfigTable 1 }

    dot20AnTotalNumSubcarriers OBJECT-TYPE
        SYNTAX        Integer32 (0..7)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This parameter takes the value 2^(7+n), where n is the
             value of the 3 bit field. This field is not to be set to a
             value of 5 or above."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
        ::= { dot20AnSectorConfigEntry 29 }

    dot20AnNumGuardSubcarriers OBJECT-TYPE
        SYNTAX        Integer32 (0..7)
```

```
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute determines the number of guard subcarriers
             as defined in 802.20 Physical layer specificationclause."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
        ::= { dot20AnSectorConfigEntry 30 }

    dot20AnFlSubzoneSize OBJECT-TYPE
        SYNTAX        Integer32 (0..1)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field determines the number of subzones on the
             forward link. If n=0, this parameter is set to 64 and if
             n=1, this parameter is set to 128."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
        ::= { dot20AnSectorConfigEntry 31 }

    dot20AnResourceChannelMuxMode OBJECT-TYPE
        SYNTAX        Integer32 (0..1)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field determines the number of subzones on the
             forward link. If nResourceChannelMuxMode=0, this parameter is set to
    64 and if
             nResourceChannelMuxMode=1, this parameter is set to 128."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 32 }

    dot20AnNumDRCHSubzones OBJECT-TYPE
        SYNTAX        Integer32
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field takes values between 0 and N_FFT/64 - 1"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 33 }

    dot20AnFLReservedInterlaces OBJECT-TYPE
        SYNTAX        INTEGER {
            zero(1),
            zeroToOne(2),
            zeroToTwo(3),
            zeroToThree(4),
            zeroToFour(5),
            zeroToFive(6),
            zeroToSix(7),
            zeroToSeven(8),
            zeroAndThree(9),
            zeroAndSix(10),
            zeroTwoAndFour(11),
            zeroTwoFourAndSix(12),
            reserved(13),
            reserved2(14),
            reserved3(15),
            none(16)
        }
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute determines which interlaces contain
             reserved bandwidth on the forward link."
```

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```
        REFERENCE
            "IEEE Std. 802.20-2008, Table 193 285 (Interpretation of FL
             Reserved Interlaces), Subclause 11.6.5.2"
        ::= { dot20AnSectorConfigEntry 34 }

    dot20AnNumFLReservedSubzones OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of subzones that are reserved
             on each interlace that contains reserved bandwidth"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.2 (SystemInfo Block)"
        ::= { dot20AnSectorConfigEntry 35 }

    dot20AnCpichHoppingMode OBJECT-TYPE
        SYNTAX          Integer32 (0..1)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to 0 for deterministic, and 1 for
             random hopping"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 36 }

    dot20AnNumEffectiveAntennas OBJECT-TYPE
        SYNTAX          Integer32 (1..8)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute determines the effective number of
             effective antennas."
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 37 }

    dot20AnNumCommonSegmentHopPorts OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute determines the number of common segment
             hop ports encoded as described in the AIS."
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 38 }

    dot20AnNumLABSegments OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field indicates the number of LABSegments."
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 39 }

    dot20AnMinScchResourceIndex OBJECT-TYPE
        SYNTAX          Integer32 (0..31)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This parameter is in units of N_FFT/32 resources, and spans
             from 0 to N_FFT -1"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
```

```
        ::= { dot20AnSectorConfigEntry 40 }

    dot20AnSinglePAForXCarriers OBJECT-TYPE
        SYNTAX          Integer32 (0..1)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
        "This field determines the structure of F-BPICH (SinglePAForMultipleChannelBands)"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 41 }

    dot20AnFlSdmaNumSubtrees OBJECT-TYPE
        SYNTAX          Integer32 (1..4)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of sub-trees on the
             forward link. (FLNumSDMADimensions)"
    "
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 11.6.5.3 (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 42 }

    dot20AnFLDPICHCodeOffsetSubtreeIndex0 OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the ~~corresponding value~~code offset for subtree
             0.  This subtree is always present, and is therefore not
             described in the overhead channels."
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
             Pilot Channel) and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorConfigEntry 43 }

    dot20AnFLDPICHCodeOffsetSubtreeIndex1 OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the ~~corresponding value~~code offset for subtree
             1"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
             Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorConfigEntry 44 }

    dot20AnFLDPICHCodeOffsetSubtree2 OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the ~~corresponding value~~code offset for subtree
             2"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
             Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorConfigEntry 45 }

    dot20AnFLDPICHCodeOffsetSubtreeIndex3 OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the ~~corresponding~~ code offset ~~value~~ for subtree
```

```
            3"
        REFERENCE
            "IEEE Std 802.20-2008 Subclause 9.4.1.2.3.2 (Forward Dedicated
             Pilot Channel), and Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorConfigEntry 46 }

    dot20AnNumCmnPilotTxAnt OBJECT-TYPE
        SYNTAX          Integer32 (1..4)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute ~~determines~~ specifies the number of common pilot
             transmit antennas.~~ See NumEffectiveAntennas in spec.~~"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 90 (NumEffectiveAntennas), Subclause
    ~~5.4.1.3.3.1.1~~9.4.1.2.3.1.1 (Forward
             Common Pilot Channel Subcarriers), and Subclause 11.6.5.3
             (QuickChannelInfo Block)"
        ::= { dot20AnSectorConfigEntry 47 }

    dot20AnModSymbolsPerQPSKLAB OBJECT-TYPE
        SYNTAX          Integer32 (0..4)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of modulation symbols
             for each block carried by the F-SCCH"
        REFERENCE
            "IEEE Std. 802.20-2008, Table ~~189~~ 287 (Interpretation of
             ModulationSymbolsPerQPSKLAB)"
        ::= { dot20AnSectorConfigEntry 48 }

    dot20AnUseDrchForFlcs OBJECT-TYPE
        SYNTAX          Integer32 (0..1)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the hopping pattern on the FLCS.  It is set to
    1 if the hopping pattern is DRCH on the FLCS, and is set to 0 otherwise"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo
             Block)"
        ::= { dot20AnSectorConfigEntry 49 }

    dot20AnEnableExpandedQPCH OBJECT-TYPE
        SYNTAX          TruthValue
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of packets delivered to
             the Physical Layer by the MAC Layer"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.3 (QuickChannelInfo
             Block)"
        ::= { dot20AnSectorConfigEntry 50 }

    dot20AnSectorConfigRowStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the SectorConfig Table. If
             the implementer of this MIB has chosen not to implement
             'dynamic assignment' of sectors, this attribute is not
    ~~useful~~applicable
             and should return noSuchName upon SNMP request."
        DEFVAL          { active }
```

```
    ::= { dot20AnSectorConfigEntry 78 }

dot20AnSectorExtChanInfoTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnSectorExtChanInfoEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row per 802.20 interface, i.e. sector
         for a specific ChannelBand. This table's attributes specify the
         configuration of the corresponding sector, and can be used to
         populate fields in extendedChannelInfo message."
    ::= { dot20AnOverheadMessages 2 }

dot20AnSectorExtChanInfoEntry OBJECT-TYPE
    SYNTAX        Dot20AnSectorExtChanInfoEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the SectorExtChanInfo table. This
         table is indexed by IfIndex. ifIndex: Each IEEE 802.20
         interface (uniquely identified by SectorID) is represented by
         an ifEntry.  The Extended Channel Info is transmitted by the
         Overhead Messages Protocol."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.4 (ExtendedChannelInfo)"
    INDEX
        { ifIndex }
    ::= { dot20AnSectorExtChanInfoTable 1 }

dot20AnPilotID OBJECT-TYPE
    SYNTAX        Integer32 (0..1023)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute is set to the PilotID of the sector."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 5.3.2.19.2.2.2.3 (PilotPN and
PilotPhasePilotID and SectorSeed)"
    ::= { dot20AnSectorExtChanInfoEntry 1 }

dot20AnHalfDuplexModeSupported OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute is set to True if the access network
         supports half duplex terminals, and is set to False
         otherwise. If half-duplex terminals are supported, the access
         network should assign MAC IDs and channel assignments in a
         manner that enables half-duplex terminal operation. A
         half-duplex access terminal is not required to monitor forward
         link transmissions on a PHY Frame where it is scheduled to make
         a reverse link transmission."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 711.7.5.4 (MACResourceAssignment)"
    ::= { dot20AnSectorExtChanInfoEntry 2 }

dot20AnFACKBandwidthFactor OBJECT-TYPE
    SYNTAX        Integer32 (1..4)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Forward Acknowledgement channel (FACK) bandwidth factor"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
    ::= { dot20AnSectorExtChanInfoEntry 3 }

dot20AnSFNCellID OBJECT-TYPE
```

```
        SYNTAX          Integer32 (0..511)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the ID of the single frequency network
             cell (for ~~BCMCS~~Broadcast Multicast Service)"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup),
             and Subclause ~~5.2.3.2.2~~9.2.2.2.2 (SFNCellID and SFNPhase)"
        ::= { dot20AnSectorExtChanInfoEntry 5 }

    dot20AnCellNullID OBJECT-TYPE
        SYNTAX          Integer32 (0..511)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Cell Null Id"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 6 }

    dot20AnMaxNumSharedLABs OBJECT-TYPE
        SYNTAX          Integer32 (1..4)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the maximum number of shared LABs
             that are transmitted by this sector"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 7 }

    dot20AnMaxNumLABs OBJECT-TYPE
        SYNTAX          Integer32 (0..63)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the Maximum number of LABs that can
             be transmitted by this sector"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 9 }

    dot20AnMax16QamScchBlocks OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the maximum number of 16-QAM blocks
             that may be transmitted by the access network"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 10 }

    dot20AnPdCabResSharingEnabled OBJECT-TYPE
        SYNTAX          TruthValue
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines if resource sharing using PDCABs is
             enabled"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 11 }

    dot20AnNumAckableLABs OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
```

```
        STATUS        current
        DESCRIPTION
            "This field is set to the number of LABs on SCCH that the
             access terminal is to acknowledge"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 12 }

    dot20An16QamScchT2PRatio OBJECT-TYPE
        SYNTAX        INTEGER {
            minusSevenDb(1),
            minusFourDb(2),
            zeroDb(3),
            minusTenDb(4)
        }
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "16 Qam Scch T2P Ratio"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 13 }

    dot20AnEffectiveTransmitPower OBJECT-TYPE
        SYNTAX        Integer32 (0..63)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the effective transmit power of the
             sector in units of dBm"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 14 }

    dot20AnAssignmentAckHARQTx OBJECT-TYPE
        SYNTAX        Integer32 (0..7)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The value 0 indicates that no ACK is sent in response to an
             assignment. The rules for interpreting other values of this
             field are provided in the Lower MAC ~~Layer~~Sublayer. The value 7 is
    reserved"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196, and Subclause 11.6.5.4.2
             (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 15 }

    dot20AnCQIPilotTransmitPower OBJECT-TYPE
        SYNTAX        Integer32 (0..15)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The field determines the power spectral density of the F-CQIPICH
             relative to the reference transmit power density defined by the
    Physical
             Layer. This parameter may take the value (-4 + n*0.5) dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 16 }

    dot20AnCommonPilotTransmitPower OBJECT-TYPE
        SYNTAX        Integer32 (0..15)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The attribute's value (denoted n) determines the power
             spectral density of the F-CPICH during the FL PHY frame
```

```
            relative to the F-ACQCH. The pilot power density is equal
            to (-4 + n*0.5) dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.1 (ForwardChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 17 }

    dot20AnCDMAInterlacesBitmap OBJECT-TYPE
        SYNTAX          Integer32 (0..255)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "The j'th bit of this field is set to 1 if interlace i
             contains a Reverse Link CDMASegment. Here j is assumed to range
             from 0 through 7, and an interlace i is the set of PHY Frames
             that satisfy PHY Frame Index mod 8 = i"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196137, and Subclause 11.6.5.4.2
             (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 18 }

    dot20AnNumOdcchReports OBJECT-TYPE
        SYNTAX          Integer32 (0..31)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Num ODCCH reports, specified in units of 16"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196137, and Subclause 11.6.5.4.2
             (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 27 }

    dot20AnNumRLCdmaSubsegments OBJECT-TYPE
        SYNTAX          Integer32 (1..16)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of RLCdmaSubsegments on
             this sector."
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196137, and Subclause 11.6.5.4.2
             (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 28 }

    dot20AnRackBandwidthFactor OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This parameter is set to 2^n, where n is the value of
             the two bit field."
        REFERENCE
            "IEEE Std. 802.20-2008, Table 137196, and Subclause 11.6.5.4.2
             (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 30 }

    dot20AnRlNumSdmaDimensions OBJECT-TYPE
        SYNTAX          Integer32 (1..4)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of spatial dimensions on
             the reverse link."
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196 137 (ReverseChannel Group), and
             Subclause 11.6.5.4.2 (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 31 }
```

```
dot20AnRlDpichCodeOffsetSubtree0 dot20AnRLDpichCodeOffsetSubtreeIndex0 OBJECT-
TYPE
    SYNTAX        Integer32 (0..3)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field is set to the code offset for subtree 0"
    REFERENCE
        "IEEE Std. 802.20-2008, Table 195 185 (ForwardChannel GroupPhysical
Layer Numeric Constants and Parameters), and
         Subclause 11.6.5.4.1 2 (ForwardChannelGroupReverse Channel Group)"
    ::= { dot20AnSectorExtChanInfoEntry 32 }

dot20AnRlDpichCodeOffsetSubtree1 dot20AnRLDpichCodeOffsetSubtreeIndex1 OBJECT-
TYPE
    SYNTAX        Integer32 (0..3)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field is set to the code offset for subtreetree 1"
    REFERENCE
        "IEEE Std. 802.20-2008, Table 195 185 (Physical Layer Numeric
Constants and ParametersForwardChannel Group), and
         Subclause 11.6.5.4.1 (ForwardChannelGroupReverse Channel Group)"
    ::= { dot20AnSectorExtChanInfoEntry 33 }

dot20AnRlDpichCodeOffsetSubtree2 dot20AnRLDpichCodeOffsetSubtreeIndex2 OBJECT-
TYPE
    SYNTAX        Integer32 (0..3)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field is set to the code offset for tree 2"
    REFERENCE
        "IEEE Std. 802.20-2008, Table 195 185 (Physical Layer Numeric
Constants and ParametersForwardChannel Group), and
         Subclause 11.6.5.4.1 (ForwardChannelGroupReverse Channel Group)"
    ::= { dot20AnSectorExtChanInfoEntry 34 }

dot20AnRlDpichCodeOffsetSubtree3 dot20AnRLDpichCodeOffsetSubtreeIndex3 OBJECT-
TYPE
    SYNTAX        Integer32 (0..3)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field is set to the code offset for subtree 3"
    REFERENCE
        "IEEE Std. 802.20-2008, Table 195 185 (Physical Layer Numeric
Constants and ParametersForwardChannel Group), and
         Subclause 11.6.5.4.1 (ForwardChannelGroupReverse Channel Group)"
    ::= { dot20AnSectorExtChanInfoEntry 35 }

dot20AnRlSubzoneSize dot20AnRLSubzoneSize OBJECT-TYPE
    SYNTAX        Integer32 (0..1)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field determines the size of subzones on the reverse
         link. If n=0, this parameter takes the value 64 and if
         n=1, this parameter takes the value 128"
    REFERENCE
        "IEEE Std. 802.20-2008, Table 196 185 (ReverseChannel GroupPhysical
Layer Numeric Constants and Parameters), and
         Subclause 11.6.5.4.2 (Reverse_Channel_Group)"
    ::= { dot20AnSectorExtChanInfoEntry 36 }

dot20AnSilenceIntervalPeriod OBJECT-TYPE
    SYNTAX        Integer32 (0..15)
```

```
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field determines the period in units of super frames
             when the silence interval repeats. The SilenceInterval takes
             a value of 2^n super frames, where n is the value of this four
             bit fieldparameter"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196 185 (ReverseChannel GroupPhysical
Layer Numeric Constants and Parameters), and
             Subclause 11.6.5.4.2 (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 38 }

    dot20AnSilenceIntervalDuration OBJECT-TYPE
        SYNTAX        Integer32 (1..8)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field determines the duration silence interval in
             units of 8 OFDM symbols"
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196 185 (Physical Layer Numeric
Constants and ParametersReverseChannel Group), and
             Subclause 11.6.5.4.2 (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 39 }

    dot20AnNumSilenceIntervalSubzone OBJECT-TYPE
        SYNTAX        Integer32 (0..15)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field specifies the set of subzones that are blanked
             during the silence interval."
        REFERENCE
            "IEEE Std. 802.20-2008, Table 196 185 (Physical Layer Numeric
Constants and ParametersReverseChannel Group), and
             Subclause 11.6.5.4.2 (ReverseChannelGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 40 }

    dot20AnAckInterferenceOffset OBJECT-TYPE
        SYNTAX        Integer32 (0..15)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field may take values in units of dB"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 42 }

    dot20AnMacIdRange OBJECT-TYPE
        SYNTAX        INTEGER {
            upTo63(1),
            upTo127(2),
            upTo255(3),
            upTo511(4),
            upTo1023(5),
            upTo2047(6),
            reserved(7),
            upTo31(8)
        }
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field is set to indicate the range of assigned
             MACID values in the sector. For example, a MACIDRange of 63
             indicates that the sector has not assigned MACID values 64 and
             above"
        REFERENCE
```

```
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 43 }

    dot20AnFlPcReportInterval OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the periodicity at which power
             control commands are sent to the access terminal. This
             parameter may can take the value 2^n, where n is the value of the
             three bit field."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 44 }

    dot20AnFlPqiReportInterval OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the periodicity at which PQI
             reports commands are sent by this sector. This parameter
             takes the value 16*2^n, where n is the value of the three bit
             field"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 45 }

    dot20AnFlIotReportInterval OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the periodicity at which IoT values
             are sent to the access terminal. This parameter takes the value 1, 8,
    16, or 32, depending on the two bit field taking values 0, 1, 2, or 3.
    _This parameter may take the
             value 2^n, where n is the value of the three bit field"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 46 }

    dot20AnFastIoTEnabled OBJECT-TYPE
        SYNTAX          TruthValue
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines if the access terminal is required
             to read Fast IoT from this sectorthe sector transmits IOT"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 47 }

    dot20AnFastOSIEnabled OBJECT-TYPE
        SYNTAX          TruthValue
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines if the access terminal is required
             to read OSI from this sector"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 48 }

    dot20AnRabEnabled OBJECT-TYPE
        SYNTAX          TruthValue
        MAX-ACCESS      read-write
```

```
        STATUS          current
        DESCRIPTION
            "This field is set to ~~1~~ TRUE if this sector transmits RAB, and
             is set to ~~1~~ FALSE otherwise"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 49 }

    dot20AnOsiResponseMode OBJECT-TYPE
        SYNTAX          INTEGER {
            stochastic(1),
            deterministic(2)
        }
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the type of response to OSI modes. It is set to
    0 for stochastic response and is set to 1 for deterministic response."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 50 }

    dot20AnSlowInterferenceOffset OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set in units of dB"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 51 }

    dot20AnCtrlAccessOffset OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the initial gain of the R-CQICH over the
             R-ACH. The value of this parameter is -11+n dB, where n
             is the value of this ~~field~~parameter"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.3 (PowerControlGroup)"
        ::= { dot20AnSectorExtChanInfoEntry 52 }

    dot20AnRlAuxPilotPower OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is determine the offset of R-AuxPICH with
             respect to R-PICH. This parameter may take the value 4+n."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
             Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 53 }

    dot20AnReqQoSPowerBoost OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            " This parameter specifies a power boost value for r-reqch
    transmissions on R-CDCCH for flows that allow request boost, and takes the
    values 0, 1, 3, or 5 dB when the two-bit field is set to '00', '01', '10', or
    '11', respectively.
     ~~This field is in units of dB~~"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.7.7.2.1 (PowerControl
```

```
            Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 54 }

    dot20AnErasureTargetCtoI0 OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value (denoted n) determines the transmit
            Powertarget C/I value of erasure sequences for different assignment
    sizes. The
            transmit power is equal to n-6 12 dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
            Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 55 }

    dot20AnErasureTargetCtoI1 OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value (denoted n) determines the transmit
            Powertarget C/I value of erasure sequences for different assignment
    sizes. The
            transmit power is equal to n-6 12 dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
            Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 56 }

    dot20AnErasureTargetCtoI2 OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value (denoted n) determines the transmit
            Powertarget C/I value of erasure sequences for different assignment
    sizes. The
            transmit power is equal to n-6 12 dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
            Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 57 }

    dot20AnErasureTargetCtoI3 OBJECT-TYPE
        SYNTAX          Integer32 (0..15)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value (denoted n) determines the transmit
            Powertarget C/I value of erasure sequences for different assignment
    sizes. The
            transmit power is equal to n-6 12 dB."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 8.8.9.2.3 (PowerParameters
            Attribute)"
        ::= { dot20AnSectorExtChanInfoEntry 58 }

    dot20AnAccessCycleDuration OBJECT-TYPE
        SYNTAX          Integer32 (0..1)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute determines the duration of the access
             cycle in units of Access Opportunities (as defined by the
             Physical Layer.)"
        REFERENCE
```

```
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
             Group)"
        ::= { dot20AnSectorExtChanInfoEntry 59 }

    dot20AnMaxProbesPerSequence OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute (denoted n) determines the maximum number of probe
             sequences that can be part of one access sequence.  The
             number of probes is n+2"
        REFERENCE
             "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
              Group)"
        ::= { dot20AnSectorExtChanInfoEntry 60 }

    dot20AnProbeRampUpStepSize OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value ~~noted n~~(denoted n) determines the power ramp
             up used for probes within a probe sequence and indicates
             a ramp up value of 2*(1+n) dB."
        REFERENCE
             "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
              Group)"
        ::= { dot20AnSectorExtChanInfoEntry 61 }

    dot20AnPilotThreshold1 OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value ~~noted n~~(denoted n) determines
             PilotThreshold1 used by the Access Channel MAC Protocol. The
             value is -10 + 2n dB."
        REFERENCE
             "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
              Group)"
        ::= { dot20AnSectorExtChanInfoEntry 62 }

    dot20AnPilotThreshold2 OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value ~~noted n~~(denoted n) determines
             PilotThreshold2 used by the Access Channel MAC Protocol. The
             value is -2n dB."
        REFERENCE
             "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
              Group)"
        ::= { dot20AnSectorExtChanInfoEntry 63 }

    dot20AnOpenLoopAdjust OBJECT-TYPE
        SYNTAX          Integer32 (0..255)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute's value ~~noted n~~(denoted n) determines the nominal
             power to be used by access terminal in the open loop power
             estimate. The value of nominal power is 70+n dB."
        REFERENCE
             "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
              Group)"
        ::= { dot20AnSectorExtChanInfoEntry 64 }
```

```
dot20AnAccessRetryPersistance0 OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute determines the persistence probability for
         determining access sequence backoff. If this attribute's value
         is set to n (n<7), the access terminal will use 2^(-n/2) as the
         retry persistence.  For n=7, the access terminal will set
         AccessRetryPersistence0 to 0."
    REFERENCE
         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
          Group)"
    ::= { dot20AnSectorExtChanInfoEntry 65 }

dot20AnAccessRetryPersistence1 OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute determines the persistence probability for
         determining access sequence backoff. If this attribute's value
         is set to n (n<7), the access terminal will use 2^(-n/2) as the
         retry persistence.  For n=7, the access terminal will set
         AccessRetryPersistence1 to 0."
    REFERENCE
         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
          Group)"
    ::= { dot20AnSectorExtChanInfoEntry 66 }

dot20AnAccessRetryPersistence2 OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute determines the persistence probability for
         determining access sequence backoff. If this attribute's value
         is set to n (n<7), the access terminal will use 2^(-n/2) as the
         retry persistence.  For n=7, the access terminal will set
         AccessRetryPersistence2 to 0."
    REFERENCE
         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
          Group)"
    ::= { dot20AnSectorExtChanInfoEntry 67 }

dot20AnAccessRetryPersistence3 OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute determines the persistence probability for
         determining access sequence backoff. If this attribute's value
         is set to n (n<7), the access terminal will use 2^(-n/2) as the
         retry persistence.  For n=7, the access terminal sets
         AccessRetryPersistence3 to 0."
    REFERENCE
         "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
          Group)"
    ::= { dot20AnSectorExtChanInfoEntry 68 }

dot20AnAccessRetryPersistence4 OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute determines the persistence probability for
         determining access sequence backoff. If this attribute's value
```

```
          is set to n (n<7), the access terminal will use 2^(-n/2) as the
          retry persistence.  For n=7, the access terminal sets
          AccessRetryPersistence4 to 0."
     REFERENCE
          "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
           Group)"
     ::= { dot20AnSectorExtChanInfoEntry 69 }

dot20AnAccessRetryPersistence5 OBJECT-TYPE
     SYNTAX         Integer32 (0..7)
     MAX-ACCESS     read-write
     STATUS         current
     DESCRIPTION
         "This attribute determines the persistence probability for
          determining access sequence backoff. If this attribute's value
          is set to n (n<7), the access terminal will use 2^(-n/2) as the
          retry persistence.  For n=7, the access terminal sets
          AccessRetryPersistence5 to 0."
     REFERENCE
          "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
           Group)"
     ::= { dot20AnSectorExtChanInfoEntry 70 }

dot20AnAccessRetryPersistence6 OBJECT-TYPE
     SYNTAX         Integer32 (0..7)
     MAX-ACCESS     read-write
     STATUS         current
     DESCRIPTION
         "This attribute determines the persistence probability for
          determining access sequence backoff. If this attribute's value
          is set to n (n<7), the access terminal will use 2^(-n/2) as the
          retry persistence.  For n=7, the access terminal sets
          AccessRetryPersistence6 to 0."
     REFERENCE
          "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
           Group)"
     ::= { dot20AnSectorExtChanInfoEntry 71 }

dot20AnAccessRetryPersistence7 OBJECT-TYPE
     SYNTAX         Integer32 (0..7)
     MAX-ACCESS     read-write
     STATUS         current
     DESCRIPTION
         "This attribute determines the persistence probability for
          determining access sequence backoff. If this attribute's value
          is set to n (n<0), the access terminal will use 2^(-n/2) as the
          retry persistence.  For n=7, the access terminal sets
          AccessRetryPersistence7 to 0."
     REFERENCE
          "IEEE Std. 802.20-2008, Subclause 11.6.5.4.4 (AccessParameters
           Group)"
     ::= { dot20AnSectorExtChanInfoEntry 72 }

dot20AnSectorExtChanRowStatus OBJECT-TYPE
     SYNTAX         RowStatus
     MAX-ACCESS     read-create
     STATUS         current
     DESCRIPTION
         "The status column used for creating, modifying, and deleting
          instances of the columnar objects in the SectorExtChanInfo
          Table. If the implementer of this MIB has chosen not to
          implement 'dynamic assignment' of sectors, this attribute is
          not useful and should return noSuchName upon SNMP request."
     DEFVAL          { active }
     ::= { dot20AnSectorExtChanInfoEntry 73 }

dot20AnSectorParamTable OBJECT-TYPE
     SYNTAX         SEQUENCE OF Dot20AnSectorParamEntry
```

```
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table provides one row per 802.20 carrier of a sector for
             a specific ChannelBand. This table's attributes specify the
             configuration of the corresponding sector and can be used to
             populate fields in the SectorParameters message."
        ::= { dot20AnOverheadMessages 3 }

    dot20AnSectorParamEntry OBJECT-TYPE
        SYNTAX        Dot20AnSectorParamEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "An Entry (conceptual row) in the SectorParam table. This table
             is indexed by ifIndex. ifIndex: Each IEEE 802.20 interface
             (uniquely identified by SectorID) is represented by an
             ifEntry."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        INDEX
            { ifIndex }
        ::= { dot20AnSectorParamTable 1 }

    dot20AnMobileCountryCode OBJECT-TYPE
        SYNTAX        Integer32 (0..4096)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the three digit Mobile Country
             Code associated with this sector (as specified in ITU-T
             Recommendation E.212, Identification Plan for Land Mobile
             Stations)."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 1 }

    dot20AnMobileNetworkCode OBJECT-TYPE
        SYNTAX        Integer32 (0..4096)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This field is set three-digit BCD (binary coded
             decimal) encoded representation of the Mobile Network Code
             that has been assigned to the operator."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 2 }

    dot20AnSectorID OBJECT-TYPE
        SYNTAX        OCTET STRING (SIZE(16))
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "Sector Address Identifier. The access network sets the
             value of the SectorID according to the rules specified in in IEEE
            802.20 AIS16.2.2. The access terminal does not assume anything about
            the format of the SectorID other than that it uniquely
            identifies the sector."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters) and
    Subclause 16.2.2 (SectorID Construction)"
        ::= { dot20AnSectorParamEntry 3 }

    dot20AnChannelBandRef OBJECT-TYPE
        SYNTAX        Integer32
        MAX-ACCESS    read-write
        STATUS        current
```

```
        DESCRIPTION
            "The reference to the ChannelBand defined in ChannelBands table
             using this value as index (dot20AnChannelBandIndex)"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters,
             first instance), and Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnSectorParamEntry 4 }

    dot20AnLatitude OBJECT-TYPE
        SYNTAX        Integer32 (-1296000..1296000)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The latitude of the sector. This attribute is set to
             this sector's latitude in units of 0.25 second, expressed as a
             two's complement signed number with positive numbers signifying
             North latitudes. Similarly, negative numbers signify South latitudes.
    This attribute is set to a value in the
             range 1296000 to 1296000 inclusive (corresponding to a range of
             -90 to +90)."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 5 }

    dot20AnLongitude OBJECT-TYPE
        SYNTAX        Integer32 (-2592000..2592000)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The longitude of the sector. This attribute is set to
             this sector's longitude in units of 0.25 second, expressed as a
             two's complement signed number with positive numbers signifying
             East longitude. Similarly, negative numbers signify West longitudes.
    This attribute is set to a value in the
             range 2592000 to 2592000 inclusive (corresponding to a range of
             -180 degrees to +180 degrees)."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 6 }

    dot20AnLeapSeconds OBJECT-TYPE
        SYNTAX        Integer32 (0..255)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The number of leap seconds that have occurred since the start
             of system time."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 7 }

    dot20AnLocalTimeOffset OBJECT-TYPE
        SYNTAX        Integer32 (0..2047)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the offset of the local time
             from System Time. This value will beis in units of minutes,
             expressed as a two's complement signed number."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 8 }

    dot20AnPrimaryRegZoneCode OBJECT-TYPE
        SYNTAX        Integer32
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
```

```
            "The PrimaryRegistrationZoneCode for this sector"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 9 }

    dot20AnAnGroupId OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Sector's AN Group Id"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause ~~11.6.5.5~~11.6.4.5.2.9
    (~~SectorParameters~~AN Groups)"
        ::= { dot20AnSectorParamEntry 10 }

    dot20AnPilotGroupId OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Sector's Pilot Group Id"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 11 }

    dot20AnSynchronousGroupId OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Sector's Synchronous Group Id"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 12 }

    dot20AnCellGroupId OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "Sector's Cell Group Id"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSectorParamEntry 13 }

    dot20AnSectorParamRowStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the SectorParam Table. If
             the implementer of this MIB has chosen not to implement
             'dynamic assignment' of sectors, this attribute is not useful
             and should return noSuchName upon SNMP request."
        DEFVAL          { active }
        ::= { dot20AnSectorParamEntry 14 }

    dot20AnSectorGrpResSetsTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF Dot20AnSectorGrpResSetsEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "This table provides one row per 802.20 sector and Forward
             Channel group resource set (see ExtendedChannelInfo ~~message in
    AIS~~)."
        ::= { dot20AnOverheadMessages 4 }
```

```
dot20AnSectorGrpResSetsEntry OBJECT-TYPE
    SYNTAX        Dot20AnSectorGrpResSetsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the
         AnSectorFwdChanGrpResourceSets table. This table is indexed
         by ifIndex and resourceSetId ifIndex: Each IEEE 802.20
         interface (uniquely identified by SectorID) is represented by
         an ifEntry."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.7.5.3
         (SupplementalConfigAssignment)"
    INDEX
        { ifIndex, dot20AnResourceSetId }
    ::= { dot20AnSectorGrpResSetsTable 1 }

dot20AnResourceSetId OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Index of the forward channel group resource set for a
         particular sector."
    ::= { dot20AnSectorGrpResSetsEntry 1 }

dot20AnResourceSetBitmap OBJECT-TYPE
    SYNTAX        Integer32 (0..255)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The j'th bit of this field is set to 1 if a frame with
         frame index mod InterlaceDepth = j contains a subzone that
         corresponds to this resource set. If the InterlaceDepth = 6,
         the last two bits of this field is set to 0"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.7.5.3
         (SupplementalConfigAssignment)"
    ::= { dot20AnSectorGrpResSetsEntry 2 }

dot20AnBRCHSubzoneCyclingEnabled OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This field parameter is set to 1 TRUE if BRCHSubzoneCycling is
enabled
         on this sector. For BRCH resource set with  BRCHSubzoneCycling
         disabled or DRCH resource set, the first subzone offset on all
         interlaces where this resource set is present is set to
         the ResourceSubzoneOffset. For BRCH resource sets with
         BRCHSubzoneCycling enabled, the offset of the first subzone
         over each interlace is shifted cyclically. Since the offset of
         first subzone over the lowest indexed interlace is defined by
         ResourceSubzoneOffset, the offset of the first subzone in the
         next interlace, where the resource set is present, is increased
         by 1 mod NumBRCHSubzones"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.7.5.3
         (SupplementalConfigAssignment)"
    ::= { dot20AnSectorGrpResSetsEntry 3 }

dot20AnResourceSetSubZoneSpacing OBJECT-TYPE
    SYNTAX        Integer32 (0..3)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
```

```
            "This field indicates the spacing between subzones in a
             resource set. Subzones belonging to a resource group on an
             interlace is equally spaced, where the first subzone is
             defined by ResourceSubzoneOffset and
             BRCHSubzoneCyclingEnabled"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.7.5.3
             (SupplementalConfigAssignment)"
        ::= { dot20AnSectorGrpResSetsEntry 4 }

    dot20AnNumResourceSubzones OBJECT-TYPE
        SYNTAX          Integer32 (0..31)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field determines the number of subzones in each
             interlace where the resource set is present. An interlace is
             defined as the set of frames that have the same Frame Index mod
             InterlaceDepth, where InterlaceDepth is defined by
             ResourceSetInterlace. This parameter takes the value n+1."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.7.5.3
             (SupplementalConfigAssignment)"
        ::= { dot20AnSectorGrpResSetsEntry 5 }

    dot20AnResourceSubzoneOffset OBJECT-TYPE
        SYNTAX          Integer32 (0..31)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This field is set to the first subzone on the lowest
             indexed interlace that is part of a resource set. Interlace
             index i is defined for the set of frames that have Frame Index
             mod InterlaceDepth = i, where InterlaceDepth is defined by
             ResourceSetInterlace"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.7.5.3
             (SupplementalConfigAssignment)"
        ::= { dot20AnSectorGrpResSetsEntry 6 }

    dot20AnResourceSetRowStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the
             SectorFwdChanGrpResourceSet Table. If the implementor of this
             MIB has chosen not to implement 'dynamic assignment' of
             sectors, this attribute is not useful and should return
             noSuchName upon SNMP request."
        DEFVAL          { active }
        ::= { dot20AnSectorGrpResSetsEntry 7 }

    dot20AnSecondaryRegZoneCodeTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF Dot20AnSecondaryRegZoneCodeEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "This table provides one row per 802.20 interface and per
             secondary registration zone code."
        ::= { dot20AnOverheadMessages 5 }

    dot20AnSecondaryRegZoneCodeEntry OBJECT-TYPE
        SYNTAX          Dot20AnSecondaryRegZoneCodeEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
```

```
            "An Entry (conceptual row) in the SecondaryRegZoneCode table,
             which is used to trigger registration for paging.  This table
             is indexed by IfIndex and dot20AnSecondaryRegZoneCodeIndex.
             ifIndex: Each IEEE 802.20 interface (uniquely identified by
             SectorID) is represented by an ifEntry."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        INDEX
            { ifIndex, dot20AnSecondaryRegZoneCodeIndex }
        ::= { dot20AnSecondaryRegZoneCodeTable 1 }

    dot20AnSecondaryRegZoneCodeIndex OBJECT-TYPE
        SYNTAX        Integer32 (0..7)
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Index of the secondary registration zone code for a particular
             sector."
        ::= { dot20AnSecondaryRegZoneCodeEntry 1 }

    dot20AnSecRegZoneCode OBJECT-TYPE
        SYNTAX        Integer32 (0..255)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "One of the SecondaryRegistrationZoneCode for this sector"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnSecondaryRegZoneCodeEntry 2 }

    dot20AnSecondaryRegZoneRowStatus OBJECT-TYPE
        SYNTAX        RowStatus
        MAX-ACCESS    read-create
        STATUS        current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the SecondaryRegZoneCode
             Table. If the implementor of this MIB has chosen not to
             implement 'dynamic assignment' of sectors, this attribute is
             not useful and should return noSuchName upon SNMP request."
        DEFVAL         { active }
        ::= { dot20AnSecondaryRegZoneCodeEntry 3 }

    dot20AnSectorIpsiTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF Dot20AnSectorIpsiEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table provides one row per 802.20 interface and per
             IPSI."
        ::= { dot20AnOverheadMessages 6 }

    dot20AnSectorIpsiEntry OBJECT-TYPE
        SYNTAX        Dot20AnSectorIpsiEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "An Entry (conceptual row) in the SectorIpsi table, which is a
             list of personalities supported by the given sector. This table
             is indexed by IfIndex and dot20AnIpsiIndex. ifIndex: Each IEEE
             802.20 interface (uniquely identified by SectorID) is
             represented by an ifEntry."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        INDEX
            { ifIndex }
        ::= { dot20AnSectorIpsiTable 1 }
```

```
dot20AnIpsiIndex OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Index of an Ipsi supported by a particular sector."
    ::= { dot20AnSectorIpsiEntry 1 }

dot20AnSupportedIpsi OBJECT-TYPE
    SYNTAX        Integer32 (0..15)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "IPSI supported by a particular sector"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnSectorIpsiEntry 2 }

dot20AnIpsiRowStatus OBJECT-TYPE
    SYNTAX        RowStatus
    MAX-ACCESS    read-create
    STATUS        current
    DESCRIPTION
        "The status column used for creating, modifying, and deleting
         instances of the columnar objects in the SectorIpsi Table. If
         the implementor of this MIB has chosen not to implement
         'dynamic assignment' of sectors, this attribute is not useful
         and should return noSuchName upon SNMP request."
    DEFVAL         { active }
    ::= { dot20AnSectorIpsiEntry 3 }

dot20AnSectorCdmaSubSegTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnSectorCdmaSubSegEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row per 802.20 sector, interlace and
         Reverse Channel group CDMA Sub segment (see ExtendedChannelInfo
         message in AIS)."
    ::= { dot20AnOverheadMessages 8 }

dot20AnSectorCdmaSubSegEntry OBJECT-TYPE
    SYNTAX        Dot20AnSectorCdmaSubSegEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the AnSectorCdmaSubSeg table.
         This table is indexed by ifIndex, interlaceId and
         CDMASubSegmentId."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.4.2 (ReverseChannelGroup)"
    INDEX
        { ifIndex, dot20AnInterlaceId }
    ::= { dot20AnSectorCdmaSubSegTable 1 }

dot20AnInterlaceId OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Interlace Id"
    ::= { dot20AnSectorCdmaSubSegEntry 1 }

dot20AnCdmaSubSegmentNum OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
```

```
            "Number of reverse channel CDMA Sub segment within an interlace
             for a particular sector."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.4.2 (ReverseChannelGroup)"
        ::= { dot20AnSectorCdmaSubSegEntry 2 }

    dot20AnSectorCdmaSubSegRowStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the SectorCdmaSubSeg
             Table. If the implementor of this MIB has chosen not to
             implement 'dynamic assignment' of sectors, this attribute is
             not useful and should return noSuchName upon SNMP request."
        DEFVAL           { active }
        ::= { dot20AnSectorCdmaSubSegEntry 3 }

    dot20AnChannelBandsTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF Dot20AnChannelBandsEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "This table provides one row per 802.20 ChannelBand. This
             table's attributes specify the ChannelBand record of a
             particular ChannelBand which may be used for a sector defined
             in the SectorConfig table, or by a member of the neighbor list
             defined in NeighborSectorsTable."
        ::= { dot20AnOverheadMessages 9 }

    dot20AnChannelBandsEntry OBJECT-TYPE
        SYNTAX          Dot20AnChannelBandsEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "An Entry (conceptual row) in the ChannelBands table. The
             Channel Bands table is referenced by the NeighborSectorsTable
             or Sector Table.  This table is indexed by ChannelBandIndex."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
             and Subclause 15.2.1 (ChannelBand Record)"
        INDEX
            { dot20AnChannelBandIndex }
        ::= { dot20AnChannelBandsTable 1 }

    dot20AnChannelBandIndex OBJECT-TYPE
        SYNTAX          Integer32 (1..2147483647)
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "Index of the ChannelBand within the ChannelBands table."
        ::= { dot20AnChannelBandsEntry 1 }

    dot20AnSystemType OBJECT-TYPE
        SYNTAX          Integer32 (0..2)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute discriminates between the different ChannelBand
             Records."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 2 }

    dot20AnBandClass OBJECT-TYPE
        SYNTAX          Integer32 (0..255)
        MAX-ACCESS      read-write
```

```
        STATUS        current
        DESCRIPTION
            "This attribute is set to the band class number
             corresponding to the frequency assignment of the ChannelBand
             specified by this record."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 3 }

    dot20AnChannelNumber OBJECT-TYPE
        SYNTAX        Integer32 (0..65535)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the Channel number
             corresponding to the frequency assignment of the ChannelBand
             specified by this record."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
             and Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 4 }

    dot20AnHalfDuplexSupported OBJECT-TYPE
        SYNTAX        TruthValue
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to a true TRUE if half duplex operation
             is supported in this system."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 5 }
    <Edited to here - 2008-11-07 1539>
    dot20AnReverseChannelBandClass OBJECT-TYPE
        SYNTAX        Integer32 (0..255)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the band class number
             corresponding to the frequency assignment of the reverse
             ChannelBand specified by this record."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
             and Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 6 }

    dot20AnReverseChannelNumber OBJECT-TYPE
        SYNTAX        Integer32 (0..65535)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the Channel number
             corresponding to the frequency assignment of the Reverse
             ChannelBand specified by this record."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters),
             and Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 7 }

    dot20AnCyclicPrefixLength OBJECT-TYPE
        SYNTAX        Integer32 (0..3)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the cyclic prefix length,
             i.e. it is set to the quantity (N_CP-1) from the Physical
             Layer."
        REFERENCE
```

```
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record),
             and Table 165 (Specification for the u Parameter)"
        ::= { dot20AnChannelBandsEntry 8 }

    dot20AnFFTSize OBJECT-TYPE
        SYNTAX          Integer32 (0..7)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute is set to log_2(N_FFT/128)."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 9 }

    dot20AnCBNumGuardSubcarriers OBJECT-TYPE
        SYNTAX          Integer32 (0..63)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute is set to the number of guard subcarriers
             for the system on the forward channel."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 15.2.1 (ChannelBand Record)"
        ::= { dot20AnChannelBandsEntry 10 }

    dot20AnChannelBandShortId OBJECT-TYPE
        SYNTAX          Integer32 (0..3)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "This attribute identifies the two bit index that identifies
             this channel in beacon transmissions"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnChannelBandsEntry 11 }

    dot20AnChannelBandAccessHashMask OBJECT-TYPE
        SYNTAX          Integer32 (0..65536)
        MAX-ACCESS      read-write
        STATUS          current
        DESCRIPTION
            "this attribute is set to the AccessHashingChannelMask for this
             channel"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnChannelBandsEntry 12 }

    dot20AnChannelBandStatus OBJECT-TYPE
        SYNTAX          RowStatus
        MAX-ACCESS      read-create
        STATUS          current
        DESCRIPTION
            "The status column used for creating, modifying, and deleting
             instances of the columnar objects in the  ChannelBands Table.
             If the implementor of this MIB has chosen not to implement
             'dynamic assignment' of ChannelBands, this attribute is not
             useful and should return noSuchName upon SNMP request."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        DEFVAL          { active }
        ::= { dot20AnChannelBandsEntry 13 }

    dot20AnNeighborSectorsTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF Dot20AnNeighborSectorsEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "This table provides one row per 802.20 neighbor sector. This
```

```
            table's attributes specify the sector parameters of a
            particular neighbor sector which may be used as a neighbor to
            one sector defined in the SectorConfig table."
        ::= { dot20AnOverheadMessages 10 }

    dot20AnNeighborSectorsEntry OBJECT-TYPE
        SYNTAX        Dot20AnNeighborSectorsEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "An Entry (conceptual row) in the AnNeighborSectors table. This
             table is indexed by ChannelBandIndex, NeighborSectorIndex."
        INDEX
            { dot20AnChannelBandIndex, dot20AnNeighborSectorIndex }
        ::= { dot20AnNeighborSectorsTable 1 }

    dot20AnNeighborSectorIndex OBJECT-TYPE
        SYNTAX        Integer32 (1..2147483647)
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Index of the Neighbor Sector for this Neighbor Carrier within
             the ChannelBand."
        ::= { dot20AnNeighborSectorsEntry 1 }

    dot20AnNeighborPilotID OBJECT-TYPE
        SYNTAX        Integer32 (0..1023)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the PilotID of a neighboring
             sector that the access terminal should add to its Neighbor
             Set."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 5.3.2.1 (PilotPN and PilotPhase)"
        ::= { dot20AnNeighborSectorsEntry 2 }

    dot20AnNeighborEffTransmitPower OBJECT-TYPE
        SYNTAX        Integer32 (0..63)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "This attribute is set to the transmit power of the
             sector in units of dBm."
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnNeighborSectorsEntry 3 }

    dot20AnNeighborChannelBandRef OBJECT-TYPE
        SYNTAX        Integer32
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The reference to the ChannelBand defined in ChannelBands table
             (dot20AnChannelBandIndex)"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnNeighborSectorsEntry 4 }

    dot20AnNeighborChannelShortID OBJECT-TYPE
        SYNTAX        Integer32 (0..3)
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "Neighbor Sector's short Channel ID"
        REFERENCE
            "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
        ::= { dot20AnNeighborSectorsEntry 5 }
```

```
dot20AnNeighborSameANAsPrimSect OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Set true if same access network as primary sector."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnNeighborSectorsEntry 6 }

dot20AnNeighborSectorPilotGrpId OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Neighbor Sector's Pilot Group Id"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnNeighborSectorsEntry 7 }

dot20AnNeighborSynchGroupId OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Neighbor Sector's Synchronous Group Id"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnNeighborSectorsEntry 8 }

dot20AnNeighborSectorCellGroupId OBJECT-TYPE
    SYNTAX        Integer32 (0..7)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "Neighbor Sector's Cell Group Id"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnNeighborSectorsEntry 9 }

dot20AnNeighborSectorStatus OBJECT-TYPE
    SYNTAX        RowStatus
    MAX-ACCESS    read-create
    STATUS        current
    DESCRIPTION
        "The status column used for creating, modifying, and deleting
         instances of the columnar objects in the NeighborSectors
         Table. If the implementor of this MIB has chosen not to
         implement 'dynamic assignment' of neighbor sectors this
         attribute is not useful and should return noSuchName upon SNMP
         request."
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    DEFVAL         { active }
    ::= { dot20AnNeighborSectorsEntry 10 }

dot20AnOtherTechNghbrsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnOtherTechNghbrsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row per other technology neighbor
         channel. This table's attributes specify the technology type
         and neighbor list of a particular neighbor channel which may be
         used by one sector defined in the SectorConfig table for
         inter-technology handoff."
    ::= { dot20AnOverheadMessages 11 }
```

```
dot20AnOtherTechNghbrsEntry OBJECT-TYPE
    SYNTAX        Dot20AnOtherTechNghbrsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the AnOtherTechNghbrs table. This
         table is indexed by Sector (ifIndex) and OtherTechnologyIndex"
    INDEX
        { ifIndex, dot20AnOtherTechnologyIndex }
    ::= { dot20AnOtherTechNghbrsTable 1 }

dot20AnOtherTechnologyIndex OBJECT-TYPE
    SYNTAX        Integer32 (1..2147483647)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "The neighbor other technology entry index"
    ::= { dot20AnOtherTechNghbrsEntry 1 }

dot20AnTechnologyType OBJECT-TYPE
    SYNTAX        Integer32 (0..255)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute is set to the type of other technology.
         Interpretation for its value should as defined in the AIS
         spec."
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnOtherTechNghbrsEntry 2 }

dot20AnTechNghbrListLength OBJECT-TYPE
    SYNTAX        Integer32 (0..255)
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute is set the length, in bytes, of the
         neighbor list information for the other technology."
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnOtherTechNghbrsEntry 3 }

dot20AnTechnologyNeighborList OBJECT-TYPE
    SYNTAX        OCTET STRING (SIZE(256))
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "This attribute is set to the neighbor list information
         for the other technology."
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 11.6.5.5 (SectorParameters)"
    ::= { dot20AnOtherTechNghbrsEntry 4 }

dot20AnOtherTechNghbrRowStatus OBJECT-TYPE
    SYNTAX        RowStatus
    MAX-ACCESS    read-create
    STATUS        current
    DESCRIPTION
        "The status column used for creating, modifying, and deleting
         instances of the columnar objects in the OtherTechNghbrs Table.
         If the implementor of this MIB has chosen not to implement
         'dynamic assignment' of other technology neighbors, this
         attribute is not useful and should return noSuchName upon SNMP
         request."
    DEFVAL         { active }
    ::= { dot20AnOtherTechNghbrsEntry 5 }
```

```
dot20AnNeighborListTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnNeighborListEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table defines the neighbor lists for the sectors defined
         in the SectorConfig table. Each row in this table indexed per
         sector (ifIndex) specifies a pointer to a neighbor sector of
         this sector."
    ::= { dot20AnOverheadMessages 12 }

dot20AnNeighborListEntry OBJECT-TYPE
    SYNTAX        Dot20AnNeighborListEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the AnNeighborList table. This
         table is indexed by Sector (ifIndex) and NeighborIndex indexing
         each neighbor sector for a particular Sector."
    INDEX
        { ifIndex, dot20AnNeighborIndex }
    ::= { dot20AnNeighborListTable 1 }

dot20AnNeighborIndex OBJECT-TYPE
    SYNTAX        Integer32 (1..32)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This index identifies one neighbor sector for a Sector."
    ::= { dot20AnNeighborListEntry 1 }

dot20AnNeighborSectorPointer OBJECT-TYPE
    SYNTAX        RowPointer
    MAX-ACCESS    read-create
    STATUS        current
    DESCRIPTION
        "This attribute points to an instance of sector in SectorConfig
         table or in NeighborSectors table. This sector is defined as a
         neighbor of the sector identified by the ifIndex of this
         attribute's entry."
    ::= { dot20AnNeighborListEntry 2 }

dot20AnNeighborRowStatus OBJECT-TYPE
    SYNTAX        RowStatus
    MAX-ACCESS    read-create
    STATUS        current
    DESCRIPTION
        "The status column used for creating, modifying, and deleting
         instances of the columnar objects in the  NeighborList Table.
         If the implementor of this MIB has chosen not to implement
         'dynamic assignment' of neighbor list entries this attribute is
         not useful and should return noSuchName upon SNMP request."
    DEFVAL         { active }
    ::= { dot20AnNeighborListEntry 3 }

dot20AnSectorToIfIndexTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20AnSectorToIfIndexEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table can be used to find the ifIndex of an 802.20
         interface based on its SectorID and ChannelBand information
         (reverse mapping of the Sector Config table)."
    ::= { dot20An 2 }

dot20AnSectorToIfIndexEntry OBJECT-TYPE
    SYNTAX        Dot20AnSectorToIfIndexEntry
    MAX-ACCESS    not-accessible
```

```
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the AnSectorToIfIndex table."
    INDEX
        { dot20AnSectorID, ifIndex }
    ::= { dot20AnSectorToIfIndexTable 1 }

dot20AnIfChannelBandRef OBJECT-TYPE
    SYNTAX        Integer32
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The reference to the ChannelBand defined in ChannelBands table
         (dot20AnChannelBandIndex)"
    REFERENCE
        "IEEE Std. 802.20-2008, Subclause 11.6.5.5 (SectorParameters,
         first instance), and Subclause 15.2.1 (ChannelBand Record)"
    ::= { dot20AnSectorToIfIndexEntry 1 }

dot20Cmn OBJECT-IDENTITY
    STATUS        current
    DESCRIPTION
        "Common configuration and statistics."
    ::= { ieee802dot20 2 }

dot20CmnMac OBJECT-IDENTITY
    STATUS        current
    DESCRIPTION
        "MAC layer objects"
    ::= { dot20Cmn 1 }

dot20CmnSessionControl OBJECT IDENTIFIER ::= { dot20CmnMac 1 }

dot20CmnSessionMgtProtocol OBJECT IDENTIFIER ::= { dot20CmnSessionControl 1 }

dot20CmnSessionOpenCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of sessions opened"
    REFERENCE
        "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
        Protocol State Diagram (Access Network))"
    ::= { dot20CmnSessionMgtProtocol 1 }

dot20CmnSessionCloseCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of sessions closed"
    REFERENCE
        "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
        Protocol State Diagram (Access Network))"
    ::= { dot20CmnSessionMgtProtocol 2 }

dot20CmnSessionFailureCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of session open/close failures"
    REFERENCE
        "IEEE Std 802.20-2008, Figure 159 (Basic Session Control
        Protocol State Diagram (Access Network))"
    ::= { dot20CmnSessionMgtProtocol 3 }
```

```
dot20CmnConnectionControl OBJECT IDENTIFIER ::= { dot20CmnMac 3 }

dot20CmnConnectedState OBJECT IDENTIFIER ::= { dot20CmnConnectionControl 1 }

dot20CmnActiveConnectionCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of current active connections (in Open state.)"
    REFERENCE
        "IEEE Std 802.20-2008, Figures 152 and 153"
    ::= { dot20CmnConnectedState 1 }

dot20CmnConnectionAttemptCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of connection attempts (i.e. that reached BindATI state.)"
    REFERENCE
        "IEEE Std 802.20-2008, Figure 152 (Basic Connected State
         Protocol State Diagram (AT)) and Figure 153 (Basic Connected
         State Protocol State Diagram (AN))"
    ::= { dot20CmnConnectedState 2 }

dot20CmnConnectionFailureCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of connection failures during connection attempt (i.e.
         That reached BindATI state without reaching Open state,
         through timeout or deactivation"
    REFERENCE
        "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
         State Diagram (AT)) and 153 (Connected State Protocol State
         Diagram (AN))"
    ::= { dot20CmnConnectedState 3 }

dot20CmnConnectionDropCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of dropped connections (via a command of
         ConnectedState.Close) after a connection has been established."
    REFERENCE
        "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
         State Diagram (AT)) and 153 (Connected State Protocol State
         Diagram (AN))"
    ::= { dot20CmnConnectedState 4 }

dot20CmnConnectionReleaseCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of connection release (Tx ConnectionClose or
         Rx ConnectionClose) after a connection has been established."
    REFERENCE
        "IEEE Std 802.20-2008, Figures 152 (Connect State Protocol
         State Diagram (AT)) and 153 (Connected State Protocol State
         Diagram (AN))"
    ::= { dot20CmnConnectedState 5 }

dot20CmnRadioLink OBJECT IDENTIFIER ::= { dot20CmnMac 4 }

```

```
dot20CmnRlp OBJECT IDENTIFIER ::= { dot20CmnRadioLink 2 }

dot20CmnRlpStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20CmnRlpStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of Radio Link Protocol statistics
         per 802.20 interface"
    ::= { dot20CmnRlp 1 }

dot20CmnRlpStatsEntry OBJECT-TYPE
    SYNTAX        Dot20CmnRlpStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the RlpStats table. This table is
         indexed by IfIndex and dot20StreamId."
    INDEX
        { ifIndex, dot20CmnStreamId }
    ::= { dot20CmnRlpStatsTable 1 }

dot20CmnStreamId OBJECT-TYPE
    SYNTAX        Integer32 (0 .. 31)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Stream Id"
    ::= { dot20CmnRlpStatsEntry 1 }

dot20CmnRlpTxBytes OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of RLP bytes of payload transmitted"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
         Procedures)"
    ::= { dot20CmnRlpStatsEntry 2 }

dot20CmnRlpReTxBytes OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of RLP bytes of payload retransmitted"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
         Procedures)"
    ::= { dot20CmnRlpStatsEntry 3 }

dot20CmnRlpTxDropBytes OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of RLP bytes of dropped before transmission"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
         Procedures)"
    ::= { dot20CmnRlpStatsEntry 4 }

dot20CmnRlpTxStatus OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
```

```
            "Number of RLP ReceiverStatus messages transmitted"
        REFERENCE
            "IEEE 802.20-2008, Subclause 7.3.4.3.3.5 (ATReceiverStatus),
             and Subclause 7.3.4.3.3.7 (ANReceiverStatus)"
        ::= { dot20CmnRlpStatsEntry 5 }

    dot20CmnRlpRxBytes OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP bytes of payload received"
        ::= { dot20CmnRlpStatsEntry 6 }

    dot20CmnRlpRxStatus OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP ReceiverStatus messages received"
        REFERENCE
            "IEEE 802.20-2008, Subclause 7.3.4.3.3.5 (ATReceiverStatus),
             and Subclause 7.3.4.3.3.7 (ANReceiverStatus)"
        ::= { dot20CmnRlpStatsEntry 7 }

    dot20CmnRlpTxPackets OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP Packets transmitted"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
             Procedures)"
        ::= { dot20CmnRlpStatsEntry 8 }

    dot20CmnRlpReTxPackets OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP Packets retransmitted"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
             Procedures)"
        ::= { dot20CmnRlpStatsEntry 9 }

    dot20CmnRlpTxrDropPackets OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP Packets dropped before transmission"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
             Procedures)"
        ::= { dot20CmnRlpStatsEntry 10 }

    dot20CmnRlpRxPackets OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of RLP Packets received"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 7.3.3.4.3 (RLP Receive
             Procedures)"
        ::= { dot20CmnRlpStatsEntry 11 }
```

```
dot20CmnRlpTxNAKTimeouts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of NAK Timeouts"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 7.3.3.4.3 (RLP Receive
         Procedures)"
    ::= { dot20CmnRlpStatsEntry 12 }

dot20CmnRlpTxACKTimeouts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of ACK Timeouts"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 7.3.3.4.2 (RLP Transmit
         Procedures)"
    ::= { dot20CmnRlpStatsEntry 13 }

dot20CmnQmp OBJECT-IDENTITY
    STATUS        current
    DESCRIPTION
        "Qos Management Protocol"
    ::= { dot20CmnRadioLink 3 }

dot20CmnQmpStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20CmnQmpStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of QMP statistics per 802.20
         interface"
    ::= { dot20CmnQmp 2 }

dot20CmnQmpStatsEntry OBJECT-TYPE
    SYNTAX        Dot20CmnQmpStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the QmpStats table. This table is
         indexed by IfIndex. ifIndex: Each IEEE 802.20 interface is
         represented by an ifEntry."
    INDEX
        { ifIndex }
    ::= { dot20CmnQmpStatsTable 1 }

dot20CmnActiveReservationsCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Active (Open State) Reservations"
    REFERENCE
        "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
         State Diagram (AT)), and Figure 22 (Forward Link Reservation State
         Diagram (AN)"
    ::= { dot20CmnQmpStatsEntry 1 }

dot20CmnIdleReservationsCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Idle (Close State) Reservations"
```

```
        REFERENCE
            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
             State Diagram (AT)), and Figure 22 (Forward Link Reservation State
             Diagram (AN)"
        ::= { dot20CmnQmpStatsEntry 2 }

    dot20CmnReservationOpenCounts OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of Reservations Open requests"
        REFERENCE
            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
             State Diagram (AT)), Figure 22 (Forward Link Reservation State
             Diagram (AN), Subclause 7.2.3.3.1 (ReservationOnRequest), and
             Subclause 7.2.3.3.6 (RevReservationOn)"
        ::= { dot20CmnQmpStatsEntry 3 }

    dot20CmnReservationCloseCounts OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of Reservations Close requests"
        REFERENCE
            "IEEE Std 802.20-2008, Figure 21 (Reverse Link Reservation
             State Diagram (AT)), Figure 22 (Forward Link Reservation State
             Diagram (AN), Subclause 7.2.3.3.2 (ReservationOffRequest),
             and Subclause 7.2.3.3.7 (RevReservationOn)"
        ::= { dot20CmnQmpStatsEntry 4 }

    dot20CmnReservationFailCounts OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of Failed Reservations requests"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 7.2.3.3.5 (ReservationReject)"
        ::= { dot20CmnQmpStatsEntry 5 }

    dot20CmnSecurity OBJECT IDENTIFIER ::= { dot20CmnMac 5 }

    dot20CmnKeyExchangeProtocol OBJECT IDENTIFIER ::= { dot20CmnSecurity 1 }

    dot20CmnKeyExchangeAttemptCounts OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of key exchanges attempts"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 10.4.5.2.1 (KeyRequest)"
        ::= { dot20CmnKeyExchangeProtocol 1 }

    dot20CmnKeyExchangeFailureCounts OBJECT-TYPE
        SYNTAX        Counter64
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Number of key exchanges failures"
        REFERENCE
            "IEEE Std 802.20-2008, Subclause 10.4.5.2.4 (KeyReject)"
        ::= { dot20CmnKeyExchangeProtocol 2 }

    dot20CmnMessageIntegrityProtocol OBJECT IDENTIFIER ::= { dot20CmnSecurity 2 }

```

```
dot20CmnAuthStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20CmnAuthStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of Authentication statistics per
         802.20 interface (i.e. sector for a specific ChannelBand.)"
    ::= { dot20CmnMessageIntegrityProtocol 1 }

dot20CmnAuthStatsEntry OBJECT-TYPE
    SYNTAX        Dot20CmnAuthStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Authentication statistics per 802.20 interfaces"
    INDEX
        { ifIndex }
    ::= { dot20CmnAuthStatsTable 1 }

dot20CmnAuthFailureCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Authentication failures (i.e. failure code 0x03 for
         RouteOpenReject.)"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 13.2.6.2.1
         (RouteOpenRequest), and Subclause 13.2.6.12
         (RouteOpenReject)"
    ::= { dot20CmnAuthStatsEntry 1 }

dot20CmnAuthSuccessCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of successful Authentications"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 13.2.6.2.1
         (RouteOpenRequest), and Subclause 13.2.6.3
         (RouteOpenAccept)"
    ::= { dot20CmnAuthStatsEntry 2 }

dot20CmnLowerMAC OBJECT IDENTIFIER ::= { dot20CmnMac 6 }

dot20CmnLMACPacketStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20CmnLMACPacketStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of Lower MAC protocol statistics
         per 802.20 interface, packet format and nb of ARQ attempts
         needed in order to successfully transmit/receive a packet."
    ::= { dot20CmnLowerMAC 1 }

dot20CmnLMACPacketStatsEntry OBJECT-TYPE
    SYNTAX        Dot20CmnLMACPacketStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the LMACPacketStats table. This
         table is indexed by IfIndex, PacketFormatIndex and
         ARQAttemptsIndex."
    INDEX
        { ifIndex, dot20CmnPacketFormatIndex, dot20CmnARQAttemptsIndex
        }
    ::= { dot20CmnLMACPacketStatsTable 1 }
```

```
dot20CmnPacketFormatIndex OBJECT-TYPE
    SYNTAX        Integer32 (0..15)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "The packet format index as defined in 802.20 AIS spec."
    ::= { dot20CmnLMACPacketStatsEntry 1 }

dot20CmnARQAttemptsIndex OBJECT-TYPE
    SYNTAX        Integer32 (0..15)
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Number of ARQ attempts that were needed in order to transmit
         or receive a packet. Index 0 means that the packets failed to
         be transmitted/received."
    ::= { dot20CmnLMACPacketStatsEntry 2 }


dot20CmnFwdTxPacketCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of transmitted packets"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 8.6.5.5.2.2 (F-DCH TX Associated
         with Persistent Assignments), Subclause 8.6.5.5.2.3 (F-DCH TX
         Associated with Non-Persistent Assignments and Residual Resource
         Assignments), and Subclause 8.6.5.5.2.4 (F-DCH TX Associated with
         Group Resource Assignments)"
    ::= { dot20CmnLMACPacketStatsEntry 3 }

dot20CmnRevRxPacketCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of received packets"
    REFERENCE
        "IEEE Std 802.20-2008,
         Subclause 8.6.5.5.1.2.2 (AT Processing for Non-Persistent
Assignments),
         Subclause 8.6.5.5.1.2.3 (AT Processing for Residual Resource
Assignments),
         Subclause 8.6.5.5.1.2.4 (AT Processing for Group Resource
Assignments)"
    ::= { dot20CmnLMACPacketStatsEntry 4 }

dot20CmnLMACStatsTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF Dot20CmnLMACStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table provides one row of Lower MAC protocol statistics
         per 802.20 interface and packet formats."
    ::= { dot20CmnLowerMAC 2 }

dot20CmnLMACStatsEntry OBJECT-TYPE
    SYNTAX        Dot20CmnLMACStatsEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "An Entry (conceptual row) in the LMACStats table. This table
         is indexed by IfIndex, PacketFormatIndex."
    INDEX
        { ifIndex, dot20CmnPacketFormatIndex }
```

```
    ::= { dot20CmnLMACStatsTable 1 }

dot20CmnFLABCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Forward Link Assignment Blocks"
    REFERENCE
        "IEEE Std 802.20-2008, Table 44 (F-SCCH Blocks), and Subclause
         8.5.5.4.1.2 (Framing of F-SCCH Blocks)"
    ::= { dot20CmnLMACStatsEntry 1 }

dot20CmnRLABCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Reverse Link Assignment Block"
    REFERENCE
        "IEEE Std 802.20-2008, Table 44 (F-SCCH Blocks), and Subclause
         8.5.5.4.1.2 (Framing of F-SCCH Blocks), and Subclause
         8.5.5.3.1.1.3.3 (RLAB)"
    ::= { dot20CmnLMACStatsEntry 2 }

dot20CmnAccessGrantCounts OBJECT-TYPE
    SYNTAX        Counter64
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Number of Access Grants (the number of times the indication
         ForwardLinkControlSegmentMAC.AccessGrantSent is raised)"
    REFERENCE
        "IEEE Std 802.20-2008, Subclause 8.5.5.4.1.1.3.1.1 (Procedures
         for Sending an Access Grant)"
    ::= { dot20CmnLMACStatsEntry 3 }

dot20Conformance OBJECT IDENTIFIER ::= { ieee802dot20 4 }

dot20Groups OBJECT IDENTIFIER ::= { dot20Conformance 1 }

dot20CmnSessionMgtPGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnSessionCloseCounts, dot20CmnSessionFailureCounts,
        dot20CmnSessionOpenCounts }
    STATUS        current
    DESCRIPTION
        "The session management protocol statistics"
    ::= { dot20Groups 1 }

dot20CmnKeyExchangePGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnKeyExchangeAttemptCounts,
        dot20CmnKeyExchangeFailureCounts }
    STATUS        current
    DESCRIPTION
        "The key exchange protocol statistics"
     ::= { dot20Groups 4 }

dot20CmnConnectedStatePGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnActiveConnectionCounts,
        dot20CmnConnectionAttemptCounts, dot20CmnConnectionDropCounts,
        dot20CmnConnectionFailureCounts, dot20CmnConnectionReleaseCounts
        }
    STATUS        current
    DESCRIPTION
        "The connected state protocol statistics"
```

```
    ::= { dot20Groups 5 }

dot20CmnRadioLinkGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnActiveReservationsCounts,
        dot20CmnIdleReservationsCounts, dot20CmnReservationCloseCounts,
        dot20CmnReservationFailCounts, dot20CmnReservationOpenCounts,
        dot20CmnRevRxPacketCounts, dot20CmnRlpReTxBytes,
        dot20CmnRlpReTxPackets, dot20CmnRlpRxBytes,
        dot20CmnRlpRxPackets, dot20CmnRlpRxStatus,
        dot20CmnRlpTxACKTimeouts, dot20CmnRlpTxBytes,
        dot20CmnRlpTxDropBytes, dot20CmnRlpTxNAKTimeouts,
        dot20CmnRlpTxPackets, dot20CmnRlpTxStatus,
        dot20CmnRlpTxrDropPackets }
    STATUS        current
    DESCRIPTION
        "The radio link layer statistics"
    ::= { dot20Groups 7 }

dot20CmnAuthGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnAuthFailureCounts, dot20CmnAuthSuccessCounts }
    STATUS        current
    DESCRIPTION
        "The authentication protocol statistics"
    ::= { dot20Groups 8 }

dot20CmnLowerMACGroup OBJECT-GROUP
    OBJECTS
        { dot20CmnAccessGrantCounts, dot20CmnFLABCounts,
        dot20CmnFwdTxPacketCounts, dot20CmnRLABCounts,
        dot20CmnRevRxPacketCounts }
    STATUS        current
    DESCRIPTION
        "The lower mac sublayer statistics"
    ::= { dot20Groups 9 }

dot20AnIdleStatePGroup OBJECT-GROUP
    OBJECTS
        { dot20AnAccessAttemptCounts, dot20AnAccessAttemptFailCounts,
        dot20AnPageAttemptCounts, dot20AnPageFailureCounts }
    STATUS        current
    DESCRIPTION
        "The An idle state protocol statistics"
    ::= { dot20Groups 10 }

dot20AnOverheadGroup OBJECT-GROUP
    OBJECTS
        { dot20An16QamScchT2PRatio, dot20AnAccessCycleDuration,
        dot20AnAccessRetryPersistance0, dot20AnAccessRetryPersistence1,
        dot20AnAccessRetryPersistence2, dot20AnAccessRetryPersistence3,
        dot20AnAccessRetryPersistence4, dot20AnAccessRetryPersistence5,
        dot20AnAccessRetryPersistence6, dot20AnAccessRetryPersistence7,
        dot20AnAckInterferenceOffset, dot20AnAnGroupId,
        dot20AnAssignmentAckHARQTx, dot20AnBRCHSubzoneCyclingEnabled,
        dot20AnBandClass, dot20AnCBNumGuardSubcarriers,
        dot20AnCDMAInterlacesBitmap, dot20AnCQIPilotTransmitPower,
        dot20AnCdmaSubSegmentNum, dot20AnCellGroupId, dot20AnCellNullID,
        dot20AnChannelBandAccessHashMask, dot20AnChannelBandRef,
        dot20AnChannelBandShortId, dot20AnChannelNumber,
        dot20AnCommonPilotTransmitPower, dot20AnCpichHoppingMode,
        dot20AnCtrlAccessOffset, dot20AnCyclicPrefixLength,
        dot20AnEffectiveTransmitPower, dot20AnEnableExpandedQPCH,
        dot20AnErasureTargetCtoI0, dot20AnErasureTargetCtoI1,
        dot20AnErasureTargetCtoI2, dot20AnErasureTargetCtoI3,
        dot20AnFACKBandwidthFactor, dot20AnFFTSize,
        dot20AnFDPICHCodeOffsetSubtree0, dot20AnFDPICHCodeOffsetSubtree1,
        dot20AnFDPICHCodeOffsetSubtree2, dot20AnFDPICHCodeOffsetSubtree3,
```

```
            dot20AnFLReservedInterlaces, dot20AnFastIoTEnabled,
            dot20AnFastOSIEnabled, dot20AnFlIotReportInterval,
            dot20AnFlPcReportInterval, dot20AnFlPqiReportInterval,
            dot20AnFlSdmaNumSubtrees, dot20AnFlSubzoneSize,
            dot20AnHalfDuplexModeSupported, dot20AnHalfDuplexSupported,
            dot20AnIfChannelBandRef, dot20AnLatitude, dot20AnLeapSeconds,
            dot20AnLocalTimeOffset, dot20AnLongitude, dot20AnMacIdRange,
            dot20AnMax16QamScchBlocks, dot20AnMaxNumLABs, dot20AnMaxNumSharedLABs,
            dot20AnMaxProbesPerSequence, dot20AnMinScchResourceIndex,
            dot20AnMobileCountryCode, dot20AnMobileNetworkCode,
            dot20AnNeighborPilotID, dot20AnNeighborChannelShortID,
            dot20AnNeighborSameANAsPrimSect, dot20AnNeighborSectorCellGroupId,
            dot20AnNeighborSectorPilotGrpId, dot20AnNeighborChannelBandRef,
            dot20AnNeighborSectorPointer, dot20AnNeighborSynchGroupId,
            dot20AnNeighborEffTransmitPower, dot20AnNumAckableLABs,
            dot20AnNumCmnPilotTxAnt, dot20AnNumCommonSegmentHopPorts,
            dot20AnNumDRCHSubzones, dot20AnNumEffectiveAntennas,
            dot20AnNumFLReservedSubzones,
            dot20AnNumGuardSubcarriers, dot20AnNumLABSegments,
            dot20AnNumOdcchReports, dot20AnNumRLCdmaSubsegments,
            dot20AnNumResourceSubzones, dot20AnNumSilenceIntervalSubzone,
            dot20AnOpenLoopAdjust, dot20AnOsiResponseMode,
            dot20AnPdCabResSharingEnabled, dot20AnPilotGroupId, dot20AnPilotID,
            dot20AnPilotThreshold1, dot20AnPilotThreshold2,
            dot20AnPrimaryRegZoneCode, dot20AnProbeRampUpStepSize,
            dot20AnRabEnabled, dot20AnRackBandwidthFactor,
            dot20AnReqQoSPowerBoost, dot20AnResourceChannelMuxMode,
            dot20AnResourceSetBitmap, dot20AnResourceSetSubZoneSpacing,
            dot20AnResourceSubzoneOffset, dot20AnReverseChannelBandClass,
            dot20AnReverseChannelNumber, dot20AnRlAuxPilotPower,
            dot20AnRlDpichCodeOffsetSubtree0, dot20AnRlDpichCodeOffsetSubtree1,
            dot20AnRlDpichCodeOffsetSubtree2, dot20AnRlDpichCodeOffsetSubtree3,
            dot20AnRlNumSdmaDimensions, dot20AnModSymbolsPerQPSKLAB,
            dot20AnSFNCellID, dot20AnSecRegZoneCode, dot20AnSectorID,
            dot20AnSilenceIntervalDuration, dot20AnSilenceIntervalPeriod,
            dot20AnSinglePAForXCarriers, dot20AnSlowInterferenceOffset,
            dot20AnSupportedIpsi, dot20AnSynchronousGroupId, dot20AnSystemType,
            dot20AnTechNghbrListLength, dot20AnTechnologyNeighborList,
            dot20AnTechnologyType, dot20AnTotalNumSubcarriers,
            dot20AnUseDrchForFlcs, dot20AnRlSubzoneSize }
        STATUS        current
        DESCRIPTION "The overhead messages protocol configuration"
        ::= { dot20Groups 11 }

    dot20AnOverheadGroup2 OBJECT-GROUP
        OBJECTS
            { dot20AnChannelBandStatus, dot20AnIpsiRowStatus,
            dot20AnNeighborRowStatus, dot20AnNeighborSectorStatus,
            dot20AnOtherTechNghbrRowStatus, dot20AnResourceSetRowStatus,
            dot20AnSecondaryRegZoneRowStatus,
            dot20AnSectorCdmaSubSegRowStatus, dot20AnSectorConfigRowStatus,
            dot20AnSectorExtChanRowStatus, dot20AnSectorParamRowStatus }
        STATUS        current
        DESCRIPTION
            "If the MIB is created with pre-configured sector list tables and
             neighbor list tables, this Overhead Group is unnecessary.  Otherwise,
             these items are used to add rows to these tables in the MIB, so
             that additional sectors and/or neighbors can be added after MIB
             creation, through SNMPv2."
        ::= { dot20Groups 12 }

    dot20Compliances OBJECT IDENTIFIER ::= { dot20Conformance 2 }

    dot20AnCompliance MODULE-COMPLIANCE
        STATUS         current
        DESCRIPTION
            "The compliance statement for SNMPv2 entities that implement
             the IEEE 802.20 MIB for the An."
```

```
        MODULE          IEEE802dot20-MIB
            MANDATORY-GROUPS
                { dot20AnIdleStatePGroup, dot20AnOverheadGroup,
                dot20CmnAuthGroup, dot20CmnConnectedStatePGroup,
                dot20CmnKeyExchangePGroup, dot20CmnLowerMACGroup,
                dot20CmnRadioLinkGroup, dot20CmnSessionMgtPGroup }
            GROUP           dot20AnOverheadGroup2
            DESCRIPTION
                "This group is required only if 'dynamic assignment' of
                 rows in the OverheadGroup tables is supported."
        ::= { dot20Compliances 1 }

    END

```