

## Annex Q

*Insert the following new Annex as shown:*

(normative)

### ASN.1 encoding of the RRM MIB

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11 -- *****
12 -- * IEEE 802.11 RRM MIB
13 -- *****
14 -- * The primary interface to the Radio Resource Measurements is meant to be
15 -- * real-time information obtained through the request/response mechanisms of
16 -- * RRM. A secondary interface to the measurements is through retention of
17 -- * information in the MIB. The information, meant to be retained for later
18 -- * access, includes the MIB entries of Annex Q. Non-SNMP requests for infor-
19 -- * mation are obtained via object IDs (OIDs) through the NDIS or "wireless"
20 -- * interfaces in the operating systems. SNMP requests for information are
21 -- * obtained via SNMP SETs and GETs.
22
23 -- *****
24 -- * Radio Resource Measurement
25 -- *****
26
27 dot11RadioResourceMeasurement OBJECT IDENTIFIER ::= { dot11smt 14 }
28 -- *****
29 -- * dot11RRMRequest and dot11RRMReport Usage
30 -- *
31 -- * The dot11RRMRequest and dot11RRMReport portions of the RRM MIB
32 -- * provide access to the Radio Measurement service. By performing
33 -- * SET operations on the various dot11RRMRequest MIB objects,
34 -- * radio measurements may be initiated directly on the local STA or
35 -- * on any peer station within the same BSS. Subsequently, by
36 -- * performing GET operations on the various dot11RRMReport MIB
37 -- * objects the results of the requested measurements may be
38 -- * retrieved.
39 -- *
40 -- *
41 -- * In the diagram below, a radio measurement could be initiated
42 -- * for STA x by performing a MIB.set operation on the RRM MIB of
43 -- * STA x and specifying the MAC address of STA x in
44 -- * dot11RRMRqstTargetAdd. Additionally, it is possible to have STA x
45 -- * request a measurement from STA y by performing a MIB.set operation
46 -- * on the SME MIB of STA x and specifying the MAC address of STA y in
47 -- * dot11RRMRqstTargetAdd. In both cases the result of the measurements
48 -- * can be retrieved by performing a MIB.get operation on the RRM MIB
49 -- * of STA x upon completion of the measurement.
50

```

```

1  -- *
2  -- *
3  -- *      MIB.Set      MIB.Set
4  -- *      or          or
5  -- *      MIB.Get      MIB.Get
6  -- *      +-----+   +-----+
7  -- *      | SME      |   | SME      |
8  -- *      | \ /      |   | \ /      |
9  -- *      | +-----+ |   | +-----+ |
10 -- *      | | RRM MIB | |   | | RRM MIB | |
11 -- *      | +-----+ |   | +-----+ |
12 -- *      | / \      |   | / \      |
13 -- *      | | MREQUEST | |   | | MREQUEST | |
14 -- *      | +-----+ |   | +-----+ |
15 -- *      | | MREPORT  | |   | | MREPORT  | |
16 -- *      | \ /      |   | \ /      |
17 -- *      | MEASURE   | |   | | MEASURE   | |
18 -- *      | +-----+ |   | +-----+ |
19 -- *      | MLME     | |   | | MLME     | |
20 -- *      | +-----+ |   | +-----+ |
21 -- *      STA x          STA y
22 -- *
23 -- *
24 -- *
25 -- *
26 -- *
27 -- *
28 -- *
29 -- *
30 -- *
31 -- *
32 -- *
33 -- *
34 -- *
35 -- *
36 -- *
37 -- *
38 -- *
39 -- *
40 -- *
41 -- *
42 -- *
43 -- *
44 -- *
45 -- *
46 -- *
47 -- *
48 -- *
49 -- *
50 -- *

```

Action Frames  
<--Measurement Request-->  
<--Measurement Report-->

```

-- *
-- * Each STA maintains a single dot11RRMRequestTable in the SME MIB
-- * used to initiate RM Measurement Requests. Each dot11RRMRequestEntry
-- * in the table represents an individual Measurement Request that
-- * makes up a complete Measurement Request Action frame.
-- * Multiple Measurement Requests may be concatenated into a single
-- * Measurement Request Action frame by setting the same
-- * dot11RRMRqstToken value into multiple dot11RRMRequestEntrys.
-- *
-- * Each row, dot11RRMRequestEntry, of the dot11RRMRequestTable
-- * provides read-create access for the initiation of a measurement
-- * request. The dot11RRMRequestNextIndex object can be used to
-- * determine which is the next row available. Each row corresponding to
-- * one measurement in the sequence is created with a dot11RRMRqstRowStatus
-- * set to notInService. Once the dot11RRMRequestEntry(s) have been
-- * created for a desired measurement sequence the corresponding
-- * dot11RRMRqstRowStatus(s) objects are set to active to indicate that
-- * the SME can trigger the appropriate MLME primitives. Upon processing
-- * the request, the SME returns the corresponding dot11RRMRqstRowStatus(s)
-- * object to notInService and are now available for additional
-- * measurement requests.
-- *
-- * After a radio measurement is complete the RRM populates the RRMReport
-- * objects with the results of the measurement. Each STA maintains a set
-- * of RRMReport tables, one for each corresponding measurement type. The
-- * results of the entire measurement sequence are spread across the tables
-- * based on what types of measurements were requested. Each xxxReportEntry
-- * within a xxxReportTable contains a xxxRprtRqstToken that corresponds
-- * to the original dot11RRMRqstToken in the measurement request. So the
-- * results of the measurement can be collected by searching the appropriate
-- * xxxReportTables and retrieve any reports with the matching request
-- * token.
-- *
-- * *****
-- * *****
-- * Radio Resource Measurement Requests
-- * *****
dot11RRMRequest OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 1 }
-- * *****
-- * dot11RRMRequest TABLE
-- * *****
dot11RRMRequestNextIndex OBJECT-TYPE
SYNTAX Unsigned32(0..65535)
MAX-ACCESS read-only
STATUS current

```

```

1      DESCRIPTION
2          "Identifies a hint for the next value of dot11RRMRqstIndex to be used in a
3          row creation attempt for dot11RRMRequestTable. If no new rows can be cre-
4          ated for some reason, such as memory, processing requirements, etc, the SME
5          shall set this attribute to 0. It shall update this attribute to a proper
6          value other than 0 as soon as it is capable of receiving new measurement
7          requests. The nextIndex is not necessarily sequential nor monotonically
8          increasing."
9      ::= { dot11RRMRequest 1 }
10
11 dot11RRMRequestTable OBJECT-TYPE
12     SYNTAX SEQUENCE OF Dot11RRMRequestEntry
13     MAX-ACCESS not-accessible
14     STATUS current
15     DESCRIPTION
16         "This group contains the current list of requests for RRM reports to be
17         issued and have been issued until removed. A network manager adds a RRM
18         request by creating a row with createAndWait row status and then filling in
19         the request parameters/attributes. The request becomes active to be issued
20         when the row status is set to Active. The columnar objects or attributes
21         other than the rowStatus shall not be written if the rowStatus is Active.
22         The request rows can be deleted, if commanded by a network manager via
23         changing the value of dot11RRMRqstRowStatus to Destroy. This may leave
24         orphaned rows if a manager crashes and forgets which rows are being used by
25         it. One recommended way to manage orphaned or finished rows is to delete
26         rows if their dot11RRMRqstRowStatus remains other than Active for longer
27         than a period (recommend at least 5 minutes, RFC 2579). Or another recom-
28         mended way is to delete older rows as needed based on their
29         dot11RRMRqstTimeStamp values. This can be done by the agent as well as the
30         manager. "
31     ::= { dot11RRMRequest 2 }
32
33 dot11RRMRequestEntry OBJECT-TYPE
34     SYNTAX Dot11RRMRequestEntry
35     MAX-ACCESS not-accessible
36     STATUS current
37     DESCRIPTION
38         "An entry in the dot11RRMRequestTable Indexed by dot11RRMRqstIndex."
39     INDEX { dot11RRMRqstIndex }
40     ::= { dot11RRMRequestTable 1 }
41
42 Dot11RRMRequestEntry ::=
43     SEQUENCE {
44         dot11RRMRqstIndex                Unsigned32,
45         dot11RRMRqstRowStatus            RowStatus,
46         dot11RRMRqstToken                OCTET STRING,
47         dot11RRMRqstRepetitions          INTEGER,
48         dot11RRMRqstIfIndex              InterfaceIndex,
49         dot11RRMRqstType                  INTEGER,
50         dot11RRMRqstTargetAdd            MacAddress,
51         dot11RRMRqstTimeStamp            TimeTicks,
52         dot11RRMRqstChanNumber            INTEGER,
53         dot11RRMRqstRegulatoryClass       INTEGER,
54         dot11RRMRqstRndInterval           Unsigned32,
55         dot11RRMRqstDuration              Unsigned32,
56         dot11RRMRqstParallel              TruthValue,
57         dot11RRMRqstEnable                 TruthValue,
58         dot11RRMRqstRequest                TruthValue,
59         dot11RRMRqstReport                 TruthValue,
60         dot11RRMRqstDurationMandatory     TruthValue,
61         dot11RRMRqstBeaconRqstMode        INTEGER,
62         dot11RRMRqstBeaconRqstDetail      INTEGER,
63         dot11RRMRqstFrameRqstType         INTEGER,
64         dot11RRMRqstBssid                  MacAddress,
65         dot11RRMRqstSSID                   OCTET STRING,
66         dot11RRMRqstBeaconReportingCondition INTEGER,
67         dot11RRMRqstBeaconThresholdOffset INTEGER,
68         dot11RRMRqstSTASatRqstGroupID     INTEGER,
69         dot11RRMRqstLCIRqstSubject         INTEGER,
70         dot11RRMRqstLCILatitudeResolution INTEGER,
71         dot11RRMRqstLCILongitudeResolution INTEGER,
72         dot11RRMRqstLCIAltitudeResolution INTEGER,

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1          dot11RRMRqstLCIAzimuthType                INTEGER,
2          dot11RRMRqstLCIAzimuthResolution           INTEGER,
3          dot11RRMRqstPauseTime                     INTEGER,
4          dot11RRMRqstTransmitStreamPeerQSTAAAddress MacAddress,
5          dot11RRMRqstTransmitStreamTrafficIdentifier INTEGER,
6          dot11RRMRqstTransmitStreamBin0Range       INTEGER,
7          dot11RRMRqstTrigdQoSAverageCondition      TruthValue,
8          dot11RRMRqstTrigdQoSConsecutiveCondition  TruthValue,
9          dot11RRMRqstTrigdQoSDelayCondition        TruthValue,
10         dot11RRMRqstTrigdQoSAverageThreshold      INTEGER,
11         dot11RRMRqstTrigdQoSConsecutiveThreshold  INTEGER,
12         dot11RRMRqstTrigdQoSDelayThresholdRange   INTEGER,
13         dot11RRMRqstTrigdQoSDelayThreshold        INTEGER,
14         dot11RRMRqstTrigdQoSMeasurementCount      INTEGER,
15         dot11RRMRqstTrigdQoSTimeout               INTEGER,
16         dot11RRMRqstChannelLoadReportingCondition  INTEGER,
17         dot11RRMRqstChannelLoadReference           INTEGER,
18         dot11RRMRqstNoiseHistogramReportingCondition INTEGER,
19         dot11RRMRqstAnpiReference                 INTEGER,
20         dot11RRMRqstAPChannelReport                OCTET STRING,
21         dot11RRMRqstSTASatPeerSTAAddress          MacAddress,
22         dot11RRMRqstFrameTransmitterAddress       MacAddress,
23         dot11RRMRqstVendorSpecific                 OCTET STRING }STRING,
24         dot11RRMRqstSTASatTrigMeasCount           Unsigned32,
25         dot11RRMRqstSTASatTrigTimeout             INTEGER,
26         dot11RRMRqstSTASatTrigSTAFailedCntThresh Unsigned32,
27         dot11RRMRqstSTASatTrigSTAFCSERRCntThresh Unsigned32,
28         dot11RRMRqstSTASatTrigSTAMultRetryCntThresh Unsigned32,
29         dot11RRMRqstSTASatTrigSTAFRAMEDUPECntThresh Unsigned32,
30         dot11RRMRqstSTASatTrigSTARTSFAILCntThresh Unsigned32,
31         dot11RRMRqstSTASatTrigSTAAckFailCntThresh Unsigned32,
32         dot11RRMRqstSTASatTrigSTARetryCntThresh  Unsigned32,
33         dot11RRMRqstSTASatTrigQoSFailedCntThresh Unsigned32,
34         dot11RRMRqstSTASatTrigQoSRetryCntThresh  Unsigned32,
35         dot11RRMRqstSTASatTrigQOSMultRetryCntThresh Unsigned32,
36         dot11RRMRqstSTASatTrigQOSFRAMEDUPECntThresh Unsigned32,
37         dot11RRMRqstSTASatTrigQOSRTSFAILCntThresh Unsigned32,
38         dot11RRMRqstSTASatTrigQOSACKFAILCntThresh Unsigned32,
39         dot11RRMRqstSTASatTrigQOSDISCARDCntThresh Unsigned32,
40         dot11RRMRqstSTASatTrigRSnaCMACICVERRCntThresh Unsigned32,
41         dot11RRMRqstSTASatTrigRSnaCMACREPLAYCntThresh Unsigned32,
42         dot11RRMRqstSTASatTrigRSnaRobustCCMPREPLAYCntThresh Unsigned32,
43         dot11RRMRqstSTASatTrigRSnaTKIPICVERRCntThresh Unsigned32,
44         dot11RRMRqstSTASatTrigRSnaTKIPREPLAYCntThresh Unsigned32,
45         dot11RRMRqstSTASatTrigRSnaCCMPDECRYPTERRCntThresh Unsigned32,
46         dot11RRMRqstSTASatTrigRSnaCCMPREPLAYCntThresh Unsigned32 }
47
48 dot11RRMRqstIndex OBJECT-TYPE
49     SYNTAX Unsigned32
50     MAX-ACCESS not-accessible
51     STATUS current
52     DESCRIPTION
53         "Index for RRM Request elements in dot11RRMRequestTable, greater than 0."
54     ::= { dot11RRMRequestEntry 1 }
55
56 dot11RRMRqstRowStatus OBJECT-TYPE
57     SYNTAX RowStatus
58     MAX-ACCESS read-create
59     STATUS current
60     DESCRIPTION
61         "The Row Status column of the current row, used for tracking status of an
62         individual request. When this attribute is set to Active, AND a measurement
63         request can be unambiguously created based on the parameters in the
64         row, then the MLME may proceed to issue the request to its intended targets
65         when appropriate. If not, this attribute may be set to Not-ready immediately
66         to indicate parametric errors. However, it is the network managers responsibility
67         to correct the error. If the request is successfully issued to the target STA,
68         then the rowStatus is set to notInService."
69     REFERENCE
70         "Clause 7.3.2.21"
71     ::= { dot11RRMRequestEntry 2 }

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1  dot11RRMRqstToken OBJECT-TYPE
2      SYNTAX OCTET STRING
3      MAX-ACCESS read-create
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates a unique string to identify a group of rows to be
7          issued as parallel or sequential measurements. To guarantee the uniqueness
8          of this token across multiple network managers, it is recommended that this
9          token be prefixed with the IP address of the network manager creating this
10         row. This token is not necessarily equivalent to the measurement tokens in
11         RRM request frames. If this attribute is an empty string, then this row of
12         request is independent from other requests."
13     DEFVAL { "" }
14     ::= { dot11RRMRequestEntry 3 }
15
16 dot11RRMRqstRepetitions OBJECT-TYPE
17     SYNTAX INTEGER
18     MAX-ACCESS read-create
19     STATUS current
20     DESCRIPTION
21         "This attribute indicates the requested number of repetitions for all the
22         measurement request elements in this frame. A value of zero in the Number
23         of Repetitions field indicates measurement request elements are executed
24         once without repetition."
25     ::= { dot11RRMRequestEntry 4 }
26
27 dot11RRMRqstIfIndex OBJECT-TYPE
28     SYNTAX InterfaceIndex
29     MAX-ACCESS read-create
30     STATUS current
31     DESCRIPTION
32         "The ifIndex for this row of RRM Request to be issued on."
33     ::= { dot11RRMRequestEntry 5 }
34
35 dot11RRMRqstType OBJECT-TYPE
36     SYNTAX INTEGER {
37         channelLoad(3),
38         noiseHistogram(4),
39         beacon(5),
40         frame(6),
41         staStatistics(7),
42         lci(8),
43         transmitStream(9),
44         pause(255)
45     }
46     MAX-ACCESS read-create
47     STATUS current
48     DESCRIPTION
49         "This attribute indicates the measurement type of this RRM request row."
50     ::= { dot11RRMRequestEntry 6 }
51
52 dot11RRMRqstTargetAdd OBJECT-TYPE
53     SYNTAX MacAddress
54     MAX-ACCESS read-create
55     STATUS current
56     DESCRIPTION
57         "The MAC address of STA for this row of RRM Request is to be issued to. If
58         this attribute matches the MAC address of the dot11RRMRqstIfIndex, then
59         measurement request is for this STA itself to carry out."
60     ::= { dot11RRMRequestEntry 7 }
61
62 dot11RRMRqstTimeStamp OBJECT-TYPE
63     SYNTAX TimeTicks
64     MAX-ACCESS read-only
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates the SysUpTime Value the last time when the
68         dot11RRMRqstRowStatus is set to active or when this row is created the
69         first time. This attribute shall be set by this STA or AP automatically,
70         not by an SNMP manager."
71     ::= { dot11RRMRequestEntry 8 }

```

```

1  dot11RRMRqstChanNumber OBJECT-TYPE
2      SYNTAX INTEGER
3      MAX-ACCESS read-create
4      STATUS current
5      DESCRIPTION
6          "The target STA channel number on which to perform the measurements indi-
7          cated in this request. The Channel Number is only defined within the indi-
8          cated Regulatory Class for this measurement request. This attribute is
9          ignored if dot11RRMRqstType = STA statistics Request, LCI Request, Trans-
10         mit Stream/Category Measurement, or Measurement Pause. However, even in
11         that case, the manager should set this attribute to the current channel for
12         this interface, so that the row can be set to active when ready with all
13         attributes indicated."
14     ::= { dot11RRMRequestEntry 9 }
15
16 dot11RRMRqstRegulatoryClass OBJECT-TYPE
17     SYNTAX INTEGER (1..255)
18     MAX-ACCESS read-create
19     STATUS current
20     DESCRIPTION
21         "This attribute indicates the channel set for this measurement request.
22         Country, Regulatory Class and Channel Number together specify the channel
23         frequency and spacing for this measurement request. Valid values of Regula-
24         tory Class are shown in Annex J."
25     REFERENCE
26         "Annex J"
27     ::= { dot11RRMRequestEntry 10 }
28
29 dot11RRMRqstRndInterval OBJECT-TYPE
30     SYNTAX Unsigned32
31     UNITS "TUs"
32     MAX-ACCESS read-create
33     STATUS current
34     DESCRIPTION
35         "This attribute indicates the upper bound of the random delay to be used
36         prior to making the measurement, expressed in units of TUs. See 11.10.2.
37         This attribute is ignored if dot11RRMRqstType = STA statistics Request, LCI
38         Request, Transmit Stream/Category Measurement or Measurement Pause."
39     DEFVAL { 0 }
40     ::= { dot11RRMRequestEntry 11 }
41
42 dot11RRMRqstDuration OBJECT-TYPE
43     SYNTAX Unsigned32
44     UNITS "TUs"
45     MAX-ACCESS read-create
46     STATUS current
47     DESCRIPTION
48         "This attribute indicates the preferred or mandatory measurement duration
49         for this Measurement Request. This attribute is ignored if dot11RRMRqstType
50         = LCI Request or Measurement Pause."
51     DEFVAL { 0 }
52     ::= { dot11RRMRequestEntry 12 }
53
54 dot11RRMRqstParallel OBJECT-TYPE
55     SYNTAX TruthValue
56     MAX-ACCESS read-create
57     STATUS current
58     DESCRIPTION
59         "This attribute indicates the parallel bit for this Measurement Request
60         element. Default is FALSE which means the measurement shall be performed in
61         sequence. This attribute, when TRUE, indicates that this measurement should
62         start at the same time as the measurement described by the next Measure-
63         ment Request element in the next row if the next row indicates the same
64         value for dot11RRMRqstToken. The default value of this attribute is FALSE."
65     ::= { dot11RRMRequestEntry 13 }
66
67 dot11RRMRqstEnable OBJECT-TYPE
68     SYNTAX TruthValue
69     MAX-ACCESS read-create
70     STATUS current
71     DESCRIPTION
72         "This attribute indicates the enable bit for this Measurement Request ele-

```

```

1      ment. The default value of this attribute is FALSE."
2      ::= { dot11RRMRequestEntry 14 }
3
4  dot11RRMRqstRequest OBJECT-TYPE
5      SYNTAX TruthValue
6      MAX-ACCESS read-create
7      STATUS current
8      DESCRIPTION
9          "This attribute indicates the request bit for this Measurement Request ele-
10         ment. This attribute, when TRUE, indicates that this STA shall accept mea-
11         surement requests from the target STA. The default value of this attribute
12         is FALSE."
13      ::= { dot11RRMRequestEntry 15 }
14
15 dot11RRMRqstReport OBJECT-TYPE
16     SYNTAX TruthValue
17     MAX-ACCESS read-create
18     STATUS current
19     DESCRIPTION
20         "This attribute indicates the report bit for this Measurement Request ele-
21         ment. This attribute, when TRUE, indicates that the target STA may enable
22         autonomous measurement reports to the requesting STA. The default value of
23         this attribute is FALSE."
24     ::= { dot11RRMRequestEntry 16 }
25
26 dot11RRMRqstDurationMandatory OBJECT-TYPE
27     SYNTAX TruthValue
28     MAX-ACCESS read-create
29     STATUS current
30     DESCRIPTION
31         "This attribute indicates the duration mandatory bit for this Measurement
32         Request element. This attribute, when TRUE, indicates that the indicated
33         Measurement Duration is a mandatory duration for this measurement. This
34         attribute, when FALSE, indicates that the indicated Measurement Duration is
35         a maximum duration for this measurement. The default value of this
36         attribute is FALSE."
37     ::= { dot11RRMRequestEntry 17 }
38
39 dot11RRMRqstBeaconRqstMode OBJECT-TYPE
40     SYNTAX INTEGER {
41         passive(0),
42         active(1),
43         beaconTable(2)
44     }
45     MAX-ACCESS read-create
46     STATUS current
47     DESCRIPTION
48         "This attribute indicates the Measurement Mode for this Beacon Request ele-
49         ment. This attribute is only valid if the dot11RRMRqstType is 5, indicat-
50         ing a beacon request, and is ignored otherwise."
51     DEFVAL { 0 }
52     ::= { dot11RRMRequestEntry 18 }
53
54 dot11RRMRqstBeaconRqstDetail OBJECT-TYPE
55     SYNTAX INTEGER {
56         noBody(0),
57         fixedFieldsAndRequestedElements(1),
58         allBody(2)
59     }
60     MAX-ACCESS read-create
61     STATUS current
62     DESCRIPTION
63         " dot11RRMRqstBeaconRqstDetail indicates the Reporting Detail for Beacon
64         Request element. This attribute is only valid if the dot11RRMRqstType is 5,
65         indicating a beacon request, and is ignored otherwise."
66     DEFVAL { 2 }
67     ::= { dot11RRMRequestEntry 19 }
68
69 dot11RRMRqstFrameRqstType OBJECT-TYPE
70     SYNTAX INTEGER {
71         frameCountRep(1)

```

```

1         }
2     MAX-ACCESS read-create
3     STATUS current
4     DESCRIPTION
5         " dot11RRMRqstFrameRqstType indicates the Frame Request Type for Frame
6         Request element. This attribute is only valid if the dot11RRMRqstType is 6,
7         indicating a frame request, and is ignored otherwise."
8     DEFVAL { 2 }
9     ::= { dot11RRMRequestEntry 20 }
10
11 dot11RRMRqstBssid OBJECT-TYPE
12     SYNTAX MacAddress
13     MAX-ACCESS read-create
14     STATUS current
15     DESCRIPTION
16         "BSSID indicates the BSSID of the particular AP for which this measurement
17         is requested. The BSSID shall be set to the wildcard BSSID when the mea-
18         surement is to be performed on any AP(s) on the indicated channel. This
19         attribute is only valid if the dot11RRMRqstType is 5, indicating a beacon
20         request, and is ignored otherwise."
21     DEFVAL { 'FFFFFFFFFH' }
22     ::= { dot11RRMRequestEntry 21 }
23
24 dot11RRMRqstSSID OBJECT-TYPE
25     SYNTAX OCTET STRING (SIZE(0..32))
26     MAX-ACCESS read-create
27     STATUS current
28     DESCRIPTION
29         "This attribute indicates the SSID for the measurement. Zero length MIB
30         element for SSID indicates the wildcard SSID. The SSID shall be set to the
31         wildcard SSID when the measurement is to be performed on all ESSs/IBSSs on
32         the indicated channel. This attribute is only valid if the dot11RRMRqstType
33         is 5, indicating a beacon request, and is ignored otherwise."
34     DEFVAL { ''H }
35     ::= { dot11RRMRequestEntry 22 }
36
37 dot11RRMRqstBeaconReportingCondition OBJECT-TYPE
38     SYNTAX INTEGER {
39         afterEveryMeasurement(0),
40         rcpiAboveAbsoluteThreshold(1),
41         rcpiBelowAbsoluteThreshold(2),
42         rsniAboveAbsoluteThreshold(3),
43         rsniBelowAbsoluteThreshold(4),
44         rcpiAboveOffsetThreshold(5),
45         rcpiBelowOffsetThreshold(6),
46         rsniAboveOffsetThreshold(7),
47         rsniBelowOffsetThreshold(8),
48         rcpiInBound(9),
49         rsniInBound(10)
50     }
51     MAX-ACCESS read-create
52     STATUS current
53     DESCRIPTION
54         "This attribute indicates when the Beacon Measurement results are to be
55         reported to the requesting STA. This attribute is only valid if the
56         dot11RRMRqstType is 5, indicating a beacon request, and is ignored other-
57         wise."
58     REFERENCE
59         "IEEE 802.11, Table 7-29d-Reporting Condition values for Beacon Request
60         element"
61     DEFVAL { 0 }
62     ::= { dot11RRMRequestEntry 23 }
63
64 dot11RRMRqstBeaconThresholdOffset OBJECT-TYPE
65     SYNTAX INTEGER
66     UNITS "0.5 dB"
67     MAX-ACCESS read-create
68     STATUS current
69     DESCRIPTION
70         "Threshold/Offset provides either the threshold value or the offset value
71         to be used for conditional reporting. For indicated Reporting Conditions 1-
72         4, the integer range is (0..255). For indicated Reporting Conditions 5-10,

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1         the integer range is (-127..+127). This attribute is only valid if the
2         dot11RRMRqstType is 5, indicating a beacon request, and is ignored other-
3         wise."
4         DEFVAL { 0 }
5         ::= { dot11RRMRequestEntry 24 }
6
7     dot11RRMRqstSTAStatRqstGroupID OBJECT-TYPE
8         SYNTAX INTEGER {
9             dot11CountersTable(0),
10            dot11CountersTabledot11MacStatistics(1),
11            dot11MacStatisticsdot11QosCountersTableforUP0(2),
12            dot11QosCountersTableforUP0dot11QosCountersTableforUP1(23),
13            dot11QosCountersTableforUP1dot11QosCountersTableforUP2(34),
14            dot11QosCountersTableforUP2dot11QosCountersTableforUP3(45),
15            dot11QosCountersTableforUP3dot11QosCountersTableforUP4(56),
16            dot11QosCountersTableforUP4dot11QosCountersTableforUP5(67),
17            dot11QosCountersTableforUP5dot11QosCountersTableforUP6(78),
18            dot11QosCountersTableforUP6dot11QosCountersTableforUP7(89),
19            dot11QosCountersTableforUP7bSSAverageAccessDelays(910),
20            bSSAverageAccessDelaysdot11RSNAStatsTable(1016)
21        }
22        MAX-ACCESS read-create
23        STATUS current
24        DESCRIPTION
25            "The attribute indicates the group identity for this Measurement Request
26            element. This attribute is only valid if the dot11RRMRqstType is 7, indi-
27            cating a statistics request, and is ignored otherwise."
28        DEFVAL { 0 }
29        ::= { dot11RRMRequestEntry 25 }
30
31     dot11RRMRqstLCIRqstSubject OBJECT-TYPE
32         SYNTAX INTEGER {
33             local(0),
34             remote(1)
35         }
36         MAX-ACCESS read-create
37         STATUS current
38         DESCRIPTION
39             "The attribute indicates the subject of the LCI measurement request. This
40             attribute is only valid if the dot11RRMRqstType is 8, indicating an LCI
41             request, and is ignored otherwise."
42         DEFVAL { 0 }
43         ::= { dot11RRMRequestEntry 26 }
44
45     dot11RRMRqstLCILatitudeResolution OBJECT-TYPE
46         SYNTAX INTEGER (0..63)
47         MAX-ACCESS read-create
48         STATUS current
49         DESCRIPTION
50             "This attribute is 6 bits indicating the number of valid
51             bits in the fixed-point value of Latitude of the LCI measurement
52             request. This attribute is only valid if the dot11RRMRqstType is 8, indi-
53             cating an LCI request, and is ignored otherwise."
54         ::= { dot11RRMRequestEntry 27 }
55
56     dot11RRMRqstLCILongitudeResolution OBJECT-TYPE
57         SYNTAX INTEGER (0..63)
58         MAX-ACCESS read-create
59         STATUS current
60         DESCRIPTION
61             "This attribute is 6 bits indicating the number of valid
62             bits in the fixed-point value of Longitude of the LCI measurement
63             request. This attribute is only valid if the dot11RRMRqstType is 8, indi-
64             cating an LCI request, and is ignored otherwise."
65         ::= { dot11RRMRequestEntry 28 }
66
67     dot11RRMRqstLCIAltitudeResolution OBJECT-TYPE
68         SYNTAX INTEGER (0..63)
69         MAX-ACCESS read-create
70         STATUS current
71         DESCRIPTION
72             "This attribute is 6 bits indicating the number of valid

```

```

1         bits in the fixed-point value of Altitude of the LCI measurement
2         request. This attribute is only valid if the dot11RRMRqstType is 8, indi-
3         cating an LCI request, and is ignored otherwise."
4         ::= { dot11RRMRequestEntry 29 }
5
6 dot11RRMRqstLCIAzimuthType OBJECT-TYPE
7     SYNTAX INTEGER {
8         frontSurfaceofSta(0),
9         radioBeam(1)
10    }
11    MAX-ACCESS read-create
12    STATUS current
13    DESCRIPTION
14        "The attribute indicates the azimuth reference for the LCI Azimuth
15        measurement request. This attribute is only valid if the dot11RRMRqstType
16        is 8, indicating an LCI request, and is ignored otherwise."
17    DEFVAL { 0 }
18    ::= { dot11RRMRequestEntry 30 }
19
20 dot11RRMRqstLCIAzimuthResolution OBJECT-TYPE
21     SYNTAX INTEGER (0..15)
22     MAX-ACCESS read-create
23     STATUS current
24     DESCRIPTION
25         "This attribute is 4 bits indicating the number of valid
26         bits in the fixed-point value of Azimuth of the LCI Azimuth
27         measurement request. This attribute is only valid if the dot11RRMRqstType
28         is 8, indicating an LCI request, and is ignored otherwise."
29     ::= { dot11RRMRequestEntry 31 }
30
31 dot11RRMRqstPauseTime OBJECT-TYPE
32     SYNTAX INTEGER (0..65535)
33     UNITS "10 TUs"
34     MAX-ACCESS read-create
35     STATUS current
36     DESCRIPTION
37         "This attribute is a 16 bit unsigned integer number
38         representing the time period for which measurements are
39         suspended or paused. Measurement Pause Requests are used to
40         provide time delays between the execution times of measurement
41         request elements in a Measurement Request Frame. This attribute is only
42         valid if the dot11RRMRqstType is 255, indicating a pause request, and is
43         ignored otherwise."
44     DEFVAL { 0 }
45     ::= { dot11RRMRequestEntry 32 }
46
47 dot11RRMRqstTransmitStreamPeerQSTAAddress OBJECT-TYPE
48     SYNTAX MacAddress
49     MAX-ACCESS read-create
50     STATUS current
51     DESCRIPTION
52         "This attribute indicates the peer STA address to be measured for a Trans-
53         mit Stream/Category Measurement measurement. This attribute is only valid
54         if the dot11RRMRqstType is 9, indicating a transmit stream/category
55         request, and is ignored otherwise."
56     ::= { dot11RRMRequestEntry 33 }
57
58 dot11RRMRqstTransmitStreamTrafficIdentifier OBJECT-TYPE
59     SYNTAX INTEGER(0..16)
60     MAX-ACCESS read-create
61     STATUS current
62     DESCRIPTION
63         "This attribute indicates the TC, or TS to be measured for a Transmit
64         Stream/Category Measurement measurement. This attribute is only valid if
65         the dot11RRMRqstType is 9, indicating a transmit stream/category request,
66         and is ignored otherwise."
67     ::= { dot11RRMRequestEntry 34 }
68
69 dot11RRMRqstTransmitStreamBin0Range OBJECT-TYPE
70     SYNTAX INTEGER(1..255)
71     MAX-ACCESS read-create
72     STATUS current

```

```

1      DESCRIPTION
2          "This attribute indicates the delay range for bin 0 of the transmit delay
3          histogram. This attribute is only valid if the dot11RRMRqstType is 9, indi-
4          cating a transmit stream/category request, and is ignored otherwise."
5      ::= { dot11RRMRequestEntry 35 }
6
7  dot11RRMRqstTrigdQoSAverageCondition OBJECT-TYPE
8      SYNTAX TruthValue
9      MAX-ACCESS read-create
10     STATUS current
11     DESCRIPTION
12         "This attribute, when TRUE, indicates a request for triggered reporting
13         with trigger based on the number of discarded MSDUs reaching the
14         dot11RRMRqstTrigdQoSAverageThreshold when averaged over
15         dot11RRMRqstTrigdQoSMeasurementCount consecutive MSDUs. This attribute is
16         only valid if the dot11RRMRqstType is 9, indicating a transmit stream/cate-
17         gory request, and is ignored otherwise. The default value of this attribute
18         is FALSE."
19     ::= { dot11RRMRequestEntry 36 }
20
21 dot11RRMRqstTrigdQoSConsecutiveCondition OBJECT-TYPE
22     SYNTAX TruthValue
23     MAX-ACCESS read-create
24     STATUS current
25     DESCRIPTION
26         "This attribute, when TRUE, indicates a request for triggered reporting
27         with trigger based on the consecutive number of MSDUs discarded reaching
28         dot11RRMRqstTrigdQoSConsecutiveThreshold. This attribute is only valid if
29         the dot11RRMRqstType is 9, indicating a transmit stream/category request,
30         and is ignored otherwise. The default value of this attribute is FALSE."
31     ::= { dot11RRMRequestEntry 37 }
32
33 dot11RRMRqstTrigdQoSDelayCondition OBJECT-TYPE
34     SYNTAX TruthValue
35     MAX-ACCESS read-create
36     STATUS current
37     DESCRIPTION
38         "This attribute, when TRUE, indicates a request for triggered reporting
39         with trigger based on the consecutive number of MSDUs that experience a
40         transmit delay greater than dot11RRMRqstTrigdQoSDelayThresholdRange reach-
41         ing dot11RRMRqstTrigdQoSDelayThreshold. This attribute is only valid if the
42         dot11RRMRqstType is 9, indicating a transmit stream/category request, and
43         is ignored otherwise. The default value of this attribute is FALSE."
44     ::= { dot11RRMRequestEntry 38 }
45
46 dot11RRMRqstTrigdQoSAverageThreshold OBJECT-TYPE
47     SYNTAX INTEGER (1..255)
48     MAX-ACCESS read-create
49     STATUS current
50     DESCRIPTION
51         "This attribute indicates the trigger threshold for triggered Transmit
52         Stream/Category Measurement based on average MSDUs discarded. Trigger
53         occurs if the number of MSDUs discarded over the moving average number of
54         transmitted MSDUs in dot11RRMRqstTrigdQoSMeasurementCount reaches this
55         threshold. This attribute is only valid if the dot11RRMRqstType is 9, indi-
56         cating a transmit stream/category request, and is ignored otherwise."
57     DEFVAL { 10 }
58     ::= { dot11RRMRequestEntry 39 }
59
60 dot11RRMRqstTrigdQoSConsecutiveThreshold OBJECT-TYPE
61     SYNTAX INTEGER (1..255)
62     MAX-ACCESS read-create
63     STATUS current
64     DESCRIPTION
65         "This attribute indicates the trigger threshold for triggered Transmit
66         Stream/Category Measurement based on consecutive MSDUs discarded. Trigger
67         occurs if the consecutive number of MSDUs discarded reaches this thresh-
68         old. This attribute is only valid if the dot11RRMRqstType is 9, indicating
69         a transmit stream/category request, and is ignored otherwise."
70     DEFVAL { 5 }
71     ::= { dot11RRMRequestEntry 40 }

```

```

1 dot11RRMRqstTrigdQoSDelayThresholdRange OBJECT-TYPE
2     SYNTAX INTEGER (0..3)
3     MAX-ACCESS read-create
4     STATUS current
5     DESCRIPTION
6         "This attribute indicates the minimum transmit delay for delayed MSDU
7         counts. Trigger occurs if the a consecutive number of MSDUs experience a
8         transmit delay greater than or equal to the lower bound of the bin of the
9         Transmit Delay Histogram given by the value of this attribute + 2, e.g. if
10        this attribute is 1 the lower bound of bin 3. This attribute is only valid
11        if the dot11RRMRqstType is 9, indicating a transmit stream/category
12        request, and is ignored otherwise."
13     DEFVAL { 1 }
14     ::= { dot11RRMRequestEntry 41 }
15
16 dot11RRMRqstTrigdQoSDelayThreshold OBJECT-TYPE
17     SYNTAX INTEGER (1..255)
18     MAX-ACCESS read-create
19     STATUS current
20     DESCRIPTION
21         "Tis attribute indicates the number of consecutive delayed MSDUs needed for
22         trigger. Trigger occurs if the consecutive number of MSDUs that experience
23         a transmit delay greater than dot11RRMRqstQoSDelayThresholdRange reaches
24         this value. This attribute is only valid if the dot11RRMRqstType is 9,
25         indicating a transmit stream/category request, and is ignored otherwise."
26     DEFVAL { 20 }
27     ::= { dot11RRMRequestEntry 42 }
28
29 dot11RRMRqstTrigdQoSMeasurementCount OBJECT-TYPE
30     SYNTAX INTEGER (1..255)
31     MAX-ACCESS read-create
32     STATUS current
33     DESCRIPTION
34         "This attribute indicates the number of MSDUs to be used as a moving aver-
35         age count in the average error threshold and in determining the scope of
36         the reported Transmit Stream/Category measurement in a triggered measure-
37         ment report. This attribute is only valid if the dot11RRMRqstType is 9,
38         indicating a transmit stream/category request, and is ignored otherwise."
39     DEFVAL { 100 }
40     ::= { dot11RRMRequestEntry 43 }
41
42 dot11RRMRqstTrigdQoSTimeout OBJECT-TYPE
43     SYNTAX INTEGER (1..255)
44     UNITS "100 TUs"
45     MAX-ACCESS read-create
46     STATUS current
47     DESCRIPTION
48         "This attribute indicates the timeout interval during which a measuring STA
49         shall not generate further triggered Transmit Stream/Category measurement
50         reports after a trigger condition has been met and a report generated. This
51         attribute is only valid if the dot11RRMRqstType is 9, indicating a trans-
52         mit stream/category request, and is ignored otherwise."
53     DEFVAL { 20 }
54     ::= { dot11RRMRequestEntry 44 }
55
56 dot11RRMRqstChannelLoadReportingCondition OBJECT-TYPE
57     SYNTAX INTEGER {
58         afterEveryMeasurement(0),
59         chanLoadAboveReference(1),
60         chanLoadBelowReference(2),
61     }
62     MAX-ACCESS read-create
63     STATUS current
64     DESCRIPTION
65         "This attribute indicates when the Channel Load Measurement results are to
66         be reported to the requesting STA. This attribute is only valid if the
67         dot11RRMRqstType is 3, indicating a channel load request, and is ignored
68         otherwise."
69     REFERENCE
70         "IEEE 802.11, Table 7-29b—Reporting Condition values for Channel Load
71         Request element"
72     DEFVAL {0}

```

```

1      ::= { dot11RRMRequestEntry 45 }
2
3  dot11RRMRqstChannelLoadReference OBJECT-TYPE
4      SYNTAX INTEGER (0..255)
5      UNITS "1/255"
6      MAX-ACCESS read-create
7      STATUS current
8      DESCRIPTION
9          "This attribute indicates the channel load reporting condition reference
10         value. The measured Channel Load is compared to this reference value and a
11         report is issued if the reporting condition is satisfied. The reference
12         value is in the same units as Channel Load and represents the fractional
13         time of the measurement duration during which the STA determined the chan-
14         nel to be busy. This attribute is only valid if the dot11RRMRqstType is 3,
15         indicating a channel load request, and is ignored otherwise."
16     DEFVAL { 5 }
17     ::= { dot11RRMRequestEntry 46 }
18
19  dot11RRMRqstNoiseHistogramReportingCondition OBJECT-TYPE
20     SYNTAX INTEGER {
21         afterEveryMeasurement(0),
22         aNPIAboveReference(1),
23         aNPIBelowReference(2),
24     }
25     MAX-ACCESS read-create
26     STATUS current
27     DESCRIPTION
28         "This attribute indicates when the Noise Histogram Measurement results are
29         to be reported to the requesting STA. This attribute is only valid if the
30         dot11RRMRqstType is 4, indicating a noise histogram request, and is ignored
31         otherwise."
32     REFERENCE
33         "IEEE 802.11, Table 7-29b—Reporting Condition values for Channel Load
34         Request element"
35     DEFVAL {0}
36     ::= { dot11RRMRequestEntry 47 }
37
38  dot11RRMRqstAnpiReference OBJECT-TYPE
39     SYNTAX INTEGER (0..255)
40     UNITS "0.5 dbm"
41     MAX-ACCESS read-create
42     STATUS current
43     DESCRIPTION
44         "This attribute indicates the noise histogram reporting condition ANPI ref-
45         erence value. The measured ANPI is compared to this reference value and a
46         report is issued if the indicated reporting condition is satisfied.
47         ANPIval = Int[(ANPIpower in dBm + 110)*2], for ANPI in the range -110 dBm
48         to 0 dBm. ANPIval = 220 for ANPI > 0 dBm. ANPIval = 255 when ANPI is not
49         available. This attribute is only valid if the dot11RRMRqstType is 4, indi-
50         cating a noise histogram request, and is ignored otherwise."
51     DEFVAL { 5 }
52     ::= { dot11RRMRequestEntry 48 }
53
54  dot11RRMRqstAPChannelReport OBJECT-TYPE
55     SYNTAX OCTET STRING (SIZE(0..255))
56     MAX-ACCESS read-create
57     STATUS current
58     DESCRIPTION
59         "This attribute indicates the specific channels to be used for the
60         requested beacon measurements. Zero length is the null default for this
61         attribute. Each octet indicates a different channel within the indicated
62         Regulatory Class. This list of channels is the Channel List in the AP Chan-
63         nel Report element described in 7.3.2.36. This attribute is only valid if
64         the dot11RRMRqstType is 5, indicating a beacon request, and is ignored oth-
65         erwise."
66     DEFVAL { ''H }
67     ::= { dot11RRMRequestEntry 49 }
68
69  dot11RRMRqstSTASatPeerSTAAddress OBJECT-TYPE
70     SYNTAX MacAddress
71     MAX-ACCESS read-create
72     STATUS current

```

```

1      DESCRIPTION
2          "This attribute indicates the peer STA address to be measured for a statis-
3          tics request. This attribute is only valid if the dot11RRMRqstType is 7,
4          indicating a statistics request, and is ignored otherwise."
5      ::= { dot11RRMRequestEntry 50 }
6
7      dot11RRMRqstFrameTransmitterAddress OBJECT-TYPE
8          SYNTAX MacAddress
9          MAX-ACCESS read-create
10         STATUS current
11         DESCRIPTION
12             "This attribute indicates the Trasnmitter Address (TA) of the frames to be
13             counted in this frame request. This attribute is only valid if the
14             dot11RRMRqstType is 6, indicating a frame request, and is ignored other-
15             wise."
16         ::= { dot11RRMRequestEntry 51 }
17
18     dot11RRMRqstVendorSpecific OBJECT-TYPE
19         SYNTAX OCTET STRING (SIZE(0..255))
20         MAX-ACCESS read-create
21         STATUS current
22         DESCRIPTION
23             "This attribute provides an envelope for any optional vendor specific sub-
24             elements which may be included in a measurement request element. Zero
25             length is the null default for this attribute. This attribute is valid for
26             all requests."
27         DEFVAL { 'H' }
28         ::= { dot11RRMRequestEntry 52 }
29
30     dot11RRMRqstSTASatTrigMeasCount OBJECT-TYPE
31         SYNTAX Unsigned32
32         MAX-ACCESS read-create
33         STATUS current
34         DESCRIPTION
35             "This attribute indicates the number of MSDUs or MPDUs over which the trig-
36             ger criterion is applied. This attribute is only valid if dot11RRMRqstType
37             is 7 (STA Statistics) and if the value of the attribute is not equal to 0."
38         DEFVAL { 0 }
39         ::= { dot11RRMRequestEntry 53 }
40
41     dot11RRMRqstSTASatTrigTimeout OBJECT-TYPE
42         SYNTAX INTEGER(0..65535)
43         UNITS "100 TUs"
44         MAX-ACCESS read-create
45         STATUS current
46         DESCRIPTION
47             "This attribute indicates the interval during which a measuring STA does
48             not generate further triggered STA Statistics Reports after a trigger con-
49             dition has been met. This attribute is only valid if dot11RRMRqstType is 7
50             (STA Statistics)."
51         DEFVAL { 0 }
52         ::= { dot11RRMRequestEntry 54 }
53
54     dot11RRMRqstSTASatTrigSTAFailedCntThresh OBJECT-TYPE
55         SYNTAX Unsigned32
56         MAX-ACCESS read-create
57         STATUS current
58         DESCRIPTION
59             "This attribute indicates that a STA Statistics Report should be generated
60             (triggered) when the dot11FailedCount value has increased more than the
61             threshold value indicated here. The counter increase is measured over the
62             last n MSDUs or MPDUs, where n is the value of
63             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
64             dot11RRMRqstType is 7 (STA Statistics), and if
65             dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
66             of the attribute is not equal to 0."
67         DEFVAL { 0 }
68         ::= { dot11RRMRequestEntry 55 }
69
70     dot11RRMRqstSTASatTrigSTAFCSerrCntThresh OBJECT-TYPE
71         SYNTAX Unsigned32
72         MAX-ACCESS read-create

```

```

1      STATUS current
2      DESCRIPTION
3          "This attribute indicates that a STA Statistics Report should be generated
4          (triggered) when the dot11FCSErrorCount value has increased more than
5          the threshold value indicated here. The counter increase is measured over
6          the last n MSDUs or MPDUs, where n is the value of
7          dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
8          dot11RRMRqstType is 7 (STA Statistics), and if
9          dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
10         of the attribute is not equal to 0."
11     DEFVAL { 0 }
12     ::= { dot11RRMRequestEntry 56 }
13
14 dot11RRMRqstSTASatTrigSTAMultRetryCntThresh OBJECT-TYPE
15     SYNTAX Unsigned32
16     MAX-ACCESS read-create
17     STATUS current
18     DESCRIPTION
19         "This attribute indicates that a STA Statistics Report should be generated
20         (triggered) when the dot11MultipleRetryCount value has increased more
21         than the threshold value indicated here. The counter increase is measured
22         over the last n MSDUs or MPDUs, where n is the value of
23         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
24         dot11RRMRqstType is 7 (STA Statistics), and if
25         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
26         of the attribute is not equal to 0."
27     DEFVAL { 0 }
28     ::= { dot11RRMRequestEntry 57 }
29
30 dot11RRMRqstSTASatTrigSTAFrameDupeCntThresh OBJECT-TYPE
31     SYNTAX Unsigned32
32     MAX-ACCESS read-create
33     STATUS current
34     DESCRIPTION
35         "This attribute indicates that a STA Statistics Report should be generated
36         (triggered) when the dot11FrameDuplicateCount value has increased more
37         than the threshold value indicated here. The counter increase is measured
38         over the last n MSDUs or MPDUs, where n is the value of
39         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
40         dot11RRMRqstType is 7 (STA Statistics), and if
41         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
42         of the attribute is not equal to 0."
43     DEFVAL { 0 }
44     ::= { dot11RRMRequestEntry 58 }
45
46 dot11RRMRqstSTASatTrigSTARTSFailCntThresh OBJECT-TYPE
47     SYNTAX Unsigned32
48     MAX-ACCESS read-create
49     STATUS current
50     DESCRIPTION
51         "This attribute indicates that a STA Statistics Report should be generated
52         (triggered) when the dot11RTSFailureCount value has increased more than
53         the threshold value indicated here. The counter increase is measured over
54         the last n MSDUs or MPDUs, where n is the value of
55         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
56         dot11RRMRqstType is 7 (STA Statistics), and if
57         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
58         of the attribute is not equal to 0."
59     DEFVAL { 0 }
60     ::= { dot11RRMRequestEntry 59 }
61
62 dot11RRMRqstSTASatTrigSTAACKFailCntThresh OBJECT-TYPE
63     SYNTAX Unsigned32
64     MAX-ACCESS read-create
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates that a STA Statistics Report should be generated
68         (triggered) when the dot11ACKFailureCount value has increased more than
69         the threshold value indicated here. The counter increase is measured over
70         the last n MSDUs or MPDUs, where n is the value of
71         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
72         dot11RRMRqstType is 7 (STA Statistics), and if
73         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
74         of the attribute is not equal to 0."
75     DEFVAL { 0 }
76     ::= { dot11RRMRequestEntry 60 }

```

```

1         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
2         of the attribute is not equal to 0."
3     DEFVAL { 0 }
4     ::= { dot11RRMRequestEntry 60 }
5
6 dot11RRMRqstSTASatTrigSTARetryCntThresh OBJECT-TYPE
7     SYNTAX Unsigned32
8     MAX-ACCESS read-create
9     STATUS current
10    DESCRIPTION
11        "This attribute indicates that a STA Statistics Report should be generated
12        (triggered) when the dot11RetryCount value has increased more than the
13        threshold value indicated here. The counter increase is measured over the
14        last n MSDUs or MPDUs, where n is the value of
15        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
16        dot11RRMRqstType is 7 (STA Statistics), and if
17        dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
18        of the attribute is not equal to 0."
19    DEFVAL { 0 }
20    ::= { dot11RRMRequestEntry 61 }
21
22 dot11RRMRqstSTASatTrigQoSFailedCntThresh OBJECT-TYPE
23     SYNTAX Unsigned32
24     MAX-ACCESS read-create
25     STATUS current
26     DESCRIPTION
27        "This attribute indicates that a STA Statistics Report should be generated
28        (triggered) when the dot11QoSFailedCount value has increased more than
29        the threshold value indicated here. The counter increase is measured over
30        the last n MSDUs or MPDUs, where n is the value of
31        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
32        dot11RRMRqstType is 7 (STA Statistics), and if
33        dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
34        if the value of the attribute is not equal to 0."
35    DEFVAL { 0 }
36    ::= { dot11RRMRequestEntry 62 }
37
38 dot11RRMRqstSTASatTrigQoSRetryCntThresh OBJECT-TYPE
39     SYNTAX Unsigned32
40     MAX-ACCESS read-create
41     STATUS current
42     DESCRIPTION
43        "This attribute indicates that a STA Statistics Report should be generated
44        (triggered) when the dot11QoSRetryCount value has increased more than
45        the threshold value indicated here. The counter increase is measured over
46        the last n MSDUs or MPDUs, where n is the value of
47        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
48        dot11RRMRqstType is 7 (STA Statistics), and if
49        dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
50        if the value of the attribute is not equal to 0."
51    DEFVAL { 0 }
52    ::= { dot11RRMRequestEntry 63 }
53
54 dot11RRMRqstSTASatTrigQoSMultRetryCntThresh OBJECT-TYPE
55     SYNTAX Unsigned32
56     MAX-ACCESS read-create
57     STATUS current
58     DESCRIPTION
59        "This attribute indicates that a STA Statistics Report should be generated
60        (triggered) when the dot11QoSMultipleRetryCount value has increased
61        more than the threshold value indicated here. The counter increase is mea-
62        sured over the last n MSDUs or MPDUs, where n is the value of
63        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
64        dot11RRMRqstType is 7 (STA Statistics), and if
65        dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
66        if the value of the attribute is not equal to 0."
67    DEFVAL { 0 }
68    ::= { dot11RRMRequestEntry 64 }
69
70 dot11RRMRqstSTASatTrigQoSFrameDupeCntThresh OBJECT-TYPE
71     SYNTAX Unsigned32
72     MAX-ACCESS read-create

```



```

1      STATUS current
2      DESCRIPTION
3          "This attribute indicates that a STA Statistics Report should be generated
4          (triggered) when the dot11QosFrameDuplicateCount value has increased
5          more than the threshold value indicated here. The counter increase is mea-
6          sured over the last n MSDUs or MPDUs, where n is the value of
7          dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
8          dot11RRMRqstType is 7 (STA Statistics), and if
9          dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
10         if the value of the attribute is not equal to 0."
11     DEFVAL { 0 }
12     ::= { dot11RRMRequestEntry 65 }
13
14 dot11RRMRqstSTASatTrigQoSRTSFailCntThresh OBJECT-TYPE
15     SYNTAX Unsigned32
16     MAX-ACCESS read-create
17     STATUS current
18     DESCRIPTION
19         "This attribute indicates that a STA Statistics Report should be generated
20         (triggered) when the dot11QoSRTSFailureCount value has increased more
21         than the threshold value indicated here. The counter increase is measured
22         over the last n MSDUs or MPDUs, where n is the value of
23         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
24         dot11RRMRqstType is 7 (STA Statistics), and if
25         dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
26         if the value of the attribute is not equal to 0."
27     DEFVAL { 0 }
28     ::= { dot11RRMRequestEntry 66 }
29
30 dot11RRMRqstSTASatTrigQoSACKFailCntThresh OBJECT-TYPE
31     SYNTAX Unsigned32
32     MAX-ACCESS read-create
33     STATUS current
34     DESCRIPTION
35         "This attribute indicates that a STA Statistics Report should be generated
36         (triggered) when the dot11QoSACKFailureCount value has increased more
37         than the threshold value indicated here. The counter increase is measured
38         over the last n MSDUs or MPDUs, where n is the value of
39         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
40         dot11RRMRqstType is 7 (STA Statistics), and if
41         dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
42         if the value of the attribute is not equal to 0."
43     DEFVAL { 0 }
44     ::= { dot11RRMRequestEntry 67 }
45
46 dot11RRMRqstSTASatTrigQoSDiscardCntThresh OBJECT-TYPE
47     SYNTAX Unsigned32
48     MAX-ACCESS read-create
49     STATUS current
50     DESCRIPTION
51         "This attribute indicates that a STA Statistics Report should be generated
52         (triggered) when the dot11QoSDiscardedFrameCount value has increased
53         more than the threshold value indicated here. The counter increase is mea-
54         sured over the last n MSDUs or MPDUs, where n is the value of
55         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
56         dot11RRMRqstType is 7 (STA Statistics), and if
57         dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
58         if the value of the attribute is not equal to 0."
59     DEFVAL { 0 }
60     ::= { dot11RRMRequestEntry 68 }
61
62 dot11RRMRqstSTASatTrigQoSDiscardCntThresh OBJECT-TYPE
63     SYNTAX Unsigned32
64     MAX-ACCESS read-create
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates that a STA Statistics Report should be generated
68         (triggered) when the dot11QoSDiscardedFrameCount value has increased
69         more than the threshold value indicated here. The counter increase is mea-
70         sured over the last n MSDUs or MPDUs, where n is the value of
71         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
72         dot11RRMRqstType is 7 (STA Statistics), and if
73         dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
74         if the value of the attribute is not equal to 0."
75     DEFVAL { 0 }
76     ::= { dot11RRMRequestEntry 69 }

```

```

1         dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
2         if the value of the attribute is not equal to 0."
3     DEFVAL { 0 }
4     ::= { dot11RRMRequestEntry 69 }
5
6 dot11RRMRqstSTASatTrigRsnaCMACICVErrCntThresh OBJECT-TYPE
7     SYNTAX Unsigned32
8     MAX-ACCESS read-create
9     STATUS current
10    DESCRIPTION
11        "This attribute indicates that a STA Statistics Report should be generated
12        (triggered) when the dot11RSNAsatsCMACICVErrors value has increased
13        more than the threshold value indicated here. The counter increase is mea-
14        sured over the last n MSDUs or MPDUs, where n is the value of
15        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
16        dot11RRMRqstType is 7 (STA Statistics), and if
17        dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsatsTable) and if the value
18        of the attribute is not equal to 0."
19    DEFVAL { 0 }
20    ::= { dot11RRMRequestEntry 70 }
21
22 dot11RRMRqstSTASatTrigRsnaCMACReplayCntThresh OBJECT-TYPE
23     SYNTAX Unsigned32
24     MAX-ACCESS read-create
25     STATUS current
26     DESCRIPTION
27        "This attribute indicates that a STA Statistics Report should be generated
28        (triggered) when the dot11RSNAsatsCMACReplays value has increased more
29        than the threshold value indicated here. The counter increase is measured
30        over the last n MSDUs or MPDUs, where n is the value of
31        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
32        dot11RRMRqstType is 7 (STA Statistics), and if
33        dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsatsTable) and if the value
34        of the attribute is not equal to 0."
35    DEFVAL { 0 }
36    ::= { dot11RRMRequestEntry 71 }
37
38 dot11RRMRqstSTASatTrigRsnaRobustCCMPReplayCntThresh OBJECT-TYPE
39     SYNTAX Unsigned32
40     MAX-ACCESS read-create
41     STATUS current
42     DESCRIPTION
43        "This attribute indicates that a STA Statistics Report should be generated
44        (triggered) when the dot11RSNAsatsRobustMgmtCCMPReplays value has
45        increased more than the threshold value indicated here. The counter
46        increase is measured over the last n MSDUs or MPDUs, where n is the value
47        of dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
48        dot11RRMRqstType is 7 (STA Statistics), and if
49        dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsatsTable) and if the value
50        of the attribute is not equal to 0."
51    DEFVAL { 0 }
52    ::= { dot11RRMRequestEntry 72 }
53
54 dot11RRMRqstSTASatTrigRsnaTKIPICVErrCntThresh OBJECT-TYPE
55     SYNTAX Unsigned32
56     MAX-ACCESS read-create
57     STATUS current
58     DESCRIPTION
59        "This attribute indicates that a STA Statistics Report should be generated
60        (triggered) when the dot11RSNAsatsTKIPICVErrors value has increased
61        more than the threshold value indicated here. The counter increase is mea-
62        sured over the last n MSDUs or MPDUs, where n is the value of
63        dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
64        dot11RRMRqstType is 7 (STA Statistics), and if
65        dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsatsTable) and if the value
66        of the attribute is not equal to 0."
67    DEFVAL { 0 }
68    ::= { dot11RRMRequestEntry 52-73 }
69
70 dot11RRMRqstSTASatTrigRsnaTKIPReplayCntThresh OBJECT-TYPE
71     SYNTAX Unsigned32
72     MAX-ACCESS read-create

```

```

1      STATUS current
2      DESCRIPTION
3          "This attribute indicates that a STA Statistics Report should be generated
4          (triggered) when the dot11RSNAsStatsTKIPReplays value has increased more
5          than the threshold value indicated here. The counter increase is measured
6          over the last n MSDUs or MPDUs, where n is the value of
7          dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
8          dot11RRMRqstType is 7 (STA Statistics), and if
9          dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsStatsTable) and if the value
10         of the attribute is not equal to 0."
11     DEFVAL { 0 }
12     ::= { dot11RRMRequestEntry 74 }
13
14 dot11RRMRqstSTASatTrigRsnaCCMPDecryptErrCntThresh OBJECT-TYPE
15     SYNTAX Unsigned32
16     MAX-ACCESS read-create
17     STATUS current
18     DESCRIPTION
19         "This attribute indicates that a STA Statistics Report should be generated
20         (triggered) when the dot11RSNAsStatsCCMPDecryptErrors value has
21         increased more than the threshold value indicated here. The counter
22         increase is measured over the last n MSDUs or MPDUs, where n is the value
23         of dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
24         dot11RRMRqstType is 7 (STA Statistics), and if
25         dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsStatsTable) and if the value
26         of the attribute is not equal to 0."
27     DEFVAL { 0 }
28     ::= { dot11RRMRequestEntry 75 }
29
30 dot11RRMRqstSTASatTrigRsnaCCMPReplayCntThresh OBJECT-TYPE
31     SYNTAX Unsigned32
32     MAX-ACCESS read-create
33     STATUS current
34     DESCRIPTION
35         "This attribute indicates that a STA Statistics Report should be generated
36         (triggered) when the dot11RSNAsStatsCCMPReplays value has increased more
37         than the threshold value indicated here. The counter increase is measured
38         over the last n MSDUs or MPDUs, where n is the value of
39         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
40         dot11RRMRqstType is 7 (STA Statistics), and if
41         dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsStatsTable) and if the value
42         of the attribute is not equal to 0."
43     DEFVAL { 0 }
44     ::= { dot11RRMRequestEntry 76 }
45
46 -- *****
47 -- * End of dot11RRMRequest TABLE
48 -- *****
49
50 -- *****
51 -- * Radio Resource Measurement Reports
52 -- * Report tables contain measurement reports received by this STA or
53 -- * results of measurements performed by this STA.
54 -- *****
55 dot11RRMReport OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 2 }
56
57 -- *****
58 -- * dot11ChannelLoadReport TABLE
59 -- *****
60     dot11ChannelLoadReportTable OBJECT-TYPE
61     SYNTAX SEQUENCE OF Dot11ChannelLoadReportEntry
62     MAX-ACCESS not-accessible
63     STATUS current
64     DESCRIPTION
65         "Group contains the current list of Channel Load reports that have been
66         received by the MLME. The report tables shall be maintained as FIFO to pre-
67         serve freshness, thus the rows in this table can be deleted for memory con-
68         straints or other implementation constraints determined by the vendor. New
69         rows shall have different RprtIndex values than those deleted within the
70         range limitation of the index. One easy way is to monotonically increase
71         RprtIndex for new reports being written in the table."
72     ::= { dot11RRMReport 1 }

```

```

1
2 dot11ChannelLoadReportEntry OBJECT-TYPE
3     SYNTAX Dot11ChannelLoadReportEntry
4     MAX-ACCESS not-accessible
5     STATUS current
6     DESCRIPTION
7         "An entry in the dot11ChannelLoadReportTable Indexed by
8         dot11ChannelLoadRprtIndex."
9     INDEX { dot11ChannelLoadRprtIndex }
10    ::= { dot11ChannelLoadReportTable 1 }
11
12 Dot11ChannelLoadReportEntry ::=
13     SEQUENCE {
14         dot11ChannelLoadRprtIndex                Unsigned32,
15         dot11ChannelLoadRprtRqstToken           OCTET STRING,
16         dot11ChannelLoadRprtIfIndex            InterfaceIndex,
17         dot11ChannelLoadMeasuringSTAAddr       MacAddress,
18         dot11ChannelLoadRprtChanNumber         INTEGER,
19         dot11ChannelLoadRprtRegulatoryClass    INTEGER,
20         dot11ChannelLoadRprtActualStartTime    TSFType,
21         dot11ChannelLoadRprtMeasurementDuration Unsigned32,
22         dot11ChannelLoadRprtChannelLoad        INTEGER,
23         dot11ChannelLoadRprtVendorSpecific    OCTET STRING,
24         dot11ChannelLoadRprtMeasurementMode    INTEGER }
25
26 dot11ChannelLoadRprtIndex OBJECT-TYPE
27     SYNTAX Unsigned32
28     MAX-ACCESS not-accessible
29     STATUS current
30     DESCRIPTION
31         "Index for Channel Load Report elements in dot11ChannelLoadReportTable,
32         greater than 0."
33     ::= { dot11ChannelLoadReportEntry 1 }
34
35 dot11ChannelLoadRprtRqstToken OBJECT-TYPE
36     SYNTAX OCTET STRING
37     MAX-ACCESS read-only
38     STATUS current
39     DESCRIPTION
40         "This attribute indicates the request token that was indicated in the Mea-
41         surement request that generated this measurement report. This should be an
42         exact match to the original dot11RRMRqstToken attribute. Note that there
43         may be multiple entries in the table that match this value since a single
44         request may generate multiple measurement reports."
45     ::= { dot11ChannelLoadReportEntry 2 }
46
47 dot11ChannelLoadRprtIfIndex OBJECT-TYPE
48     SYNTAX InterfaceIndex
49     MAX-ACCESS read-only
50     STATUS current
51     DESCRIPTION
52         "The ifIndex for this row of ChannelLoad Report has been received on."
53     ::= { dot11ChannelLoadReportEntry 3 }
54
55 dot11ChannelLoadMeasuringSTAAddr OBJECT-TYPE
56     SYNTAX MacAddress
57     MAX-ACCESS read-only
58     STATUS current
59     DESCRIPTION
60         "The MAC address of the measuring STA for this row of Channel Load report."
61     ::= { dot11ChannelLoadReportEntry 4 }
62
63 dot11ChannelLoadRprtChanNumber OBJECT-TYPE
64     SYNTAX INTEGER
65     MAX-ACCESS read-only
66     STATUS current
67     DESCRIPTION
68         "This attribute indicates the channel number used for this Channel Load
69         Report. The Channel Number is only defined within the indicated Regulatory
70         Class for this measurement report."
71     ::= { dot11ChannelLoadReportEntry 5 }
72

```

```

1  dot11ChannelLoadRprtRegulatoryClass OBJECT-TYPE
2      SYNTAX INTEGER(1..255)
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates the channel set for this measurement report.
7          Country, Regulatory Class and Channel Number together specify the channel
8          frequency and spacing for this measurement request. Valid values of Regula-
9          tory Class are shown in Annex J."
10     REFERENCE
11         "Annex J"
12     ::= { dot11ChannelLoadReportEntry 6 }
13
14 dot11ChannelLoadRprtActualStartTime OBJECT-TYPE
15     SYNTAX TSFType
16     MAX-ACCESS read-only
17     STATUS current
18     DESCRIPTION
19         "This attribute indicates the TSF value at the time when the
20         measurement started."
21     ::= { dot11ChannelLoadReportEntry 7 }
22
23 dot11ChannelLoadRprtMeasurementDuration OBJECT-TYPE
24     SYNTAX Unsigned32
25     UNITS "TUs"
26     MAX-ACCESS read-only
27     STATUS current
28     DESCRIPTION
29         "This attribute indicates the duration over which the ChannelLoad Report
30         was measured."
31     ::= { dot11ChannelLoadReportEntry 8 }
32
33 dot11ChannelLoadRprtChannelLoad OBJECT-TYPE
34     SYNTAX INTEGER(0..255)
35     UNITS "1/255"
36     MAX-ACCESS read-only
37     STATUS current
38     DESCRIPTION
39         "Channel Load shall contain the fractional duration over which the measur-
40         ing STA determined the channel to be busy during the measurement duration."
41     REFERENCE
42         "Clause 7.3.2.22.4"
43     ::= { dot11ChannelLoadReportEntry 9 }
44
45 dot11ChannelLoadRprtVendorSpecific OBJECT-TYPE
46     SYNTAX OCTET STRING (SIZE(0..255))
47     MAX-ACCESS read-create
48     STATUS current
49     DESCRIPTION
50         "This attribute provides an envelope for any optional vendor specific sub-
51         elements which may be included in a measurement report element. Zero length
52         is the null default for this attribute."
53     DEFVAL { ''H }
54     ::= { dot11ChannelLoadReportEntry 10 }
55
56 dot11ChannelLoadRprtMeasurementMode OBJECT-TYPE
57     SYNTAX INTEGER {
58         success(0),
59         incapableBit(1),
60         refusedBit(2),
61     }
62     MAX-ACCESS read-only
63     STATUS current
64     DESCRIPTION
65         "This attribute indicates the outcome status for the measurement request
66         which generated this measurement report; status is indicated using the fol-
67         lowing reason codes: 1 indicates this STA is incapable of generating the
68         report, 2 indicates this STA is refusing to generate the report, 0 indi-
69         cates the STA successfully carried out the measurement request."
70     DEFVAL { 0 }
71     ::= { dot11ChannelLoadReportEntry 11 }

```

```

1  -- *****
2  -- * End of dot11ChannelLoadReport TABLE
3  -- *****
4  -- *****
5  -- * dot11NoiseHistogramReport TABLE
6  -- *****
7  dot11NoiseHistogramReportTable OBJECT-TYPE
8      SYNTAX SEQUENCE OF Dot11NoiseHistogramReportEntry
9      MAX-ACCESS not-accessible
10     STATUS current
11     DESCRIPTION
12         "Group contains the current list of Noise Histogram reports that have been
13         received by the MLME. The report tables shall be maintained as FIFO to pre-
14         serve freshness, thus the rows in this table can be deleted for memory con-
15         straints or other implementation constraints determined by the vendor. New
16         rows shall have different RprtIndex values than those deleted within the
17         range limitation of the index. One easy way is to monotonically increase
18         RprtIndex for new reports being written in the table."
19     ::= { dot11RRMReport 2 }
20
21 dot11NoiseHistogramReportEntry OBJECT-TYPE
22     SYNTAX Dot11NoiseHistogramReportEntry
23     MAX-ACCESS not-accessible
24     STATUS current
25     DESCRIPTION
26         "An entry in the dot11NoiseHistogramReportTable Indexed by
27         dot11NoiseHistogramRprtIndex."
28     INDEX { dot11NoiseHistogramRprtIndex }
29     ::= { dot11NoiseHistogramReportTable 1 }
30
31 Dot11NoiseHistogramReportEntry ::=
32     SEQUENCE {
33         dot11NoiseHistogramRprtIndex                Unsigned32,
34         dot11NoiseHistogramRprtRqstToken           OCTET STRING,
35         dot11NoiseHistogramRprtIfIndex             InterfaceIndex,
36         dot11NoiseHistogramMeasuringSTAAddr        MacAddress,
37         dot11NoiseHistogramRprtChanNumber          INTEGER,
38         dot11NoiseHistogramRprtRegulatoryClass     INTEGER,
39         dot11NoiseHistogramRprtActualStartTime     TSFTType,
40         dot11NoiseHistogramRprtMeasurementDuration Unsigned32,
41         dot11NoiseHistogramRprtAntennaID           INTEGER,
42         dot11NoiseHistogramRprtANPI               INTEGER,
43         dot11NoiseHistogramRprtIPIDensity0         INTEGER,
44         dot11NoiseHistogramRprtIPIDensity1         INTEGER,
45         dot11NoiseHistogramRprtIPIDensity2         INTEGER,
46         dot11NoiseHistogramRprtIPIDensity3         INTEGER,
47         dot11NoiseHistogramRprtIPIDensity4         INTEGER,
48         dot11NoiseHistogramRprtIPIDensity5         INTEGER,
49         dot11NoiseHistogramRprtIPIDensity6         INTEGER,
50         dot11NoiseHistogramRprtIPIDensity7         INTEGER,
51         dot11NoiseHistogramRprtIPIDensity8         INTEGER,
52         dot11NoiseHistogramRprtIPIDensity9         INTEGER,
53         dot11NoiseHistogramRprtIPIDensity10        INTEGER,
54         dot11NoiseHistogramRprtVendorSpecific     OCTET STRING,
55         dot11NoiseHistogramRprtMeasurementMode     INTEGER}
56
57 dot11NoiseHistogramRprtIndex OBJECT-TYPE
58     SYNTAX Unsigned32
59     MAX-ACCESS not-accessible
60     STATUS current
61     DESCRIPTION
62         "Index for Noise Histogram elements in dot11NoiseHistogramReportTable,
63         greater than 0."
64     ::= { dot11NoiseHistogramReportEntry 1 }
65
66 dot11NoiseHistogramRprtRqstToken OBJECT-TYPE
67     SYNTAX OCTET STRING
68     MAX-ACCESS read-only
69     STATUS current
70     DESCRIPTION
71         "This attribute indicates the request token that was indicated in the

```

```

1         measurement request that generated this measurement report. This should be
2         an exact match to the original dot11RRMRqstToken attribute. Note that there
3         may be multiple entries in the table that match this value since a single
4         request may generate multiple measurement reports."
5     ::= { dot11NoiseHistogramReportEntry 2 }
6
7 dot11NoiseHistogramRprtIfIndex OBJECT-TYPE
8     SYNTAX InterfaceIndex
9     MAX-ACCESS read-only
10    STATUS current
11    DESCRIPTION
12        "The ifIndex for this row of Noise Histogram Report has been received
13        on. "
14    ::= { dot11NoiseHistogramReportEntry 3 }
15
16 dot11NoiseHistogramMeasuringSTAAddr OBJECT-TYPE
17     SYNTAX MacAddress
18     MAX-ACCESS read-only
19     STATUS current
20     DESCRIPTION
21        "The MAC address of the measuring STA for this row of Noise Histogram
22        report."
23    ::= { dot11NoiseHistogramReportEntry 4 }
24
25 dot11NoiseHistogramRprtChanNumber OBJECT-TYPE
26     SYNTAX INTEGER
27     MAX-ACCESS read-only
28     STATUS current
29     DESCRIPTION
30        "This attribute indicates the channel number used for this Noise Histogram
31        Report. The Channel Number is only defined within the indicated Regulatory
32        Class for this measurement report."
33    ::= { dot11NoiseHistogramReportEntry 5 }
34
35 dot11NoiseHistogramRprtRegulatoryClass OBJECT-TYPE
36     SYNTAX INTEGER(1..255)
37     MAX-ACCESS read-only
38     STATUS current
39     DESCRIPTION
40        "This attribute indicates the channel set for this measurement report.
41        Country, Regulatory Class and Channel Number together specify the channel
42        frequency and spacing for this measurement request. Valid values of Regula-
43        tory Class are shown in Annex J."
44     REFERENCE
45        "Annex J"
46    ::= { dot11NoiseHistogramReportEntry 6 }
47
48 dot11NoiseHistogramRprtActualStartTime OBJECT-TYPE
49     SYNTAX TSFType
50     MAX-ACCESS read-only
51     STATUS current
52     DESCRIPTION
53        "This attribute indicates the TSF value at the time when the
54        measurement started."
55    ::= { dot11NoiseHistogramReportEntry 7 }
56
57 dot11NoiseHistogramRprtMeasurementDuration OBJECT-TYPE
58     SYNTAX Unsigned32
59     UNITS "TUs"
60     MAX-ACCESS read-only
61     STATUS current
62     DESCRIPTION
63        "This attribute indicates the duration over which the Noise Histogram
64        Report was measured."
65    ::= { dot11NoiseHistogramReportEntry 8 }
66
67 dot11NoiseHistogramRprtAntennaID OBJECT-TYPE
68     SYNTAX INTEGER(0..255)
69     MAX-ACCESS read-only
70     STATUS current
71     DESCRIPTION
72        "This attribute indicates the identifying number for the antenna used for

```

```

1         this measurement. The value 0 indicates that the antenna identifier is
2         unknown. The value 255 indicates that the measurement was made with
3         multiple antennas or that the antenna ID is unknown. that the antenna
4         identifier is unknown. The value 255 indicates that this measurement was
5         made with multiple antennas. The value 1 is used for a STA with only one
6         antenna. STAs with more than one antenna shall assign Antenna IDs to
7         each antenna as consecutive, ascending numbers. Each Antenna ID number
8         represents a unique antenna characterized by a fixed relative position,
9         a fixed relative direction and a peak gain for that position and
10        direction."
11        ::= { dot11NoiseHistogramReportEntry 9 }
12
13        dot11NoiseHistogramRprtANPI OBJECT-TYPE
14        SYNTAX INTEGER(0..255)
15        UNITS "0.5 dBm"
16        MAX-ACCESS read-only
17        STATUS current
18        DESCRIPTION
19        "This attribute indicates the ANPI for this Noise Histogram measurement.
20        Average Noise Power Indicator (ANPI) value represents
21        the average noise plus interference power on the measured channel at the
22        antenna connector during the measurement duration To calculate ANPI, the
23        STA shall measure and use IPI in the indicated channel when NAV is equal
24        to 0 (when virtual CS mechanism indicates idle channel) except during
25        frame transmission or reception."
26        ::= { dot11NoiseHistogramReportEntry 10 }
27
28        dot11NoiseHistogramRprtIPIDensity0 OBJECT-TYPE
29        SYNTAX INTEGER
30        MAX-ACCESS read-only
31        STATUS current
32        DESCRIPTION
33        "This attribute indicates the measured IPI density for non-802.11 signals
34        with measured power satisfying the condition: Power <= -92dBm."
35        ::= { dot11NoiseHistogramReportEntry 11 }
36
37        dot11NoiseHistogramRprtIPIDensity1 OBJECT-TYPE
38        SYNTAX INTEGER
39        MAX-ACCESS read-only
40        STATUS current
41        DESCRIPTION
42        "This attribute indicates the measured IPI density for non-802.11 signals
43        with measured power satisfying the condition: -92dBm < Power <= -89dBm."
44        ::= { dot11NoiseHistogramReportEntry 12 }
45
46        dot11NoiseHistogramRprtIPIDensity2 OBJECT-TYPE
47        SYNTAX INTEGER
48        MAX-ACCESS read-only
49        STATUS current
50        DESCRIPTION
51        "This attribute indicates the measured IPI density for non-802.11 signals
52        with measured power satisfying the condition: -89dBm < Power <= -86dBm."
53        ::= { dot11NoiseHistogramReportEntry 13 }
54
55        dot11NoiseHistogramRprtIPIDensity3 OBJECT-TYPE
56        SYNTAX INTEGER
57        MAX-ACCESS read-only
58        STATUS current
59        DESCRIPTION
60        "This attribute indicates the measured IPI density for non-802.11 signals
61        with measured power satisfying the condition: -86dBm < Power <= -83dBm."
62        ::= { dot11NoiseHistogramReportEntry 14 }
63
64        dot11NoiseHistogramRprtIPIDensity4 OBJECT-TYPE
65        SYNTAX INTEGER
66        MAX-ACCESS read-only
67        STATUS current
68        DESCRIPTION
69        "This attribute indicates the measured IPI density for non-802.11 signals
70        with measured power satisfying the condition: -83dBm < Power <= -80dBm."
71        ::= { dot11NoiseHistogramReportEntry 15 }

```



```

1  dot11NoiseHistogramRprtIPIDensity5 OBJECT-TYPE
2      SYNTAX INTEGER
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates the measured IPI density for non-802.11 signals
7          with measured power satisfying the condition: -80dBm < Power <= -75dBm."
8      ::= { dot11NoiseHistogramReportEntry 16 }
9
10 dot11NoiseHistogramRprtIPIDensity6 OBJECT-TYPE
11     SYNTAX INTEGER
12     MAX-ACCESS read-only
13     STATUS current
14     DESCRIPTION
15         "This attribute indicates the measured IPI density for non-802.11 signals
16         with measured power satisfying the condition: -75dBm < Power <= -70dBm."
17     ::= { dot11NoiseHistogramReportEntry 17 }
18
19 dot11NoiseHistogramRprtIPIDensity7 OBJECT-TYPE
20     SYNTAX INTEGER
21     MAX-ACCESS read-only
22     STATUS current
23     DESCRIPTION
24         "This attribute indicates the measured IPI density for non-802.11 signals
25         with measured power satisfying the condition: -70dBm < Power <= -65dBm."
26     ::= { dot11NoiseHistogramReportEntry 18 }
27
28 dot11NoiseHistogramRprtIPIDensity8 OBJECT-TYPE
29     SYNTAX INTEGER
30     MAX-ACCESS read-only
31     STATUS current
32     DESCRIPTION
33         "This attribute indicates the measured IPI density for non-802.11 signals
34         with measured power satisfying the condition: -65dBm < Power <= -60dBm."
35     ::= { dot11NoiseHistogramReportEntry 19 }
36
37 dot11NoiseHistogramRprtIPIDensity9 OBJECT-TYPE
38     SYNTAX INTEGER
39     MAX-ACCESS read-only
40     STATUS current
41     DESCRIPTION
42         "This attribute indicates the measured IPI density for non-802.11 signals
43         with measured power satisfying the condition: -60dBm < Power <= -55dBm."
44     ::= { dot11NoiseHistogramReportEntry 20 }
45
46 dot11NoiseHistogramRprtIPIDensity10 OBJECT-TYPE
47     SYNTAX INTEGER
48     MAX-ACCESS read-only
49     STATUS current
50     DESCRIPTION
51         "This attribute indicates the measured IPI density for non-802.11 signals
52         with measured power satisfying the condition: -55dBm < Power."
53     ::= { dot11NoiseHistogramReportEntry 21 }
54
55 dot11NoiseHistogramRprtVendorSpecific OBJECT-TYPE
56     SYNTAX OCTET STRING (SIZE(0..255))
57     MAX-ACCESS read-create
58     STATUS current
59     DESCRIPTION
60         "This attribute provides an envelope for any optional vendor specific sub-
61         elements which may be included in a measurement report element. Zero length
62         is the null default for this attribute."
63     DEFVAL { ''H }
64     ::= { dot11NoiseHistogramReportEntry 22 }
65
66 dot11NoiseHistogramRprtMeasurementMode OBJECT-TYPE
67     SYNTAX INTEGER {
68         success(0),
69         incapableBit(1),
70         refusedBit(2),
71     }
72     MAX-ACCESS read-only

```

```

1      STATUS current
2      DESCRIPTION
3          "This attribute indicates the outcome status for the measurement request
4          which generated this measurement report; status is indicated using the fol-
5          lowing reason codes: 1 indicates this STA is incapable of generating the
6          report, 2 indicates this STA is refusing to generate the report, 0 indi-
7          cates the STA successfully carried out the measurement request."
8      DEFVAL { 0 }
9      ::= { dot11NoiseHistogramReportEntry 23 }
10
11  -- *****
12  -- * End of dot11NoiseHistogramReport TABLE
13  -- *****
14
15  -- *****
16  -- * dot11BeaconReport TABLE
17  -- *****
18  dot11BeaconReportTable OBJECT-TYPE
19      SYNTAX SEQUENCE OF Dot11BeaconReportEntry
20      MAX-ACCESS not-accessible
21      STATUS current
22      DESCRIPTION
23          "Group contains the current list of Beacon reports that have been received
24          by the MLME. The report tables shall be maintained as FIFO to preserve
25          freshness, thus the rows in this table can be deleted for memory con-
26          straints or other implementation constraints determined by the vendor. New
27          rows shall have different RprtIndex values than those deleted within the
28          range limitation of the index. One easy way is to monotonically increase
29          RprtIndex for new reports being written in the table."
30      ::= { dot11RRMReport 3 }
31
32  dot11BeaconReportEntry OBJECT-TYPE
33      SYNTAX Dot11BeaconReportEntry
34      MAX-ACCESS not-accessible
35      STATUS current
36      DESCRIPTION
37          "An entry in the dot11BeaconReportTable Indexed by dot11BeaconRprtIndex."
38      INDEX { dot11BeaconRprtIndex }
39      ::= { dot11BeaconReportTable 1 }
40
41  Dot11BeaconReportEntry ::=
42      SEQUENCE {
43          dot11BeaconRprtIndex                Unsigned32,
44          dot11BeaconRprtRqstToken           OCTET STRING,
45          dot11BeaconRprtIfIndex             InterfaceIndex,
46          dot11BeaconMeasuringSTAAddr       MacAddress,
47          dot11BeaconRprtChanNumber         INTEGER,
48          dot11BeaconRprtRegulatoryClass    INTEGER,
49          dot11BeaconRprtActualStartTime    TSFType,
50          dot11BeaconRprtMeasurementDuration Unsigned32,
51          dot11BeaconRprtPhyType            INTEGER,
52          dot11BeaconRprtReportedFrameType  INTEGER,
53          dot11BeaconRprtRCPI               INTEGER,
54          dot11BeaconRprtRSNI               INTEGER,
55          dot11BeaconRprtBSSID              MacAddress,
56          dot11BeaconRprtAntennaID          INTEGER,
57          dot11BeaconRprtParentTSF          TSFType,
58          dot11BeaconRprtReportedFrameBody  OCTET STRING,
59          dot11BeaconRprtVendorSpecific     OCTET STRING,
60          dot11BeaconRprtMeasurementMode    INTEGER}
61
62  dot11BeaconRprtIndex OBJECT-TYPE
63      SYNTAX Unsigned32
64      MAX-ACCESS not-accessible
65      STATUS current
66      DESCRIPTION
67          "Index for Beacon Report elements in dot11BeaconReportTable, greater than
68          0."
69      ::= { dot11BeaconReportEntry 1 }
70
71  dot11BeaconRprtRqstToken OBJECT-TYPE
72      SYNTAX OCTET STRING

```

```

1      MAX-ACCESS read-only
2      STATUS current
3      DESCRIPTION
4          "This attribute indicates the request token that was indicated in the mea-
5          surement request that generated this measurement report. This should be an
6          exact match to the original dot11RRMRqstToken attribute. Note that there
7          may be multiple entries in the table that match this value since a single
8          request may generate multiple measurement reports."
9      ::= { dot11BeaconReportEntry 2 }
10
11     dot11BeaconRprtIfIndex OBJECT-TYPE
12         SYNTAX InterfaceIndex
13         MAX-ACCESS read-only
14         STATUS current
15         DESCRIPTION
16             "The ifIndex for this row of Beacon Report has been received on."
17         ::= { dot11BeaconReportEntry 3 }
18
19     dot11BeaconMeasuringSTAAddr OBJECT-TYPE
20         SYNTAX MacAddress
21         MAX-ACCESS read-only
22         STATUS current
23         DESCRIPTION
24             "The MAC address of the measuring STA for this row of Beacon report."
25         ::= { dot11BeaconReportEntry 4 }
26
27     dot11BeaconRprtChanNumber OBJECT-TYPE
28         SYNTAX INTEGER
29         MAX-ACCESS read-only
30         STATUS current
31         DESCRIPTION
32             "This attribute indicates the channel number used for this Beacon Report.
33             The Channel Number is only defined within the indicated Regulatory Class
34             for this measurement report."
35         ::= { dot11BeaconReportEntry 5 }
36
37     dot11BeaconRprtRegulatoryClass OBJECT-TYPE
38         SYNTAX INTEGER(1..255)
39         MAX-ACCESS read-only
40         STATUS current
41         DESCRIPTION
42             "This attribute indicates the channel set for this measurement report.
43             Country, Regulatory Class and Channel Number together specify the channel
44             frequency and spacing for this measurement request. Valid values of Regula-
45             tory Class are shown in Annex J."
46         REFERENCE
47             "Annex J"
48         ::= { dot11BeaconReportEntry 6 }
49
50     dot11BeaconRprtActualStartTime OBJECT-TYPE
51         SYNTAX TSFType
52         MAX-ACCESS read-only
53         STATUS current
54         DESCRIPTION
55             "This attribute indicates the TSF value at the time when the
56             measurement started."
57         ::= { dot11BeaconReportEntry 7 }
58
59     dot11BeaconRprtMeasurementDuration OBJECT-TYPE
60         SYNTAX Unsigned32
61         UNITS "TUs"
62         MAX-ACCESS read-only
63         STATUS current
64         DESCRIPTION
65             "This attribute indicates the duration over which the Beacon Report was
66             measured."
67         ::= { dot11BeaconReportEntry 8 }
68
69     dot11BeaconRprtPhyType OBJECT-TYPE
70         SYNTAX INTEGER {
71             fhss(1),
72             dsss(2),

```

```

1         irbaseband(3),
2         ofdm(4),
3         hrdsss(5),
4         exp(6)
5     }
6     UNITS "dot11PHYType"
7     MAX-ACCESS read-only
8     STATUS current
9     DESCRIPTION
10        "This attribute indicates the PHY Type for this row of Beacon Report."
11    ::= { dot11BeaconReportEntry 9 }
12
13 dot11BeaconRprtReportedFrameType OBJECT-TYPE
14     SYNTAX INTEGER {
15         beaconOrProbeResponse(0),
16         measurementPilot(1)
17     }
18     MAX-ACCESS read-only
19     STATUS current
20     DESCRIPTION
21        "This attribute indicates the frame type reported in
22         dot11BeaconRprtReportedFrameBody"
23    ::= { dot11BeaconReportEntry 10 }
24
25 dot11BeaconRprtRCPI OBJECT-TYPE
26     SYNTAX INTEGER(0..255)
27     UNITS "0.5 dBm"
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31        "This attribute indicates the received channel power of the beacon or
32         probe response frame in dBm, as defined in the RCPI measurement clause
33         for the indicated PHY Type. RCPIval = Int[(RCPIpower in dBm + 110)*2], for
34         RCPI in the range -110 dBm to 0 dBm. RCPIval = 220 for RCPI > 0 dBm.
35         RCPIval = 255 when RCPI is not available."
36    ::= { dot11BeaconReportEntry 11 }
37
38 dot11BeaconRprtRSNI OBJECT-TYPE
39     SYNTAX INTEGER(0..255)
40     UNITS "0.5 dB"
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44        "This attribute indicates the received signal to noise ratio of the beacon
45         or probe response frame in dB. RSNI is the received signal to noise plus
46         interference ratio derived from the measured RCPI for the received frame
47         and from the measured ANPI for the channel used to receive the frame. RSNI
48         is calculated by the ratio of the received signal power (RCPI - ANPI) over
49         the noise plus interference power (ANPI) where
50         RSNI = [(ratio(dB) + 10) * 2], for ratios in the range -10dB to +118dB.
51         "
52    ::= { dot11BeaconReportEntry 12 }
53
54 dot11BeaconRprtBSSID OBJECT-TYPE
55     SYNTAX MacAddress
56     MAX-ACCESS read-only
57     STATUS current
58     DESCRIPTION
59        "This attribute indicates the BSSID of the beacon for this row of
60         Beacon Report."
61    ::= { dot11BeaconReportEntry 13 }
62
63 dot11BeaconRprtAntennaID OBJECT-TYPE
64     SYNTAX INTEGER(0..255)
65     MAX-ACCESS read-only
66     STATUS current
67     DESCRIPTION
68        "This attribute indicates the identifying number for the antenna used
69         for this measurement. The value 0 indicates that the antenna identifier is
70         unknown. The value 255 indicates that this measurement was made with mul-
71         tiple antennas. The value 1 is used for a STA with only one antenna. STAs

```

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1         with more than one antenna shall assign Antenna IDs to each antenna as con-
2         secutive, ascending numbers. Each Antenna ID number represents a unique
3         antenna characterized by a fixed relative position, a fixed relative direc-
4         tion and a peak gain for that position and direction."
5         ::= { dot11BeaconReportEntry 14 }
6
7 dot11BeaconRprtParentTSF OBJECT-TYPE
8     SYNTAX TSFType
9     MAX-ACCESS read-only
10    STATUS current
11    DESCRIPTION
12        "This attribute indicates the TSF value of the serving measuring STA's TSF
13        value at the time the measuring STA received the beacon or probe response
14        frame."
15    ::= { dot11BeaconReportEntry 15 }
16
17 dot11BeaconRprtReportedFrameBody OBJECT-TYPE
18     SYNTAX OCTET STRING (SIZE(0..100))
19     MAX-ACCESS read-only
20     STATUS current
21     DESCRIPTION
22        "This attribute indicates the fixed fields and information elements from
23        the frame body of the Beacon, Measurement Pilot or Probe Response frame
24        being received. All reported TIM elements are truncated to 4 octets."
25    ::= { dot11BeaconReportEntry 16 }
26
27 dot11BeaconRprtVendorSpecific OBJECT-TYPE
28     SYNTAX OCTET STRING (SIZE(0..255))
29     MAX-ACCESS read-create
30     STATUS current
31     DESCRIPTION
32        "This attribute provides an envelope for any optional vendor specific sub-
33        elements which may be included in a measurement report element. Zero length
34        is the null default for this attribute."
35     DEFVAL { 'H' }
36    ::= { dot11BeaconReportEntry 17 }
37
38 dot11BeaconRprtMeasurementMode OBJECT-TYPE
39     SYNTAX INTEGER {
40         success(0),
41         incapableBit(1),
42         refusedBit(2),
43     }
44     MAX-ACCESS read-only
45     STATUS current
46     DESCRIPTION
47        "This attribute indicates the outcome status for the measurement request
48        which generated this measurement report; status is indicated using the fol-
49        lowing reason codes: 1 indicates this STA is incapable of generating the
50        report, 2 indicates this STA is refusing to generate the report, 0 indi-
51        cates the STA successfully carried out the measurement request."
52     DEFVAL { 0 }
53    ::= { dot11BeaconReportEntry 18 }
54
55 -- *****
56 -- * End of dot11BeaconReport TABLE
57 -- *****
58
59 -- *****
60 -- * dot11FrameReport TABLE
61 -- *****
62 dot11FrameReportTable OBJECT-TYPE
63     SYNTAX SEQUENCE OF Dot11FrameReportEntry
64     MAX-ACCESS not-accessible
65     STATUS current
66     DESCRIPTION
67        "Group contains the current list of Frame reports that have been received by
68        the MLME. The report tables shall be maintained as FIFO to preserve fresh-
69        ness, thus the rows in this table can be deleted for memory constraints or
70        other implementation constraints determined by the vendor. New rows shall
71        have different RprtIndex values than those deleted within the range limita-
72        tion of the index. One easy way is to monotonically increase RprtIndex for

```

```

1         new reports being written in the table."
2         ::= { dot11RRMReport 4 }
3
4 dot11FrameReportEntry OBJECT-TYPE
5     SYNTAX Dot11FrameReportEntry
6     MAX-ACCESS not-accessible
7     STATUS current
8     DESCRIPTION
9         "An entry in the dot11FrameReportTable Indexed by dot11FrameRprtIndex."
10    INDEX { dot11FrameRprtIndex }
11    ::= { dot11FrameReportTable 1 }
12
13 Dot11FrameReportEntry ::=
14     SEQUENCE {
15         dot11FrameRprtIndex                Unsigned32,
16         dot11FrameRprtIfIndex              InterfaceIndex,
17         dot11FrameRprtRqstToken            Unsigned32,
18         dot11FrameRprtChanNumber           INTEGER,
19         dot11FrameRprtRegulatoryClass      INTEGER,
20         dot11FrameRprtActualStartTime      TSFType,
21         dot11FrameRprtMeasurementDuration  Unsigned32,
22         dot11FrameRprtTransmitSTAAddress   MacAddress,
23         dot11FrameRprtBSSID                MacAddress,
24         dot11FrameRprtPhyType              INTEGER,
25         dot11FrameRprtAvgRCPI              INTEGER,
26         dot11FrameRprtRSNI                 INTEGER,
27         dot11FrameRprtLastRCPI            INTEGER,
28         dot11FrameRprtAntennaID            INTEGER,
29         dot11FrameRprtNumberFrames         INTEGER,
30         dot11FrameRprtVendorSpecific      OCTET STRING,
31         dot11FrameRprtMeasurementMode     INTEGER}
32
33 dot11FrameRprtIndex OBJECT-TYPE
34     SYNTAX Unsigned32
35     MAX-ACCESS not-accessible
36     STATUS current
37     DESCRIPTION
38         "Index for Frame Report elements in dot11FrameReportTable, greater than 0."
39     ::= { dot11FrameReportEntry 1 }
40
41 dot11FrameRprtIfIndex OBJECT-TYPE
42     SYNTAX InterfaceIndex
43     MAX-ACCESS read-only
44     STATUS current
45     DESCRIPTION
46         "The ifIndex for this row of Frame Report has been received on."
47     ::= { dot11FrameReportEntry 2 }
48
49 dot11FrameRprtRqstToken OBJECT-TYPE
50     SYNTAX Unsigned32
51     MAX-ACCESS read-only
52     STATUS current
53     DESCRIPTION
54         "Index for Frame Request elements in dot11FrameRequestTable that corre-
55         sponds to this row of frame report. Since a single frame request can gener-
56         ate multiple rows in the frame report table, one per BSSID, this
57         dot11FrameRprtRqstToken indicates which request this particular row indi-
58         cates. If this row of report is received without a particular
59         request, this attribute should be 0"
60     ::= { dot11FrameReportEntry 3 }
61
62 dot11FrameRprtChanNumber OBJECT-TYPE
63     SYNTAX INTEGER
64     MAX-ACCESS read-only
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates the channel number used for this Frame Report.
68         The Channel Number is only defined within the indicated Regulatory Class
69         for this measurement report."
70     ::= { dot11FrameReportEntry 4 }
71
72 dot11FrameRprtRegulatoryClass OBJECT-TYPE

```

```

1      SYNTAX INTEGER(1..255)
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "This attribute indicates the channel set for this measurement report.
6          Country, Regulatory Class and Channel Number together specify the channel
7          frequency and spacing for this measurement request. Valid values of Regula-
8          tory Class are shown in Annex J."
9      REFERENCE
10         "Annex J"
11     ::= { dot11FrameReportEntry 5 }
12
13 dot11FrameRprtActualStartTime OBJECT-TYPE
14     SYNTAX TSFType
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "This attribute indicates the TSF value at the time when measurement
19         started."
20     ::= { dot11FrameReportEntry 6 }
21
22 dot11FrameRprtMeasurementDuration OBJECT-TYPE
23     SYNTAX Unsigned32
24     MAX-ACCESS read-only
25     STATUS current
26     DESCRIPTION
27         "This attribute indicates the duration over which the Frame Report
28         was measured, expressed in units of TUs."
29     ::= { dot11FrameReportEntry 7 }
30
31 dot11FrameRprtTransmitSTAAddress OBJECT-TYPE
32     SYNTAX MacAddress
33     MAX-ACCESS read-only
34     STATUS current
35     DESCRIPTION
36         "The MAC address of STA for this row of Frame report that it has been
37         received from."
38     ::= { dot11FrameReportEntry 8 }
39
40 dot11FrameRprtBSSID OBJECT-TYPE
41     SYNTAX MacAddress
42     MAX-ACCESS read-only
43     STATUS current
44     DESCRIPTION
45         "This attribute indicates the BSSID of the STA that transmitted this
46         frame."
47     ::= { dot11FrameReportEntry 9 }
48
49 dot11FrameRprtPhyType OBJECT-TYPE
50     SYNTAX INTEGER {
51         fhss(1),
52         dsss(2),
53         irbaseband(3),
54         ofdm(4),
55         hrdsss(5),
56         erp(6)
57     }
58     UNITS "dot11PHYType"
59     MAX-ACCESS read-create
60     STATUS current
61     DESCRIPTION
62         "This attribute indicates the PHY used for frame reception in this row of
63         the frame report."
64     ::= { dot11FrameReportEntry 10 }
65
66 dot11FrameRprtAvgRCPI OBJECT-TYPE
67     SYNTAX INTEGER(0..255)
68     UNITS "0.5 dBm"
69     MAX-ACCESS read-only
70     STATUS current
71     DESCRIPTION
72         "This attribute indicates the average value for the received channel power

```

```

1         of all the frames received and counted in this Frame Report Entry, in dBm,
2         as defined in the RCPI measurement clause for the indicated PHY Type.
3         RCPIval = Int[(RCPIpower in dBm + 110)*2], for RCPI in the range -110 dBm
4         to 0 dBm. RCPIval = 220 for RCPI > 0 dBm. RCPIval = 255 when RCPI is not
5         available."
6         ::= { dot11FrameReportEntry 11 }
7
8 dot11FrameRprtRSNI OBJECT-TYPE
9     SYNTAX INTEGER(0..255)
10    UNITS "0.5 dB"
11    MAX-ACCESS read-only
12    STATUS current
13    DESCRIPTION
14        "This attribute indicates the received signal to noise ratio of the
15        received frame in dBm. RSNI is the received signal to noise plus interfer-
16        ence ratio derived from the RCPI for the received frame and from the most
17        recent ANPI value measured on the channel used to receive the frame. RSNI
18        may be calculated by the ratio of the received signal power (RCPI - ANPI)
19        over the noise plus interference power (ANPI) where RSNI = [(ratio(dB) +
20        10) * 2], for ratios in the range -10dB to +118dB. Other measurement
21        techniques are allowed."
22    ::= { dot11FrameReportEntry 12 }
23
24 dot11FrameRprtLastRCPI OBJECT-TYPE
25     SYNTAX INTEGER(0..255)
26     MAX-ACCESS read-only
27     STATUS current
28     DESCRIPTION
29         "This attribute indicates the received channel power of the most recently
30         measured frame in this Frame Report entry, in dBm, as defined in the RCPI
31         measurement clause for the indicated PHY Type.
32         RCPIval = Int[(RCPIpower in dBm + 110)*2], for RCPI in the range -110 dBm
33         to 0 dBm. RCPIval = 220 for RCPI > 0 dBm. RCPIval = 255 when RCPI is not
34         available."
35     ::= { dot11FrameReportEntry 13 }
36
37 dot11FrameRprtAntennaID OBJECT-TYPE
38     SYNTAX INTEGER(0..255)
39     MAX-ACCESS read-only
40     STATUS current
41     DESCRIPTION
42         "This attribute indicates the identifying number for the antenna used for
43         this measurement. The value 0 indicates that the antenna identifier is
44         unknown. The value 255 indicates that this measurement was made with mul-
45         tiple antennas. The value 1 is used for a STA with only one antenna. STAs
46         with more than one antenna shall assign Antenna IDs to each antenna as con-
47         secutive, ascending numbers. Each Antenna ID number represents a unique
48         antenna characterized by a fixed relative position, a fixed relative direc-
49         tion and a peak gain for that position and direction."
50     ::= { dot11FrameReportEntry 14 }
51
52 dot11FrameRprtNumberFrames OBJECT-TYPE
53     SYNTAX INTEGER(0..65535)
54     MAX-ACCESS read-only
55     STATUS current
56     DESCRIPTION
57         "This attribute indicates the number of received frames in the measurement
58         Report Frame for this row of Frame Report."
59     ::= { dot11FrameReportEntry 15 }
60
61 dot11FrameRprtVendorSpecific OBJECT-TYPE
62     SYNTAX OCTET STRING (SIZE(0..255))
63     MAX-ACCESS read-create
64     STATUS current
65     DESCRIPTION
66         "This attribute provides an envelope for any optional vendor specific sub-
67         elements which may be included in a measurement report element. Zero length
68         is the null default for this attribute."
69     DEFVAL { ''H }
70     ::= { dot11FrameReportEntry 16 }
71
72 dot11FrameRptMeasurementMode OBJECT-TYPE

```



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1      SYNTAX INTEGER {
2          success(0),
3          incapableBit(1),
4          refusedBit(2),
5      }
6      MAX-ACCESS read-only
7      STATUS current
8      DESCRIPTION
9          "This attribute indicates the outcome status for the measurement request
10         which generated this measurement report; status is indicated using the fol-
11         lowing reason codes: 1 indicates this STA is incapable of generating the
12         report, 2 indicates this STA is refusing to generate the report, 0 indi-
13         cates the STA successfully carried out the measurement request."
14      DEFVAL { 0 }
15      ::= { dot11FrameReportEntry 17 }
16
17  -- *****
18  -- * End of dot11FrameReport TABLE
19  -- *****
20
21  -- *****
22  -- * dot11STAStatisticsReport TABLE
23  -- *****
24  dot11STAStatisticsReportTable OBJECT-TYPE
25      SYNTAX SEQUENCE OF Dot11STAStatisticsReportEntry
26      MAX-ACCESS not-accessible
27      STATUS current
28      DESCRIPTION
29          "Group contains the current list of STA Statistics reports that have been
30         received by the MLME. The report tables shall be maintained as FIFO to pre-
31         serve freshness, thus the rows in this table can be deleted for memory con-
32         straints or other implementation constraints determined by the vendor. New
33         rows shall have different RprtIndex values than those deleted within the
34         range limitation of the index. One easy way is to monotonically increase
35         RprtIndex for new reports being written in the table."
36      ::= { dot11RRMReport 5 }
37
38  dot11STAStatisticsReportEntry OBJECT-TYPE
39      SYNTAX Dot11STAStatisticsReportEntry
40      MAX-ACCESS not-accessible
41      STATUS current
42      DESCRIPTION
43          "An entry in the dot11STAStatisticsReportTable Indexed by
44         dot11STAStatisticsReportIndex."
45      INDEX { dot11STAStatisticsReportIndex }
46      ::= { dot11STAStatisticsReportTable 1 }
47
48  Dot11STAStatisticsReportEntry ::=
49      SEQUENCE {
50          dot11STAStatisticsReportIndex                Unsigned32,
51          dot11STAStatisticsReportToken                OCTET STRING,
52          dot11STAStatisticsIfIndex                    InterfaceIndex,
53          dot11STAStatisticsSTAAddress                 MacAddress,
54          dot11STAStatisticsMeasurementDuration        Unsigned32,
55          dot11STAStatisticsRTSGroupID                  INTEGER,
56          dot11STAStatisticsTransmittedFragmentCount   Counter32,
57          dot11STAStatisticsMulticastTransmittedFrameCount Counter32,
58          dot11STAStatisticsFailedCount                 Counter32,
59          dot11STAStatisticsRetryCount                  Counter32,
60          dot11STAStatisticsMultipleRetryCount          Counter32,
61          dot11STAStatisticsFrameDuplicateCount         Counter32,
62          dot11STAStatisticsRTSSuccessCount             Counter32,
63          dot11STAStatisticsRTSFailureCount             Counter32,
64          dot11STAStatisticsACKFailureCount             Counter32,
65          dot11STAStatisticsQosTransmittedFragmentCount Counter32,
66          dot11STAStatisticsQosFailedCount              Counter32,
67          dot11STAStatisticsQosRetryCount               Counter32,
68          dot11STAStatisticsQosMultipleRetryCount       Counter32,
69          dot11STAStatisticsQosFrameDuplicateCount      Counter32,
70          dot11STAStatisticsQosRTSSuccessCount          Counter32,
71          dot11STAStatisticsQosRTSFailureCount          Counter32,
72          dot11STAStatisticsQosACKFailureCount          Counter32,

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1      dot11STAStatisticsQosReceivedFragmentCount      Counter32,
2      dot11STAStatisticsQosTransmittedFrameCount     Counter32,
3      dot11STAStatisticsQosDiscardedFrameCount       Counter32,
4      dot11STAStatisticsQosMPDUsReceivedCount        Counter32,
5      dot11STAStatisticsQosRetriesReceivedCount      Counter32,
6      dot11STAStatisticsReceivedFragmentCount        Counter32,
7      dot11STAStatisticsMulticastReceivedFrameCount  Counter32,
8      dot11STAStatisticsFCSErrorCount                Counter32,
9      dot11STAStatisticsTransmittedFrameCount        Counter32,
10     dot11STAStatisticsAPAverageAccessDelay          INTEGER,
11     dot11STAStatisticsAverageAccessDelayBestEffort  INTEGER,
12     dot11STAStatisticsAverageAccessDelayBackground  INTEGER,
13     dot11STAStatisticsAverageAccessDelayVideo       INTEGER,
14     dot11STAStatisticsAverageAccessDelayVoice      INTEGER,
15     dot11STAStatisticsStationCount                  INTEGER,
16     dot11STAStatisticsChannelUtilization            INTEGER,
17     dot11STAStatisticsVendorSpecific                OCTET STRING,
18     dot11STAStatisticsRprtMeasurementMode           INTEGER,
19     dot11STAStatisticsRSNAStatsCMACICVErrors        Counter32,
20     dot11STAStatisticsRSNAStatsCMACReplays          Counter32,
21     dot11STAStatisticsRSNAStatsRobustMgmtCCMPReplays Counter32,
22     dot11STAStatisticsRSNAStatsTKIPICVErrors        Counter32,
23     dot11STAStatisticsRSNAStatsTKIPReplays          Counter32,
24     dot11STAStatisticsRSNAStatsCCMPDecryptErrors    Counter32,
25     dot11STAStatisticsRSNAStatsCCMPReplays          Counter32,
26     dot11STAStatisticsReportingReasonSTACounters    OCTET STRING,
27     dot11STAStatisticsReportingReasonQosCounters    OCTET STRING,
28     dot11STAStatisticsReportingReasonRsnaCounters   OCTET STRING}
29
30 dot11STAStatisticsReportIndex OBJECT-TYPE
31     SYNTAX Unsigned32
32     MAX-ACCESS not-accessible
33     STATUS current
34     DESCRIPTION
35         "Index for STA Statistics Report elements in dot11STAStatisticsReportTable,
36         greater than 0."
37     ::= { dot11STAStatisticsReportEntry 1 }
38
39 dot11STAStatisticsReportToken OBJECT-TYPE
40     SYNTAX OCTET STRING
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44         "This attribute indicates the token that was indicated in the measurement
45         request that generated this measurement report. This should be an exact
46         match to the original dot11RRMRqstToken attribute. Note that there may be
47         multiple entries in the table that match this value since a single request
48         may generate multiple measurement reports."
49     ::= { dot11STAStatisticsReportEntry 2 }
50
51 dot11STAStatisticsIfIndex OBJECT-TYPE
52     SYNTAX InterfaceIndex
53     MAX-ACCESS read-only
54     STATUS current
55     DESCRIPTION
56         "Identifies the Interface that this row of STA Statistics Report has been
57         received on"
58     ::= { dot11STAStatisticsReportEntry 3 }
59
60 dot11STAStatisticsSTAAddress OBJECT-TYPE
61     SYNTAX MacAddress
62     MAX-ACCESS read-only
63     STATUS current
64     DESCRIPTION
65         "The MAC address of the STA that returned this STA Statistics Report."
66     ::= { dot11STAStatisticsReportEntry 4 }
67
68 dot11STAStatisticsMeasurementDuration OBJECT-TYPE
69     SYNTAX Unsigned32
70     UNITS "TUs"
71     MAX-ACCESS read-only
72     STATUS current

```

```

1      DESCRIPTION
2          "This attribute indicates the duration over which the STA Statistics was
3      measured. A zero value for this attribute indicates that the reported sta-
4      tistics are a current snapshot of the statistics variables. A non-zero
5      value for this attribute indicates that the reported statistics contain the
6      difference in the corresponding statistics variables over the indicated
7      duration."
8      ::= { dot11STAStatisticsReportEntry 5 }
9
10     dot11STAStatisticsGroupID OBJECT-TYPE
11     SYNTAX INTEGER {
12         dot11CountersTable(0),
13         dot11CountersTabledot11MacStatistics(01),
14         dot11MacStatisticsdot11QosCountersTableforUP0(12),
15         dot11QosCountersTableforUP0dot11QosCountersTableforUP1(23),
16         dot11QosCountersTableforUP1dot11QosCountersTableforUP2(34),
17         dot11QosCountersTableforUP2dot11QosCountersTableforUP3(45),
18         dot11QosCountersTableforUP3dot11QosCountersTableforUP4(56),
19         dot11QosCountersTableforUP4dot11QosCountersTableforUP5(67),
20         dot11QosCountersTableforUP5dot11QosCountersTableforUP6(78),
21         dot11QosCountersTableforUP6dot11QosCountersTableforUP7(89),
22         dot11QosCountersTableforUP7bSSAverageAccessDelays(910),
23         bSSAverageAccessDelaysdot11RSNAStatsTable(1016)
24     }
25     MAX-ACCESS read-only
26     STATUS current
27     DESCRIPTION
28         "This attribute indicates the value of dot11RRMRqstSTASatRqstGroupID
29     returned from the STA in this STA Statistics Report."
30     DEFVAL { 0 }
31     ::= { dot11STAStatisticsReportEntry 6 }
32
33     dot11STAStatisticsTransmittedFragmentCount OBJECT-TYPE
34     SYNTAX Counter32
35     MAX-ACCESS read-only
36     STATUS current
37     DESCRIPTION
38         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
39     cates the value of dot11TransmittedFragmentCount returned from the STA in
40     this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
41     cates a non-zero value, this attribute indicates the difference in the ref-
42     erenced dot11 variable over the indicated duration. This attribute is only
43     valid if the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
44     ::= { dot11STAStatisticsReportEntry 7 }
45
46     dot11STAStatisticsMulticastTransmittedFrameCount OBJECT-TYPE SYNTAX Counter32
47     MAX-ACCESS read-only
48     STATUS current
49     DESCRIPTION
50         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
51     cates the value of dot11MulticastTransmittedFrameCount returned from the
52     STA in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
53     indicates a non-zero value, this attribute indicates the difference in the
54     referenced dot11 variable over the indicated duration. This attribute is
55     only valid if the dot11STAStatisticsGroupID is 0, and is ignored other-
56     wise."
57     ::= { dot11STAStatisticsReportEntry 8 }
58
59     dot11STAStatisticsFailedCount OBJECT-TYPE
60     SYNTAX Counter32
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
65     cates the value of dot11FailedCount returned from the STA in this STA Sta-
66     tistics Report. If dot11STAStatisticsMeasurementDuration indicates a non-
67     zero value, this attribute indicates the difference in the referenced dot11
68     variable over the indicated duration. This attribute is only valid if the
69     dot11STAStatisticsGroupID is 0, and is ignored otherwise."
70     ::= { dot11STAStatisticsReportEntry 9 }
71
72     dot11STAStatisticsRetryCount OBJECT-TYPE

```

```

1      SYNTAX Counter32
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
6          cates the value of dot11RetryCount returned from the STA in this STA Sta-
7          tistics Report. If dot11STAStatisticsMeasurementDuration indicates a non-
8          zero value, this attribute indicates the difference in the referenced dot11
9          variable over the indicated duration. This attribute is only valid if the
10         dot11STAStatisticsGroupID is 1, and is ignored otherwise."
11     ::= { dot11STAStatisticsReportEntry 10 }
12
13 dot11STAStatisticsMultipleRetryCount OBJECT-TYPE
14     SYNTAX Counter32
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
19         cates the value of dot11MultipleRetryCount returned from the STA in this
20         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
21         non-zero value, this attribute indicates the difference in the referenced
22         dot11 variable over the indicated duration. This attribute is only valid if
23         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
24     ::= { dot11STAStatisticsReportEntry 11 }
25
26 dot11STAStatisticsFrameDuplicateCount OBJECT-TYPE
27     SYNTAX Counter32
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
32         cates the value of dot11FrameDuplicateCount returned from the STA in this
33         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
34         non-zero value, this attribute indicates the difference in the referenced
35         dot11 variable over the indicated duration. This attribute is only valid if
36         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
37     ::= { dot11STAStatisticsReportEntry 12 }
38
39 dot11STAStatisticsRTSSuccessCount OBJECT-TYPE
40     SYNTAX Counter32
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
45         cates the value of dot11RTSSuccessCount returned from the STA in this STA
46         Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
47         non-zero value, this attribute indicates the difference in the referenced
48         dot11 variable over the indicated duration. This attribute is only valid if
49         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
50     ::= { dot11STAStatisticsReportEntry 13 }
51
52 dot11STAStatisticsRTSFailureCount OBJECT-TYPE
53     SYNTAX Counter32
54     MAX-ACCESS read-only
55     STATUS current
56     DESCRIPTION
57         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
58         cates the value of dot11RTSFailureCount returned from the STA in this STA
59         Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
60         non-zero value, this attribute indicates the difference in the referenced
61         dot11 variable over the indicated duration. This attribute is only valid if
62         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
63     ::= { dot11STAStatisticsReportEntry 14 }
64
65 dot11STAStatisticsACKFailureCount OBJECT-TYPE
66     SYNTAX Counter32
67     MAX-ACCESS read-only
68     STATUS current
69     DESCRIPTION
70         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
71         cates the value of dot11ACKFailureCount returned from the STA in this STA
72         Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a

```

```

1         non-zero value, this attribute indicates the difference in the referenced
2         dot11 variable over the indicated duration. This attribute is only valid if
3         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
4     ::= { dot11STAStatisticsReportEntry 15 }
5
6 dot11STAStatisticsQosTransmittedFragmentCount OBJECT-TYPE
7     SYNTAX Counter32
8     MAX-ACCESS read-only
9     STATUS current
10    DESCRIPTION
11        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
12        cates the value of dot11QosTransmittedFragmentCount returned from the STA
13        in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
14        indicates a non-zero value, this attribute indicates the difference in the
15        referenced dot11 variable over the indicated duration. This attribute is
16        only valid if the dot11STAStatisticsGroupID is 2-9, and is ignored other-
17        wise."
18    ::= { dot11STAStatisticsReportEntry 16 }
19
20 dot11STAStatisticsQosFailedCount OBJECT-TYPE
21     SYNTAX Counter32
22     MAX-ACCESS read-only
23     STATUS current
24     DESCRIPTION
25        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
26        cates the value of dot11QosFailedCount returned from the STA in this STA
27        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
28        non-zero value, this attribute indicates the difference in the referenced
29        dot11 variable over the indicated duration. This attribute is only valid if
30        the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
31    ::= { dot11STAStatisticsReportEntry 17 }
32
33 dot11STAStatisticsQosRetryCount OBJECT-TYPE
34     SYNTAX Counter32
35     MAX-ACCESS read-only
36     STATUS current
37     DESCRIPTION
38        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
39        cates the value of dot11QosRetryCount returned from the STA in this STA
40        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
41        non-zero value, this attribute indicates the difference in the referenced
42        dot11 variable over the indicated duration. This attribute is only valid if
43        the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
44    ::= { dot11STAStatisticsReportEntry 18 }
45
46 dot11STAStatisticsQosMultipleRetryCount OBJECT-TYPE
47     SYNTAX Counter32
48     MAX-ACCESS read-only
49     STATUS current
50     DESCRIPTION
51        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
52        cates the value of dot11QosMultipleRetryCount returned from the STA in this
53        STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
54        non-zero value, this attribute indicates the difference in the referenced
55        dot11 variable over the indicated duration. This attribute is only valid if
56        the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
57    ::= { dot11STAStatisticsReportEntry 19 }
58
59 dot11STAStatisticsQosFrameDuplicateCount OBJECT-TYPE
60     SYNTAX Counter32
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
65        cates the value of dot11QosFrameDuplicateCount returned from the STA in
66        this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
67        cates a non-zero value, this attribute indicates the difference in the ref-
68        erenced dot11 variable over the indicated duration. This attribute is only
69        valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
70    ::= { dot11STAStatisticsReportEntry 20 }
71
72 dot11STAStatisticsQosRTSSuccessCount OBJECT-TYPE

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1      SYNTAX Counter32
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
6          cates the value of dot11QosRTSSuccessCount returned from the STA in this
7          STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
8          non-zero value, this attribute indicates the difference in the referenced
9          dot11 variable over the indicated duration. This attribute is only valid if
10         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
11     ::= { dot11STAStatisticsReportEntry 21 }
12
13 dot11STAStatisticsQosRTSFailureCount OBJECT-TYPE
14     SYNTAX Counter32
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
19         cates the value of dot11QosRTSFailureCount returned from the STA in this
20         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
21         non-zero value, this attribute indicates the difference in the referenced
22         dot11 variable over the indicated duration. This attribute is only valid if
23         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
24     ::= { dot11STAStatisticsReportEntry 22 }
25
26 dot11STAStatisticsQosACKFailureCount OBJECT-TYPE
27     SYNTAX Counter32
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
32         cates the value of dot11QosACKFailureCount returned from the STA in this
33         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
34         non-zero value, this attribute indicates the difference in the referenced
35         dot11 variable over the indicated duration. This attribute is only valid if
36         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
37     ::= { dot11STAStatisticsReportEntry 23 }
38
39 dot11STAStatisticsQosReceivedFragmentCount OBJECT-TYPE
40     SYNTAX Counter32
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
45         cates the value of dot11QosReceivedFragmentCount returned from the STA in
46         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
47         cates a non-zero value, this attribute indicates the difference in the ref-
48         erenced dot11 variable over the indicated duration. This attribute is only
49         valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
50     ::= { dot11STAStatisticsReportEntry 24 }
51
52 dot11STAStatisticsQosTransmittedFrameCount OBJECT-TYPE
53     SYNTAX Counter32
54     MAX-ACCESS read-only
55     STATUS current
56     DESCRIPTION
57         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
58         cates the value of dot11QosTransmittedFrameCount returned from the STA in
59         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
60         cates a non-zero value, this attribute indicates the difference in the ref-
61         erenced dot11 variable over the indicated duration. This attribute is only
62         valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
63     ::= { dot11STAStatisticsReportEntry 25 }
64
65 dot11STAStatisticsQosDiscardedFrameCount OBJECT-TYPE
66     SYNTAX Counter32
67     MAX-ACCESS read-only
68     STATUS current
69     DESCRIPTION
70         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
71         cates the value of dot11QosDiscardedFrameCount returned from the STA in
72         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-

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1         cates a non-zero value, this attribute indicates the difference in the ref-
2         erenced dot11 variable over the indicated duration. This attribute is only
3         valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
4     ::= { dot11STAStatisticsReportEntry 26 }
5
6 dot11STAStatisticsQosMPDUsReceivedCount OBJECT-TYPE
7     SYNTAX Counter32
8     MAX-ACCESS read-only
9     STATUS current
10    DESCRIPTION
11        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
12        cates the value of dot11QosMPDUsReceivedCount returned from the STA in this
13        STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
14        non-zero value, this attribute indicates the difference in the referenced
15        dot11 variable over the indicated duration. This attribute is only valid if
16        the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
17    ::= { dot11STAStatisticsReportEntry 27 }
18
19 dot11STAStatisticsQosRetriesReceivedCount OBJECT-TYPE
20     SYNTAX Counter32
21     MAX-ACCESS read-only
22     STATUS current
23     DESCRIPTION
24        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
25        cates the value of dot11QosRetriesReceivedCount returned from the STA in
26        this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
27        cates a non-zero value, this attribute indicates the difference in the ref-
28        erenced dot11 variable over the indicated duration. This attribute is only
29        valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
30    ::= { dot11STAStatisticsReportEntry 28 }
31
32 dot11STAStatisticsReceivedFragmentCount OBJECT-TYPE
33     SYNTAX Counter32
34     MAX-ACCESS read-only
35     STATUS current
36     DESCRIPTION
37        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
38        cates the value of dot11ReceivedFragmentCount returned from the STA in this
39        STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
40        non-zero value, this attribute indicates the difference in the referenced
41        dot11 variable over the indicated duration. This attribute is only valid if
42        the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
43    ::= { dot11STAStatisticsReportEntry 29 }
44
45 dot11STAStatisticsMulticastReceivedFrameCount OBJECT-TYPE
46     SYNTAX Counter32
47     MAX-ACCESS read-only
48     STATUS current
49     DESCRIPTION
50        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
51        cates the value of dot11MulticastReceivedFrameCount returned from the STA
52        in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
53        indicates a non-zero value, this attribute indicates the difference in the
54        referenced dot11 variable over the indicated duration. This attribute is
55        only valid if the dot11STAStatisticsGroupID is 0, and is ignored other-
56        wise."
57    ::= { dot11STAStatisticsReportEntry 30 }
58
59 dot11STAStatisticsFCSErrorCount OBJECT-TYPE
60     SYNTAX Counter32
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
65        cates the value of dot11FCSErrorCount returned from the STA in this STA
66        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
67        non-zero value, this attribute indicates the difference in the referenced
68        dot11 variable over the indicated duration. This attribute is only valid if
69        the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
70    ::= { dot11STAStatisticsReportEntry 31 }
71
72 dot11STAStatisticsTransmittedFrameCount OBJECT-TYPE

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1      SYNTAX Counter32
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
6          cates the value of dot11TransmittedFrameCount returned from the STA in this
7          STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
8          non-zero value, this attribute indicates the difference in the referenced
9          dot11 variable over the indicated duration. This attribute is only valid if
10         the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
11     ::= { dot11STAStatisticsReportEntry 32 }
12
13 dot11STAStatisticsAPAverageAccessDelay OBJECT-TYPE
14     SYNTAX INTEGER (0..255)
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
19         cates the value of the AP Average Access Delay (AAD) returned from the STA
20         in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
21         indicates a non-zero value, this attribute indicates the difference in the
22         referenced access delay value over the indicated duration. This attribute
23         is only valid if the dot11STAStatisticsGroupID is 10, and is ignored other-
24         wise."
25     REFERENCE
26         "IEEE 802.11 Clause 7.3.2.39"
27     ::= { dot11STAStatisticsReportEntry 33 }
28
29 dot11STAStatisticsAverageAccessDelayBestEffort OBJECT-TYPE
30     SYNTAX INTEGER (0..255)
31     MAX-ACCESS read-only
32     STATUS current
33     DESCRIPTION
34         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
35         cates the value of the Average Access Delay (AAD) for the Best Effort
36         Access Category returned from the STA in this STA Statistics Report. If
37         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
38         attribute indicates the difference in the referenced access delay value
39         over the indicated duration. This attribute is only valid if the
40         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
41     REFERENCE
42         "IEEE 802.11 Clause 7.3.2.44"
43     ::= { dot11STAStatisticsReportEntry 34 }
44
45 dot11STAStatisticsAverageAccessDelayBackground OBJECT-TYPE
46     SYNTAX INTEGER (0..255)
47     MAX-ACCESS read-only
48     STATUS current
49     DESCRIPTION
50         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
51         cates the value of the Average Access Delay (AAD) for the Background Access
52         Category returned from the STA in this STA Statistics Report. If
53         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
54         attribute indicates the difference in the referenced access delay value
55         over the indicated duration. This attribute is only valid if the
56         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
57     REFERENCE
58         "IEEE 802.11 Clause 7.3.2.44"
59     ::= { dot11STAStatisticsReportEntry 35 }
60
61 dot11STAStatisticsAverageAccessDelayVideo OBJECT-TYPE
62     SYNTAX INTEGER (0..255)
63     MAX-ACCESS read-only
64     STATUS current
65     DESCRIPTION
66         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
67         cates the value of the Average Access Delay (AAD) for the Video Access Cat-
68         egory returned from the STA in this STA Statistics Report. If
69         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
70         attribute indicates the difference in the referenced access delay value
71         over the indicated duration. This attribute is only valid if the
72         dot11STAStatisticsGroupID is 10, and is ignored otherwise."

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1      REFERENCE
2          "IEEE 802.11 Clause 7.3.2.44"
3      ::= { dot11STAStatisticsReportEntry 36 }
4
5  dot11STAStatisticsAverageAccessDelayVoice OBJECT-TYPE
6      SYNTAX INTEGER (0..255)
7      MAX-ACCESS read-only
8      STATUS current
9      DESCRIPTION
10         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
11         cates the value of the Average Access Delay (AAD) for the Voice Access Cat-
12         egory returned from the STA in this STA Statistics Report. If
13         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
14         attribute indicates the difference in the referenced access delay value
15         over the indicated duration. This attribute is only valid if the
16         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
17
18     REFERENCE
19         "IEEE 802.11 Clause 7.3.2.44"
20     ::= { dot11STAStatisticsReportEntry 37 }
21
22 dot11STAStatisticsStationCount OBJECT-TYPE
23     SYNTAX INTEGER (0..65535)
24     MAX-ACCESS read-only
25     STATUS current
26     DESCRIPTION
27         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
28         cates the value of dot11AssociatedStationCount returned from the STA in
29         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
30         cates a non-zero value, this attribute indicates the difference in the ref-
31         erenced dot11 variable over the indicated duration. This attribute is only
32         valid if the dot11STAStatisticsGroupID is 10, and is ignored otherwise."
33     ::= { dot11STAStatisticsReportEntry 38 }
34
35 dot11STAStatisticsChannelUtilization OBJECT-TYPE
36     SYNTAX INTEGER (0..255)
37     UNITS "1/255"
38     MAX-ACCESS read-only
39     STATUS current
40     DESCRIPTION
41         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
42         cates the value of the Channel Utilization returned from the STA in this
43         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
44         non-zero value, this attribute indicates the difference in the Channel Uti-
45         lization value over the indicated duration. The Channel Utilization is the
46         time fraction during which the AP sensed the channel busy. This attribute
47         is only valid if the dot11STAStatisticsGroupID is 10, and is ignored other-
48         wise."
49     REFERENCE
50         "IEEE 802.11 Clause 7.3.2.28"
51     ::= { dot11STAStatisticsReportEntry 39 }
52
53 dot11STAStatisticsVendorSpecific OBJECT-TYPE
54     SYNTAX OCTET STRING (SIZE(0..255))
55     MAX-ACCESS read-create
56     STATUS current
57     DESCRIPTION
58         "This attribute provides an envelope for any optional vendor specific sub-
59         elements which may be included in a measurement report element. Zero length
60         is the null default for this attribute."
61     DEFVAL { 'H' }
62     ::= { dot11STAStatisticsReportEntry 40 }
63
64 dot11STAStatisticsRprtMeasurementMode OBJECT-TYPE
65     SYNTAX INTEGER {
66         success(0),
67         incapableBit(1),
68         refusedBit(2),
69     }
70     MAX-ACCESS read-only
71     STATUS current
72     DESCRIPTION
73         "This attribute indicates the outcome status for the measurement request

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1           which generated this measurement report; status is indicated using the fol-
2           lowing reason codes: 1 indicates this STA is incapable of generating the
3           report, 2 indicates this STA is refusing to generate the report, 0 indi-
4           cates the STA successfully carried out the measurement request."
5           DEFVAL { 0 }
6           ::= { dot11STAStatisticsReportEntry 41 }
7
8 dot11STAStatisticsRSNASTatsCMACICVErrors OBJECT-TYPE
9     SYNTAX Counter32
10    MAX-ACCESS read-only
11    STATUS current
12    DESCRIPTION
13      "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
14      cates the value of dot11RSNASTatsCMACICVErrors returned from the STA in
15      this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
16      cates a non-zero value, this attribute indicates the difference in the ref-
17      erenced dot11 variable over the indicated duration. This attribute is only
18      valid if the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
19    ::= { dot11STAStatisticsReportEntry 42 }
20
21 dot11STAStatisticsRSNASTatsCMACReplays OBJECT-TYPE
22     SYNTAX Counter32
23     MAX-ACCESS read-only
24     STATUS current
25     DESCRIPTION
26       "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
27       cates the value of dot11RSNASTatsCMACReplays returned from the STA in this
28       STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
29       non-zero value, this attribute indicates the difference in the referenced
30       dot11 variable over the indicated duration. This attribute is only valid if
31       the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
32     ::= { dot11STAStatisticsReportEntry 41-43 }
33
34 dot11STAStatisticsRSNASTatsRobustMgmtCCMPReplays OBJECT-TYPE
35     SYNTAX Counter32
36     MAX-ACCESS read-only
37     STATUS current
38     DESCRIPTION
39       "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
40       cates the value of dot11RSNASTatsRobustMgmtCCMPReplays returned from the
41       STA in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
42       indicates a non-zero value, this attribute indicates the difference in the
43       referenced dot11 variable over the indicated duration. This attribute is
44       only valid if the dot11STAStatisticsGroupID is 16, and is ignored other-
45       wise."
46     ::= { dot11STAStatisticsReportEntry 44 }
47
48 dot11STAStatisticsRSNASTatsTKIPICVErrors OBJECT-TYPE
49     SYNTAX Counter32
50     MAX-ACCESS read-only
51     STATUS current
52     DESCRIPTION
53       "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
54       cates the value of dot11RSNASTatsTKIPICVErrors returned from the STA in
55       this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
56       cates a non-zero value, this attribute indicates the difference in the ref-
57       erenced dot11 variable over the indicated duration. This attribute is only
58       valid if the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
59     ::= { dot11STAStatisticsReportEntry 45 }
60
61 dot11STAStatisticsRSNASTatsTKIPReplays OBJECT-TYPE
62     SYNTAX Counter32
63     MAX-ACCESS read-only
64     STATUS current
65     DESCRIPTION
66       "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
67       cates the value of dot11RSNASTatsTKIPReplays returned from the STA in this
68       STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
69       non-zero value, this attribute indicates the difference in the referenced
70       dot11 variable over the indicated duration. This attribute is only valid if
71       the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
72     ::= { dot11STAStatisticsReportEntry 46 }

```

```

1
2 dot11STAStatisticsRSNAStatsCCMPDecryptErrors OBJECT-TYPE
3     SYNTAX Counter32
4     MAX-ACCESS read-only
5     STATUS current
6     DESCRIPTION
7         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
8         cates the value of dot11RSNAStatsCCMPDecryptErrors returned from the STA in
9         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
10        cates a non-zero value, this attribute indicates the difference in the ref-
11        erenced dot11 variable over the indicated duration. This attribute is only
12        valid if the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
13        ::= { dot11STAStatisticsReportEntry 47 }
14
15 dot11STAStatisticsRSNAStatsCCMPReplays OBJECT-TYPE
16     SYNTAX Counter32
17     MAX-ACCESS read-only
18     STATUS current
19     DESCRIPTION
20         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
21         cates the value of dot11RSNAStatsCCMPReplays returned from the STA in this
22         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
23         non-zero value, this attribute indicates the difference in the referenced
24         dot11 variable over the indicated duration. This attribute is only valid if
25         the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
26        ::= { dot11STAStatisticsReportEntry 48 }
27
28 dot11STAStatisticsReportingReasonSTACounters OBJECT-TYPE
29     SYNTAX OCTET STRING (SIZE(0..1))
30     MAX-ACCESS read-only
31     STATUS current
32     DESCRIPTION
33         "This attribute indicates the trigger reason(s) for this Statistics Report.
34         Each bit indicates a different trigger condition. When the bit is set to
35         1, it indicates that the listed trigger threshold has been exceeded:
36         B0: dot11Failed,
37         B1: dotFCSError,
38         B2: dot11MultipleRetry,
39         B3: dot11FrameDuplicate,
40         B4: dot11RTSFailure,
41         B5: dot11ACKFailur,
42         B6: dot11Retry,
43         B7: Reserved.
44         This attribute is only valid if the dot11STAStatisticsGroupID is 0, and is
45         ignored otherwise."
46        ::= { dot11STAStatisticsReportEntry 49 }
47
48 dot11STAStatisticsReportingReasonQoSCounters OBJECT-TYPE
49     SYNTAX OCTET STRING (SIZE(0..1))
50     MAX-ACCESS read-only
51     STATUS current
52     DESCRIPTION
53         "This attribute indicates the trigger reason(s) for this Statistics Report.
54         Each bit indicates a different trigger condition. When the bit is set to
55         1, it indicates that the listed trigger threshold has been exceeded:
56         B0: dot11QoSFailed,
57         B1: dotQoSRetry,
58         B2: dot11QoSMultipleRetry,
59         B3: dot11QoSFrameDuplicate,
60         B4: dot11QoSRTSFailure,
61         B5: dot11QoSACKFailur,
62         B6: dot11QoSDiscarded,eB7: Reserved.
63         This attribute is only valid if the dot11STAStatisticsGroupID is 2-9, and
64         is ignored otherwise."
65        ::= { dot11STAStatisticsReportEntry 50 }
66
67 dot11STAStatisticsReportingReasonRsnaCounters OBJECT-TYPE
68     SYNTAX OCTET STRING (SIZE(0..1))
69     MAX-ACCESS read-only
70     STATUS current
71     DESCRIPTION
72         "This attribute indicates the trigger reason(s) for this Statistics Report.

```

```

1      Eash bit indicates a different trigger condition.  When the bit is set to
2      1, it indicates that the listed trigger threshold has been exceeded:
3      B0: dot11RSNASTatsCMACICVErrors,
4      B1: dotRSNASTatsCMACReplays,
5      B2: dot11RSNASTatsRobustMgmtCCMPReplays,
6      B3: dot11RSNASTatsTKIPICVErrors,
7      B4: dot11RSNASTatsCCMPReplays,
8      B5: dot11RSNASTatsCCMPDecryptErrors,
9      B6: dot11RSNASTatsCCMPReplays,
10     B7: Reserved.
11     This attribute is only valid if the dot11STAStatisticsGroupID is 16, and is
12     ignored otherwise."
13     ::= { dot11STAStatisticsReportEntry 51 }
14
15 -- *****
16 -- * End of dot11STAStatisticsReport TABLE
17 -- *****
18
19 -- *****
20 -- * dot11LCIReport TABLE
21 -- *****
22 dot11LCIReportTable OBJECT-TYPE
23     SYNTAX SEQUENCE OF Dot11LCIReportEntry
24     MAX-ACCESS not-accessible
25     STATUS current
26     DESCRIPTION
27         "Group contains the current list of LCI reports that have been received by
28         the MLME. The report tables shall be maintained as FIFO to preserve fresh-
29         ness, thus the rows in this table can be deleted for memory constraints or
30         other implementation constraints determined by the vendor. New rows shall
31         have different RprtIndex values than those deleted within the range limita-
32         tion of the index. One easy way is to monotonically increase RprtIndex for
33         new reports being written in the table."
34     ::= { dot11RRMReport 6 }
35
36 dot11LCIReportEntry OBJECT-TYPE
37     SYNTAX Dot11LCIReportEntry
38     MAX-ACCESS not-accessible
39     STATUS current
40     DESCRIPTION
41         "An entry in the dot11LCIReportTable
42         Indexed by dot11LCIReportIndex."
43     INDEX { dot11LCIReportIndex }
44     ::= { dot11LCIReportTable 1 }
45
46 Dot11LCIReportEntry ::=
47     SEQUENCE {
48         dot11LCIReportIndex                Unsigned32,
49         dot11LCIReportToken                OCTET STRING,
50         dot11LCIIIfIndex                   InterfaceIndex,
51         dot11LCIStAAddress                 MacAddress,
52         dot11LCILatitudeResolution         INTEGER,
53         dot11LCILatitudeInteger            INTEGER,
54         dot11LCILatitudeFraction           INTEGER,
55         dot11LCILongitudeResolution        INTEGER,
56         dot11LCILongitudeInteger           INTEGER,
57         dot11LCILongitudeFraction          INTEGER,
58         dot11LCIAltitudeType               INTEGER,
59         dot11LCIAltitudeResolution         INTEGER,
60         dot11LCIAltitudeInteger            INTEGER,
61         dot11LCIAltitudeFraction          INTEGER,
62         dot11LCIDatum                     INTEGER,
63         dot11LCIAzimuthType                INTEGER,
64         dot11LCIAzimuthResolution          INTEGER,
65         dot11LCIAzimuth                   Integer32,
66         dot11LCIVendorSpecific             OCTET STRING,
67         dot11LCIRprtMeasurementMode        INTEGER}
68
69 dot11LCIReportIndex OBJECT-TYPE
70     SYNTAX Unsigned32
71     MAX-ACCESS not-accessible
72     STATUS current

```

```

1      DESCRIPTION
2      "Index for LCI Report elements in dot11LCIReportTable, greater than 0."
3      ::= { dot11LCIReportEntry 1 }
4
5  dot11LCIReportToken OBJECT-TYPE
6      SYNTAX OCTET STRING
7      MAX-ACCESS read-only
8      STATUS current
9      DESCRIPTION
10     "This attribute indicates the token that was indicated in the measurement
11     request that generated this measurement report. This should be an exact
12     match to the original dot11RRMRqstToken attribute. Note that there may be
13     multiple entries in the table that match this value since a single request
14     may generate multiple measurement reports."
15     ::= { dot11LCIReportEntry 2 }
16
17  dot11LCIIfIndex OBJECT-TYPE
18      SYNTAX InterfaceIndex
19      MAX-ACCESS read-only
20      STATUS current
21      DESCRIPTION
22     "Identifies the Interface that this row of LCI Report has been received on"
23     ::= { dot11LCIReportEntry 3 }
24
25  dot11LCIStAAddress OBJECT-TYPE
26      SYNTAX MacAddress
27      MAX-ACCESS read-only
28      STATUS current
29      DESCRIPTION
30     "The MAC address of the STA that returned this LCI Report."
31     ::= { dot11LCIReportEntry 4 }
32
33  dot11LCILatitudeResolution OBJECT-TYPE
34      SYNTAX INTEGER (0..63)
35      MAX-ACCESS read-only
36      STATUS current
37      DESCRIPTION
38     "This attribute indicates the latitude resolution as 6 bits indicating the
39     number of valid bits in the fixed-point value of Latitude. This field is
40     derived from IETF RFC-3825, and is accessed big-endian."
41     ::= { dot11LCIReportEntry 5 }
42
43  dot11LCILatitudeInteger OBJECT-TYPE
44      SYNTAX INTEGER (-359..359)
45      MAX-ACCESS read-only
46      STATUS current
47      DESCRIPTION
48     "This attribute indicates the latitude as a 34 bit fixed point value con-
49     sisting of 9 bits of integer and 25 bits of fraction. This field contains
50     the 9 bits of integer portion of Latitude. This field is derived from IETF
51     RFC-3825, and is accessed big-endian."
52     ::= { dot11LCIReportEntry 6 }
53
54  dot11LCILatitudeFraction OBJECT-TYPE
55      SYNTAX INTEGER (-16777215..16777215)
56      MAX-ACCESS read-only
57      STATUS current
58      DESCRIPTION
59     "This attribute indicates the latitude as a 34 bit fixed point value con-
60     sisting of 9 bits of integer and 25 bits of fraction. This field contains
61     the 25 bits of fraction portion of Latitude. This field is derived from
62     IETF RFC-3825, and is accessed big-endian."
63     ::= { dot11LCIReportEntry 7 }
64
65  dot11LCILongitudeResolution OBJECT-TYPE
66      SYNTAX INTEGER (0..63)
67      MAX-ACCESS read-only
68      STATUS current
69      DESCRIPTION
70     "This attribute indicates the longitude resolution as 6 bits indicating the
71     number of valid bits in the fixed-point value of Longitude. This field is

```

```

1         derived from IETF RFC-3825, and is accessed big-endian."
2         ::= { dot11LCIReportEntry 8 }
3
4 dot11LCILongitudeInteger OBJECT-TYPE
5     SYNTAX INTEGER (-359..359)
6     MAX-ACCESS read-only
7     STATUS current
8     DESCRIPTION
9         "This attribute indicates the longitude as a 34 bit fixed point value con-
10        sisting of 9 bits of integer and 25 bits of fraction. This field contains
11        the 9 bits of integer portion of Longitude. This field is derived from IETF
12        RFC-3825, and is accessed big-endian."
13        ::= { dot11LCIReportEntry 9 }
14
15 dot11LCILongitudeFraction OBJECT-TYPE
16     SYNTAX INTEGER (-16777215..16777215)
17     MAX-ACCESS read-only
18     STATUS current
19     DESCRIPTION
20         "This attribute indicates the longitude as a 34 bit fixed point value con-
21        sisting of 9 bits of integer and 25 bits of fraction. This field contains
22        the 25 bits of fraction portion of Longitude. This field is derived from
23        IETF RFC-3825, and is accessed big-endian."
24        ::= { dot11LCIReportEntry 10 }
25
26 dot11LCIAltitudeType OBJECT-TYPE
27     SYNTAX INTEGER {
28         meters(1),
29         floors(2) }
30     MAX-ACCESS read-only
31     STATUS current
32     DESCRIPTION
33         "This attribute indicates the altitude Type as four bits encoding the type
34        of altitude. Codes defined are:meters : in 2s-complement fixed-point 22-bit
35        integer part with 8-bit fraction floors : in 2s-complement fixed-point 22-
36        bit integer part with 8-bit fraction. This field is derived from IETF RFC-
37        3825, and is accessed big-endian."
38        ::= { dot11LCIReportEntry 11 }
39
40 dot11LCIAltitudeResolution OBJECT-TYPE
41     SYNTAX INTEGER (0..63)
42     MAX-ACCESS read-only
43     STATUS current
44     DESCRIPTION
45         "This attribute indicates the altitude resolution as 6 bits indicating the
46        number of valid bits in the altitude. This field is derived from IETF RFC-
47        3825, and is accessed big-endian."
48        ::= { dot11LCIReportEntry 12 }
49
50 dot11LCIAltitudeInteger OBJECT-TYPE
51     SYNTAX INTEGER (-2097151..2097151)
52     MAX-ACCESS read-only
53     STATUS current
54     DESCRIPTION
55         "This attribute indicates the altitude as a 30 bit value defined by the
56        Altitude type field. The field is encoded as a 2s-complement fixed-point
57        22-bit integer Part with 8-bit fraction. This field contains the fixed-
58        point Part of Altitude. This field is derived from IETF RFC-3825, and is
59        accessed big-endian."
60        ::= { dot11LCIReportEntry 13 }
61
62 dot11LCIAltitudeFraction OBJECT-TYPE
63     SYNTAX INTEGER (-127..127)
64     MAX-ACCESS read-only
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates the altitude as a 30 bit value defined by the
68        Altitude type field. The field is encoded as a 2s-complement fixed-point
69        22-bit integer Part with 8-bit fraction. This field contains the fraction
70        part of Altitude. This field is derived from IETF RFC-3825, and is accessed
71        big-endian."
72        ::= { dot11LCIReportEntry 14 }

```

```

1  dot11LCIDatum OBJECT-TYPE
2      SYNTAX INTEGER (0..255)
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates the datum as an eight-bit value encoding the hor-
7          izontal and vertical references used for the coordinates given in this
8          LCI."
9      ::= { dot11LCIReportEntry 15 }
10
11 dot11LCIAzimuthType OBJECT-TYPE
12     SYNTAX INTEGER {
13         frontSurfaceOfSTA(0),
14         radioBeam(1) }
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "This attribute indicates the azimuth Type as a one bit attribute encoding
19         the type of Azimuth. Codes defined are: front surface of STA : in 2s-com-
20         plement fixed-point 9-bit integer; and radio beam : in 2s-complement fixed-
21         point 9-bit integer"
22     ::= { dot11LCIReportEntry 16 }
23
24 dot11LCIAzimuthResolution OBJECT-TYPE
25     SYNTAX INTEGER (0..15)
26     MAX-ACCESS read-only
27     STATUS current
28     DESCRIPTION
29         "This attribute indicates the azimuth Resolution as 4 bits indicating the
30         number of valid bits in the azimuth."
31     ::= { dot11LCIReportEntry 17 }
32
33 dot11LCIAzimuth OBJECT-TYPE
34     SYNTAX Integer32
35     MAX-ACCESS read-only
36     STATUS current
37     DESCRIPTION
38         "This attribute indicates the azimuth as a 9 bit value defined by the Azi-
39         muth Type field.The field is encoded as a 2s-complement fixed-point 9-bit
40         integer horizontal angle in degrees from True North."
41     ::= { dot11LCIReportEntry 18 }
42
43 dot11LCIVendorSpecific OBJECT-TYPE
44     SYNTAX OCTET STRING (SIZE(0..255))
45     MAX-ACCESS read-create
46     STATUS current
47     DESCRIPTION
48         "This attribute provides an envelope for any optional vendor specific sub-
49         elements which may be included in a measurement report element. Zero length
50         is the null default for this attribute."
51     DEFVAL { 'H' }
52     ::= { dot11LCIReportEntry 19 }
53
54 dot11LCIRprtMeasurementMode OBJECT-TYPE
55     SYNTAX INTEGER {
56         success(0),
57         incapableBit(1),
58         refusedBit(2),
59         }
60     MAX-ACCESS read-only
61     STATUS current
62     DESCRIPTION
63         "This attribute indicates the outcome status for the measurement request
64         which generated this measurement report; status is indicated using the fol-
65         lowing reason codes: 1 indicates this STA is incapable of generating the
66         report, 2 indicates this STA is refusing to generate the report, 0 indi-
67         cates the STA successfully carried out the measurement request."
68     DEFVAL { 0 }
69     ::= { dot11LCIReportEntry 20 }
70
71 -- *****

```

```

1  -- * End of dot11LCIReport TABLE
2  -- *****
3  -- *****
4  -- * dot11TransmitStreamReport TABLE
5  -- *****
6  dot11TransmitStreamReportTable OBJECT-TYPE
7      SYNTAX SEQUENCE OF Dot11TransmitStreamReportEntry
8      MAX-ACCESS not-accessible
9      STATUS current
10     DESCRIPTION
11         "Group contains the current list of Transmit Delay Metrics reports that
12         have been received by the MLME. The report tables shall be maintained as
13         FIFO to preserve freshness, thus the rows in this table can be deleted for
14         memory constraints or other implementation constraints determined by the
15         vendor. New rows shall have different RprtIndex values than those deleted
16         within the range limitation of the index. One easy way is to monotonically
17         increase RprtIndex for new reports being written in the table."
18     ::= { dot11RRMReport 7 }
19
20 dot11TransmitStreamReportEntry OBJECT-TYPE
21     SYNTAX Dot11TransmitStreamReportEntry
22     MAX-ACCESS not-accessible
23     STATUS current
24     DESCRIPTION
25         "An entry in the dot11TransmitStreamReportTable Indexed by
26         dot11TransmitStreamRprtIndex."
27     INDEX { dot11TransmitStreamRprtIndex }
28     ::= { dot11TransmitStreamReportTable 1 }
29
30 Dot11TransmitStreamReportEntry ::=
31     SEQUENCE {
32         dot11TransmitStreamRprtIndex                Unsigned32,
33         dot11TransmitStreamRprtRqstToken            OCTET STRING,
34         dot11TransmitStreamRprtIfIndex              InterfaceIndex,
35         dot11TransmitStreamMeasuringSTAAddr         MacAddress,
36         dot11TransmitStreamRprtActualStartTime     TSFTType,
37         dot11TransmitStreamRprtMeasurementDuration  Unsigned32,
38         dot11TransmitStreamRprtPeerSTAAddress       MacAddress,
39         dot11TransmitStreamRprtTID                  INTEGER,
40         dot11TransmitStreamRprtAverageQueueDelay   Integer32,
41         dot11TransmitStreamRprtAverageTransmitDelay Integer32,
42         dot11TransmitStreamRprtTransmittedMSDUCount Integer32,
43         dot11TransmitStreamRprtMSDUDiscardedCount  Integer32,
44         dot11TransmitStreamRprtMSDUFailedCount     Integer32,
45         dot11TransmitStreamRprtMultipleRetryCount  Integer32,
46         dot11TransmitStreamRprtCFPollsLostCount    Integer32,
47         dot11TransmitStreamRprtBinORange            INTEGER,
48         dot11TransmitStreamRprtDelayHistogram      OCTET STRING,
49         dot11TransmitStreamRprtReason              INTEGER,
50         dot11TransmitStreamRprtVendorSpecific      OCTET STRING,
51         dot11TransmitStreamRprtMeasurementMode     INTEGER}
52
53 dot11TransmitStreamRprtIndex OBJECT-TYPE
54     SYNTAX Unsigned32
55     MAX-ACCESS not-accessible
56     STATUS current
57     DESCRIPTION
58         "Index for Transmit Delay Metrics Report elements in
59         dot11TransmitStreamReportTable, greater than 0."
60     ::= { dot11TransmitStreamReportEntry 1 }
61
62 dot11TransmitStreamRprtRqstToken OBJECT-TYPE
63     SYNTAX OCTET STRING
64     MAX-ACCESS read-only
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates the request token that was indicated in the mea-
68         surement request that generated this measurement report. This should be an
69         exact match to the original dot11RRMRqstToken attribute. Note that there
70         may be multiple entries in the table that match this value since a single

```



```

1         request may generate multiple measurement reports."
2         ::= { dot11TransmitStreamReportEntry 2 }
3
4 dot11TransmitStreamRprtIfIndex OBJECT-TYPE
5     SYNTAX InterfaceIndex
6     MAX-ACCESS read-only
7     STATUS current
8     DESCRIPTION
9         "The InterfaceIndex for this row of TransmitStream Report has been
10        received on."
11    ::= { dot11TransmitStreamReportEntry 3 }
12
13 dot11TransmitStreamMeasuringSTAAddr OBJECT-TYPE
14     SYNTAX MacAddress
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "The MAC address of the measuring STA for this row of Transmit Delay Met-
19        rics report."
20    ::= { dot11TransmitStreamReportEntry 4 }
21
22 dot11TransmitStreamRprtActualStartTime OBJECT-TYPE
23     SYNTAX TSFType
24     MAX-ACCESS read-only
25     STATUS current
26     DESCRIPTION
27         "This attribute indicates the TSF value at the time when the measurement
28        started or for a triggered Transmit Stream/Category Measurement report the
29        TSF value at the reporting QoS STA when the trigger condition was met."
30    ::= { dot11TransmitStreamReportEntry 5 }
31
32 dot11TransmitStreamRprtMeasurementDuration OBJECT-TYPE
33     SYNTAX Unsigned32
34     UNITS "TUs"
35     MAX-ACCESS read-only
36     STATUS current
37     DESCRIPTION
38         "This attribute indicates the duration over which the Transmit Delay Met-
39        rics Report was measured. For a triggered Transmit Stream/Category Measure-
40        ment Report, metrics are reported over a number of transmitted MSDUs rather
41        than a duration, hence Measurement Duration shall be set to 0."
42    ::= { dot11TransmitStreamReportEntry 6 }
43
44 dot11TransmitStreamRprtPeerSTAAddress OBJECT-TYPE
45     SYNTAX MacAddress
46     MAX-ACCESS read-only
47     STATUS current
48     DESCRIPTION
49         "The MAC address present in the Address 1 field of the measured
50        data frames for this row of Transmit Stream/Category Measurement
51        report."
52    ::= { dot11TransmitStreamReportEntry 7 }
53
54 dot11TransmitStreamRprtTID OBJECT-TYPE
55     SYNTAX INTEGER(0..16)
56     MAX-ACCESS read-only
57     STATUS current
58     DESCRIPTION
59         "This attribute indicates the TC or TS for which traffic is to be mea-
60        sured. Values 0 through 15 are defined. Values 16-255 are reserved."
61    ::= { dot11TransmitStreamReportEntry 8 }
62
63 dot11TransmitStreamRprtAverageQueueDelay OBJECT-TYPE
64     SYNTAX Integer32
65     UNITS "TUs"
66     MAX-ACCESS read-only
67     STATUS current
68     DESCRIPTION
69         "This attribute indicates the average delay of the frames (MSDUs) that are
70        passed to the MAC during the measurement duration for the indicated desti-
71        nation and the indicated Traffic Identifier. Queue Delay shall be measured
72        from the time the MSDU is passed to the MAC until the transmission starts

```

```

1         and shall be expressed in units of TUs."
2         ::= { dot11TransmitStreamReportEntry 9 }
3
4 dot11TransmitStreamRprtAverageTransmitDelay OBJECT-TYPE
5     SYNTAX Integer32
6     UNITS "TUs"
7     MAX-ACCESS read-only
8     STATUS current
9     DESCRIPTION
10        "This attribute indicates the average delay of the frames (MSDUs) that are
11        successfully transmitted during the measurement duration for the indicated
12        destination and the indicated Traffic Identifier. Delay shall be measured
13        from the time the MSDU is passed to the MAC until ACK is received from the
14        intermediate destination."
15        ::= { dot11TransmitStreamReportEntry 10}
16
17 dot11TransmitStreamRprtTransmittedMSDUCount OBJECT-TYPE
18     SYNTAX Integer32
19     MAX-ACCESS read-only
20     STATUS current
21     DESCRIPTION
22        "This attribute indicates the number of MSDUs to the peer STA for the TC,
23        or TS given by the Traffic Identifier successfully transmitted in the mea-
24        surement duration"
25        ::= {dot11TransmitStreamReportEntry 11}
26
27 dot11TransmitStreamRprtMSDUDiscardedCount OBJECT-TYPE
28     SYNTAX Integer32
29     MAX-ACCESS read-only
30     STATUS current
31     DESCRIPTION
32        "This attribute indicates the number of MSDUs to the peer STA for the TC,
33        or TS given by the Traffic Identifier discarded due either to the number of
34        transmit attempts exceeding dot11ShortRetryLimit or dot11LongRetryLimit as
35        appropriate, or due to the MSDU lifetime having been reached"
36        ::= {dot11TransmitStreamReportEntry 12}
37
38 dot11TransmitStreamRprtMSDUFailedCount OBJECT-TYPE
39     SYNTAX Integer32
40     MAX-ACCESS read-only
41     STATUS current
42     DESCRIPTION
43        "This attribute indicates the number of MSDUs to the peer STA for the TC,
44        or TS given by the Traffic Identifier discarded during the measurement
45        duration due to the number of transmit attempts exceeding
46        dot11ShortRetryLimit or dot11LongRetryLimit as appropriate."
47        ::= {dot11TransmitStreamReportEntry 13}
48
49 dot11TransmitStreamRprtMultipleRetryCount OBJECT-TYPE
50     SYNTAX Integer32
51     MAX-ACCESS read-only
52     STATUS current
53     DESCRIPTION
54        "This attribute indicates the number of MSDUs for the TC, or TS given by
55        the Traffic Identifier that are successfully transmitted after more than
56        one retransmission attempt."
57        ::= {dot11TransmitStreamReportEntry 14}
58
59 dot11TransmitStreamRprtCFPollsLostCount OBJECT-TYPE
60     SYNTAX Integer32
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64        "This attribute indicates the number of QoS (+)CF-Poll frames transmitted
65        to the peer STA where there was no response from the QoS STA."
66        ::= {dot11TransmitStreamReportEntry 15}
67
68 dot11TransmitStreamRprtBin0Range OBJECT-TYPE
69     SYNTAX INTEGER
70     UNITS "TUs"
71     MAX-ACCESS read-only
72     STATUS current

```

```

1      DESCRIPTION
2          "This attribute indicates the delay range for Bin 0 of the delay histo-
3          gram."
4      ::= { dot11TransmitStreamReportEntry 16 }
5
6  dot11TransmitStreamRprtDelayHistogram OBJECT-TYPE
7      SYNTAX OCTET STRING (SIZE (6))
8      MAX-ACCESS read-only
9      STATUS current
10     DESCRIPTION
11         "This attribute indicates the histogram of delay of the frames (MSDUs) that
12         are successfully transmitted during the measurement duration for the indi-
13         cated Traffic Identifier and the indicated destination. Delay shall be mea-
14         sured from the time the MSDU is passed to the MAC until the ACK is received
15         from the intermediate destination and shall be expressed in units of TUs. "
16     ::= { dot11TransmitStreamReportEntry 17 }
17
18  dot11TransmitStreamRprtReason OBJECT-TYPE
19     SYNTAX INTEGER {
20         averageError(0),
21         consecutiveError(1),
22         delayError(2),
23     }
24     MAX-ACCESS read-only
25     STATUS current
26     DESCRIPTION
27         "This attribute indicates the Reason field indicating the reason that the
28         measuring QoS STA sent the Transmit Stream/Category measurement report."
29     DEFVAL { 0 }
30     ::= { dot11TransmitStreamReportEntry 18 }
31
32  dot11TransmitStreamRprtVendorSpecific OBJECT-TYPE
33     SYNTAX OCTET STRING (SIZE(0..255))
34     MAX-ACCESS read-create
35     STATUS current
36     DESCRIPTION
37         "This attribute provides an envelope for any optional vendor specific sub-
38         elements which may be included in a measurement report element. Zero length
39         is the null default for this attribute."
40     DEFVAL { 'H' }
41     ::= { dot11TransmitStreamReportEntry 19 }
42
43  dot11TransmitStreamRprtMeasurementMode OBJECT-TYPE
44     SYNTAX INTEGER {
45         success(0),
46         incapableBit(1),
47         refusedBit(2),
48     }
49     MAX-ACCESS read-only
50     STATUS current
51     DESCRIPTION
52         "This attribute indicates the outcome status for the measurement request
53         which generated this measurement report; status is indicated using the fol-
54         lowing reason codes: 1 indicates this STA is incapable of generating the
55         report, 2 indicates this STA is refusing to generate the report, 0 indi-
56         cates the STA successfully carried out the measurement request."
57     DEFVAL { 0 }
58     ::= { dot11TransmitStreamReportEntry 20 }
59
60  -- *****
61  -- * End of dot11TransmitStreamReport TABLE
62  -- *****
63
64  -- *****
65  -- * Radio Resource Measurement Configuration Information
66  -- *****
67  dot11RRMConfig OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 3 }
68
69  -- *****
70  -- * dot11APChannelReport TABLE
71  -- *****
72  dot11APChannelReportTable OBJECT-TYPE

```

```

1      SYNTAX SEQUENCE OF Dot11APChannelReportEntry
2      MAX-ACCESS not-accessible
3      STATUS current
4      DESCRIPTION
5          "AP Channel Report information, in tabular form."
6      ::= { dot11RRMConfig 1 }
7
8  dot11APChannelReportEntry OBJECT-TYPE
9      SYNTAX Dot11APChannelReportEntry
10     MAX-ACCESS not-accessible
11     STATUS current
12     DESCRIPTION
13         "An entry in the dot11APChannelReportTable. Each entry in the table is
14         indexed by dot11APChannelReportIndex."
15     INDEX { dot11APChannelReportIndex }
16     ::= { dot11APChannelReportTable 1 }
17
18 Dot11APChannelReportEntry ::=
19     SEQUENCE {
20         dot11APChannelReportIndex                Unsigned32,
21         dot11APChannelReportIfIndex             InterfaceIndex,
22         dot11APChannelReportRegulatoryClass     INTEGER,
23         dot11APChannelReportChannelList        OCTET STRING}
24
25 dot11APChannelReportIndex OBJECT-TYPE
26 SYNTAX Unsigned32
27 MAX-ACCESS read-only
28 STATUS current
29 DESCRIPTION
30     "Index for AP channel report entry in dot11APChannelReportTable, greater
31     than 0."
32 ::= { dot11APChannelReportEntry 1 }
33
34 dot11APChannelReportIfIndex OBJECT-TYPE
35 SYNTAX InterfaceIndex
36 MAX-ACCESS read-create
37 STATUS current
38 DESCRIPTION
39     "The ifIndex this row of AP channel report entry belongs to."
40 ::= { dot11APChannelReportEntry 2 }
41
42 dot11APChannelReportRegulatoryClass OBJECT-TYPE
43 SYNTAX INTEGER(1..255)
44 MAX-ACCESS read-create
45 STATUS current
46 DESCRIPTION
47     "This attribute indicates the channel set for this AP Channel Report. Coun-
48     try, Regulatory Class and Channel Number together specify the channel fre-
49     quency and spacing for this measurement request. Valid values of Regulatory
50     Class are shown in Annex J."
51 REFERENCE
52     "Annex J"
53 ::= { dot11APChannelReportEntry 3 }
54
55 dot11APChannelReportChannelList OBJECT-TYPE
56 SYNTAX OCTET STRING (SIZE(0..255))
57 MAX-ACCESS read-create
58 STATUS current
59 DESCRIPTION
60     "This attribute lists the specific channels in this AP Channel Report. Zero
61     length is the null default for this attribute. Each octet indicates a dif-
62     ferent channel within the indicated Regulatory Class. This list of chan-
63     nels is the Channel List in the AP Channel Report element described in
64     7.3.2.36. "
65 DEFVAL { 'H }
66 ::= { dot11APChannelReportEntry 4 }
67
68 -- *****
69 -- * End of dot11APChannelReportTable TABLE
70 -- *****
71 -- *****

```

```

1  -- * dot11RRMNeighborReport TABLE
2  -- *****
3  dot11RRMNeighborReportNextIndex OBJECT-TYPE
4      SYNTAX INTEGER(0..255)
5      MAX-ACCESS not-accessible
6      STATUS current
7      DESCRIPTION
8          "Identifies the next available index for managing the Neighbor Report
9          table. If this attribute is 0, it indicates that the Neighbor Report fea-
10         ture is not configurable via SNMP, or the table is full and new rows can-
11         not be accepted."
12     ::= { dot11RRMConfig 2 }
13
14 dot11RRMNeighborReportTable OBJECT-TYPE
15     SYNTAX SEQUENCE OF Dot11RRMNeighborReportEntry
16     MAX-ACCESS not-accessible
17     STATUS current
18     DESCRIPTION
19         "Group contains pertinent information on a collection of BSSID's that are
20         candidates to which STA's can roam. The rows are created using createAnd-
21         Wait method and fill in the attributes. When the rowStatus is set to
22         active, the row can be included in Neighbor Report IEs. If there is an
23         error, the rowStatus shall be set to notReady by SME. Since this table con-
24         tains all Neighbor Report IE entries for all interfaces enabled with the
25         Neighbor Report feature, it is possible to have too many entries for one
26         interface, while still remaining under the MaxTableSize. In that situa-
27         tion, SME shall only include Neighbor Report entries with lower
28         dot11RRMNeighborReportIFIndex up to the maximum possible number of entries
29         for a particular interface identified by ifIndex. SME shall set the rowSta-
30         tus to notInService for those rows that cannot be included in the Neighbor
31         Report element for that interface."
32     ::= { dot11RRMConfig 3 }
33
34 dot11RRMNeighborReportEntry OBJECT-TYPE
35     SYNTAX Dot11RRMNeighborReportEntry
36     MAX-ACCESS not-accessible
37     STATUS current
38     DESCRIPTION
39         "An entry in the dot11RRMNeighborReportTable"
40     INDEX { dot11RRMNeighborReportIndex }
41     ::= { dot11RRMNeighborReportTable 1 }
42
43 Dot11RRMNeighborReportEntry ::=
44     SEQUENCE {
45         dot11RRMNeighborReportIndex                Unsigned32,
46         dot11RRMNeighborReportIfIndex              InterfaceIndex,
47         dot11RRMNeighborReportBSSID                MacAddress,
48         dot11RRMNeighborReportAPReachability       INTEGER,
49         dot11RRMNeighborReportSecurity             TruthValue,
50         dot11RRMNeighborReportCapSpectrumMgmt     TruthValue,
51         dot11RRMNeighborReportCapQoS               TruthValue,
52         dot11RRMNeighborReportCapAPSD              TruthValue,
53         dot11RRMNeighborReportCapRRM              TruthValue,
54         dot11RRMNeighborReportCapDelayBlockAck    TruthValue,
55         dot11RRMNeighborReportCapImmediateBlockAck TruthValue,
56         dot11RRMNeighborReportKeyScope             TruthValue,
57         dot11RRMNeighborReportRegulatoryClass      INTEGER,
58         dot11RRMNeighborReportChannelNumber       INTEGER,
59         dot11RRMNeighborReportPhyType              INTEGER,
60         dot11RRMNeighborReportNeighborTSFInfo     OCTET STRING,
61         dot11RRMNeighborReportPilotInterval       Unsigned32,
62         dot11RRMNeighborReportPilotMultipleBSSID  OCTET STRING,
63         dot11RRMNeighborReportRRMEnabledCapabilities OCTET STRING,
64         dot11RRMNeighborReportVendorSpecific      OCTET STRING,
65         dot11RRMNeighborReportRowStatus           RowStatus},
66         dot11RRMNeighborReportBSSTransitCandPreference INTEGER,
67         dot11RRMNeighborReportBSSTerminationTSF   OCTET STRING,
68         dot11RRMNeighborReportBSSTerminationDuration INTEGER}
69
70 dot11RRMNeighborReportIndex OBJECT-TYPE
71     SYNTAX Unsigned32
72     MAX-ACCESS not-accessible

```

```

1      STATUS current
2      DESCRIPTION
3          "Index for Neighbor Report configuration table in
4          dot11RRMNeighborReportTable, greater than 0."
5      ::= { dot11RRMNeighborReportEntry 1 }
6
7  dot11RRMNeighborReportIfIndex OBJECT-TYPE
8      SYNTAX InterfaceIndex
9      MAX-ACCESS read-create
10     STATUS current
11     DESCRIPTION
12         "The ifIndex for this row of Neighbor Report entry belongs to."
13     ::= { dot11RRMNeighborReportEntry 2 }
14
15 dot11RRMNeighborReportBSSID OBJECT-TYPE
16     SYNTAX MacAddress
17     MAX-ACCESS read-write
18     STATUS current
19     DESCRIPTION
20         "This attribute indicates the BSSID of the AP described by this row of
21         Neighbor Report."
22     ::= { dot11RRMNeighborReportEntry 3 }
23
24 dot11RRMNeighborReportAPReachability OBJECT-TYPE
25     SYNTAX INTEGER {
26         notReachable(1),
27         unknown(2),
28         reachable(3)
29     }
30     MAX-ACCESS read-create
31     STATUS current
32     DESCRIPTION
33         "This attribute indicates the reachability of the AP represented by the
34         dot11NeighborReportBSSID."
35     ::= { dot11RRMNeighborReportEntry 4 }
36
37 dot11RRMNeighborReportSecurity OBJECT-TYPE
38     SYNTAX TruthValue
39     MAX-ACCESS read-create
40     STATUS current
41     DESCRIPTION
42         "This attribute, when TRUE, indicates that the neighbor AP identified by
43         this BSSID supports the same security provisioning as used by the AP which
44         provided this neighbor report. This attribute, when False, indicates
45         either that the neighbor AP identified by this BSSID does not support the
46         same security provisioning or that the security information for this neigh-
47         bor AP is not available at this time."
48     ::= { dot11RRMNeighborReportEntry 5 }
49
50 dot11RRMNeighborReportCapSpectrumMgmt OBJECT-TYPE
51     SYNTAX TruthValue
52     MAX-ACCESS read-create
53     STATUS current
54     DESCRIPTION
55         "This attribute indicates the spectrum management capability of the AP rep-
56         resented by dot11NeighborReportBSSID."
57     ::= { dot11RRMNeighborReportEntry 6 }
58
59 dot11RRMNeighborReportCapQoS OBJECT-TYPE
60     SYNTAX TruthValue
61     MAX-ACCESS read-write
62     STATUS current
63     DESCRIPTION
64         "This attribute indicates the QoS capability of the AP represented by
65         dot11NeighborReportBSSID."
66     ::= { dot11RRMNeighborReportEntry 7 }
67
68 dot11RRMNeighborReportCapAPSD OBJECT-TYPE
69     SYNTAX TruthValue
70     MAX-ACCESS read-create
71     STATUS current
72     DESCRIPTION

```

```

1           "This attribute indicates the APSD capability of the AP represented by
2           dot11NeighborReportBSSID."
3           ::= { dot11RRMNeighborReportEntry 8 }
4
5 dot11RRMNeighborReportCapRRM OBJECT-TYPE
6     SYNTAX TruthValue
7     MAX-ACCESS read-create
8     STATUS current
9     DESCRIPTION
10        "This attribute indicates the RRM capability of the AP represented by
11        dot11NeighborReportBSSID."
12        ::= { dot11RRMNeighborReportEntry 9 }
13
14 dot11RRMNeighborReportCapDelayBlockAck OBJECT-TYPE
15     SYNTAX TruthValue
16     MAX-ACCESS read-create
17     STATUS current
18     DESCRIPTION
19        "This attribute indicates the Delayed BlockAck capability of the AP repre-
20        sented by dot11NeighborReportBSSID."
21        ::= { dot11RRMNeighborReportEntry 10 }
22
23 dot11RRMNeighborReportCapImmediateBlockAck OBJECT-TYPE
24     SYNTAX TruthValue
25     MAX-ACCESS read-create
26     STATUS current
27     DESCRIPTION
28        "This attribute indicates the Immediate BlockAck capability of the AP rep-
29        resented by dot11NeighborReportBSSID."
30        ::= { dot11RRMNeighborReportEntry 11 }
31
32 dot11RRMNeighborReportKeyScope OBJECT-TYPE
33     SYNTAX TruthValue
34     MAX-ACCESS read-create
35     STATUS current
36     DESCRIPTION
37        "This attribute, when TRUE, indicates the neighbor AP identified by this
38        BSSID has the same authenticator as the AP which provided this neighbor
39        report. This attribute, when FALSE, indicates that the the neighbor AP
40        identified by this BSSID has a different authenticator or that authentica-
41        tor information is not available."
42        ::= { dot11RRMNeighborReportEntry 12 }
43
44 dot11RRMNeighborReportRegulatoryClass OBJECT-TYPE
45     SYNTAX INTEGER(1..255)
46     MAX-ACCESS read-create
47     STATUS current
48     DESCRIPTION
49        "This attribute indicates the channel set for this Neighbor Report entry.
50        Country, Regulatory Class and Channel Number together specify the channel
51        frequency and spacing for this measurement request. Valid values of Regula-
52        tory Class are shown in Annex J."
53     REFERENCE
54        "Annex J"
55     ::= { dot11RRMNeighborReportEntry 13 }
56
57 dot11RRMNeighborReportChannelNumber OBJECT-TYPE
58     SYNTAX INTEGER (1..255)
59     MAX-ACCESS read-create
60     STATUS current
61     DESCRIPTION
62        "This attribute indicates the current operating channel of the AP repre-
63        sented by the dot11NeighborReportBSSID. The Channel Number is only defined
64        within the indicated Regulatory Class for this Neighbor Report entry."
65     ::= { dot11RRMNeighborReportEntry 14 }
66
67 dot11RRMNeighborReportPhyType OBJECT-TYPE
68     SYNTAX INTEGER {
69         fhss(1),
70         dsss(2),
71         irbaseband(3),
72         ofdm(4),

```

```

1         hrdsss(5),
2         erp(6)
3     }
4     UNITS "dot11PHYType"
5     MAX-ACCESS read-create
6     STATUS current
7     DESCRIPTION
8         "This attribute indicates the PHY Type of the neighbor AP identified by
9         this BSSID."
10    ::= { dot11RRMNeighborReportEntry 15 }
11
12    dot11RRMNeighborReportNeighborTSFInfo OBJECT-TYPE
13    SYNTAX OCTET STRING (SIZE (6))
14    MAX-ACCESS read-create
15    STATUS current
16    DESCRIPTION
17        "This attribute indicates TSF timing information for the neighbor AP iden-
18        tified by this BSSID. The TSF timing information includes the TSF Offset
19        and the Beacon Interval, as defined in clause 7.3.2.37."
20    ::= { dot11RRMNeighborReportEntry 16 }
21
22    dot11RRMNeighborReportPilotInterval OBJECT-TYPE
23    SYNTAX Unsigned32
24    UNITS "TUs"
25    MAX-ACCESS read-create
26    STATUS current
27    DESCRIPTION
28        "This attribute indicates Measurement Pilot Interval for the neighbor AP
29        identified by this BSSID, as defined in clause 7.3.1.18."
30    ::= { dot11RRMNeighborReportEntry 17 }
31
32    dot11RRMNeighborReportPilotMultipleBSSID OBJECT-TYPE
33    SYNTAX OCTET STRING (SIZE(1))
34    UNITS "BSSID LSBs"
35    MAX-ACCESS read-create
36    STATUS current
37    DESCRIPTION
38        "This attribute indicates n, where 2n is the maximum number of BSSIDs in
39        the multiple BSSID set, as described in clause 11.10.11."
40    ::= { dot11RRMNeighborReportEntry 18 }
41
42    dot11RRMNeighborReportRRMEnabledCapabilities OBJECT-TYPE
43    SYNTAX OCTET STRING (SIZE(7))
44    MAX-ACCESS read-create
45    STATUS current
46    DESCRIPTION
47        "This attribute indicates the detailed enabled capabilities of the AP rep-
48        resented by the dot11NeighborReportBSSID, as defined in clause 7.3.2.45."
49    REFERENCE
50        "IEEE 802.11 - Clause 7.3.2.45"
51    ::= { dot11RRMNeighborReportEntry 19 }
52
53    dot11RRMNeighborReportVendorSpecific OBJECT-TYPE
54    SYNTAX OCTET STRING (SIZE(0..255))
55    MAX-ACCESS read-create
56    STATUS current
57    DESCRIPTION
58        "This attribute provides an envelope for any optional vendor specific sub-
59        elements which may be included in a measurement report element. Zero length
60        is the null default for this attribute."
61    DEFVAL { 'H' }
62    ::= { dot11RRMNeighborReportEntry 20 }
63
64    dot11RRMNeighborReportRowStatus OBJECT-TYPE
65    SYNTAX RowStatus
66    MAX-ACCESS read-create
67    STATUS current
68    DESCRIPTION
69        "Contains the row status of the Neighbor Report, essentially used for indi-
70        cating whether the row has all valid attributes filled in. Then set to
71        active to be used in Neighbor Report information elements. If any parame-
72        ter is invalid, the SME shall set this attribute back to notReady. It is

```



```

1         the responsibility of the manager to correct the parameters."
2     ::= { dot11RRMNeighborReportEntry 21 }
3
4 dot11RRMNeighborReportBSSTransitCandPreference OBJECT-TYPE
5     SYNTAX INTEGER (1..255)
6     MAX-ACCESS read-create
7     STATUS current
8     DESCRIPTION
9         "This attribute indicates indicates the network preference for BSS transi-
10        tion to the BSS listed in this BSS Transition Candidate List Entries field
11        in the BSS Transition Management Request frame, BSS Transition Management
12        Query frame and BSS Transition Management Response frame. The Preference
13        field value is a number ranging from 0 to 255 indicating an ordering of
14        preferences for the BSS transition candidates for this STA. The value 0
15        indicates an excluded BSS. The values 1-255 the preferred relative order-
16        ing of BSSs, with 255 indicating the most preferred candidate and 1 indi-
17        cating the least preferred candidate. Additional details describing use of
18        the Preference field are provided in 11.22.6.3. "
19    ::= { dot11RRMNeighborReportEntry 22 }
20
21 dot11RRMNeighborReportBSSTerminationTSF OBJECT-TYPE
22     SYNTAX OCTET STRING (SIZE (6))
23     MAX-ACCESS read-create
24     STATUS current
25     DESCRIPTION
26         "This attribute indicates the value of the TSF counter when the BSS termi-
27        nation will occur in the future. A BSS Termination TSF field value of 0
28        indicates that termination of the BSS will occur imminently. Prior to ter-
29        mination of the BSS, all associated STAs are disassociated by the AP."
30    ::= { dot11RRMNeighborReportEntry 23 }
31
32 dot11RRMNeighborReportBSSTerminationDuration OBJECT-TYPE
33     SYNTAX INTEGER (1..65535)
34     UNITS "minutes"
35     MAX-ACCESS read-create
36     STATUS current
37     DESCRIPTION
38         "This attribute indicates indicates the number of minutes for which the BSS
39        is not present. The Duration field value of 0 is reserved. The Duration
40        field value is set to 65535 when the BSS is terminated for a period longer
41        than or equal to 65535 minutes."
42    ::= { dot11RRMNeighborReportEntry 21 24 }
43
44 -- *****
45 -- * End of dot11RRMNeighborReport TABLE
46 -- *****
47
48 dot11SMTRRMRequest OBJECT-GROUP
49     OBJECTS { dot11RRMRqstIndex,
50               dot11RRMRqstRowStatus,
51               dot11RRMRqstToken,
52               dot11RRMRqstRepetitions,
53               dot11RRMRqstIfIndex,
54               dot11RRMRqstType,
55               dot11RRMRqstTargetAdd,
56               dot11RRMRqstTimeStamp,
57               dot11RRMRqstChanNumber,
58               dot11RRMRqstRegulatoryClass,
59               dot11RRMRqstRndInterval,
60               dot11RRMRqstDuration,
61               dot11RRMRqstParallel,
62               dot11RRMRqstEnable,
63               dot11RRMRqstRequest,
64               dot11RRMRqstReport,
65               dot11RRMRqstDurationMandatory,
66               dot11RRMRqstBeaconRqstMode,
67               dot11RRMRqstBeaconRqstDetail,
68               dot11RRMRqstFrameRqstType,
69               dot11RRMRqstBssid,
70               dot11RRMRqstSSID,
71               dot11RRMRqstBeaconReportingCondition,

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1      dot11RRMRqstBeaconThresholdOffset,
2      dot11RRMRqstSTASatRqstGroupID,
3      dot11RRMRqstLCIRqstSubject,
4      dot11RRMRqstLCILatitudeResolution,
5      dot11RRMRqstLCILongitudeResolution,
6      dot11RRMRqstLCIAltitudeResolution,
7      dot11RRMRqstLCIAzimuthType,
8      dot11RRMRqstLCIAzimuthResolution,
9      dot11RRMRqstPauseTime,
10     dot11RRMRqstTransmitStreamPeerQSTAAAddress,
11     dot11RRMRqstTransmitStreamTrafficIdentifier,
12     dot11RRMRqstTransmitStreamBin0Range,
13     dot11RRMRqstTrigdQoSAverageCondition,
14     dot11RRMRqstTrigdQoSConsecutiveCondition,
15     dot11RRMRqstTrigdQoSDelayCondition,
16     dot11RRMRqstTrigdQoSAverageThreshold,
17     dot11RRMRqstTrigdQoSConsecutiveThreshold,
18     dot11RRMRqstTrigdQoSDelayThresholdRange,
19     dot11RRMRqstTrigdQoSDelayThreshold,
20     dot11RRMRqstTrigdQoSMeasurementCount,
21     dot11RRMRqstTrigdQoSTimeout,
22     dot11RRMRqstChannelLoadReportingCondition,
23     dot11RRMRqstChannelLoadReference,
24     dot11RRMRqstNoiseHistogramReportingCondition,
25     dot11RRMRqstAnpiReference,
26     dot11RRMRqstAPChannelReport,
27     dot11RRMRqstSTASatPeerSTAAAddress,
28     dot11RRMRqstFrameTransmitterAddress,
29     dot11RRMRqstVendorSpecific }
30
31 STATUS current
32 DESCRIPTION
33     "The SMTRRMRequest package is a set of attributes that shall be present
34     if the STA supports the Radio Measurement service."
35 ::= { dot11Groups 37 }
36
37 dot11SMTRRMReport OBJECT-GROUP
38 OBJECTS { dot11ChannelLoadRprtIndex,
39 dot11ChannelLoadRprtRqstToken,
40 dot11ChannelLoadRprtIfIndex,
41 dot11ChannelLoadMeasuringSTAAAddr,
42 dot11ChannelLoadRprtChanNumber,
43 dot11ChannelLoadRprtRegulatoryClass,
44 dot11ChannelLoadRprtActualStartTime,
45 dot11ChannelLoadRprtMeasurementDuration,
46 dot11ChannelLoadRprtChannelLoad,
47 dot11ChannelLoadRprtVendorSpecific,
48 dot11ChannelLoadRprtMeasurementMode,
49 dot11NoiseHistogramRprtIndex,
50 dot11NoiseHistogramRprtRqstToken,
51 dot11NoiseHistogramRprtIfIndex,
52 dot11NoiseHistogramMeasuringSTAAAddr,
53 dot11NoiseHistogramRprtChanNumber,
54 dot11NoiseHistogramRprtRegulatoryClass,
55 dot11NoiseHistogramRprtActualStartTime,
56 dot11NoiseHistogramRprtMeasurementDuration,
57 dot11NoiseHistogramRprtAntennaID,
58 dot11NoiseHistogramRprtANPI,
59 dot11NoiseHistogramRprtIPIDensity0,
60 dot11NoiseHistogramRprtIPIDensity1,
61 dot11NoiseHistogramRprtIPIDensity2,
62 dot11NoiseHistogramRprtIPIDensity3,
63 dot11NoiseHistogramRprtIPIDensity4,
64 dot11NoiseHistogramRprtIPIDensity5,
65 dot11NoiseHistogramRprtIPIDensity6,
66 dot11NoiseHistogramRprtIPIDensity7,
67 dot11NoiseHistogramRprtIPIDensity8,
68 dot11NoiseHistogramRprtIPIDensity9,
69 dot11NoiseHistogramRprtIPIDensity10,
70 dot11NoiseHistogramRprtVendorSpecific,
71 dot11NoiseHistogramRprtMeasurementMode,
72 dot11BeaconRprtIndex,
73 dot11BeaconRprtRqstToken,

```

```

1      dot11BeaconRprtIfIndex,
2      dot11BeaconMeasuringSTAAddr,
3      dot11BeaconRprtChanNumber,
4      dot11BeaconRprtRegulatoryClass,
5      dot11BeaconRprtActualStartTime,
6      dot11BeaconRprtMeasurementDuration,
7      dot11BeaconRprtPhyType,
8      dot11BeaconRprtReportedFrameType,
9      dot11BeaconRprtRCPI,
10     dot11BeaconRprtRSNI,
11     dot11BeaconRprtBSSID,
12     dot11BeaconRprtAntennaID,
13     dot11BeaconRprtParentTSF,
14     dot11BeaconRprtReportedFrameBody,
15     dot11BeaconRprtVendorSpecific,
16     dot11BeaconRprtMeasurementMode,
17     dot11FrameRprtIndex,
18     dot11FrameRprtIfIndex,
19     dot11FrameRprtRqstToken,
20     dot11FrameRprtChanNumber,
21     dot11FrameRprtRegulatoryClass,
22     dot11FrameRprtActualStartTime,
23     dot11FrameRprtMeasurementDuration,
24     dot11FrameRprtTransmitSTAAddress,
25     dot11FrameRprtBSSID,
26     dot11FrameRprtPhyType,
27     dot11FrameRprtAvgRCPI,
28     dot11FrameRprtRSNI,
29     dot11FrameRprtLastRCPI,
30     dot11FrameRprtAntennaID,
31     dot11FrameRprtNumberFrames,
32     dot11FrameRprtVendorSpecific,
33     dot11FrameRprtMeasurementMode,
34     dot11STAStatisticsReportIndex,
35     dot11STAStatisticsReportToken,
36     dot11STAStatisticsIfIndex,
37     dot11STAStatisticsSTAAddress,
38     dot11STAStatisticsMeasurementDuration,
39     dot11STAStatisticsGroupID,
40     dot11STAStatisticsTransmittedFragmentCount,
41     dot11STAStatisticsMulticastTransmittedFrameCount,
42     dot11STAStatisticsFailedCount,
43     dot11STAStatisticsRetryCount,
44     dot11STAStatisticsMultipleRetryCount,
45     dot11STAStatisticsFrameDuplicateCount,
46     dot11STAStatisticsRTSSuccessCount,
47     dot11STAStatisticsRTSFailureCount,
48     dot11STAStatisticsACKFailureCount,
49     dot11STAStatisticsQosTransmittedFragmentCount,
50     dot11STAStatisticsQosFailedCount,
51     dot11STAStatisticsQosRetryCount,
52     dot11STAStatisticsQosMultipleRetryCount,
53     dot11STAStatisticsQosFrameDuplicateCount,
54     dot11STAStatisticsQosRTSSuccessCount,
55     dot11STAStatisticsQosRTSFailureCount,
56     dot11STAStatisticsQosACKFailureCount,
57     dot11STAStatisticsQosReceivedFragmentCount,
58     dot11STAStatisticsQosTransmittedFrameCount,
59     dot11STAStatisticsQosDiscardedFrameCount,
60     dot11STAStatisticsQosMPDUsReceivedCount,
61     dot11STAStatisticsQosRetriesReceivedCount,
62     dot11STAStatisticsReceivedFragmentCount,
63     dot11STAStatisticsMulticastReceivedFrameCount,
64     dot11STAStatisticsFCSErrorCount,
65     dot11STAStatisticsTransmittedFrameCount,
66     dot11STAStatisticsAPAverageAccessDelay,
67     dot11STAStatisticsAverageAccessDelayBestEffort,
68     dot11STAStatisticsAverageAccessDelayBackGround,
69     dot11STAStatisticsAverageAccessDelayVIdo,
70     dot11STAStatisticsAverageAccessDelayVOice,
71     dot11STAStatisticsStationCount,
72     dot11STAStatisticsChannelUtilization,

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1      dot11STAStatisticsVendorSpecific,
2      dot11STAStatisticsRprtMeasurementMode,
3      dot11LCIReportIndex,
4      dot11LCIReportToken,
5      dot11LCIIfIndex,
6      dot11LCIStAAddress,
7      dot11LCILatitudeResolution,
8      dot11LCILatitude,
9      dot11LCILatitudeFraction,
10     dot11LCILongitudeResolution,
11     dot11LCILongitude,
12     dot11LCILongitudeFraction,
13     dot11LCIAltitudeType,
14     dot11LCIAltitudeResolution,
15     dot11LCIAltitude,
16     dot11LCIAltitudeFraction,
17     dot11LCIDatum,
18     dot11LCIAzimuthType,
19     dot11LCIAzimuthResolution,
20     dot11LCIAzimuth,
21     dot11LCIRprtVendorSpecific,
22     dot11LCIRprtMeasurementMode,
23     dot11TransmitStreamRprtIndex,
24     dot11TransmitStreamRprtRqstToken,
25     dot11TransmitStreamRprtIfIndex,
26     dot11TransmitStreamMeasuringSTAAddr,
27     dot11TransmitStreamRprtActualStartTime,
28     dot11TransmitStreamRprtMeasurementDuration,
29     dot11TransmitStreamRprtPeerSTAAddress,
30     dot11TransmitStreamRprtTID,
31     dot11TransmitStreamRprtAverageQueueDelay,
32     dot11TransmitStreamRprtAverageTransmitDelay,
33     dot11TransmitStreamRprtTransmittedMSDUCount,
34     dot11TransmitStreamRprtMSDUDiscardedCount,
35     dot11TransmitStreamRprtMSDUFailedCount,
36     dot11TransmitStreamRprtMultipleRetryCount,
37     dot11TransmitStreamRprtCFPollsLostCount,
38     dot11TransmitStreamRprtBin0Range,
39     dot11TransmitStreamRprtDelayHistogram,
40     dot11TransmitStreamRprtReason,
41     dot11TransmitStreamRprtVendorSpecific,
42     dot11TransmitStreamRprtMeasurementMode
43 }
44 STATUS current
45 DESCRIPTION
46     "The SMTRRMReport package is a set of attributes that shall be present
47     if the STA supports the Radio Measurement service."
48 ::= { dot11Groups 38 }
49
50 dot11SMTRRMConfig OBJECT-GROUP
51     OBJECTS { dot11APChannelReportIndex,
52               dot11APChannelReportIfIndex,
53               dot11APChannelReportRegulatoryClass,
54               dot11APChannelReportChannelList,
55               dot11RRMNeighborReportIndex,
56               dot11RRMNeighborReportIfIndex,
57               dot11RRMNeighborReportBSSID,
58               dot11RRMNeighborReportReachability,
59               dot11RRMNeighborReportSecurity,
60               dot11RRMNeighborReportCapSpectrumMgmt,
61               dot11RRMNeighborReportCapQoS,
62               dot11RRMNeighborReportCapAPSD,
63               dot11RRMNeighborReportCapRRM,
64               dot11RRMNeighborReportCapDelayBlockAck,
65               dot11RRMNeighborReportCapImmediateBlockAck,
66               dot11RRMNeighborReportKeyScope,
67               dot11RRMNeighborReportChannelNumber,
68               dot11RRMNeighborReportRegulatoryClass,
69               dot11RRMNeighborReportPhyType,
70               dot11RRMNeighborReportNeighborTSFInfo,
71               dot11RRMNeighborReportPilotPeriod,
72               dot11RRMNeighborReportPilotMultipleBSSID,

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1         dot11RRMNeighborReportRRMEnabledCapabilities,
2         dot11RRMNeighborReportVendorSpecific,
3         dot11RRMNeighborReportRowStatus }
4 STATUS current
5 DESCRIPTION
6     "The SMTRRMConfig package is a set of attributes that shall be present
7     if the STA supports the Radio Measurement service."
8 ::= { dot11Groups 39 }
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