

Annex Q

Insert the following new Annex as shown:

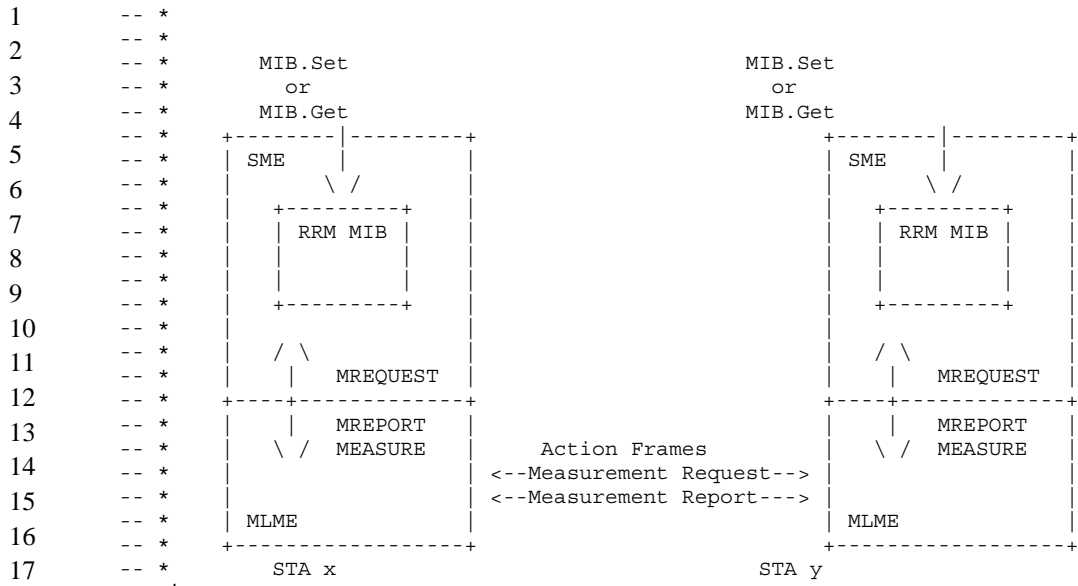
(normative)

ASN.1 encoding of the RRM MIB

```

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

```



```

18 -- *
19 -- * Each STA maintains a single dot11RRMRequestTable in the SME MIB
20 -- * used to initiate RM Measurement Requests. Each dot11RRMRequestEntry
21 -- * in the table represents an individual Measurement Request that
22 -- * makes up a complete Measurement Request Action frame.
23 -- * Multiple Measurement Requests may be concatenated into a single
24 -- * Measurement Request Action frame by setting the same
25 -- * dot11RRMRqstToken value into multiple dot11RRMRequestEntrys.
26 -- *
27 -- * Each row, dot11RRMRequestEntry, of the dot11RRMRequestTable
28 -- * provides read-create access for the initiation of a measurement
29 -- * request. The dot11RRMRequestNextIndex object can be used to
30 -- * determine which is the next row available. Each row corresponding to
31 -- * one measurement in the sequence is created with a dot11RRMRqstRowStatus
32 -- * set to notInService. Once the dot11RRMRequestEntry(s) have been
33 -- * created for a desired measurement sequence the corresponding
34 -- * dot11RRMRqstRowStatus(s) objects are set to active to indicate that
35 -- * the SME can trigger the appropriate MLME primitives. Upon processing
36 -- * the request, the SME returns the corresponding dot11RRMRqstRowStatus(s)
37 -- * object to notInService and are now available for additional
38 -- * measurement requests.
39 -- *
40 -- * After a radio measurement is complete the RRM populates the RRMReport
41 -- * objects with the results of the measurement. Each STA maintains a set
42 -- * of RRMReport tables, one for each corresponding measurement type. The
43 -- * results of the entire measurement sequence are spread across the tables
44 -- * based on what types of measurements were requested. Each xxxReportEntry
45 -- * within a xxxReportTable contains a xxxRprtRqstToken that corresponds
46 -- * to the original dot11RRMRqstToken in the measurement request. So the
47 -- * results of the measurement can be collected by searching the appropriate
48 -- * xxxReportTables and retrieve any reports with the matching request
49 -- * token.

```

```

41 -- *****
42 -- *****
43 -- * Radio Resource Measurement Requests
44 -- *****
45 dot11RRMRequest OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 1 }
46 -- *****
47 -- * dot11RRMRequest TABLE
48 -- *****
49 dot11RRMRequestNextIndex OBJECT-TYPE
50     SYNTAX Unsigned32(0..65535)
51     MAX-ACCESS read-only
52     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,

```

```

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     dot11RRMRqstSTASatTrigMeasCount      Unsigned32,
24     dot11RRMRqstSTASatTrigTimeout        INTEGER,
25     dot11RRMRqstSTASatTrigSTAFailedCntThresh Unsigned32,
26     dot11RRMRqstSTASatTrigSTAFCSERRCntThresh Unsigned32,
27     dot11RRMRqstSTASatTrigSTAMultRetryCntThresh Unsigned32,
28     dot11RRMRqstSTASatTrigSTAFRAMEDUPECntThresh Unsigned32,
29     dot11RRMRqstSTASatTrigSTARTSFAILCntThresh Unsigned32,
30     dot11RRMRqstSTASatTrigSTAAckFailCntThresh Unsigned32,
31     dot11RRMRqstSTASatTrigSTARetryCntThresh Unsigned32,
32     dot11RRMRqstSTASatTrigQoSFailedCntThresh Unsigned32,
33     dot11RRMRqstSTASatTrigQoSRetryCntThresh Unsigned32,
34     dot11RRMRqstSTASatTrigQOSMultRetryCntThresh Unsigned32,
35     dot11RRMRqstSTASatTrigQoSFRAMEDUPECntThresh Unsigned32,
36     dot11RRMRqstSTASatTrigQOSRTSFAILCntThresh Unsigned32,
37     dot11RRMRqstSTASatTrigQOSACKFAILCntThresh Unsigned32,
38     dot11RRMRqstSTASatTrigQOSDISCARDCntThresh Unsigned32,
39     dot11RRMRqstSTASatTrigRsnaCMACICVErrCntThresh Unsigned32,
40     dot11RRMRqstSTASatTrigRsnaCMACReplayCntThresh Unsigned32,
41     dot11RRMRqstSTASatTrigRsnaRobustCCMPReplayCntThresh Unsigned32,
42     dot11RRMRqstSTASatTrigRsnaTKIPICVErrCntThresh Unsigned32,
43     dot11RRMRqstSTASatTrigRsnaTKIPReplayCntThresh Unsigned32,
44     dot11RRMRqstSTASatTrigRsnaCCMPDecryptErrCntThresh Unsigned32,
45     dot11RRMRqstSTASatTrigRsnaCCMPReplayCntThresh Unsigned32,
46     dot11RRMRqstVendorSpecific           OCTET STRING }
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 }

```

```

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,

```



```

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     dot11RRMRqstSTASatRqstGroupID 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 an 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     dot11RRMRqstSTASatTrigMeasCount OBJECT-TYPE
19         SYNTAX Unsigned32
20         MAX-ACCESS read-create
21         STATUS current
22         DESCRIPTION
23             "This attribute indicates the Trasnmitter Address (TA) number of MSDUs or
24             MPDUs over which the frames to be counted in this frame request trigger cri-
25             terion is applied. This attribute is only valid if the dot11RRMRqstType is
26             6, indicating a frame request, 7 (STA Statistics) and if the value of the
27             attribute is ignored otherwise not equal to 0."
28         DEFVAL { 0 }
29         ::= { dot11RRMRequestEntry 52 }
30
31     dot11RRMRqstSTASatTrigTimeout OBJECT-TYPE
32         SYNTAX INTEGER(0..65535)
33         UNITS "100 TUs"
34         MAX-ACCESS read-create
35         STATUS current
36         DESCRIPTION
37             "This attribute indicates the interval during which a measuring STA does
38             not generate further triggered STA Statistics Reports after a trigger con-
39             dition has been met. This attribute is only valid if dot11RRMRqstType is 7
40             (STA Statistics)."
41         DEFVAL { 0 }
42         ::= { dot11RRMRequestEntry 53 }
43
44     dot11RRMRqstSTASatTrigSTAFailedCntThresh OBJECT-TYPE
45         SYNTAX Unsigned32
46         MAX-ACCESS read-create
47         STATUS current
48         DESCRIPTION
49             "This attribute indicates that a STA Statistics Report should be generated
50             (triggered) when the dot11FailedCount value has increased more than the
51             threshold value indicated here. The counter increase is measured over the
52             last n MSDUs or MPDUs, where n is the value of
53             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
54             dot11RRMRqstType is 7 (STA Statistics), and if
55             dot11RRMRqstSTASatTrigGroupID is 0 (dot11CountersTable) and if the value
56             of the attribute is not equal to 0."
57         DEFVAL { 0 }
58         ::= { dot11RRMRequestEntry 54 }
59
60     dot11RRMRqstSTASatTrigSTAFCSerrCntThresh OBJECT-TYPE
61         SYNTAX Unsigned32
62         MAX-ACCESS read-create
63         STATUS current
64         DESCRIPTION
65             "This attribute indicates that a STA Statistics Report should be generated
66             (triggered) when the dot11FCSErrorCount value has increased more than
67             the threshold value indicated here. The counter increase is measured over
68             the last n MSDUs or MPDUs, where n is the value of
69             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
70             dot11RRMRqstType is 7 (STA Statistics), and if
71             dot11RRMRqstSTASatTrigGroupID is 0 (dot11CountersTable) and if the value
72             of the attribute is not equal to 0."

```

```

1      DEFVAL { 0 }
2      ::= { dot11RRMRequestEntry 55 }
3
4      dot11RRMRqstSTASatTrigSTAMultRetryCntThresh OBJECT-TYPE
5          SYNTAX Unsigned32
6          MAX-ACCESS read-create
7          STATUS current
8          DESCRIPTION
9              "This attribute indicates that a STA Statistics Report should be generated
10             (triggered) when the dot11MultipleRetryCount value has increased more
11             than the threshold value indicated here. The counter increase is measured
12             over the last n MSDUs or MPDUs, where n is the value of
13             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
14             dot11RRMRqstType is 7 (STA Statistics), and if
15             dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
16             of the attribute is not equal to 0."
17      DEFVAL { 0 }
18      ::= { dot11RRMRequestEntry 56 }
19
20     dot11RRMRqstSTASatTrigSTAFrameDupeCntThresh OBJECT-TYPE
21         SYNTAX Unsigned32
22         MAX-ACCESS read-create
23         STATUS current
24         DESCRIPTION
25             "This attribute indicates that a STA Statistics Report should be generated
26             (triggered) when the dot11FrameDuplicateCount value has increased more
27             than the threshold value indicated here. The counter increase is measured
28             over the last n MSDUs or MPDUs, where n is the value of
29             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
30             dot11RRMRqstType is 7 (STA Statistics), and if
31             dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
32             of the attribute is not equal to 0."
33     DEFVAL { 0 }
34     ::= { dot11RRMRequestEntry 57 }
35
36     dot11RRMRqstSTASatTrigSTARTSFailCntThresh OBJECT-TYPE
37         SYNTAX Unsigned32
38         MAX-ACCESS read-create
39         STATUS current
40         DESCRIPTION
41             "This attribute indicates that a STA Statistics Report should be generated
42             (triggered) when the dot11RTSFailureCount value has increased more than
43             the threshold value indicated here. The counter increase is measured over
44             the last n MSDUs or MPDUs, where n is the value of
45             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
46             dot11RRMRqstType is 7 (STA Statistics), and if
47             dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
48             of the attribute is not equal to 0."
49     DEFVAL { 0 }
50     ::= { dot11RRMRequestEntry 58 }
51
52     dot11RRMRqstSTASatTrigSTAACKFailCntThresh OBJECT-TYPE
53         SYNTAX Unsigned32
54         MAX-ACCESS read-create
55         STATUS current
56         DESCRIPTION
57             "This attribute indicates that a STA Statistics Report should be generated
58             (triggered) when the dot11ACKFailureCount value has increased more than
59             the threshold value indicated here. The counter increase is measured over
60             the last n MSDUs or MPDUs, where n is the value of
61             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
62             dot11RRMRqstType is 7 (STA Statistics), and if
63             dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
64             of the attribute is not equal to 0."
65     DEFVAL { 0 }
66     ::= { dot11RRMRequestEntry 59 }
67
68     dot11RRMRqstSTASatTrigSTARetryCntThresh OBJECT-TYPE
69         SYNTAX Unsigned32
70         MAX-ACCESS read-create
71         STATUS current
72         DESCRIPTION

```

```

1         "This attribute indicates that a STA Statistics Report should be generated
2         (triggered) when the dot11RetryCount value has increased more than the
3         threshold value indicated here. The counter increase is measured over the
4         last n MSDUs or MPDUs, where n is the value of
5         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
6         dot11RRMRqstType is 7 (STA Statistics), and if
7         dot11RRMRqstSTASatRqstGroupID is 0 (dot11CountersTable) and if the value
8         of the attribute is not equal to 0."
9         DEFVAL { 0 }
10        ::= { dot11RRMRequestEntry 60 }
11
12       dot11RRMRqstSTASatTrigQoSFailedCntThresh OBJECT-TYPE
13       SYNTAX Unsigned32
14       MAX-ACCESS read-create
15       STATUS current
16       DESCRIPTION
17       "This attribute indicates that a STA Statistics Report should be generated
18       (triggered) when the dot11QoSFailedCount value has increased more than
19       the threshold value indicated here. The counter increase is measured over
20       the last n MSDUs or MPDUs, where n is the value of
21       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
22       dot11RRMRqstType is 7 (STA Statistics), and if
23       dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
24       if the value of the attribute is not equal to 0."
25       DEFVAL { 0 }
26       ::= { dot11RRMRequestEntry 61 }
27
28       dot11RRMRqstSTASatTrigQoSRetryCntThresh OBJECT-TYPE
29       SYNTAX Unsigned32
30       MAX-ACCESS read-create
31       STATUS current
32       DESCRIPTION
33       "This attribute indicates that a STA Statistics Report should be generated
34       (triggered) when the dot11QoSRetryCount value has increased more than
35       the threshold value indicated here. The counter increase is measured over
36       the last n MSDUs or MPDUs, where n is the value of
37       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
38       dot11RRMRqstType is 7 (STA Statistics), and if
39       dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
40       if the value of the attribute is not equal to 0."
41       DEFVAL { 0 }
42       ::= { dot11RRMRequestEntry 62 }
43
44       dot11RRMRqstSTASatTrigQoSMultRetryCntThresh OBJECT-TYPE
45       SYNTAX Unsigned32
46       MAX-ACCESS read-create
47       STATUS current
48       DESCRIPTION
49       "This attribute indicates that a STA Statistics Report should be generated
50       (triggered) when the dot11QoSMultipleRetryCount value has increased
51       more than the threshold value indicated here. The counter increase is mea-
52       sured over the last n MSDUs or MPDUs, where n is the value of
53       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
54       dot11RRMRqstType is 7 (STA Statistics), and if
55       dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
56       if the value of the attribute is not equal to 0."
57       DEFVAL { 0 }
58       ::= { dot11RRMRequestEntry 63 }
59
60       dot11RRMRqstSTASatTrigQoSFrameDupeCntThresh OBJECT-TYPE
61       SYNTAX Unsigned32
62       MAX-ACCESS read-create
63       STATUS current
64       DESCRIPTION
65       "This attribute indicates that a STA Statistics Report should be generated
66       (triggered) when the dot11QoSFrameDuplicateCount value has increased
67       more than the threshold value indicated here. The counter increase is mea-
68       sured over the last n MSDUs or MPDUs, where n is the value of
69       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
70       dot11RRMRqstType is 7 (STA Statistics), and if
71       dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QoSCountersTable) and
72       if the value of the attribute is not equal to 0."

```



```

1      DEFVAL { 0 }
2      ::= { dot11RRMRequestEntry 64 }
3
4      dot11RRMRqstSTASatTrigQoSRTSFailCntThresh OBJECT-TYPE
5          SYNTAX Unsigned32
6          MAX-ACCESS read-create
7          STATUS current
8          DESCRIPTION
9              "This attribute indicates that a STA Statistics Report should be generated
10             (triggered) when the dot11QoSRTSFailureCount value has increased more
11             than the threshold value indicated here. The counter increase is measured
12             over the last n MSDUs or MPDUs, where n is the value of
13             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
14             dot11RRMRqstType is 7 (STA Statistics), and if
15             dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
16             if the value of the attribute is not equal to 0."
17      DEFVAL { 0 }
18      ::= { dot11RRMRequestEntry 65 }
19
20     dot11RRMRqstSTASatTrigQoSACKFailCntThresh OBJECT-TYPE
21         SYNTAX Unsigned32
22         MAX-ACCESS read-create
23         STATUS current
24         DESCRIPTION
25             "This attribute indicates that a STA Statistics Report should be generated
26             (triggered) when the dot11QoSACKFailureCount value has increased more
27             than the threshold value indicated here. The counter increase is measured
28             over the last n MSDUs or MPDUs, where n is the value of
29             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
30             dot11RRMRqstType is 7 (STA Statistics), and if
31             dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
32             if the value of the attribute is not equal to 0."
33     DEFVAL { 0 }
34     ::= { dot11RRMRequestEntry 66 }
35
36     dot11RRMRqstSTASatTrigQoSDiscardCntThresh OBJECT-TYPE
37         SYNTAX Unsigned32
38         MAX-ACCESS read-create
39         STATUS current
40         DESCRIPTION
41             "This attribute indicates that a STA Statistics Report should be generated
42             (triggered) when the dot11QoSDiscardedFrameCount value has increased
43             more than the threshold value indicated here. The counter increase is mea-
44             sured over the last n MSDUs or MPDUs, where n is the value of
45             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
46             dot11RRMRqstType is 7 (STA Statistics), and if
47             dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
48             if the value of the attribute is not equal to 0."
49     DEFVAL { 0 }
50     ::= { dot11RRMRequestEntry 67 }
51
52     dot11RRMRqstSTASatTrigQoSDiscardCntThresh OBJECT-TYPE
53         SYNTAX Unsigned32
54         MAX-ACCESS read-create
55         STATUS current
56         DESCRIPTION
57             "This attribute indicates that a STA Statistics Report should be generated
58             (triggered) when the dot11QoSDiscardedFrameCount value has increased
59             more than the threshold value indicated here. The counter increase is mea-
60             sured over the last n MSDUs or MPDUs, where n is the value of
61             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
62             dot11RRMRqstType is 7 (STA Statistics), and if
63             dot11RRMRqstSTASatRqstGroupID is 2 through 9 (dot11QosCountersTable) and
64             if the value of the attribute is not equal to 0."
65     DEFVAL { 0 }
66     ::= { dot11RRMRequestEntry 68 }
67
68     dot11RRMRqstSTASatTrigRsnacMACICVErrCntThresh OBJECT-TYPE
69         SYNTAX Unsigned32
70         MAX-ACCESS read-create
71         STATUS current
72         DESCRIPTION

```

```

1         "This attribute indicates that a STA Statistics Report should be generated
2         (triggered) when the dot11RSNStatsCMACICVErrors value has increased
3         more than the threshold value indicated here. The counter increase is mea-
4         sured over the last n MSDUs or MPDUs, where n is the value of
5         dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
6         dot11RRMRqstType is 7 (STA Statistics), and if
7         dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNStatsTable) and if the value
8         of the attribute is not equal to 0."
9         DEFVAL { 0 }
10        ::= { dot11RRMRequestEntry 69 }
11
12       dot11RRMRqstSTASatTrigRsnacMACReplayCntThresh OBJECT-TYPE
13       SYNTAX Unsigned32
14       MAX-ACCESS read-create
15       STATUS current
16       DESCRIPTION
17       "This attribute indicates that a STA Statistics Report should be generated
18       (triggered) when the dot11RSNStatsCMACReplays value has increased more
19       than the threshold value indicated here. The counter increase is measured
20       over the last n MSDUs or MPDUs, where n is the value of
21       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
22       dot11RRMRqstType is 7 (STA Statistics), and if
23       dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNStatsTable) and if the value
24       of the attribute is not equal to 0."
25       DEFVAL { 0 }
26       ::= { dot11RRMRequestEntry 70 }
27
28       dot11RRMRqstSTASatTrigRsnacRobustCCMPReplayCntThresh OBJECT-TYPE
29       SYNTAX Unsigned32
30       MAX-ACCESS read-create
31       STATUS current
32       DESCRIPTION
33       "This attribute indicates that a STA Statistics Report should be generated
34       (triggered) when the dot11RSNStatsRobustMgmtCCMPReplays value has
35       increased more than the threshold value indicated here. The counter
36       increase is measured over the last n MSDUs or MPDUs, where n is the value
37       of dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
38       dot11RRMRqstType is 7 (STA Statistics), and if
39       dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNStatsTable) and if the value
40       of the attribute is not equal to 0."
41       DEFVAL { 0 }
42       ::= { dot11RRMRequestEntry 71 }
43
44       dot11RRMRqstSTASatTrigRsnacTKIPICVErrCntThresh OBJECT-TYPE
45       SYNTAX Unsigned32
46       MAX-ACCESS read-create
47       STATUS current
48       DESCRIPTION
49       "This attribute indicates that a STA Statistics Report should be generated
50       (triggered) when the dot11RSNStatsTKIPICVErrors value has increased
51       more than the threshold value indicated here. The counter increase is mea-
52       sured over the last n MSDUs or MPDUs, where n is the value of
53       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
54       dot11RRMRqstType is 7 (STA Statistics), and if
55       dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNStatsTable) and if the value
56       of the attribute is not equal to 0."
57       DEFVAL { 0 }
58       ::= { dot11RRMRequestEntry 5172 }
59
60       dot11RRMRqstVendorSpecific_dot11RRMRqstSTASatTrigRsnacTKIPReplayCntThresh OBJECT-TYPE
61       SYNTAX Unsigned32
62       MAX-ACCESS read-create
63       STATUS current
64       DESCRIPTION
65       "This attribute indicates that a STA Statistics Report should be generated
66       (triggered) when the dot11RSNStatsTKIPReplays value has increased more
67       than the threshold value indicated here. The counter increase is measured
68       over the last n MSDUs or MPDUs, where n is the value of
69       dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
70       dot11RRMRqstType is 7 (STA Statistics), and if
71       dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNStatsTable) and if the value
72       of the attribute is not equal to 0."

```

```

1      DEFVAL { 0 }
2      ::= { dot11RRMRequestEntry 73 }
3
4      dot11RRMRqstSTASatTrigRsnacCmpDecryptErrCntThresh OBJECT-TYPE
5          SYNTAX Unsigned32
6          MAX-ACCESS read-create
7          STATUS current
8          DESCRIPTION
9              "This attribute indicates that a STA Statistics Report should be generated
10             (triggered) when the dot11RSNAsStatsCCMPDecryptErrors value has
11             increased more than the threshold value indicated here. The counter
12             increase is measured over the last n MSDUs or MPDUs, where n is the value
13             of dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
14             dot11RRMRqstType is 7 (STA Statistics), and if
15             dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsStatsTable) and if the value
16             of the attribute is not equal to 0."
17      DEFVAL { 0 }
18      ::= { dot11RRMRequestEntry 74 }
19
20      dot11RRMRqstSTASatTrigRsnacCmpReplayCntThresh OBJECT-TYPE
21          SYNTAX Unsigned32
22          MAX-ACCESS read-create
23          STATUS current
24          DESCRIPTION
25              "This attribute indicates that a STA Statistics Report should be generated
26             (triggered) when the dot11RSNAsStatsCCMPReplays value has increased more
27             than the threshold value indicated here. The counter increase is measured
28             over the last n MSDUs or MPDUs, where n is the value of
29             dot11RRMRqstSTASatTrigMeasCount. This attribute is only valid if
30             dot11RRMRqstType is 7 (STA Statistics), and if
31             dot11RRMRqstSTASatRqstGroupID is 16 (dot11RSNAsStatsTable) and if the value
32             of the attribute is not equal to 0."
33      DEFVAL { 0 }
34      ::= { dot11RRMRequestEntry 75 }
35
36      dot11RRMRqstVendorSpecific OBJECT-TYPE
37          SYNTAX OCTET STRING (SIZE(0..255))
38          MAX-ACCESS read-create
39          STATUS current
40          DESCRIPTION
41              "This attribute provides an envelope for any optional vendor specific sub-
42             elements which may be included in a measurement request element. Zero
43             length is the null default for this attribute. This attribute is valid for
44             all requests."
45      DEFVAL { 'H' }
46      ::= { dot11RRMRequestEntry 52-76 }
47
48      -- *****
49      -- * End of dot11RRMRequest TABLE
50      -- *****
51
52      -- *****
53      -- * Radio Resource Measurement Reports
54      -- * Report tables contain measurement reports received by this STA or
55      -- * results of measurements performed by this STA.
56      -- *****
57      dot11RRMReport OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 2 }
58
59      -- *****
60      -- * dot11ChannelLoadReport TABLE
61      -- *****
62      dot11ChannelLoadReportTable OBJECT-TYPE
63          SYNTAX SEQUENCE OF Dot11ChannelLoadReportEntry
64          MAX-ACCESS not-accessible
65          STATUS current
66          DESCRIPTION
67              "Group contains the current list of Channel Load reports that have been
68             received by the MLME. The report tables shall be maintained as FIFO to pre-
69             serve freshness, thus the rows in this table can be deleted for memory con-
70             straints or other implementation constraints determined by the vendor. New
71             rows shall have different RprtIndex values than those deleted within the
72             range limitation of the index. One easy way is to monotonically increase

```

```

1           RprtIndex for new reports being written in the table."
2       ::= { dot11RRMReport 1 }
3
4   dot11ChannelLoadReportEntry OBJECT-TYPE
5       SYNTAX Dot11ChannelLoadReportEntry
6       MAX-ACCESS not-accessible
7       STATUS current
8       DESCRIPTION
9           "An entry in the dot11ChannelLoadReportTable Indexed by
10          dot11ChannelLoadRprtIndex."
11      INDEX { dot11ChannelLoadRprtIndex }
12      ::= { dot11ChannelLoadReportTable 1 }
13
14  Dot11ChannelLoadReportEntry ::=
15      SEQUENCE {
16          dot11ChannelLoadRprtIndex                Unsigned32,
17          dot11ChannelLoadRprtRqstToken           OCTET STRING,
18          dot11ChannelLoadRprtIfIndex            InterfaceIndex,
19          dot11ChannelLoadMeasuringSTAAddr       MacAddress,
20          dot11ChannelLoadRprtChanNumber         INTEGER,
21          dot11ChannelLoadRprtRegulatoryClass    INTEGER,
22          dot11ChannelLoadRprtActualStartTime    TSFType,
23          dot11ChannelLoadRprtMeasurementDuration Unsigned32,
24          dot11ChannelLoadRprtChannelLoad       INTEGER,
25          dot11ChannelLoadRprtVendorSpecific     OCTET STRING,
26          dot11ChannelLoadRprtMeasurementMode    INTEGER }
27
28  dot11ChannelLoadRprtIndex OBJECT-TYPE
29      SYNTAX Unsigned32
30      MAX-ACCESS not-accessible
31      STATUS current
32      DESCRIPTION
33          "Index for Channel Load Report elements in dot11ChannelLoadReportTable,
34          greater than 0."
35      ::= { dot11ChannelLoadReportEntry 1 }
36
37  dot11ChannelLoadRprtRqstToken OBJECT-TYPE
38      SYNTAX OCTET STRING
39      MAX-ACCESS read-only
40      STATUS current
41      DESCRIPTION
42          "This attribute indicates the request token that was indicated in the Mea-
43          surement request that generated this measurement report. This should be an
44          exact match to the original dot11RRMRqstToken attribute. Note that there
45          may be multiple entries in the table that match this value since a single
46          request may generate multiple measurement reports."
47      ::= { dot11ChannelLoadReportEntry 2 }
48
49  dot11ChannelLoadRprtIfIndex OBJECT-TYPE
50      SYNTAX InterfaceIndex
51      MAX-ACCESS read-only
52      STATUS current
53      DESCRIPTION
54          "The ifIndex for this row of ChannelLoad Report has been received on."
55      ::= { dot11ChannelLoadReportEntry 3 }
56
57  dot11ChannelLoadMeasuringSTAAddr OBJECT-TYPE
58      SYNTAX MacAddress
59      MAX-ACCESS read-only
60      STATUS current
61      DESCRIPTION
62          "The MAC address of the measuring STA for this row of Channel Load report."
63      ::= { dot11ChannelLoadReportEntry 4 }
64
65  dot11ChannelLoadRprtChanNumber OBJECT-TYPE
66      SYNTAX INTEGER
67      MAX-ACCESS read-only
68      STATUS current
69      DESCRIPTION
70          "This attribute indicates the channel number used for this Channel Load
71          Report. The Channel Number is only defined within the indicated Regulatory
72          Class for this measurement report."

```

```

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

```

```

1      ::= { dot11ChannelLoadReportEntry 11 }
2
3      -- *****
4      -- * End of dot11ChannelLoadReport TABLE
5      -- *****
6
7      -- *****
8      -- * dot11NoiseHistogramReport TABLE
9      -- *****
10     dot11NoiseHistogramReportTable OBJECT-TYPE
11         SYNTAX SEQUENCE OF Dot11NoiseHistogramReportEntry
12         MAX-ACCESS not-accessible
13         STATUS current
14         DESCRIPTION
15             "Group contains the current list of Noise Histogram reports that have been
16             received by the MLME. The report tables shall be maintained as FIFO to pre-
17             serve freshness, thus the rows in this table can be deleted for memory con-
18             straints or other implementation constraints determined by the vendor. New
19             rows shall have different RprtIndex values than those deleted within the
20             range limitation of the index. One easy way is to monotonically increase
21             RprtIndex for new reports being written in the table."
22     ::= { dot11RRMReport 2 }
23
24     dot11NoiseHistogramReportEntry OBJECT-TYPE
25         SYNTAX Dot11NoiseHistogramReportEntry
26         MAX-ACCESS not-accessible
27         STATUS current
28         DESCRIPTION
29             "An entry in the dot11NoiseHistogramReportTable Indexed by
30             dot11NoiseHistogramRprtIndex."
31         INDEX { dot11NoiseHistogramRprtIndex }
32     ::= { dot11NoiseHistogramReportTable 1 }
33
34     Dot11NoiseHistogramReportEntry ::=
35         SEQUENCE {
36             dot11NoiseHistogramRprtIndex                Unsigned32,
37             dot11NoiseHistogramRprtRqstToken            OCTET STRING,
38             dot11NoiseHistogramRprtIfIndex              InterfaceIndex,
39             dot11NoiseHistogramMeasuringSTAAddr         MacAddress,
40             dot11NoiseHistogramRprtChanNumber           INTEGER,
41             dot11NoiseHistogramRprtRegulatoryClass      INTEGER,
42             dot11NoiseHistogramRprtActualStartTime     TSFTType,
43             dot11NoiseHistogramRprtMeasurementDuration  Unsigned32,
44             dot11NoiseHistogramRprtAntennaID            INTEGER,
45             dot11NoiseHistogramRprtANPI                 INTEGER,
46             dot11NoiseHistogramRprtIPIDensity0          INTEGER,
47             dot11NoiseHistogramRprtIPIDensity1          INTEGER,
48             dot11NoiseHistogramRprtIPIDensity2          INTEGER,
49             dot11NoiseHistogramRprtIPIDensity3          INTEGER,
50             dot11NoiseHistogramRprtIPIDensity4          INTEGER,
51             dot11NoiseHistogramRprtIPIDensity5          INTEGER,
52             dot11NoiseHistogramRprtIPIDensity6          INTEGER,
53             dot11NoiseHistogramRprtIPIDensity7          INTEGER,
54             dot11NoiseHistogramRprtIPIDensity8          INTEGER,
55             dot11NoiseHistogramRprtIPIDensity9          INTEGER,
56             dot11NoiseHistogramRprtIPIDensity10         INTEGER,
57             dot11NoiseHistogramRprtVendorSpecific      OCTET STRING,
58             dot11NoiseHistogramRprtMeasurementMode     INTEGER}
59
60     dot11NoiseHistogramRprtIndex OBJECT-TYPE
61         SYNTAX Unsigned32
62         MAX-ACCESS not-accessible
63         STATUS current
64         DESCRIPTION
65             "Index for Noise Histogram elements in dot11NoiseHistogramReportTable,
66             greater than 0."
67     ::= { dot11NoiseHistogramReportEntry 1 }
68
69     dot11NoiseHistogramRprtRqstToken OBJECT-TYPE
70         SYNTAX OCTET STRING
71         MAX-ACCESS read-only
72         STATUS current

```

```

1      DESCRIPTION
2          "This attribute indicates the request token that was indicated in the
3      measurement request that generated this measurement report. This should be
4      an exact match to the original dot11RRMRqstToken attribute. Note that there
5      may be multiple entries in the table that match this value since a single
6      request may generate multiple measurement reports."
7      ::= { dot11NoiseHistogramReportEntry 2 }
8
9      dot11NoiseHistogramRprtIfIndex OBJECT-TYPE
10     SYNTAX InterfaceIndex
11     MAX-ACCESS read-only
12     STATUS current
13     DESCRIPTION
14         "The ifIndex for this row of Noise Histogram Report has been received
15     on. "
16     ::= { dot11NoiseHistogramReportEntry 3 }
17
18     dot11NoiseHistogramMeasuringSTAAddr OBJECT-TYPE
19     SYNTAX MacAddress
20     MAX-ACCESS read-only
21     STATUS current
22     DESCRIPTION
23         "The MAC address of the measuring STA for this row of Noise Histogram
24     report."
25     ::= { dot11NoiseHistogramReportEntry 4 }
26
27     dot11NoiseHistogramRprtChanNumber 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 Noise Histogram
33     Report. The Channel Number is only defined within the indicated Regulatory
34     Class for this measurement report."
35     ::= { dot11NoiseHistogramReportEntry 5 }
36
37     dot11NoiseHistogramRprtRegulatoryClass 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     ::= { dot11NoiseHistogramReportEntry 6 }
49
50     dot11NoiseHistogramRprtActualStartTime 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     ::= { dot11NoiseHistogramReportEntry 7 }
58
59     dot11NoiseHistogramRprtMeasurementDuration 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 Noise Histogram
66     Report was measured."
67     ::= { dot11NoiseHistogramReportEntry 8 }
68
69     dot11NoiseHistogramRprtAntennaID OBJECT-TYPE
70     SYNTAX INTEGER(0..255)
71     MAX-ACCESS read-only
72     STATUS current

```

```

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

```



```

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

```

```

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

```

```

1  dot11BeaconRprtRqstToken OBJECT-TYPE
2      SYNTAX OCTET STRING
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates the request token that was indicated in the mea-
7          surement request that generated this measurement report. This should be an
8          exact match to the original dot11RRMRqstToken attribute. Note that there
9          may be multiple entries in the table that match this value since a single
10         request may generate multiple measurement reports."
11     ::= { dot11BeaconReportEntry 2 }
12
13 dot11BeaconRprtIfIndex OBJECT-TYPE
14     SYNTAX InterfaceIndex
15     MAX-ACCESS read-only
16     STATUS current
17     DESCRIPTION
18         "The ifIndex for this row of Beacon Report has been received on."
19     ::= { dot11BeaconReportEntry 3 }
20
21 dot11BeaconMeasuringSTAAddr OBJECT-TYPE
22     SYNTAX MacAddress
23     MAX-ACCESS read-only
24     STATUS current
25     DESCRIPTION
26         "The MAC address of the measuring STA for this row of Beacon report."
27     ::= { dot11BeaconReportEntry 4 }
28
29 dot11BeaconRprtChanNumber OBJECT-TYPE
30     SYNTAX INTEGER
31     MAX-ACCESS read-only
32     STATUS current
33     DESCRIPTION
34         "This attribute indicates the channel number used for this Beacon Report.
35         The Channel Number is only defined within the indicated Regulatory Class
36         for this measurement report."
37     ::= { dot11BeaconReportEntry 5 }
38
39 dot11BeaconRprtRegulatoryClass OBJECT-TYPE
40     SYNTAX INTEGER(1..255)
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44         "This attribute indicates the channel set for this measurement report.
45         Country, Regulatory Class and Channel Number together specify the channel
46         frequency and spacing for this measurement request. Valid values of Regula-
47         tory Class are shown in Annex J."
48     REFERENCE
49         "Annex J"
50     ::= { dot11BeaconReportEntry 6 }
51
52 dot11BeaconRprtActualStartTime OBJECT-TYPE
53     SYNTAX TSFType
54     MAX-ACCESS read-only
55     STATUS current
56     DESCRIPTION
57         "This attribute indicates the TSF value at the time when the
58         measurement started."
59     ::= { dot11BeaconReportEntry 7 }
60
61 dot11BeaconRprtMeasurementDuration OBJECT-TYPE
62     SYNTAX Unsigned32
63     UNITS "TUs"
64     MAX-ACCESS read-only
65     STATUS current
66     DESCRIPTION
67         "This attribute indicates the duration over which the Beacon Report was
68         measured."
69     ::= { dot11BeaconReportEntry 8 }
70
71 dot11BeaconRprtPhyType OBJECT-TYPE
72     SYNTAX INTEGER {

```

```

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

```

```

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

```

```

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

```

```

1  dot11FrameRprtRegulatoryClass 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     ::= { dot11FrameReportEntry 5 }
13
14 dot11FrameRprtActualStartTime 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 measurement
20         started."
21     ::= { dot11FrameReportEntry 6 }
22
23 dot11FrameRprtMeasurementDuration OBJECT-TYPE
24     SYNTAX Unsigned32
25     MAX-ACCESS read-only
26     STATUS current
27     DESCRIPTION
28         "This attribute indicates the duration over which the Frame Report
29         was measured, expressed in units of TUs."
30     ::= { dot11FrameReportEntry 7 }
31
32 dot11FrameRprtTransmitSTAAddress OBJECT-TYPE
33     SYNTAX MacAddress
34     MAX-ACCESS read-only
35     STATUS current
36     DESCRIPTION
37         "The MAC address of STA for this row of Frame report that it has been
38         received from."
39     ::= { dot11FrameReportEntry 8 }
40
41 dot11FrameRprtBSSID OBJECT-TYPE
42     SYNTAX MacAddress
43     MAX-ACCESS read-only
44     STATUS current
45     DESCRIPTION
46         "This attribute indicates the BSSID of the STA that transmitted this
47         frame."
48     ::= { dot11FrameReportEntry 9 }
49
50 dot11FrameRprtPhyType OBJECT-TYPE
51     SYNTAX INTEGER {
52         fhss(1),
53         dsss(2),
54         irbaseband(3),
55         ofdm(4),
56         hrdsss(5),
57         erp(6)
58     }
59     UNITS "dot11PHYType"
60     MAX-ACCESS read-create
61     STATUS current
62     DESCRIPTION
63         "This attribute indicates the PHY used for frame reception in this row of
64         the frame report."
65     ::= { dot11FrameReportEntry 10 }
66
67 dot11FrameRprtAvgRCPI OBJECT-TYPE
68     SYNTAX INTEGER(0..255)
69     UNITS "0.5 dBm"
70     MAX-ACCESS read-only
71     STATUS current

```

```

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

```



```

1
2 dot11FrameRptMeasurementMode OBJECT-TYPE
3     SYNTAX INTEGER {
4         success(0),
5         incapableBit(1),
6         refusedBit(2),
7     }
8     MAX-ACCESS read-only
9     STATUS current
10    DESCRIPTION
11        "This attribute indicates the outcome status for the measurement request
12        which generated this measurement report; status is indicated using the fol-
13        lowing reason codes: 1 indicates this STA is incapable of generating the
14        report, 2 indicates this STA is refusing to generate the report, 0 indi-
15        cates the STA successfully carried out the measurement request."
16    DEFVAL { 0 }
17    ::= { dot11FrameReportEntry 17 }
18
19 -- *****
20 -- * End of dot11FrameReport TABLE
21 -- *****
22
23 -- *****
24 -- * dot11STAStatisticsReport TABLE
25 -- *****
26 dot11STAStatisticsReportTable OBJECT-TYPE
27     SYNTAX SEQUENCE OF Dot11STAStatisticsReportEntry
28     MAX-ACCESS not-accessible
29     STATUS current
30     DESCRIPTION
31         "Group contains the current list of STA Statistics reports that have been
32         received by the MLME. The report tables shall be maintained as FIFO to pre-
33         serve freshness, thus the rows in this table can be deleted for memory con-
34         straints or other implementation constraints determined by the vendor. New
35         rows shall have different RprtIndex values than those deleted within the
36         range limitation of the index. One easy way is to monotonically increase
37         RprtIndex for new reports being written in the table."
38     ::= { dot11RRMReport 5 }
39
40 dot11STAStatisticsReportEntry OBJECT-TYPE
41     SYNTAX Dot11STAStatisticsReportEntry
42     MAX-ACCESS not-accessible
43     STATUS current
44     DESCRIPTION
45         "An entry in the dot11STAStatisticsReportTable Indexed by
46         dot11STAStatisticsReportIndex."
47     INDEX { dot11STAStatisticsReportIndex }
48     ::= { dot11STAStatisticsReportTable 1 }
49
50 Dot11STAStatisticsReportEntry ::=
51     SEQUENCE {
52         dot11STAStatisticsReportIndex                Unsigned32,
53         dot11STAStatisticsReportToken                OCTET STRING,
54         dot11STAStatisticsReportIndexdot11STAStatisticsIfIndex
55         Unsigned32InterfaceIndex,
56         dot11STAStatisticsReportIndexdot11STAStatisticsSTAAddress
57         Unsigned32MacAddress,
58         dot11STAStatisticsReportTokendot11STAStatisticsMeasurementDurationOCTET-
59         STRINGUnsigned32,
60         dot11STAStatisticsIfIndexdot11STAStatisticsGroupID  InterfaceIndexINTEGER,
61         dot11STAStatisticsSTAAddressdot11STAStatisticsTransmittedFragmentCount
62         MacAddressCounter32,
63         dot11STAStatisticsMeasurementDurationdot11STAStatisticsMulticastTransmitted
64         FrameCount                Unsigned32Counter32,
65         dot11STAStatisticsGroupIDDot11STAStatisticsFailedCountINTEGERCounter32,
66         dot11STAStatisticsTransmittedFragmentCountdot11STAStatisticsRetryCount
67         Counter32,
68         dot11STAStatisticsMulticastTransmittedFrameCountdot11STAStatisticsMultipleR
69         etryCount                Counter32,
70         dot11STAStatisticsFailedCountdot11STAStatisticsFrameDuplicateCount
71         Counter32,
72         dot11STAStatisticsRetryCountdot11STAStatisticsRTSSuccessCountCounter32,

```

```

1      dot11STAStatisticsMultipleRetryCount dot11STAStatisticsRTSFailureCount
2      Counter32,
3      dot11STAStatisticsFrameDuplicateCount dot11STAStatisticsACKFailureCount
4      Counter32,
5      dot11STAStatisticsRTSSuccessCount dot11STAStatisticsQosTransmittedFragmentCo
6      unt Counter32,
7      dot11STAStatisticsRTSFailureCount dot11STAStatisticsQosFailedCount Counter32,
8      dot11STAStatisticsACKFailureCount dot11STAStatisticsQosRetryCount Counter32,
9      dot11STAStatisticsQosTransmittedFragmentCount dot11STAStatisticsQosMultipleR
10     etryCount Counter32,
11     dot11STAStatisticsQosFailedCount dot11STAStatisticsQosFrameDuplicateCount
12     Counter32,
13     dot11STAStatisticsQosRetryCount dot11STAStatisticsQosRTSSuccessCount
14     Counter32,
15     dot11STAStatisticsQosMultipleRetryCount dot11STAStatisticsQosRTSFailureCount
16     Counter32,
17     dot11STAStatisticsQosFrameDuplicateCount dot11STAStatisticsQosACKFailureCoun
18     t Counter32,
19     dot11STAStatisticsQosRTSSuccessCount dot11STAStatisticsQosReceivedFragmentCo
20     unt Counter32,
21     dot11STAStatisticsQosRTSFailureCount dot11STAStatisticsQosTransmittedFrameCo
22     unt Counter32,
23     dot11STAStatisticsQosACKFailureCount dot11STAStatisticsQosDiscardedFrameCoun
24     t Counter32,
25     dot11STAStatisticsQosReceivedFragmentCount dot11STAStatisticsQosMPDUsReceive
26     dCount Counter32,
27     dot11STAStatisticsQosTransmittedFrameCount dot11STAStatisticsQosRetriesRecei
28     vedCount Counter32,
29     dot11STAStatisticsQosDiscardedFrameCount dot11STAStatisticsReceivedFragmentC
30     ount Counter32,
31     dot11STAStatisticsQosMPDUsReceivedCount dot11STAStatisticsMulticastReceivedF
32     rameCount Counter32,
33     dot11STAStatisticsQosRetriesReceivedCount dot11STAStatisticsFCSErrorCount
34     Counter32,
35     dot11STAStatisticsReceivedFragmentCount dot11STAStatisticsTransmittedFrameCo
36     unt Counter32,
37     dot11STAStatisticsMulticastReceivedFrameCount dot11STAStatisticsAPAverageAcc
38     essDelay Counter32 INTEGER,
39     dot11STAStatisticsFCSErrorCount dot11STAStatisticsAverageAccessDelayBestEffo
40     rt Counter32 INTEGER,
41     dot11STAStatisticsTransmittedFrameCount dot11STAStatisticsAverageAccessDelay
42     Background Counter32 INTEGER,
43     dot11STAStatisticsAPAverageAccessDelay dot11STAStatisticsAverageAccessDelayV
44     ideo INTEGER,
45     dot11STAStatisticsAverageAccessDelayBestEffort dot11STAStatisticsAverageAcce
46     ssDelayVoice INTEGER,
47     dot11STAStatisticsAverageAccessDelayBackground dot11STAStatisticsStationCoun
48     t INTEGER,
49     dot11STAStatisticsAverageAccessDelayVideodot11STAStatisticsChannelUtilizati
50     on INTEGER,
51     dot11STAStatisticsAverageAccessDelayVoicedot11STAStatisticsRSNAsStatsCMACICV
52     Errors INTEGER Counter32,
53     dot11STAStatisticsStationCount dot11STAStatisticsRSNAsStatsCMACReplays
54     INTEGER Counter32,
55     dot11STAStatisticsChannelUtilization dot11STAStatisticsRSNAsStatsRobustMgmtCC
56     MPReplays INTEGER Counter32,
57     dot11STAStatisticsVendorSpecific dot11STAStatisticsRSNAsStatsTKIPICVErrors
58     OCTET_STRING Counter32,
59     dot11STAStatisticsRSNAsStatsTKIPReplays Counter32,
60     dot11STAStatisticsRSNAsStatsCCMPDecryptErrors Counter32,
61     dot11STAStatisticsRSNAsStatsCCMPReplays Counter32,
62     dot11STAStatisticsReportingReasonSTACounters OCTET_STRING,
63     dot11STAStatisticsReportingReasonReasonQosCounters OCTET_STRING,
64     dot11STAStatisticsReportingReasonRsnaCounters OCTET_STRING,
65     dot11STAStatisticsVendorSpecific OCTET_STRING,
66     dot11STAStatisticsRprtMeasurementMode INTEGER}
67
68 dot11STAStatisticsReportIndex OBJECT-TYPE
69     SYNTAX Unsigned32
70     MAX-ACCESS not-accessible
71     STATUS current
72     DESCRIPTION

```

```

1           "Index for STA Statistics Report elements in dot11STAStatisticsReportTable,
2           greater than 0."
3           ::= { dot11STAStatisticsReportEntry 1 }
4
5 dot11STAStatisticsReportToken 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        ::= { dot11STAStatisticsReportEntry 2 }
16
17 dot11STAStatisticsIfIndex OBJECT-TYPE
18     SYNTAX InterfaceIndex
19     MAX-ACCESS read-only
20     STATUS current
21     DESCRIPTION
22        "Identifies the Interface that this row of STA Statistics Report has been
23        received on"
24        ::= { dot11STAStatisticsReportEntry 3 }
25
26 dot11STAStatisticsSTAAddress OBJECT-TYPE
27     SYNTAX MacAddress
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31        "The MAC address of the STA that returned this STA Statistics Report."
32        ::= { dot11STAStatisticsReportEntry 4 }
33
34 dot11STAStatisticsMeasurementDuration OBJECT-TYPE
35     SYNTAX Unsigned32
36     UNITS "TUs"
37     MAX-ACCESS read-only
38     STATUS current
39     DESCRIPTION
40        "This attribute indicates the duration over which the STA Statistics was
41        measured. A zero value for this attribute indicates that the reported sta-
42        tistics are a current snapshot of the statistics variables. A non-zero
43        value for this attribute indicates that the reported statistics contain the
44        difference in the corresponding statistics variables over the indicated
45        duration."
46        ::= { dot11STAStatisticsReportEntry 5 }
47
48 dot11STAStatisticsGroupID OBJECT-TYPE
49     SYNTAX INTEGER {
50         dot11CountersTable(0),
51         dot11CountersTabledot11MacStatistics(01),
52         dot11MacStatisticsdot11QosCountersTableforUP0(12),
53         dot11QosCountersTableforUP0dot11QosCountersTableforUP1(23),
54         dot11QosCountersTableforUP1dot11QosCountersTableforUP2(34),
55         dot11QosCountersTableforUP2dot11QosCountersTableforUP3(45),
56         dot11QosCountersTableforUP3dot11QosCountersTableforUP4(56),
57         dot11QosCountersTableforUP4dot11QosCountersTableforUP5(67),
58         dot11QosCountersTableforUP5dot11QosCountersTableforUP6(78),
59         dot11QosCountersTableforUP6dot11QosCountersTableforUP7(89),
60         dot11QosCountersTableforUP7bSSAverageAccessDelays(910),
61         bSSAverageAccessDelaysdot11RSNAStatsTable(1016)
62     }
63     MAX-ACCESS read-only
64     STATUS current
65     DESCRIPTION
66        "This attribute indicates the value of dot11RRMRqstSTAStatRqstGroupID
67        returned from the STA in this STA Statistics Report."
68     DEFVAL { 0 }
69     ::= { dot11STAStatisticsReportEntry 6 }
70
71 dot11STAStatisticsTransmittedFragmentCount OBJECT-TYPE
72     SYNTAX Counter32

```

```

1      MAX-ACCESS read-only
2      STATUS current
3      DESCRIPTION
4          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
5          cates the value of dot11TransmittedFragmentCount returned from the STA in
6          this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
7          cates a non-zero value, this attribute indicates the difference in the ref-
8          erenced dot11 variable over the indicated duration. This attribute is only
9          valid if the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
10     ::= { dot11STAStatisticsReportEntry 7 }
11
12 dot11STAStatisticsMulticastTransmittedFrameCount OBJECT-TYPE SYNTAX Counter32
13     MAX-ACCESS read-only
14     STATUS current
15     DESCRIPTION
16         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
17         cates the value of dot11MulticastTransmittedFrameCount returned from the
18         STA in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
19         indicates a non-zero value, this attribute indicates the difference in the
20         referenced dot11 variable over the indicated duration. This attribute is
21         only valid if the dot11STAStatisticsGroupID is 0, and is ignored other-
22         wise."
23     ::= { dot11STAStatisticsReportEntry 8 }
24
25 dot11STAStatisticsFailedCount OBJECT-TYPE
26     SYNTAX Counter32
27     MAX-ACCESS read-only
28     STATUS current
29     DESCRIPTION
30         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
31         cates the value of dot11FailedCount returned from the STA in this STA Sta-
32         tistics Report. If dot11STAStatisticsMeasurementDuration indicates a non-
33         zero value, this attribute indicates the difference in the referenced dot11
34         variable over the indicated duration. This attribute is only valid if the
35         dot11STAStatisticsGroupID is 0, and is ignored otherwise."
36     ::= { dot11STAStatisticsReportEntry 9 }
37
38 dot11STAStatisticsRetryCount OBJECT-TYPE
39     SYNTAX Counter32
40     MAX-ACCESS read-only
41     STATUS current
42     DESCRIPTION
43         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
44         cates the value of dot11RetryCount returned from the STA in this STA Sta-
45         tistics Report. If dot11STAStatisticsMeasurementDuration indicates a non-
46         zero value, this attribute indicates the difference in the referenced dot11
47         variable over the indicated duration. This attribute is only valid if the
48         dot11STAStatisticsGroupID is 1, and is ignored otherwise."
49     ::= { dot11STAStatisticsReportEntry 10 }
50
51 dot11STAStatisticsMultipleRetryCount OBJECT-TYPE
52     SYNTAX Counter32
53     MAX-ACCESS read-only
54     STATUS current
55     DESCRIPTION
56         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
57         cates the value of dot11MultipleRetryCount returned from the STA in this
58         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
59         non-zero value, this attribute indicates the difference in the referenced
60         dot11 variable over the indicated duration. This attribute is only valid if
61         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
62     ::= { dot11STAStatisticsReportEntry 11 }
63
64 dot11STAStatisticsFrameDuplicateCount OBJECT-TYPE
65     SYNTAX Counter32
66     MAX-ACCESS read-only
67     STATUS current
68     DESCRIPTION
69         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
70         cates the value of dot11FrameDuplicateCount returned from the STA in this
71         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
72         non-zero value, this attribute indicates the difference in the referenced

```

```

1         dot11 variable over the indicated duration. This attribute is only valid if
2         the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
3     ::= { dot11STAStatisticsReportEntry 12 }
4
5 dot11STAStatisticsRTSSuccessCount OBJECT-TYPE
6     SYNTAX Counter32
7     MAX-ACCESS read-only
8     STATUS current
9     DESCRIPTION
10        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
11        cates the value of dot11RTSSuccessCount returned from the STA in this STA
12        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
13        non-zero value, this attribute indicates the difference in the referenced
14        dot11 variable over the indicated duration. This attribute is only valid if
15        the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
16    ::= { dot11STAStatisticsReportEntry 13 }
17
18 dot11STAStatisticsRTSFailureCount OBJECT-TYPE
19     SYNTAX Counter32
20     MAX-ACCESS read-only
21     STATUS current
22     DESCRIPTION
23        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
24        cates the value of dot11RTSFailureCount returned from the STA in this STA
25        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
26        non-zero value, this attribute indicates the difference in the referenced
27        dot11 variable over the indicated duration. This attribute is only valid if
28        the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
29    ::= { dot11STAStatisticsReportEntry 14 }
30
31 dot11STAStatisticsACKFailureCount OBJECT-TYPE
32     SYNTAX Counter32
33     MAX-ACCESS read-only
34     STATUS current
35     DESCRIPTION
36        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
37        cates the value of dot11ACKFailureCount returned from the STA in this STA
38        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
39        non-zero value, this attribute indicates the difference in the referenced
40        dot11 variable over the indicated duration. This attribute is only valid if
41        the dot11STAStatisticsGroupID is 1, and is ignored otherwise."
42    ::= { dot11STAStatisticsReportEntry 15 }
43
44 dot11STAStatisticsQosTransmittedFragmentCount OBJECT-TYPE
45     SYNTAX Counter32
46     MAX-ACCESS read-only
47     STATUS current
48     DESCRIPTION
49        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
50        cates the value of dot11QosTransmittedFragmentCount returned from the STA
51        in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
52        indicates a non-zero value, this attribute indicates the difference in the
53        referenced dot11 variable over the indicated duration. This attribute is
54        only valid if the dot11STAStatisticsGroupID is 2-9, and is ignored other-
55        wise."
56    ::= { dot11STAStatisticsReportEntry 16 }
57
58 dot11STAStatisticsQosFailedCount OBJECT-TYPE
59     SYNTAX Counter32
60     MAX-ACCESS read-only
61     STATUS current
62     DESCRIPTION
63        "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
64        cates the value of dot11QosFailedCount returned from the STA in this STA
65        Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
66        non-zero value, this attribute indicates the difference in the referenced
67        dot11 variable over the indicated duration. This attribute is only valid if
68        the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
69    ::= { dot11STAStatisticsReportEntry 17 }
70
71 dot11STAStatisticsQosRetryCount OBJECT-TYPE
72     SYNTAX Counter32

```

```

1      MAX-ACCESS read-only
2      STATUS current
3      DESCRIPTION
4          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
5          cates the value of dot11QosRetryCount returned from the STA in this STA
6          Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
7          non-zero value, this attribute indicates the difference in the referenced
8          dot11 variable over the indicated duration. This attribute is only valid if
9          the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
10     ::= { dot11STAStatisticsReportEntry 18 }
11
12 dot11STAStatisticsQosMultipleRetryCount OBJECT-TYPE
13     SYNTAX Counter32
14     MAX-ACCESS read-only
15     STATUS current
16     DESCRIPTION
17         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
18         cates the value of dot11QosMultipleRetryCount returned from the STA in this
19         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
20         non-zero value, this attribute indicates the difference in the referenced
21         dot11 variable over the indicated duration. This attribute is only valid if
22         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
23     ::= { dot11STAStatisticsReportEntry 19 }
24
25 dot11STAStatisticsQosFrameDuplicateCount OBJECT-TYPE
26     SYNTAX Counter32
27     MAX-ACCESS read-only
28     STATUS current
29     DESCRIPTION
30         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
31         cates the value of dot11QosFrameDuplicateCount returned from the STA in
32         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
33         cates a non-zero value, this attribute indicates the difference in the ref-
34         erenced dot11 variable over the indicated duration. This attribute is only
35         valid if the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
36     ::= { dot11STAStatisticsReportEntry 20 }
37
38 dot11STAStatisticsQosRTSSuccessCount OBJECT-TYPE
39     SYNTAX Counter32
40     MAX-ACCESS read-only
41     STATUS current
42     DESCRIPTION
43         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
44         cates the value of dot11QosRTSSuccessCount returned from the STA in this
45         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
46         non-zero value, this attribute indicates the difference in the referenced
47         dot11 variable over the indicated duration. This attribute is only valid if
48         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
49     ::= { dot11STAStatisticsReportEntry 21 }
50
51 dot11STAStatisticsQosRTSFailureCount OBJECT-TYPE
52     SYNTAX Counter32
53     MAX-ACCESS read-only
54     STATUS current
55     DESCRIPTION
56         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
57         cates the value of dot11QosRTSFailureCount returned from the STA in this
58         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
59         non-zero value, this attribute indicates the difference in the referenced
60         dot11 variable over the indicated duration. This attribute is only valid if
61         the dot11STAStatisticsGroupID is 2-9, and is ignored otherwise."
62     ::= { dot11STAStatisticsReportEntry 22 }
63
64 dot11STAStatisticsQosACKFailureCount OBJECT-TYPE
65     SYNTAX Counter32
66     MAX-ACCESS read-only
67     STATUS current
68     DESCRIPTION
69         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
70         cates the value of dot11QosACKFailureCount returned from the STA in this
71         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
72         non-zero value, this attribute indicates the difference in the referenced

```

```

1         dot11 variable over the indicated duration. This attribute is only valid if
2         the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
3     ::= { dot11STASStatisticsReportEntry 23 }
4
5 dot11STASStatisticsQosReceivedFragmentCount OBJECT-TYPE
6     SYNTAX Counter32
7     MAX-ACCESS read-only
8     STATUS current
9     DESCRIPTION
10        "If dot11STASStatisticsMeasurementDuration is zero, this attribute indi-
11        cates the value of dot11QosReceivedFragmentCount returned from the STA in
12        this STA Statistics Report. If dot11STASStatisticsMeasurementDuration indi-
13        cates a non-zero value, this attribute indicates the difference in the ref-
14        erenced dot11 variable over the indicated duration. This attribute is only
15        valid if the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
16    ::= { dot11STASStatisticsReportEntry 24 }
17
18 dot11STASStatisticsQosTransmittedFrameCount OBJECT-TYPE
19     SYNTAX Counter32
20     MAX-ACCESS read-only
21     STATUS current
22     DESCRIPTION
23        "If dot11STASStatisticsMeasurementDuration is zero, this attribute indi-
24        cates the value of dot11QosTransmittedFrameCount returned from the STA in
25        this STA Statistics Report. If dot11STASStatisticsMeasurementDuration indi-
26        cates a non-zero value, this attribute indicates the difference in the ref-
27        erenced dot11 variable over the indicated duration. This attribute is only
28        valid if the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
29    ::= { dot11STASStatisticsReportEntry 25 }
30
31 dot11STASStatisticsQosDiscardedFrameCount OBJECT-TYPE
32     SYNTAX Counter32
33     MAX-ACCESS read-only
34     STATUS current
35     DESCRIPTION
36        "If dot11STASStatisticsMeasurementDuration is zero, this attribute indi-
37        cates the value of dot11QosDiscardedFrameCount returned from the STA in
38        this STA Statistics Report. If dot11STASStatisticsMeasurementDuration indi-
39        cates a non-zero value, this attribute indicates the difference in the ref-
40        erenced dot11 variable over the indicated duration. This attribute is only
41        valid if the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
42    ::= { dot11STASStatisticsReportEntry 26 }
43
44 dot11STASStatisticsQosMPDUsReceivedCount OBJECT-TYPE
45     SYNTAX Counter32
46     MAX-ACCESS read-only
47     STATUS current
48     DESCRIPTION
49        "If dot11STASStatisticsMeasurementDuration is zero, this attribute indi-
50        cates the value of dot11QosMPDUsReceivedCount returned from the STA in this
51        STA Statistics Report. If dot11STASStatisticsMeasurementDuration indicates a
52        non-zero value, this attribute indicates the difference in the referenced
53        dot11 variable over the indicated duration. This attribute is only valid if
54        the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
55    ::= { dot11STASStatisticsReportEntry 27 }
56
57 dot11STASStatisticsQosRetriesReceivedCount OBJECT-TYPE
58     SYNTAX Counter32
59     MAX-ACCESS read-only
60     STATUS current
61     DESCRIPTION
62        "If dot11STASStatisticsMeasurementDuration is zero, this attribute indi-
63        cates the value of dot11QosRetriesReceivedCount returned from the STA in
64        this STA Statistics Report. If dot11STASStatisticsMeasurementDuration indi-
65        cates a non-zero value, this attribute indicates the difference in the ref-
66        erenced dot11 variable over the indicated duration. This attribute is only
67        valid if the dot11STASStatisticsGroupID is 2-9, and is ignored otherwise."
68    ::= { dot11STASStatisticsReportEntry 28 }
69
70 dot11STASStatisticsReceivedFragmentCount OBJECT-TYPE
71     SYNTAX Counter32
72     MAX-ACCESS read-only

```

```

1      STATUS current
2      DESCRIPTION
3          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
4          cates the value of dot11ReceivedFragmentCount returned from the STA in this
5          STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
6          non-zero value, this attribute indicates the difference in the referenced
7          dot11 variable over the indicated duration. This attribute is only valid if
8          the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
9      ::= { dot11STAStatisticsReportEntry 29 }
10
11     dot11STAStatisticsMulticastReceivedFrameCount OBJECT-TYPE
12         SYNTAX Counter32
13         MAX-ACCESS read-only
14         STATUS current
15         DESCRIPTION
16             "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
17             cates the value of dot11MulticastReceivedFrameCount returned from the STA
18             in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
19             indicates a non-zero value, this attribute indicates the difference in the
20             referenced dot11 variable over the indicated duration. This attribute is
21             only valid if the dot11STAStatisticsGroupID is 0, and is ignored other-
22             wise."
23         ::= { dot11STAStatisticsReportEntry 30 }
24
25     dot11STAStatisticsFCSErrorCount OBJECT-TYPE
26         SYNTAX Counter32
27         MAX-ACCESS read-only
28         STATUS current
29         DESCRIPTION
30             "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
31             cates the value of dot11FCSErrorCount returned from the STA in this STA
32             Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
33             non-zero value, this attribute indicates the difference in the referenced
34             dot11 variable over the indicated duration. This attribute is only valid if
35             the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
36         ::= { dot11STAStatisticsReportEntry 31 }
37
38     dot11STAStatisticsTransmittedFrameCount OBJECT-TYPE
39         SYNTAX Counter32
40         MAX-ACCESS read-only
41         STATUS current
42         DESCRIPTION
43             "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
44             cates the value of dot11TransmittedFrameCount returned from the STA in this
45             STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
46             non-zero value, this attribute indicates the difference in the referenced
47             dot11 variable over the indicated duration. This attribute is only valid if
48             the dot11STAStatisticsGroupID is 0, and is ignored otherwise."
49         ::= { dot11STAStatisticsReportEntry 32 }
50
51     dot11STAStatisticsAPAverageAccessDelay OBJECT-TYPE
52         SYNTAX INTEGER (0..255)
53         MAX-ACCESS read-only
54         STATUS current
55         DESCRIPTION
56             "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
57             cates the value of the AP Average Access Delay (AAD) returned from the STA
58             in this STA Statistics Report. If dot11STAStatisticsMeasurementDuration
59             indicates a non-zero value, this attribute indicates the difference in the
60             referenced access delay value over the indicated duration. This attribute
61             is only valid if the dot11STAStatisticsGroupID is 10, and is ignored other-
62             wise."
63         REFERENCE
64             "IEEE 802.11 Clause 7.3.2.39"
65         ::= { dot11STAStatisticsReportEntry 33 }
66
67     dot11STAStatisticsAverageAccessDelayBestEffort OBJECT-TYPE
68         SYNTAX INTEGER (0..255)
69         MAX-ACCESS read-only
70         STATUS current
71         DESCRIPTION
72             "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-

```



```

1         cates the value of the Average Access Delay (AAD) for the Best Effort
2         Access Category returned from the STA in this STA Statistics Report. If
3         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
4         attribute indicates the difference in the referenced access delay value
5         over the indicated duration. This attribute is only valid if the
6         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
7     REFERENCE
8         "IEEE 802.11 Clause 7.3.2.44"
9     ::= { dot11STAStatisticsReportEntry 34 }
10
11 dot11STAStatisticsAverageAccessDelayBackground OBJECT-TYPE
12     SYNTAX INTEGER (0..255)
13     MAX-ACCESS read-only
14     STATUS current
15     DESCRIPTION
16         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
17         cates the value of the Average Access Delay (AAD) for the Background Access
18         Category returned from the STA in this STA Statistics Report. If
19         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
20         attribute indicates the difference in the referenced access delay value
21         over the indicated duration. This attribute is only valid if the
22         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
23     REFERENCE
24         "IEEE 802.11 Clause 7.3.2.44"
25     ::= { dot11STAStatisticsReportEntry 35 }
26
27 dot11STAStatisticsAverageAccessDelayVideo OBJECT-TYPE
28     SYNTAX INTEGER (0..255)
29     MAX-ACCESS read-only
30     STATUS current
31     DESCRIPTION
32         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
33         cates the value of the Average Access Delay (AAD) for the Video Access Cat-
34         egory returned from the STA in this STA Statistics Report. If
35         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
36         attribute indicates the difference in the referenced access delay value
37         over the indicated duration. This attribute is only valid if the
38         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
39     REFERENCE
40         "IEEE 802.11 Clause 7.3.2.44"
41     ::= { dot11STAStatisticsReportEntry 36 }
42
43 dot11STAStatisticsAverageAccessDelayVoice OBJECT-TYPE
44     SYNTAX INTEGER (0..255)
45     MAX-ACCESS read-only
46     STATUS current
47     DESCRIPTION
48         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
49         cates the value of the Average Access Delay (AAD) for the Voice Access Cat-
50         egory returned from the STA in this STA Statistics Report. If
51         dot11STAStatisticsMeasurementDuration indicates a non-zero value, this
52         attribute indicates the difference in the referenced access delay value
53         over the indicated duration. This attribute is only valid if the
54         dot11STAStatisticsGroupID is 10, and is ignored otherwise."
55     REFERENCE
56         "IEEE 802.11 Clause 7.3.2.44"
57     ::= { dot11STAStatisticsReportEntry 37 }
58
59 dot11STAStatisticsStationCount OBJECT-TYPE
60     SYNTAX INTEGER (0..65535)
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
65         cates the value of dot11AssociatedStationCount 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 10, and is ignored otherwise."
70     ::= { dot11STAStatisticsReportEntry 38 }
71
72 dot11STAStatisticsChannelUtilization OBJECT-TYPE

```

```

1      SYNTAX INTEGER (0..255)
2      UNITS "1/255"
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
7          cates the value of the Channel Utilization returned from the STA in this
8          STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
9          non-zero value, this attribute indicates the difference in the Channel Uti-
10         lization value over the indicated duration. The Channel Utilization is the
11         time fraction during which the AP sensed the channel busy. This attribute
12         is only valid if the dot11STAStatisticsGroupID is 10, and is ignored other-
13         wise."
14     REFERENCE
15         "IEEE 802.11 Clause 7.3.2.28"
16     ::= { dot11STAStatisticsReportEntry 39 }
17
18 dot11STAStatisticsRSNStatsCMACICVErrors OBJECT-TYPE
19     SYNTAX Counter32
20     MAX-ACCESS read-only
21     STATUS current
22     DESCRIPTION
23         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
24         cates the value of dot11RSNStatsCMACICVErrors returned from the STA in
25         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
26         cates a non-zero value, this attribute indicates the difference in the ref-
27         erenced dot11 variable over the indicated duration. This attribute is only
28         valid if the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
29     ::= { dot11STAStatisticsReportEntry 40 }
30
31 dot11STAStatisticsRSNStatsCMACReplays OBJECT-TYPE
32     SYNTAX Counter32
33     MAX-ACCESS read-only
34     STATUS current
35     DESCRIPTION
36         "If dot11STAStatisticsMeasurementDuration is zero, this attribute indi-
37         cates the value of dot11RSNStatsCMACReplays returned from the STA in this
38         STA Statistics Report. If dot11STAStatisticsMeasurementDuration indicates a
39         non-zero value, this attribute indicates the difference in the referenced
40         dot11 variable over the indicated duration. This attribute is only valid if
41         the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
42     ::= { dot11STAStatisticsReportEntry 39-41 }
43
44 dot11STAStatisticsVendorSpecific dot11STAStatisticsRSNStatsRobustMgmtCCMPReplays OBJECT-
45 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 dot11RSNStatsRobustMgmtCCMPReplays 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 16, and is ignored other-
56         wise."
57     ::= { dot11STAStatisticsReportEntry 42 }
58
59 dot11STAStatisticsRSNStatsTKIPICVErrors 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 dot11RSNStatsTKIPICVErrors 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 16, and is ignored otherwise."
70     ::= { dot11STAStatisticsReportEntry 43 }
71
72 dot11STAStatisticsRSNStatsTKIPReplays 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 dot11RSNStatsTKIPReplays 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 16, and is ignored otherwise."
11     ::= { dot11STAStatisticsReportEntry 44 }
12
13 dot11STAStatisticsRSNStatsCCMPDecryptErrors 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 dot11RSNStatsCCMPDecryptErrors returned from the STA in
20         this STA Statistics Report. If dot11STAStatisticsMeasurementDuration indi-
21         cates a non-zero value, this attribute indicates the difference in the ref-
22         erenced dot11 variable over the indicated duration. This attribute is only
23         valid if the dot11STAStatisticsGroupID is 16, and is ignored otherwise."
24     ::= { dot11STAStatisticsReportEntry 45 }
25
26 dot11STAStatisticsRSNStatsCCMPReplays 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 dot11RSNStatsCCMPReplays 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 16, and is ignored otherwise."
37     ::= { dot11STAStatisticsReportEntry 46 }
38
39 dot11STAStatisticsReportingReasonSTACounters OBJECT-TYPE
40     SYNTAX OCTET STRING (SIZE(0..1))
41     MAX-ACCESS read-only
42     STATUS current
43     DESCRIPTION
44         "This attribute indicates the trigger reason(s) for this Statistics Report.
45         Each bit indicates a different trigger condition. When the bit is set to
46         1, it indicates that the listed trigger threshold has been exceeded:
47         B0: dot11Failed,
48         B1: dotFCSError,
49         B2: dot11MultipleRetry,
50         B3: dot11FrameDuplicate,
51         B4: dot11RTSFailure,
52         B5: dot11ACKFailur,
53         B6: dot11Retry,
54         B7: Reserved.
55         This attribute is only valid if the dot11STAStatisticsGroupID is 0, and is
56         ignored otherwise."
57     ::= { dot11STAStatisticsReportEntry 47 }
58
59 dot11STAStatisticsReportingReasonQoSCounters OBJECT-TYPE
60     SYNTAX OCTET STRING (SIZE(0..1))
61     MAX-ACCESS read-only
62     STATUS current
63     DESCRIPTION
64         "This attribute indicates the trigger reason(s) for this Statistics Report.
65         Each bit indicates a different trigger condition. When the bit is set to
66         1, it indicates that the listed trigger threshold has been exceeded:
67         B0: dot11QoSFailed,
68         B1: dotQoSRetry,
69         B2: dot11QoSMultipleRetry,
70         B3: dot11QoSFrameDuplicate,
71         B4: dot11QoSRTSFailure,
72         B5: dot11QoSACKFailur,

```

```

1         B6: dot11QoSdiscarded,eB7: Reserved.
2         This attribute is only valid if the dot11STAStatisticsGroupID is 2-9, and
3         is ignored otherwise."
4         ::= { dot11STAStatisticsReportEntry 48 }
5
6 dot11STAStatisticsReportingReasonRsnaCounters OBJECT-TYPE
7     SYNTAX OCTET STRING (SIZE(0..255))
8     MAX-ACCESS read-create
9     STATUS current
10    DESCRIPTION
11        "This attribute indicates the trigger reason(s) for this Statistics Report.
12        Each bit indicates a different trigger condition. When the bit is set to
13        1, it indicates that the listed trigger threshold has been exceeded:
14        B0: dot11RSNASTatsCMACICVErrors,
15        B1: dot11RSNASTatsCMACReplays,
16        B2: dot11RSNASTatsRobustMgmtCCMPReplays,
17        B3: dot11RSNASTatsTKIPICVErrors,
18        B4: dot11RSNASTatsCCMPReplays,
19        B5: dot11RSNASTatsCCMPDecryptErrors,
20        B6: dot11RSNASTatsCCMPReplays,
21        B7: Reserved.
22        This attribute is only valid if the dot11STAStatisticsGroupID is 16, and is
23        ignored otherwise."
24    ::= { dot11STAStatisticsReportEntry 49 }
25
26 dot11STAStatisticsVendorSpecific OBJECT-TYPE
27     SYNTAX OCTET STRING (SIZE(0..255))
28     MAX-ACCESS read-create
29     STATUS current
30     DESCRIPTION
31        "This attribute provides an envelope for any optional vendor specific sub-
32        elements which may be included in a measurement report element. Zero length
33        is the null default for this attribute."
34     DEFVAL { 'H' }
35     ::= { dot11STAStatisticsReportEntry 40-50 }
36
37 dot11STAStatisticsRprtMeasurementMode OBJECT-TYPE
38     SYNTAX INTEGER {
39         success(0),
40         incapableBit(1),
41         refusedBit(2),
42     }
43     MAX-ACCESS read-only
44     STATUS current
45     DESCRIPTION
46        "This attribute indicates the outcome status for the measurement request
47        which generated this measurement report; status is indicated using the fol-
48        lowing reason codes: 1 indicates this STA is incapable of generating the
49        report, 2 indicates this STA is refusing to generate the report, 0 indi-
50        cates the STA successfully carried out the measurement request."
51     DEFVAL { 0 }
52     ::= { dot11STAStatisticsReportEntry 41-51 }
53
54 -- *****
55 -- * End of dot11STAStatisticsReport TABLE
56 -- *****
57
58 -- *****
59 -- * dot11LCIReport TABLE
60 -- *****
61 dot11LCIReportTable OBJECT-TYPE
62     SYNTAX SEQUENCE OF Dot11LCIReportEntry
63     MAX-ACCESS not-accessible
64     STATUS current
65     DESCRIPTION
66        "Group contains the current list of LCI reports that have been received by
67        the MLME. The report tables shall be maintained as FIFO to preserve fresh-
68        ness, thus the rows in this table can be deleted for memory constraints or
69        other implementation constraints determined by the vendor. New rows shall
70        have different RprtIndex values than those deleted within the range limita-
71        tion of the index. One easy way is to monotonically increase RprtIndex for
72        new reports being written in the table."

```

```

1      ::= { dot11RRMReport 6 }
2
3  dot11LCIReportEntry OBJECT-TYPE
4      SYNTAX Dot11LCIReportEntry
5      MAX-ACCESS not-accessible
6      STATUS current
7      DESCRIPTION
8          "An entry in the dot11LCIReportTable
9          Indexed by dot11LCIReportIndex."
10     INDEX { dot11LCIReportIndex }
11     ::= { dot11LCIReportTable 1 }
12
13 Dot11LCIReportEntry ::=
14     SEQUENCE {
15         dot11LCIReportIndex                Unsigned32,
16         dot11LCIReportToken                OCTET STRING,
17         dot11LCIIfIndex                    InterfaceIndex,
18         dot11LCISTAAddress                 MacAddress,
19         dot11LCILatitudeResolution         INTEGER,
20         dot11LCILatitudeInteger            INTEGER,
21         dot11LCILatitudeFraction           INTEGER,
22         dot11LCILongitudeResolution        INTEGER,
23         dot11LCILongitudeInteger           INTEGER,
24         dot11LCILongitudeFraction          INTEGER,
25         dot11LCIAltitudeType               INTEGER,
26         dot11LCIAltitudeResolution         INTEGER,
27         dot11LCIAltitudeInteger            INTEGER,
28         dot11LCIAltitudeFraction           INTEGER,
29         dot11LCIDatum                      INTEGER,
30         dot11LCIAzimuthType                INTEGER,
31         dot11LCIAzimuthResolution          INTEGER,
32         dot11LCIAzimuth                    Integer32,
33         dot11LCIVendorSpecific              OCTET STRING,
34         dot11LCIRprtMeasurementMode        INTEGER}
35
36 dot11LCIReportIndex OBJECT-TYPE
37     SYNTAX Unsigned32
38     MAX-ACCESS not-accessible
39     STATUS current
40     DESCRIPTION
41         "Index for LCI Report elements in dot11LCIReportTable, greater than 0."
42     ::= { dot11LCIReportEntry 1 }
43
44 dot11LCIReportToken OBJECT-TYPE
45     SYNTAX OCTET STRING
46     MAX-ACCESS read-only
47     STATUS current
48     DESCRIPTION
49         "This attribute indicates the token that was indicated in the measurement
50         request that generated this measurement report. This should be an exact
51         match to the original dot11RRMRqstToken attribute. Note that there may be
52         multiple entries in the table that match this value since a single request
53         may generate multiple measurement reports."
54     ::= { dot11LCIReportEntry 2 }
55
56 dot11LCIIfIndex OBJECT-TYPE
57     SYNTAX InterfaceIndex
58     MAX-ACCESS read-only
59     STATUS current
60     DESCRIPTION
61         "Identifies the Interface that this row of LCI Report has been received on"
62     ::= { dot11LCIReportEntry 3 }
63
64 dot11LCISTAAddress OBJECT-TYPE
65     SYNTAX MacAddress
66     MAX-ACCESS read-only
67     STATUS current
68     DESCRIPTION
69         "The MAC address of the STA that returned this LCI Report."
70     ::= { dot11LCIReportEntry 4 }
71
72 dot11LCILatitudeResolution OBJECT-TYPE

```

```

1      SYNTAX INTEGER (0..63)
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "This attribute indicates the latitude resolution as 6 bits indicating the
6          number of valid bits in the fixed-point value of Latitude. This field is
7          derived from IETF RFC-3825, and is accessed big-endian."
8      ::= { dot11LCIReportEntry 5 }
9
10     dot11LCILatitudeInteger OBJECT-TYPE
11         SYNTAX INTEGER (-359..359)
12         MAX-ACCESS read-only
13         STATUS current
14         DESCRIPTION
15             "This attribute indicates the latitude as a 34 bit fixed point value con-
16             sisting of 9 bits of integer and 25 bits of fraction. This field contains
17             the 9 bits of integer portion of Latitude. This field is derived from IETF
18             RFC-3825, and is accessed big-endian."
19         ::= { dot11LCIReportEntry 6 }
20
21     dot11LCILatitudeFraction OBJECT-TYPE
22         SYNTAX INTEGER (-16777215..16777215)
23         MAX-ACCESS read-only
24         STATUS current
25         DESCRIPTION
26             "This attribute indicates the latitude as a 34 bit fixed point value con-
27             sisting of 9 bits of integer and 25 bits of fraction. This field contains
28             the 25 bits of fraction portion of Latitude. This field is derived from
29             IETF RFC-3825, and is accessed big-endian."
30         ::= { dot11LCIReportEntry 7 }
31
32     dot11LCILongitudeResolution OBJECT-TYPE
33         SYNTAX INTEGER (0..63)
34         MAX-ACCESS read-only
35         STATUS current
36         DESCRIPTION
37             "This attribute indicates the longitude resolution as 6 bits indicating the
38             number of valid bits in the fixed-point value of Longitude. This field is
39             derived from IETF RFC-3825, and is accessed big-endian."
40         ::= { dot11LCIReportEntry 8 }
41
42     dot11LCILongitudeInteger OBJECT-TYPE
43         SYNTAX INTEGER (-359..359)
44         MAX-ACCESS read-only
45         STATUS current
46         DESCRIPTION
47             "This attribute indicates the longitude as a 34 bit fixed point value con-
48             sisting of 9 bits of integer and 25 bits of fraction. This field contains
49             the 9 bits of integer portion of Longitude. This field is derived from IETF
50             RFC-3825, and is accessed big-endian."
51         ::= { dot11LCIReportEntry 9 }
52
53     dot11LCILongitudeFraction OBJECT-TYPE
54         SYNTAX INTEGER (-16777215..16777215)
55         MAX-ACCESS read-only
56         STATUS current
57         DESCRIPTION
58             "This attribute indicates the longitude as a 34 bit fixed point value con-
59             sisting of 9 bits of integer and 25 bits of fraction. This field contains
60             the 25 bits of fraction portion of Longitude. This field is derived from
61             IETF RFC-3825, and is accessed big-endian."
62         ::= { dot11LCIReportEntry 10 }
63
64     dot11LCIAltitudeType OBJECT-TYPE
65         SYNTAX INTEGER {
66             meters(1),
67             floors(2) }
68         MAX-ACCESS read-only
69         STATUS current
70         DESCRIPTION
71             "This attribute indicates the altitude Type as four bits encoding the type

```

```

1         of altitude. Codes defined are:meters : in 2s-complement fixed-point 22-bit
2         integer part with 8-bit fraction floors : in 2s-complement fixed-point 22-
3         bit integer part with 8-bit fraction. This field is derived from IETF RFC-
4         3825, and is accessed big-endian."
5         ::= { dot11LCIReportEntry 11 }
6
7     dot11LCIAltitudeResolution OBJECT-TYPE
8         SYNTAX INTEGER (0..63)
9         MAX-ACCESS read-only
10        STATUS current
11        DESCRIPTION
12            "This attribute indicates the altitude resolution as 6 bits indicating the
13            number of valid bits in the altitude. This field is derived from IETF RFC-
14            3825, and is accessed big-endian."
15        ::= { dot11LCIReportEntry 12 }
16
17    dot11LCIAltitudeInteger OBJECT-TYPE
18        SYNTAX INTEGER (-2097151..2097151)
19        MAX-ACCESS read-only
20        STATUS current
21        DESCRIPTION
22            "This attribute indicates the altitude as a 30 bit value defined by the
23            Altitude type field. The field is encoded as a 2s-complement fixed-point
24            22-bit integer Part with 8-bit fraction. This field contains the fixed-
25            point Part of Altitude. This field is derived from IETF RFC-3825, and is
26            accessed big-endian."
27        ::= { dot11LCIReportEntry 13 }
28
29    dot11LCIAltitudeFraction OBJECT-TYPE
30        SYNTAX INTEGER (-127..127)
31        MAX-ACCESS read-only
32        STATUS current
33        DESCRIPTION
34            "This attribute indicates the altitude as a 30 bit value defined by the
35            Altitude type field. The field is encoded as a 2s-complement fixed-point
36            22-bit integer Part with 8-bit fraction. This field contains the fraction
37            part of Altitude. This field is derived from IETF RFC-3825, and is accessed
38            big-endian."
39        ::= { dot11LCIReportEntry 14 }
40
41    dot11LCIDatum OBJECT-TYPE
42        SYNTAX INTEGER (0..255)
43        MAX-ACCESS read-only
44        STATUS current
45        DESCRIPTION
46            "This attribute indicates the datum as an eight-bit value encoding the hor-
47            izontal and vertical references used for the coordinates given in this
48            LCI."
49        ::= { dot11LCIReportEntry 15 }
50
51    dot11LCIAzimuthType OBJECT-TYPE
52        SYNTAX INTEGER {
53            frontSurfaceOfSTA(0),
54            radioBeam(1) }
55        MAX-ACCESS read-only
56        STATUS current
57        DESCRIPTION
58            "This attribute indicates the azimuth Type as a one bit attribute encoding
59            the type of Azimuth. Codes defined are: front surface of STA : in 2s-com-
60            plement fixed-point 9-bit integer; and radio beam : in 2s-complement fixed-
61            point 9-bit integer"
62        ::= { dot11LCIReportEntry 16 }
63
64    dot11LCIAzimuthResolution OBJECT-TYPE
65        SYNTAX INTEGER (0..15)
66        MAX-ACCESS read-only
67        STATUS current
68        DESCRIPTION
69            "This attribute indicates the azimuth Resolution as 4 bits indicating the
70            number of valid bits in the azimuth."
71        ::= { dot11LCIReportEntry 17 }

```

```

1  dot11LCIAzimuth OBJECT-TYPE
2      SYNTAX Integer32
3      MAX-ACCESS read-only
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates the azimuth as a 9 bit value defined by the Azi-
7          muth Type field.The field is encoded as a 2s-complement fixed-point 9-bit
8          integer horizontal angle in degrees from True North."
9      ::= { dot11LCIReportEntry 18 }
10
11 dot11LCIVendorSpecific OBJECT-TYPE
12     SYNTAX OCTET STRING (SIZE(0..255))
13     MAX-ACCESS read-create
14     STATUS current
15     DESCRIPTION
16         "This attribute provides an envelope for any optional vendor specific sub-
17         elements which may be included in a measurement report element. Zero length
18         is the null default for this attribute."
19     DEFVAL { 'H' }
20     ::= { dot11LCIReportEntry 19 }
21
22 dot11LCIRprtMeasurementMode OBJECT-TYPE
23     SYNTAX INTEGER {
24         success(0),
25         incapableBit(1),
26         refusedBit(2),
27     }
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31         "This attribute indicates the outcome status for the measurement request
32         which generated this measurement report; status is indicated using the fol-
33         lowing reason codes: 1 indicates this STA is incapable of generating the
34         report, 2 indicates this STA is refusing to generate the report, 0 indi-
35         cates the STA successfully carried out the measurement request."
36     DEFVAL { 0 }
37     ::= { dot11LCIReportEntry 20 }
38
39 -- *****
40 -- * End of dot11LCIReport TABLE
41 -- *****
42
43 -- *****
44 -- * dot11TransmitStreamReport TABLE
45 -- *****
46
47 dot11TransmitStreamReportTable OBJECT-TYPE
48     SYNTAX SEQUENCE OF Dot11TransmitStreamReportEntry
49     MAX-ACCESS not-accessible
50     STATUS current
51     DESCRIPTION
52         "Group contains the current list of Transmit Delay Metrics reports that
53         have been received by the MLME. The report tables shall be maintained as
54         FIFO to preserve freshness, thus the rows in this table can be deleted for
55         memory constraints or other implementation constraints determined by the
56         vendor. New rows shall have different RprtIndex values than those deleted
57         within the range limitation of the index. One easy way is to monotonically
58         increase RprtIndex for new reports being written in the table."
59     ::= { dot11RRMReport 7 }
60
61 dot11TransmitStreamReportEntry OBJECT-TYPE
62     SYNTAX Dot11TransmitStreamReportEntry
63     MAX-ACCESS not-accessible
64     STATUS current
65     DESCRIPTION
66         "An entry in the dot11TransmitStreamReportTable Indexed by
67         dot11TransmitStreamRprtIndex."
68     INDEX { dot11TransmitStreamRprtIndex }
69     ::= { dot11TransmitStreamReportTable 1 }
70
71 Dot11TransmitStreamReportEntry ::=
72     SEQUENCE {

```



```

1      dot11TransmitStreamRprtIndex                Unsigned32,
2      dot11TransmitStreamRprtRqstToken           OCTET STRING,
3      dot11TransmitStreamRprtIfIndex             InterfaceIndex,
4      dot11TransmitStreamMeasuringSTAAddr        MacAddress,
5      dot11TransmitStreamRprtActualStartTime     TSFType,
6      dot11TransmitStreamRprtMeasurementDuration Unsigned32,
7      dot11TransmitStreamRprtPeerSTAAddress      MacAddress,
8      dot11TransmitStreamRprtTID                 INTEGER,
9      dot11TransmitStreamRprtAverageQueueDelay   Integer32,
10     dot11TransmitStreamRprtAverageTransmitDelay Integer32,
11     dot11TransmitStreamRprtTransmittedMSDUCount Integer32,
12     dot11TransmitStreamRprtMSDUDiscardedCount  Integer32,
13     dot11TransmitStreamRprtMSDUFailedCount     Integer32,
14     dot11TransmitStreamRprtMultipleRetryCount  Integer32,
15     dot11TransmitStreamRprtCFPollsLostCount    Integer32,
16     dot11TransmitStreamRprtBin0Range           INTEGER,
17     dot11TransmitStreamRprtDelayHistogram      OCTET STRING,
18     dot11TransmitStreamRprtReason              INTEGER,
19     dot11TransmitStreamRprtVendorSpecific      OCTET STRING,
20     dot11TransmitStreamRprtMeasurementMode     INTEGER}
21
22 dot11TransmitStreamRprtIndex OBJECT-TYPE
23     SYNTAX Unsigned32
24     MAX-ACCESS not-accessible
25     STATUS current
26     DESCRIPTION
27         "Index for Transmit Delay Metrics Report elements in
28         dot11TransmitStreamReportTable, greater than 0."
29     ::= { dot11TransmitStreamReportEntry 1 }
30
31 dot11TransmitStreamRprtRqstToken OBJECT-TYPE
32     SYNTAX OCTET STRING
33     MAX-ACCESS read-only
34     STATUS current
35     DESCRIPTION
36         "This attribute indicates the request token that was indicated in the mea-
37         surement request that generated this measurement report. This should be an
38         exact match to the original dot11RRMRqstToken attribute. Note that there
39         may be multiple entries in the table that match this value since a single
40         request may generate multiple measurement reports."
41     ::= { dot11TransmitStreamReportEntry 2 }
42
43 dot11TransmitStreamRprtIfIndex OBJECT-TYPE
44     SYNTAX InterfaceIndex
45     MAX-ACCESS read-only
46     STATUS current
47     DESCRIPTION
48         "The InterfaceIndex for this row of TransmitStream Report has been
49         received on."
50     ::= { dot11TransmitStreamReportEntry 3 }
51
52 dot11TransmitStreamMeasuringSTAAddr OBJECT-TYPE
53     SYNTAX MacAddress
54     MAX-ACCESS read-only
55     STATUS current
56     DESCRIPTION
57         "The MAC address of the measuring STA for this row of Transmit Delay Met-
58         rics report."
59     ::= { dot11TransmitStreamReportEntry 4 }
60
61 dot11TransmitStreamRprtActualStartTime OBJECT-TYPE
62     SYNTAX TSFType
63     MAX-ACCESS read-only
64     STATUS current
65     DESCRIPTION
66         "This attribute indicates the TSF value at the time when the measurement
67         started or for a triggered Transmit Stream/Category Measurement report the
68         TSF value at the reporting QoS STA when the trigger condition was met."
69     ::= { dot11TransmitStreamReportEntry 5 }
70
71 dot11TransmitStreamRprtMeasurementDuration OBJECT-TYPE
72     SYNTAX Unsigned32

```

```

1      UNITS "TUs"
2      MAX-ACCESS read-only
3      STATUS current
4      DESCRIPTION
5          "This attribute indicates the duration over which the Transmit Delay Met-
6          rics Report was measured. For a triggered Transmit Stream/Category Measure-
7          ment Report, metrics are reported over a number of transmitted MSDUs rather
8          than a duration, hence Measurement Duration shall be set to 0."
9      ::= { dot11TransmitStreamReportEntry 6 }
10
11     dot11TransmitStreamRprtPeerSTAAddress OBJECT-TYPE
12         SYNTAX MacAddress
13         MAX-ACCESS read-only
14         STATUS current
15         DESCRIPTION
16             "The MAC address present in the Address 1 filed of the measured
17             data frames for this row of Transmit Transmit Stream/Category Measurement
18             report."
19         ::= { dot11TransmitStreamReportEntry 7 }
20
21     dot11TransmitStreamRprtTID OBJECT-TYPE
22         SYNTAX INTEGER(0..16)
23         MAX-ACCESS read-only
24         STATUS current
25         DESCRIPTION
26             "This attribute indicates the TC or TS for which traffic is to be mea-
27             sured. Values 0 through 15 are defined. Values 16-255 are reserved."
28         ::= { dot11TransmitStreamReportEntry 8 }
29
30     dot11TransmitStreamRprtAverageQueueDelay OBJECT-TYPE
31         SYNTAX Integer32
32         UNITS "TUs"
33         MAX-ACCESS read-only
34         STATUS current
35         DESCRIPTION
36             "This attribute indicates the average delay of the frames (MSDUs) that are
37             passed to the MAC during the measurement duration for the indicated desti-
38             nation and the indicated Traffic Identifier. Queue Delay shall be measured
39             from the time the MSDU is passed to the MAC until the transmission starts
40             and shall be expressed in units of TUs."
41         ::= { dot11TransmitStreamReportEntry 9 }
42
43     dot11TransmitStreamRprtAverageTransmitDelay OBJECT-TYPE
44         SYNTAX Integer32
45         UNITS "TUs"
46         MAX-ACCESS read-only
47         STATUS current
48         DESCRIPTION
49             "This attribute indicates the average delay of the frames (MSDUs) that are
50             successfully transmitted during the measurement duration for the indicated
51             destination and the indicated Traffic Identifier. Delay shall be measured
52             from the time the MSDU is passed to the MAC until ACK is received from the
53             intermediate destination."
54         ::= { dot11TransmitStreamReportEntry 10 }
55
56     dot11TransmitStreamRprtTransmittedMSDUCount OBJECT-TYPE
57         SYNTAX Integer32
58         MAX-ACCESS read-only
59         STATUS current
60         DESCRIPTION
61             "This attribute indicates the number of MSDUs to the peer STA for the TC,
62             or TS given by the Traffic Identifier successfully transmitted in the mea-
63             surement duration"
64         ::= { dot11TransmitStreamReportEntry 11 }
65
66     dot11TransmitStreamRprtMSDUDiscardedCount OBJECT-TYPE
67         SYNTAX Integer32
68         MAX-ACCESS read-only
69         STATUS current
70         DESCRIPTION
71             "This attribute indicates the number of MSDUs to the peer STA for the TC,
72             or TS given by the Traffic Identifier discarded due either to the number of

```

```

1         transmit attempts exceeding dot11ShortRetryLimit or dot11LongRetryLimit as
2         appropriate, or due to the MSDU lifetime having been reached"
3         ::= {dot11TransmitStreamReportEntry 12}
4
5 dot11TransmitStreamRprtMSDUFailedCount OBJECT-TYPE
6     SYNTAX Integer32
7     MAX-ACCESS read-only
8     STATUS current
9     DESCRIPTION
10        "This attribute indicates the number of MSDUs to the peer STA for the TC,
11        or TS given by the Traffic Identifier discarded during the measurement
12        duration due to the number of transmit attempts exceeding
13        dot11ShortRetryLimit or dot11LongRetryLimit as appropriate."
14        ::= {dot11TransmitStreamReportEntry 13}
15
16 dot11TransmitStreamRprtMultipleRetryCount OBJECT-TYPE
17     SYNTAX Integer32
18     MAX-ACCESS read-only
19     STATUS current
20     DESCRIPTION
21        "This attribute indicates the number of MSDUs for the TC, or TS given by
22        the Traffic Identifier that are successfully transmitted after more than
23        one retransmission attempt."
24        ::= {dot11TransmitStreamReportEntry 14}
25
26 dot11TransmitStreamRprtCFPollsLostCount OBJECT-TYPE
27     SYNTAX Integer32
28     MAX-ACCESS read-only
29     STATUS current
30     DESCRIPTION
31        "This attribute indicates the number of QoS (+)CF-Poll frames transmitted
32        to the peer STA where there was no response from the QoS STA."
33        ::= {dot11TransmitStreamReportEntry 15}
34
35 dot11TransmitStreamRprtBin0Range OBJECT-TYPE
36     SYNTAX INTEGER
37     UNITS "TUs"
38     MAX-ACCESS read-only
39     STATUS current
40     DESCRIPTION
41        "This attribute indicates the delay range for Bin 0 of the delay histo-
42        gram."
43        ::= { dot11TransmitStreamReportEntry 16 }
44
45 dot11TransmitStreamRprtDelayHistogram OBJECT-TYPE
46     SYNTAX OCTET STRING (SIZE (6))
47     MAX-ACCESS read-only
48     STATUS current
49     DESCRIPTION
50        "This attribute indicates the histogram of delay of the frames (MSDUs) that
51        are successfully transmitted during the measurement duration for the indi-
52        cated Traffic Identifier and the indicated destination. Delay shall be mea-
53        sured from the time the MSDU is passed to the MAC until the ACK is received
54        from the intermediate destination and shall be expressed in units of TUs."
55        ::= { dot11TransmitStreamReportEntry 17 }
56
57 dot11TransmitStreamRprtReason OBJECT-TYPE
58     SYNTAX INTEGER {
59         averageError(0),
60         consecutiveError(1),
61         delayError(2),
62     }
63     MAX-ACCESS read-only
64     STATUS current
65     DESCRIPTION
66        "This attribute indicates the Reason field indicating the reason that the
67        measuring QoS STA sent the Transmit Stream/Category measurement report."
68     DEFVAL { 0 }
69     ::= { dot11TransmitStreamReportEntry 18 }
70
71 dot11TransmitStreamRprtVendorSpecific OBJECT-TYPE
72     SYNTAX OCTET STRING (SIZE(0..255))

```

```

1      MAX-ACCESS read-create
2      STATUS current
3      DESCRIPTION
4          "This attribute provides an envelope for any optional vendor specific sub-
5          elements which may be included in a measurement report element. Zero length
6          is the null default for this attribute."
7      DEFVAL { 'H' }
8      ::= { dot11TransmitStreamReportEntry 19 }
9
10     dot11TransmitStreamRprtMeasurementMode OBJECT-TYPE
11     SYNTAX INTEGER {
12         success(0),
13         incapableBit(1),
14         refusedBit(2),
15     }
16     MAX-ACCESS read-only
17     STATUS current
18     DESCRIPTION
19         "This attribute indicates the outcome status for the measurement request
20         which generated this measurement report; status is indicated using the fol-
21         lowing reason codes: 1 indicates this STA is incapable of generating the
22         report, 2 indicates this STA is refusing to generate the report, 0 indi-
23         cates the STA successfully carried out the measurement request."
24     DEFVAL { 0 }
25     ::= { dot11TransmitStreamReportEntry 20 }
26
27     -- *****
28     -- * End of dot11TransmitStreamReport TABLE
29     -- *****
30
31     -- *****
32     -- * Radio Resource Measurement Configuration Information
33     -- *****
34     dot11RRMConfig OBJECT IDENTIFIER ::= { dot11RadioResourceMeasurement 3 }
35
36     -- *****
37     -- * dot11APChannelReport TABLE
38     -- *****
39     dot11APChannelReportTable OBJECT-TYPE
40     SYNTAX SEQUENCE OF Dot11APChannelReportEntry
41     MAX-ACCESS not-accessible
42     STATUS current
43     DESCRIPTION
44         "AP Channel Report information, in tabular form."
45     ::= { dot11RRMConfig 1 }
46
47     dot11APChannelReportEntry OBJECT-TYPE
48     SYNTAX Dot11APChannelReportEntry
49     MAX-ACCESS not-accessible
50     STATUS current
51     DESCRIPTION
52         "An entry in the dot11APChannelReportTable. Each entry in the table is
53         indexed by dot11APChannelReportIndex."
54     INDEX { dot11APChannelReportIndex }
55     ::= { dot11APChannelReportTable 1 }
56
57     Dot11APChannelReportEntry ::=
58     SEQUENCE {
59         dot11APChannelReportIndex                Unsigned32,
60         dot11APChannelReportIfIndex              InterfaceIndex,
61         dot11APChannelReportRegulatoryClass      INTEGER,
62         dot11APChannelReportChannelList         OCTET STRING}
63
64     dot11APChannelReportIndex OBJECT-TYPE
65     SYNTAX Unsigned32
66     MAX-ACCESS read-only
67     STATUS current
68     DESCRIPTION
69         "Index for AP channel report entry in dot11APChannelReportTable, greater
70         than 0."
71     ::= { dot11APChannelReportEntry 1 }

```

```

1  dot11APChannelReportIfIndex OBJECT-TYPE
2      SYNTAX InterfaceIndex
3      MAX-ACCESS read-create
4      STATUS current
5      DESCRIPTION
6          "The ifIndex this row of AP channel report entry belongs to."
7      ::= { dot11APChannelReportEntry 2 }
8
9  dot11APChannelReportRegulatoryClass OBJECT-TYPE
10     SYNTAX INTEGER(1..255)
11     MAX-ACCESS read-create
12     STATUS current
13     DESCRIPTION
14         "This attribute indicates the channel set for this AP Channel Report. Country, Regulatory Class and Channel Number together specify the channel frequency and spacing for this measurement request. Valid values of Regulatory Class are shown in Annex J."
15     REFERENCE
16         "Annex J"
17     ::= { dot11APChannelReportEntry 3 }
18
19  dot11APChannelReportChannelList OBJECT-TYPE
20     SYNTAX OCTET STRING (SIZE(0..255))
21     MAX-ACCESS read-create
22     STATUS current
23     DESCRIPTION
24         "This attribute lists the specific channels in this AP Channel Report. Zero length is the null default for this attribute. Each octet indicates a different channel within the indicated Regulatory Class. This list of channels is the Channel List in the AP Channel Report element described in 7.3.2.36. "
25     DEFVAL { 'H' }
26     ::= { dot11APChannelReportEntry 4 }
27
28  -- *****
29  -- * End of dot11APChannelReportTable TABLE
30  -- *****
31
32  -- *****
33  -- * dot11RRMNeighborReport TABLE
34  -- *****
35
36  dot11RRMNeighborReportNextIndex OBJECT-TYPE
37     SYNTAX INTEGER(0..255)
38     MAX-ACCESS not-accessible
39     STATUS current
40     DESCRIPTION
41         "Identifies the next available index for managing the Neighbor Report table. If this attribute is 0, it indicates that the Neighbor Report feature is not configurable via SNMP, or the table is full and new rows cannot be accepted."
42     ::= { dot11RRMConfig 2 }
43
44  dot11RRMNeighborReportTable OBJECT-TYPE
45     SYNTAX SEQUENCE OF Dot11RRMNeighborReportEntry
46     MAX-ACCESS not-accessible
47     STATUS current
48     DESCRIPTION
49         "Group contains pertinent information on a collection of BSSID's that are candidates to which STA's can roam. The rows are created using createAndWait method and fill in the attributes. When the rowStatus is set to active, the row can be included in Neighbor Report IEs. If there is an error, the rowStatus shall be set to notReady by SME. Since this table contains all Neighbor Report IE entries for all interfaces enabled with the Neighbor Report feature, it is possible to have too many entries for one interface, while still remaining under the MaxTableSize. In that situation, SME shall only include Neighbor Report entries with lower dot11RRMNeighborReportIfIndex up to the maximum possible number of entries for a particular interface identified by ifIndex. SME shall set the rowStatus to notInService for those rows that cannot be included in the Neighbor Report element for that interface."
50     ::= { dot11RRMConfig 3 }

```

```

1  dot11RRMNeighborReportEntry OBJECT-TYPE
2      SYNTAX Dot11RRMNeighborReportEntry
3      MAX-ACCESS not-accessible
4      STATUS current
5      DESCRIPTION
6          "An entry in the dot11RRMNeighborReportTable"
7      INDEX { dot11RRMNeighborReportIndex }
8      ::= { dot11RRMNeighborReportTable 1 }
9
10 Dot11RRMNeighborReportEntry ::=
11     SEQUENCE {
12         dot11RRMNeighborReportIndex                Unsigned32,
13         dot11RRMNeighborReportIfIndex              InterfaceIndex,
14         dot11RRMNeighborReportBSSID                MacAddress,
15         dot11RRMNeighborReportAPReachability        INTEGER,
16         dot11RRMNeighborReportSecurity              TruthValue,
17         dot11RRMNeighborReportCapSpectrumMgmt       TruthValue,
18         dot11RRMNeighborReportCapQoS                TruthValue,
19         dot11RRMNeighborReportCapAPSD               TruthValue,
20         dot11RRMNeighborReportCapRRM                TruthValue,
21         dot11RRMNeighborReportCapDelayBlockAck      TruthValue,
22         dot11RRMNeighborReportCapImmediateBlockAck  TruthValue,
23         dot11RRMNeighborReportKeyScope              TruthValue,
24         dot11RRMNeighborReportRegulatoryClass        INTEGER,
25         dot11RRMNeighborReportChannelNumber          INTEGER,
26         dot11RRMNeighborReportPhyType                INTEGER,
27         dot11RRMNeighborReportNeighborTSFInfo        OCTET STRING,
28         dot11RRMNeighborReportPilotInterval          Unsigned32,
29         dot11RRMNeighborReportPilotMultipleBSSID     OCTET STRING,
30         dot11RRMNeighborReportRRMEnabledCapabilities OCTET STRING,
31         dot11RRMNeighborReportVendorSpecificdot11RRMNeighborReportBSSTransitCandPre
32         ference                                       OCTET STRING,
33         dot11RRMNeighborReportBSSTerminationTSF      OCTET STRING,
34         dot11RRMNeighborReportBSSTerminationDuration INTEGER,
35         dot11RRMNeighborReportVendorSpecific          OCTET STRING,
36         dot11RRMNeighborReportRowStatus              RowStatus}
37
38 dot11RRMNeighborReportIndex OBJECT-TYPE
39     SYNTAX Unsigned32
40     MAX-ACCESS not-accessible
41     STATUS current
42     DESCRIPTION
43         "Index for Neighbor Report configuration table in
44         dot11RRMNeighborReportTable, greater than 0."
45     ::= { dot11RRMNeighborReportEntry 1 }
46
47 dot11RRMNeighborReportIfIndex OBJECT-TYPE
48     SYNTAX InterfaceIndex
49     MAX-ACCESS read-create
50     STATUS current
51     DESCRIPTION
52         "The ifIndex for this row of Neighbor Report entry belongs to."
53     ::= { dot11RRMNeighborReportEntry 2 }
54
55 dot11RRMNeighborReportBSSID OBJECT-TYPE
56     SYNTAX MacAddress
57     MAX-ACCESS read-write
58     STATUS current
59     DESCRIPTION
60         "This attribute indicates the BSSID of the AP described by this row of
61         Neighbor Report."
62     ::= { dot11RRMNeighborReportEntry 3 }
63
64 dot11RRMNeighborReportAPReachability OBJECT-TYPE
65     SYNTAX INTEGER {
66         notReachable(1),
67         unknown(2),
68         reachable(3)
69     }
70     MAX-ACCESS read-create
71     STATUS current
72     DESCRIPTION

```

```

1           "This attribute indicates the reachability of the AP represented by the
2           dot11NeighborReportBSSID."
3           ::= { dot11RRMNeighborReportEntry 4 }
4
5 dot11RRMNeighborReportSecurity OBJECT-TYPE
6     SYNTAX TruthValue
7     MAX-ACCESS read-create
8     STATUS current
9     DESCRIPTION
10        "This attribute, when TRUE, indicates that the neighbor AP identified by
11        this BSSID supports the same security provisioning as used by the AP which
12        provided this neighbor report. This attribute, when False, indicates
13        either that the neighbor AP identified by this BSSID does not support the
14        same security provisioning or that the security information for this neigh-
15        bor AP is not available at this time."
16        ::= { dot11RRMNeighborReportEntry 5 }
17
18 dot11RRMNeighborReportCapSpectrumMgmt OBJECT-TYPE
19     SYNTAX TruthValue
20     MAX-ACCESS read-create
21     STATUS current
22     DESCRIPTION
23        "This attribute indicates the spectrum management capability of the AP rep-
24        resented by dot11NeighborReportBSSID."
25        ::= { dot11RRMNeighborReportEntry 6 }
26
27 dot11RRMNeighborReportCapQoS OBJECT-TYPE
28     SYNTAX TruthValue
29     MAX-ACCESS read-write
30     STATUS current
31     DESCRIPTION
32        "This attribute indicates the QoS capability of the AP represented by
33        dot11NeighborReportBSSID."
34        ::= { dot11RRMNeighborReportEntry 7 }
35
36 dot11RRMNeighborReportCapAPSD OBJECT-TYPE
37     SYNTAX TruthValue
38     MAX-ACCESS read-create
39     STATUS current
40     DESCRIPTION
41        "This attribute indicates the APSD capability of the AP represented by
42        dot11NeighborReportBSSID."
43        ::= { dot11RRMNeighborReportEntry 8 }
44
45 dot11RRMNeighborReportCapRRM OBJECT-TYPE
46     SYNTAX TruthValue
47     MAX-ACCESS read-create
48     STATUS current
49     DESCRIPTION
50        "This attribute indicates the RRM capability of the AP represented by
51        dot11NeighborReportBSSID."
52        ::= { dot11RRMNeighborReportEntry 9 }
53
54 dot11RRMNeighborReportCapDelayBlockAck OBJECT-TYPE
55     SYNTAX TruthValue
56     MAX-ACCESS read-create
57     STATUS current
58     DESCRIPTION
59        "This attribute indicates the Delayed BlockAck capability of the AP repre-
60        sented by dot11NeighborReportBSSID."
61        ::= { dot11RRMNeighborReportEntry 10 }
62
63 dot11RRMNeighborReportCapImmediateBlockAck OBJECT-TYPE
64     SYNTAX TruthValue
65     MAX-ACCESS read-create
66     STATUS current
67     DESCRIPTION
68        "This attribute indicates the Immediate BlockAck capability of the AP rep-
69        resented by dot11NeighborReportBSSID."
70        ::= { dot11RRMNeighborReportEntry 11 }
71
72 dot11RRMNeighborReportKeyScope OBJECT-TYPE

```

```

1      SYNTAX TruthValue
2      MAX-ACCESS read-create
3      STATUS current
4      DESCRIPTION
5          "This attribute, when TRUE, indicates the neighbor AP identified by this
6          BSSID has the same authenticator as the AP which provided this neighbor
7          report. This attribute, when FALSE, indicates that the the neighbor AP
8          identified by this BSSID has a different authenticator or that authentica-
9          tor information is not available."
10     ::= { dot11RRMNeighborReportEntry 12 }
11
12 dot11RRMNeighborReportRegulatoryClass OBJECT-TYPE
13     SYNTAX INTEGER(1..255)
14     MAX-ACCESS read-create
15     STATUS current
16     DESCRIPTION
17         "This attribute indicates the channel set for this Neighbor Report entry.
18         Country, Regulatory Class and Channel Number together specify the channel
19         frequency and spacing for this measurement request. Valid values of Regula-
20         tory Class are shown in Annex J."
21     REFERENCE
22         "Annex J"
23     ::= { dot11RRMNeighborReportEntry 13 }
24
25 dot11RRMNeighborReportChannelNumber OBJECT-TYPE
26     SYNTAX INTEGER (1..255)
27     MAX-ACCESS read-create
28     STATUS current
29     DESCRIPTION
30         "This attribute indicates the current operating channel of the AP repre-
31         sented by the dot11NeighborReportBSSID. The Channel Number is only defined
32         within the indicated Regulatory Class for this Neighbor Report entry."
33     ::= { dot11RRMNeighborReportEntry 14 }
34
35 dot11RRMNeighborReportPhyType OBJECT-TYPE
36     SYNTAX INTEGER {
37         fhss(1),
38         dsss(2),
39         irbaseband(3),
40         ofdm(4),
41         hrdsss(5),
42         erp(6)
43     }
44     UNITS "dot11PHYType"
45     MAX-ACCESS read-create
46     STATUS current
47     DESCRIPTION
48         "This attribute indicates the PHY Type of the neighbor AP identified by
49         this BSSID."
50     ::= { dot11RRMNeighborReportEntry 15 }
51
52 dot11RRMNeighborReportNeighborTSFInfo OBJECT-TYPE
53     SYNTAX OCTET STRING (SIZE (6))
54     MAX-ACCESS read-create
55     STATUS current
56     DESCRIPTION
57         "This attribute indicates TSF timing information for the neighbor AP iden-
58         tified by this BSSID. The TSF timing information includes the TSF Offset
59         and the Beacon Interval, as defined in clause 7.3.2.37."
60     ::= { dot11RRMNeighborReportEntry 16 }
61
62 dot11RRMNeighborReportPilotInterval OBJECT-TYPE
63     SYNTAX Unsigned32
64     UNITS "TUs"
65     MAX-ACCESS read-create
66     STATUS current
67     DESCRIPTION
68         "This attribute indicates Measurement Pilot Interval for the neighbor AP
69         identified by this BSSID, as defined in clause 7.3.1.18."
70     ::= { dot11RRMNeighborReportEntry 17 }
71
72 dot11RRMNeighborReportPilotMultipleBSSID OBJECT-TYPE

```



```

1      SYNTAX OCTET STRING (SIZE(1))
2      UNITS "BSSID LSBs"
3      MAX-ACCESS read-create
4      STATUS current
5      DESCRIPTION
6          "This attribute indicates n, where 2n is the maximum number of BSSIDs in
7          the multiple BSSID set, as described in clause 11.10.11."
8      ::= { dot11RRMNeighborReportEntry 18 }
9
10     dot11RRMNeighborReportRRMEnabledCapabilities OBJECT-TYPE
11     SYNTAX OCTET STRING (SIZE(7))
12     MAX-ACCESS read-create
13     STATUS current
14     DESCRIPTION
15         "This attribute indicates the detailed enabled capabilities of the AP rep-
16         resented by the dot11NeighborReportBSSID, as defined in clause 7.3.2.45."
17     REFERENCE
18         "IEEE 802.11 - Clause 7.3.2.45"
19     ::= { dot11RRMNeighborReportEntry 19 }
20
21     dot11RRMNeighborReportBSSTransitCandPreference OBJECT-TYPE
22     SYNTAX INTEGER (1..255)
23     MAX-ACCESS read-create
24     STATUS current
25     DESCRIPTION
26         "This attribute indicates indicates the network preference for BSS transi-
27         tion to the BSS listed in this BSS Transition Candidate List Entries field
28         in the BSS Transition Management Request frame, BSS Transition Management
29         Query frame and BSS Transition Management Response frame. The Preference
30         field value is a number ranging from 0 to 255 indicating an ordering of
31         preferences for the BSS transition candidates for this STA. The value 0
32         indicates an excluded BSS. The values 1-255 the preferred relative order-
33         ing of BSSs, with 255 indicating the most preferred candidate and 1 indi-
34         cating the least preferred candidate. Additional details describing use of
35         the Preference field are provided in 11.22.6.3. "
36     ::= { dot11RRMNeighborReportEntry 20 }
37
38     dot11RRMNeighborReportBSSTerminationTSF OBJECT-TYPE
39     SYNTAX OCTET STRING (SIZE (6))
40     MAX-ACCESS read-create
41     STATUS current
42     DESCRIPTION
43         "This attribute indicates the value of the TSF counter when the BSS termi-
44         nation will occur in the future. A BSS Termination TSF field value of 0
45         indicates that termination of the BSS will occur imminently. Prior to ter-
46         mination of the BSS, all associated STAs are disassociated by the AP."
47     ::= { dot11RRMNeighborReportEntry 21 }
48
49     dot11RRMNeighborReportBSSTerminationDuration OBJECT-TYPE
50     SYNTAX INTEGER (1..65535)
51     UNITS "minutes"
52     MAX-ACCESS read-create
53     STATUS current
54     DESCRIPTION
55         "This attribute indicates indicates the number of minutes for which the BSS
56         is not present. The Duration field value of 0 is reserved. The Duration
57         field value is set to 65535 when the BSS is terminated for a period longer
58         than or equal to 65535 minutes."
59     ::= { dot11RRMNeighborReportEntry 19 22 }
60
61     dot11RRMNeighborReportVendorSpecific 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     ::= { dot11RRMNeighborReportEntry 20 23 }
71
72     dot11RRMNeighborReportRowStatus OBJECT-TYPE

```

```

1      SYNTAX RowStatus
2      MAX-ACCESS read-create
3      STATUS current
4      DESCRIPTION
5          "Contains the row status of the Neighbor Report, essentially used for indi-
6          cating whether the row has all valid attributes filled in. Then set to
7          active to be used in Neighbor Report information elements. If any param-
8          eter is invalid, the SME shall set this attribute back to notReady. It is
9          the responsibility of the manager to correct the parameters."
10     ::= { dot11RRMNeighborReportEntry 21-24 }
11
12     -- *****
13     -- * End of dot11RRMNeighborReport TABLE
14     -- *****
15
16 dot11SMTRRMRequest OBJECT-GROUP
17     OBJECTS { dot11RRMRqstIndex,
18               dot11RRMRqstRowStatus,
19               dot11RRMRqstToken,
20               dot11RRMRqstRepetitions,
21               dot11RRMRqstIfIndex,
22               dot11RRMRqstType,
23               dot11RRMRqstTargetAdd,
24               dot11RRMRqstTimeStamp,
25               dot11RRMRqstChanNumber,
26               dot11RRMRqstRegulatoryClass,
27               dot11RRMRqstRndInterval,
28               dot11RRMRqstDuration,
29               dot11RRMRqstParallel,
30               dot11RRMRqstEnable,
31               dot11RRMRqstRequest,
32               dot11RRMRqstReport,
33               dot11RRMRqstDurationMandatory,
34               dot11RRMRqstBeaconRqstMode,
35               dot11RRMRqstBeaconRqstDetail,
36               dot11RRMRqstFrameRqstType,
37               dot11RRMRqstBssid,
38               dot11RRMRqstSSID,
39               dot11RRMRqstBeaconReportingCondition,
40               dot11RRMRqstBeaconThresholdOffset,
41               dot11RRMRqstSTASatRqstGroupID,
42               dot11RRMRqstLCIRqstSubject,
43               dot11RRMRqstLCILatitudeResolution,
44               dot11RRMRqstLCILongitudeResolution,
45               dot11RRMRqstLCIAltitudeResolution,
46               dot11RRMRqstLCIAzimuthType,
47               dot11RRMRqstLCIAzimuthResolution,
48               dot11RRMRqstPauseTime,
49               dot11RRMRqstTransmitStreamPeerQSTAAAddress,
50               dot11RRMRqstTransmitStreamTrafficIdentifier,
51               dot11RRMRqstTransmitStreamBin0Range,
52               dot11RRMRqstTrigdQoSaverageCondition,
53               dot11RRMRqstTrigdQoSconsecutiveCondition,
54               dot11RRMRqstTrigdQoSdelayCondition,
55               dot11RRMRqstTrigdQoSaverageThreshold,
56               dot11RRMRqstTrigdQoSconsecutiveThreshold,
57               dot11RRMRqstTrigdQoSdelayThresholdRange,
58               dot11RRMRqstTrigdQoSdelayThreshold,
59               dot11RRMRqstTrigdQoSmeasurementCount,
60               dot11RRMRqstTrigdQoStimeout,
61               dot11RRMRqstChannelLoadReportingCondition,
62               dot11RRMRqstChannelLoadReference,
63               dot11RRMRqstNoiseHistogramReportingCondition,
64               dot11RRMRqstAnpiReference,
65               dot11RRMRqstAPChannelReport,
66               dot11RRMRqstSTASatPeerSTAAddress,
67               dot11RRMRqstFrameTransmitterAddress,
68               dot11RRMRqstVendorSpecific }
69
70     STATUS current
71     DESCRIPTION
72         "The SMTRRMRequest package is a set of attributes that shall be present

```

```

1         if the STA supports the Radio Measurement service."
2         ::= { dot11Groups 37 }
3
4 dot11SMTRRMReport OBJECT-GROUP
5     OBJECTS {
6         dot11ChannelLoadRprtIndex,
7         dot11ChannelLoadRprtRqstToken,
8         dot11ChannelLoadRprtIfIndex,
9         dot11ChannelLoadMeasuringSTAAddr,
10        dot11ChannelLoadRprtChanNumber,
11        dot11ChannelLoadRprtRegulatoryClass,
12        dot11ChannelLoadRprtActualStartTime,
13        dot11ChannelLoadRprtMeasurementDuration,
14        dot11ChannelLoadRprtChannelLoad,
15        dot11ChannelLoadRprtVendorSpecific,
16        dot11ChannelLoadRprtMeasurementMode,
17        dot11NoiseHistogramRprtIndex,
18        dot11NoiseHistogramRprtRqstToken,
19        dot11NoiseHistogramRprtIfIndex,
20        dot11NoiseHistogramMeasuringSTAAddr,
21        dot11NoiseHistogramRprtChanNumber,
22        dot11NoiseHistogramRprtRegulatoryClass,
23        dot11NoiseHistogramRprtActualStartTime,
24        dot11NoiseHistogramRprtMeasurementDuration,
25        dot11NoiseHistogramRprtAntennaID,
26        dot11NoiseHistogramRprtANPI,
27        dot11NoiseHistogramRprtIPIDensity0,
28        dot11NoiseHistogramRprtIPIDensity1,
29        dot11NoiseHistogramRprtIPIDensity2,
30        dot11NoiseHistogramRprtIPIDensity3,
31        dot11NoiseHistogramRprtIPIDensity4,
32        dot11NoiseHistogramRprtIPIDensity5,
33        dot11NoiseHistogramRprtIPIDensity6,
34        dot11NoiseHistogramRprtIPIDensity7,
35        dot11NoiseHistogramRprtIPIDensity8,
36        dot11NoiseHistogramRprtIPIDensity9,
37        dot11NoiseHistogramRprtIPIDensity10,
38        dot11NoiseHistogramRprtVendorSpecific,
39        dot11NoiseHistogramRprtMeasurementMode,
40        dot11BeaconRprtIndex,
41        dot11BeaconRprtRqstToken,
42        dot11BeaconRprtIfIndex,
43        dot11BeaconMeasuringSTAAddr,
44        dot11BeaconRprtChanNumber,
45        dot11BeaconRprtRegulatoryClass,
46        dot11BeaconRprtActualStartTime,
47        dot11BeaconRprtMeasurementDuration,
48        dot11BeaconRprtPhyType,
49        dot11BeaconRprtReportedFrameType,
50        dot11BeaconRprtRCPI,
        dot11BeaconRprtRSNI,
        dot11BeaconRprtBSSID,
        dot11BeaconRprtAntennaID,
        dot11BeaconRprtParentTSF,
        dot11BeaconRprtReportedFrameBody,
        dot11BeaconRprtVendorSpecific,
        dot11BeaconRprtMeasurementMode,
        dot11FrameRprtIndex,
        dot11FrameRprtIfIndex,
        dot11FrameRprtRqstToken,
        dot11FrameRprtChanNumber,
        dot11FrameRprtRegulatoryClass,
        dot11FrameRprtActualStartTime,
        dot11FrameRprtMeasurementDuration,
        dot11FrameRprtTransmitSTAAddress,
        dot11FrameRprtBSSID,
        dot11FrameRprtPhyType,
        dot11FrameRprtAvgRCPI,
        dot11FrameRprtRSNI,
        dot11FrameRprtLastRCPI,
        dot11FrameRprtAntennaID,
        dot11FrameRprtNumberFrames,
        dot11FrameRprtVendorSpecific,

```

```

1      dot11FrameRptMeasurementMode,
2      dot11STAStatisticsReportIndex,
3      dot11STAStatisticsReportToken,
4      dot11STAStatisticsIfIndex,
5      dot11STAStatisticsSTAAddress,
6      dot11STAStatisticsMeasurementDuration,
7      dot11STAStatisticsGroupID,
8      dot11STAStatisticsTransmittedFragmentCount,
9      dot11STAStatisticsMulticastTransmittedFrameCount,
10     dot11STAStatisticsFailedCount,
11     dot11STAStatisticsRetryCount,
12     dot11STAStatisticsMultipleRetryCount,
13     dot11STAStatisticsFrameDuplicateCount,
14     dot11STAStatisticsRTSSuccessCount,
15     dot11STAStatisticsRTSFailureCount,
16     dot11STAStatisticsACKFailureCount,
17     dot11STAStatisticsQosTransmittedFragmentCount,
18     dot11STAStatisticsQosFailedCount,
19     dot11STAStatisticsQosRetryCount,
20     dot11STAStatisticsQosMultipleRetryCount,
21     dot11STAStatisticsQosFrameDuplicateCount,
22     dot11STAStatisticsQosRTSSuccessCount,
23     dot11STAStatisticsQosRTSFailureCount,
24     dot11STAStatisticsQosACKFailureCount,
25     dot11STAStatisticsQosReceivedFragmentCount,
26     dot11STAStatisticsQosTransmittedFrameCount,
27     dot11STAStatisticsQosDiscardedFrameCount,
28     dot11STAStatisticsQosMPDUsReceivedCount,
29     dot11STAStatisticsQosRetriesReceivedCount,
30     dot11STAStatisticsReceivedFragmentCount,
31     dot11STAStatisticsMulticastReceivedFrameCount,
32     dot11STAStatisticsFCSErrorCount,
33     dot11STAStatisticsTransmittedFrameCount,
34     dot11STAStatisticsAPAverageAccessDelay,
35     dot11STAStatisticsAverageAccessDelayBestEffort,
36     dot11STAStatisticsAverageAccessDelayBackGround,
37     dot11STAStatisticsAverageAccessDelayVIdео,
38     dot11STAStatisticsAverageAccessDelayVоIce,
39     dot11STAStatisticsStationCount,
40     dot11STAStatisticsChannelUtilization,
41     dot11STAStatisticsVendorSpecific,
42     dot11STAStatisticsRrptMeasurementMode,
43     dot11LCIReportIndex,
44     dot11LCIReportToken,
45     dot11LCIIfIndex,
46     dot11LCISTAAddress,
47     dot11LCILatitudeResolution,
48     dot11LCILatitude,
49     dot11LCILatitudeFraction,
50     dot11LCILongitudeResolution,
51     dot11LCILongitude,
52     dot11LCILongitudeFraction,
53     dot11LCIAltitudeType,
54     dot11LCIAltitudeResolution,
55     dot11LCIAltitude,
56     dot11LCIAltitudeFraction,
57     dot11LCIDatum,
58     dot11LCIAzimuthType,
59     dot11LCIAzimuthResolution,
60     dot11LCIAzimuth,
61     dot11LCIRrptVendorSpecific,
62     dot11LCIRrptMeasurementMode,
63     dot11TransmitStreamRrptIndex,
64     dot11TransmitStreamRrptRqstToken,
65     dot11TransmitStreamRrptIfIndex,
66     dot11TransmitStreamMeasuringSTAAddr,
67     dot11TransmitStreamRrptActualStartTime,
68     dot11TransmitStreamRrptMeasurementDuration,
69     dot11TransmitStreamRrptPeerSTAAddress,
70     dot11TransmitStreamRrptTID,
71     dot11TransmitStreamRrptAverageQueueDelay,
72     dot11TransmitStreamRrptAverageTransmitDelay,

```

```

1      dot11TransmitStreamRprtTransmittedMSDUCount,
2      dot11TransmitStreamRprtMSDUDiscardedCount,
3      dot11TransmitStreamRprtMSDUFailedCount,
4      dot11TransmitStreamRprtMultipleRetryCount,
5      dot11TransmitStreamRprtCFPollsLostCount,
6      dot11TransmitStreamRprtBin0Range,
7      dot11TransmitStreamRprtDelayHistogram,
8      dot11TransmitStreamRprtReason,
9      dot11TransmitStreamRprtVendorSpecific,
10     dot11TransmitStreamRprtMeasurementMode
11     }
12     STATUS current
13     DESCRIPTION
14         "The SMTRRMReport package is a set of attributes that shall be present
15         if the STA supports the Radio Measurement service."
16     ::= { dot11Groups 38 }
17
18     dot11SMTRRMConfig OBJECT-GROUP
19         OBJECTS { dot11APChannelReportIndex,
20                 dot11APChannelReportIfIndex,
21                 dot11APChannelReportRegulatoryClass,
22                 dot11APChannelReportChannelList,
23                 dot11RRMNeighborReportIndex,
24                 dot11RRMNeighborReportIfIndex,
25                 dot11RRMNeighborReportBSSID,
26                 dot11RRMNeighborReportReachability,
27                 dot11RRMNeighborReportSecurity,
28                 dot11RRMNeighborReportCapSpectrumMgmt,
29                 dot11RRMNeighborReportCapQoS,
30                 dot11RRMNeighborReportCapAPSD,
31                 dot11RRMNeighborReportCapRRM,
32                 dot11RRMNeighborReportCapDelayBlockAck,
33                 dot11RRMNeighborReportCapImmediateBlockAck,
34                 dot11RRMNeighborReportKeyScope,
35                 dot11RRMNeighborReportChannelNumber,
36                 dot11RRMNeighborReportRegulatoryClass,
37                 dot11RRMNeighborReportPhyType,
38                 dot11RRMNeighborReportNeighborTSFInfo,
39                 dot11RRMNeighborReportPilotPeriod,
40                 dot11RRMNeighborReportPilotMultipleBSSID,
41                 dot11RRMNeighborReportRRMEnabledCapabilities,
42                 dot11RRMNeighborReportVendorSpecific,
43                 dot11RRMNeighborReportRowStatus }
44     STATUS current
45     DESCRIPTION
46         "The SMTRRMConfig package is a set of attributes that shall be present
47         if the STA supports the Radio Measurement service."
48     ::= { dot11Groups 39 }
49
50

```