IEEE P802.11  
Wireless LANs

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| 802.11  IEEE P802.11REVmd D2.1 Mandatory Draft Review (MDR) Report | | | | |
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**Abstract**

This document contains the report of the 802.11REVmc Mandatory Draft Review.

R0: initial version – section headings with assignments.

R1: input from Emily, Yongho, Mark, Edward, Carol, Joe

R2: input from Menzo

# Introduction

## Purpose of this document

This document is the report from the group of volunteers that participated in the P802.11REVmd/D2.1 mandatory draft review.

This document contains recommendations for changes to REVmd to bring it into improved compliance to IEEE-SA and WG11 style.

The recommended changes need to be reviewed by TGmd and approved, or ownership of the issues taken by TGmd.

## Process / references

The MDR process is described in:

* 11-11/615r5 – Mandatory Draft Review process

And references:

* 11-09/1034r12 – 802.11 Editorial Style Guide

A setup meeting was held, and review topics identified and assigned to volunteers. The volunteers provided their review comments, which have been compiled into this document, with some editorial changes.

## Acknowledgements

The 802.11 technical editors (Robert Stacey and Peter Ecclesine) gratefully acknowledge the work and contribution of:

* Joseph Levy
* Carol Ansley
* Menzo Wentink
* Bahar Sadeghi
* Mark Hamilton
* Yongho Seok
* Emily Qi
* Edward Au

# Findings

## Style

### Style Gude 2.1 – Frames

Emily

780.38, 846.4 : remove underline.

809.34: delete the second “Bits:”, and change the first “Bits” to “Bits:”

919.25: line should be a “thin” line.

960.2: there should be a space between B0B1, B2B3, etc... Add some spaces between Bs.

1035.2: change “Map (see Figure 9-225 (Map fieldformat))” to “Map”

1035.23. 1035.28:

Change “OFDM preamble bit” to “OFDM Preamble bit”

1035.43: change “Orthogonal frequency division multiplexing (OFDM) Preamble” to “OFDM Preamble”

1035.42: add bit locations on the top of the figure: “B0/B1/B2/B3/B4/B5 B7”

1035.48: change “Bit/0/1/2/3/4/5-7” to “Bits:/1/1/1/1/1/3”.

1055.35: change “LCI field” to”LCI”.

1082.56: change “Channel Map (see Figure 9-286 (Channel Map field format))” to “Channel Map”.

See requirements in 2.17 for the following changes.

Since “Operating Channel Validation Capable” are used only 2 times in the draft, its abbreviation should be deleted:

* At 211.21: delete “OCVC operating channel validation capable”.
* At 1093.21, change “Operating Channel Validation Capable (OCVC)” to “Operating Channel Validation Capable”.

Since “management frame protection required” are used only 5 times in the draft, its Abbreviation should be deleted:

* At 210.26: delete “MFPR management frame protection required”
* At 1093.13, 1094.17, 1858.13,2589.25: Change “Management Frame Protection Required (MFPR)” to “Management Frame Protection Required”.

Although theabbreviation of “management frame protection capable” is defined in 3.4, 4 out of 8 instances still use the full term. To keep it consistant with “management frame protection required”, delete its abbreviation.

* At 210.25: delete “MFPC management frame protection capable”
* At 1093.13, 1094.25, 1858.12, 2589.25: Change “Management Frame Protection Capable (MFPC)” to “Management Frame Protection Capable”.

1141.35: change line to a thin line.

1233.62: move “s:” to the same line with “Octet”.

1234.7: delete “Bits:”.

1234.13: at the bottom of the figure, add “Bits:/4/1/1/1/1”

1236.18: delete “Bits:”.

1236.22: at the bottom of the figure, add “Bits:/7/1”

1240.2: delete “Bits:”.

1240.5: at the bottom of the figure, add “Bits:/4/4”

1246.7, change “Congestion Notification Duration Timer” to “Congestion Notification Duration”, 4 instances.

1573.38, at the top of the figure, add bit locations: “B0/B1/B2/B3/B4/B5 B7”.

1573.43 change “Bits:/0/1/2/3/4/5-7” to “Bits:/1/1/1/1/1/3”.

### Style Guide 2.2 – Naming Frames

Emily

774.57: change “management frame bodies” to “Management frame bodies”

794.52, change “Frame Body” to “Frame Body field”.

1654.49: change “Ack” to “Ack frame”.

1661.49: change “The Frame Body is” to “The Frame Body field is”

1675.7, 1675.17: change “uplink data frames” to “uplink Data frames”

1734.44, 1734.52: change “data or management frame” to “Data or Management frame”

1706.25, 1706.34, 1746.18, 1746.19, 1756.22, 1756.35, 1756.60, 1766.4, 1810.20,1825.36 : change “control frame” to “Control frame”

188.54, 253.47, 303.32, 837.39, 1642.19, 1663.36, 1664.25, 1846.60, 1850.24, 1850.26, 1850.50, 1851.43, 1851.45, 1899.30, 2045.38, 2097.47, 2098.47, 2112.23, 2145.56, 2192.21, 2211.37, 2502.2, 2770.23, 2770.25: Change “data frame” to “Data frame”

### Style Guide 2.2 – true/false

Carol

Table 23-1 page 3303 Value of TIME\_OF\_DEPARTURE\_REQUESTED includes “True indicates…” and “False indicates…”, while Table 22-1 page 3248 include “true indicates…” and “false indicates…”

Table 23-36 page 3407 and 3408, table default options are “False/Boolean”, whiel previous tables such as Table 21-28 use “false/Boolean”

### Style Guide 2.3 – “is set to”

Menzo

Table 20-14—Parameters for computing Length field value in SC header when Extended SC MCS Indication field is set to 1

9.2.4.5.13 A-MSDU Type subfield

The A-MSDU Type subfield is 1 bit in length and indicates the type of A-MSDU present in the Frame Body. When the A-MSDU Type subfield is set to 0, the Frame Body field contains a Basic A-MSDU as defined in 9.3.2.2.2 (Basic A-MSDU subframe format). When the A-MSDU Type subfield is set to 1, the Frame Body field contains a Short A-MSDU as defined in 9.3.2.2.3 (Short A-MSDU subframe format). The A-MSDU Type subfield is reserved if the A-MSDU Present subfield is set to 0.

9.2.4.5.16 Buffered AC subfield

The Buffered AC subfield is a 4-bit bitmap that indicates buffered traffic for four ACs as defined in Figure 9-10 (Buffered AC subfield). At least one BU for the indicated AC is buffered if the related subfield is set to 1.

9.3.2 Data frames

9.3.2.1 Format of Data frames

9.3.2.1.1 General(11ak)

The format of a Data frame is defined in Figure 9-65 (Data frame). The Frame Control, Duration, Address 1, Address 2, Address 3, and Sequence Control fields are present in all data frame subtypes. The presence of the Address 4 field is determined by the setting of the To DS and From DS subfields of the Frame Control field (see below). The QoS Control field is present when the QoS subfield of the Subtype subfield is set to 1.

852.23

The Active BSSID Count element is optionally present when (#1095)dot11MultiBSSIDImplemented is set to true.

872.37

The Active BSSID Count element is optionally present when (#1095)dot11MultiBSSIDImplemented is set to true.

882.45

The Active BSSID Count element is optionally present when (#1095)dot11MultiBSSIDImplemented is set to true.

883.48

The IsResponderTXSS subfield is set to 1 to indicate the A-BFT following the BTI is used for responder transmit sector sweep (TXSS). This field is set to 0 to indicate responder receive sector sweep (RXSS). When this subfield is set to 0, the FSS subfield specifies the length of a complete receive sector sweep by the STA sending the DMG Beacon frame.

884.46

If ECAPC Policy Enforced field is set to 0, the Beacon SP Duration subfield indicates the duration, in units of 8 μs, of the Beacon SPs in the cluster. If ECAPC Policy Enforced field is set to 1, the Beacon SP Duration subfield indicates the maximum duration, in units of 8 μs, of the beacon header interval (BHI) of the BSS, and the minimum duration of Beacon SPs in the cluster (see 10.41.2.2 (Centralized AP or PCP cluster formation)).

885.2

the beacon interval value (10.43.2 (Sector-level sweep (SLS) phase)). The value 0 is reserved. Values 8 and above are reserved if the ECAPC Policy Enforced field is set to 0. The value 1 is assigned to the S-AP or SPCP.

979.47

(#283)A “Yes” in the Extensible column of an element listed in Table 9-94 (Element IDs) indicates that the Length of the element might be extended in future revisions or amendments of this standard. See 10.29.8 (Extensible element parsing). When the Extensible column of an element is set to “Subelements,” then the element might be extended in future revisions or amendments of this standard by defining additional subelements. See 10.29.9 (Extensible subelement parsing).

1019.2

The Originator Requesting STA MAC Address subelement contains the MAC address of the STA requesting the Location Information and it is present whenever the Location Subject field is set to 2. The format of the Originator Requesting STA MAC Address subelement is shown in Figure 9-201 (Originator Requesting STA MAC Address subelement format).

1019.16

The Target MAC Address subelement contains the MAC address of the STA whose Location Information is requested and it is present whenever the Location Subject field is set to 2. The format of the Target MAC Address(#2254) subelement is shown in Figure 9-202 (Target MAC Address subelement format).

1027.1

The Originator Requesting STA MAC Address subelement contains the MAC address of the STA requesting for the Location Information and it is present whenever the Location Subject field is set to 2. The format of the Originator Requesting STA MAC Address subelement is shown in Figure 9-201 (Originator Requesting STA MAC Address subelement format).

The Target MAC Address subelement contains the MAC address of the STA whose Location Information is requested and it is present whenever the Location Subject field is set to 2. The format of the Target MAC Address(#2254) subelement is shown in Figure 9-202 (Target MAC Address subelement format).

1028.2

The Originator Requesting STA MAC Address subelement contains the MAC address of the STA requesting the Location Information and it is present whenever the Location Subject field is set to 2. The format of the Originator Requesting STA MAC Address subelement is shown in Figure 9-201 (Originator Requesting STA MAC Address subelement format).

The Target MAC Address subelement contains the MAC address of the STA whose Location Information is

requested and it is present whenever the Location Subject field is set to 2. The format of the Target MAC

Address (#2254)subelement is shown in Figure 9-202 (Target MAC Address subelement format).

1048.49

The Measurement Method field indicates the method that is to be used by the Requested STA to carry out this measurement request and report back in the measurement report. If this field is set to 0, it indicates ANIPI. If this field is set to 1, it indicates RSNI. Other values are reserved.

1030.35

The Measurement Method field indicates the method that is to be used by the Requested STA to carry out this measurement request and report back in the measurement report. If this field is set to 0, it indicates ANIPI. If this field is set to 1, it indicates RCPI. If the field is set to 2, it indicates Channel Load. Other values are reserved.

1031.11

The Measurement Method field indicates the method that is to be used by the Requested STA to carry out this measurement request and report back in the measurement report. If this field is set to 0, it indicates ANIPI. If this field is set to 1, it indicates RCPI. If the field is set to 2, it indicates Channel Load. Other values are reserved.

1043.57

(M8)The Last Beacon Report Indication subelement has the format defined in Figure 9-773 (Subelement format), with a Length field set to 1. When the Data field is set to 1, it indicates that this Beacon report is the last frame sent as a response to a Beacon request. A value of 0 indicates that there are more frames expected.

1077.4

The Measurement Method field indicates the method used by the STA to carry out this measurement request and the format of the Measurement for Time Block field(s). If this field is set to 0, it indicates that the Measurement for Time Block fields are expressed in ANIPI. If this field is set to 1, it indicates that the Measurement for Time Block fields are expressed in RSNI. Other values are reserved.

1078.21

The Measurement Method field indicates the method used by the STA to carry out the measurement request and the format of values in the Measurement for Direction fields. If this field is set to 0, it indicates that the values in the Measurement for Direction fields are expressed in ANIPI. If this field is set to 1, it indicates that the values in the Measurement for Direction fields are expressed in RCPI. If this field is set to 2, it indicates that the values in the Measurement for Direction fields are expressed in Channel Load. Other values are reserved. ANIPI is defined in 9.4.2.21.15 (Directional Channel Quality report). RCPI is a logarithmic indication of the received channel power of the corresponding Link Measurement Request frame, as defined in 9.4.2.37 (RCPI element). (#1011)Channel Load is measured and reported as defined in 11.10.9.3 (Channel load report).

1079.36

The Measurement Method field indicates the method used by the STA to carry out the measurement request and the format of values in the Measurement Results field. If this field is set to 0, it indicates that the values in the Measurement Results field are expressed in ANIPI. If this field is set to 1, it indicates that the values in the Measurement Results field are expressed in RCPI. If this field is set to 2, it indicates that the values in the Measurement Results field are expressed in Channel Load. Other values are reserved.

1099.28

This field is defined when the S-PSMP Support field is set to 1;

1104.23

If the ACM subfield is set to 1,

1143.50

(#1300)NOTE—For example, assuming the maximum number of BSSIDs in the multiple BSSID set is 8 (i.e., the MaxBSSID Indicator field (n) is set to 3) and the transmitted (reference) BSSID is 8c:fd:0f:7f:1e:f5, the results would be as follows:

1230.17

When the Response Type field is set to “Terminate,” the value of the DMS Length field is set to 3.

1243.59

The Connected to AS subfield is set to 1 if the Authentication Protocol Identifier field in the Mesh Configuration element is set to 2 (indicating IEEE 802.1X authentication) and the mesh STA has an active connection to an AS.

1244.48

The Mesh Power Save Level subfield is set to 1 if at least one of the peer-specific mesh power management modes is deep sleep mode and set to 0 otherwise. The Mesh Power Save Level subfield is reserved when the Power Management subfield in the Frame Control field is set to 0. See 9.2.4.5.11 (Mesh Power Save Level subfield).

1252.27

When the MCCA Reply Code is set to other values, the MCCAOP Reservation field is not present.

1258.47

The Originator External Address field is the MAC address of an external STA proxied by the (#241)originator. This field is present only if the AE subfield in the Flags field is set to 1 and is represented as a 48-bit MAC address.

1260.38

The Target HWMP Sequence Number field is coded as an unsigned integer and is set to the HWMP SN of the target mesh STA (if the AE subfield in the Flags field is set to 0) or target proxy mesh gate (if the AE subfield in the Flags field is set to 1).

1266.56

The Alternate Queue subfield indicates the intended primary or alternate EDCA queue that is used for this stream. When dot11AlternateEDCAActivated is false, this subfield is reserved. When the Alternate Queue subfield is set to 0, the primary EDCA queue for this AC is used. When the Alternate Queue subfield is equal to 1, the Alternate EDCA queue for this AC (see 10.2.3.2 (HCF contention based channel access (EDCA))) is used.

1272.32

If the Move subfield is set to 1, it indicates a change in the TBTT of the BSS. The TBTT is not changed if the Move field is set to 0. If the Size subfield is set to 1, it indicates a change in the beacon interval duration. The beacon interval duration is not changed if the Size subfield is set to 0.

1272.42

The BI Duration field value indicates the beacon interval, expressed in TUs, following the indicated DMG BSS parameter change. The BI Duration field is reserved if the Size bit of the Change Type Bitmap field is set to 0.

1276.59

The Pseudo-static Allocations subfield is set to 1 only if the TDDTI subfield in the DMG AP Or PCP Capability Information field is set to 1. The Pseudo-static Allocations subfield is reserved if the TDDTI subfield in the DMG AP Or PCP Capability Information field is set to 0.

1286.40

— At least one of the Truncatable or Extendable subfields is set to 1

1287.6

The Allocation Start subfield contains the lower 4 octets of the TSF at the time the SP or CBAP starts. The Allocation Start subfield can be specified at a future beacon interval when the pseudo-static subfield is set to 1.

1287.19

The Allocation Block Period subfield contains the time, in microseconds, between the start of two consecutive time blocks belonging to the same allocation. The Allocation Block Period subfield is reserved when the Number of Blocks subfield is set to 1.

1295.50

The Sector ID Order subfield indicates the TX sector IDs corresponding to the SNRs in the SNR subfield when the SNR Present subfield is set to 1 and Sector ID Order Present subfield is set to 1, in response to a BRP PPDU(#1379) with the SNR Requested subfield set to 1. The Sector ID Order subfield indicates the TX sector IDs ranked in the decreasing order of link quality, determined in an implementation dependent manner, when the SNR Present subfield is set to 0 and the Sector ID Order Present subfield is set to 1 in response to setting the SNR Requested subfield to 0 and the Sector ID Order Requested subfield to 1. The FBCK-REQ field and the FBCK TYPE field in the DMG Beam Refinement element are used by the transmitter and receiver to, respectively, request for and indicate the sector IDs and their order.

1297.19

The STA MAC Address Present subfield indicates whether the STA MAC Address subfield is present in the Multi-band element. If the present subfield is set to 1, the STA MAC Address subfield is present. If the STA MAC Address Present subfield is set to 0, the STA MAC Address subfield is not present.

1297.23

The Pairwise Cipher Suite Present subfield indicates whether the Pairwise Cipher Suite Count field and the Pairwise Cipher Suite List field are present in the Multi-band element. If the Pairwise Cipher Suite Present subfield is set to 1, the Pairwise Cipher Suite Count field and the Pairwise Cipher Suite List field are present. If the Pairwise Cipher Suite Present subfield is set to 0, the Pairwise Cipher Suite Count field and the Pairwise Cipher Suite List field are not present.

1298.43

The STA MAC Address field contains the MAC address that the transmitting STA uses while operating on the channel indicated in this element. The STA MAC Address field is not present in this element if the STA MAC Address Present field is set to 0.

1298.48

The Pairwise Cipher Suite Count field and the Pairwise Cipher Suite List field are defined in 9.4.2.24 (RSNE). These fields are not present in this element if the Pairwise Cipher Suite Present subfield is set to 0.

1302.4

The Non-QoS Data Frames field specifies whether non-QoS Data frames can be transmitted in the frequency band indicated in the New Band ID field. If the Non-QoS Data Frames field is set to 0, non-QoS Data frames cannot be transmitted in the frequency band indicated in the New Band ID field. If the Non-QoS Data Frames field is set to 1, non-QoS Data frames can be transmitted in the frequency band indicated in the New Band ID field.

1302.27

The Stream ID In Old Band and Stream ID In New Band subfields are comprised of the TID and Direction subfields. The subfields within the Stream ID In New Band subfield are reserved if the Stream ID In New Band Valid subfield is set to 0.

etc.

It looks like this rule may not be very well understood. If so many people make this mistake, then is it really a mistake? I'd say it happens about once every 10 times.

[Robert: there is a subtlty here that is sometimes missed. If the condition relates to fields being set in the same frame or transmission, then “is set to” is OK. For example, “If a STA sets X field to 1, then the STA sets Y field to 1” which, in the frame formats clause is often contracted to “If X field is set to 1, then Y field is set to 1.” The same actor is setting both fields. But if the condition is on something received resulting in something being set a certain way, then it is not the same actor performing the “setting”: the action on the implementation is to read a field and then set a field in the response a certain way. In this case “is set to” is inappropriate: the action by the implementation is not “set” but “compare” (i.e., “is equal to”)].

### Style Guide 2.4.1 – Information Elements/subelements – Naming

Emily

At 195.52, 1349.1, 2072.11, 2072.24, 2072.47, 2136.2, 2138.61, 2140.23:

change “information element” to “element”

At 4100.23, 4100.38, 4100.53, 4101.3, 4101.18:

Change “Authentication Control Element” to “Authentication Control element”.

### Style Guide 2.4.2 – Definition Conventions

Joe

Note at 815.41 – editorial error – CTS is labelled “clear-to-sent” not “clear-to-send” also CTS is not defined in its first use in the text in 9 – though it is elsewhere in Clause 9 (812.25, 815.41 incorrectly as above) – it is defined in the acronym list, but does not have a definition. Also, it is not defined when first used in Clause 10 (1686.9) or anywhere else (based on my quick review). CTS is used 858 times in the specification. Also – CTS is defined as clear to send in the acronyms and clear-to-send is used in at (178.36, 812.25) and clear to send at 206.11, 206.12, 206.14, 3549.21, 3713.13).

1137.31 – there is no ned to specify any value for the Element ID field. Therefore delete: “The Element ID field is equal to the Measurement Pilot Transmission value in Table 9-94 (Element IDs).”. (1137.31) The following sentence (1137.33) is all that is required.

999.48 – there is no need to specify any value for the Length field. Therefore delete: “The value of the Length field is variable and depends on the length of the Measurement Request field. The minimum value of the Length field is 3 (based on a minimum length for the Measurement Request field of 0 octets).” The reference in on 999.45 is all that is required.

1033.13 – there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 3”.

1127.37 - there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 1 (based on a minimum length for the channel list field of 0 octets).”

1128.2 - there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 13 (i.e., with no optional subelements in the Neighbour Report element).”

1157.53 - there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 1 (based on a minimum length for the Channel List field of 0 octets).”

187.27 – there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 4 (based on a minimum length for the Diagnostic Subelements field of 0 octets).”

1198.33 - there is no need to specify the minimum value of the Length field. Therefore delete; “The minimum value of the Length field is 3.”

1209.61- there is no need to specify the minimum value of the Length field. Therefore delete; “The value of the Length field is 1 octet when the Multiple BSSID-Index element is included in the Probe Response frame and otherwise is three octets.”

1222.47 - there is no need to specify the minimum value of the Length field. Therefore delete; “The value of the Length field is 1 or 10, depending on the presence of a TIM Broadcast schedule (TIM Broadcast Interval, TIM Broadcast Offset, High Rate TIM Rate, and Low Rate TIM Rate fields).”

1238.51- there is no need to specify the minimum value of the Length field. Therefore delete; “The Length field is set to 16+2×n, where n is the number of DSCP Exception fields in the QoS Map element.”

1331.19 - there is no need to specify the minimum value of the Length field. Therefore modify; “In this case, the Length field is set to 1 and the Bitmap Offset field is set to 0.” To be: “In this case, the Bitmap Offset field is set to 0.”

1331.19 - there is no need to specify the value of the Length field. Therefore modify; “In this case, the Length field is set to 1 and the Bitmap Offset field is set to 0.” To be: “In this case, the Bitmap Offset field is set to 0.”

1331.27 - there is no need to specify the value of the Length field. Therefore modify; “In this case, the Length field is set to (N2 - N1) + 2 and the Bitmap Offset subfield is set to N1.” To be: “In this case, the Bitmap Offset subfield is set to N1.”

1507.29 – there is no need to specify the value of the Length field. Therefore delete: “The Length field indicates the length of the remaining frame fields in octets, and the value is variable. The minimum value of the Length field is 13.” and add: “The Length field is defined in 9.4.3 (Subelements).”

1525.26 – there is no need to specify the value of the Length field. Therefore delete: “The Length field indicates the length of the remaining frame fields in octets, and the value is variable. The minimum value of the Length field is 14.” and add: “The Length field is defined in 9.4.3 (Subelements).”

1461.18 – the use of Venue URL Duples field and Venue URL Duple field, vary from the way other “Duple” fields are defined. For consistency the Venue URL Duple field should be called URL Duple subfield. Change in 2 locations: 1461.18, 1461.27 (note the second location is a figure title and hence is referenced in the text and in the table of figures).

1461.62 – the use of Advice of Charge Duples field and Advice of Charge Duple field, vary from the way other “Duple” fields are defined. For consistency the Advice of Charge Duple field should be called Advice of Charge Duple subfield. Change in 2 locations: 1461.62, 1462.7 (note the second location is a figure title and hence is referenced in the text and in the table of figures).

1463.19 – the use of Local Content Duples field and Local Content Duple field, vary from the way other “Duple” fields are defined. For consistency the Local Content Duple field should be called Local Content Duple subfield. Change in 2 locations: 1463.19, 1463.28 (note the second location is a figure title and hence is referenced in the text and in the table of figures).

Possible issues noticed:

1. GAS – fields, subfields, and elements seem to be defined differently is this ok? e.g.: Query Request/Response fields? Query Response Length field?
2. 1440.7 – Why are TLV format frames in a table? Why is the Length field defined as variable? This seems strange.
3. What is a Duple? Duple is not defined in the specification. The word duple is an adjective defined as having two elements, commonly used to describe two beats per measure of music. This is very different from a Tuple which is a noun defined as a set of elements (usually an ordered set of elements) Note: most of the uses of Duple are in field and sub-field names so I don’t think the use of an additive as an undefined noun it is an issue. But in some places not so: 1461.34 “The Venue Number field is a 1-octet field whose value corresponds to the implicit returned order value of the corresponding Venue Name Duple returned in a Venue Name ANQP-element, as defined in 9.4.5.4 (Venue Name ANQP-element). (also
4. Is it ok that Tuple and Duple subfields are defined?
5. In 12 Security – the Length field is defined (2562.8, .15)
6. In 19 High-throughput (HT) PHY specification – there is a Length field – which is a PHY field – is it confusing to label this field “Length field”. (2980.20)

### Style Guide 2.6 – Removal of functions and features

Menzo

No findings

### Style Guide 2.7 – Capitalization

**Clause 9** – Carol

9.2.3, Page 774, line 42 “Frame Control Field” should be “Frame Control field”

9.2.4.6.4, page 805, line 57 “CCMG control field” should be “CCMG Control field”

9.3.2.1.4, page 841, line 53 “the frame body field” should be “the Frame Body field”

9.4.1.49, page 938, line 40 “the compressed beamforming feedback matrix subfield” should be “the Compressed Beamforming Feedback Matrix subfield”

9.4.2.20.1, page 1002, line 11 “with the measurement type field” shuld be “with the Measurement Type field”

9.4.2.21.7, page 1042, line 13 “the timestamp field” should be “the Timestamp field”

9.4.2.21.15, page 1076, line 62, “Channel Number is defined” should be “The channel number is defined”

9.4.2.30, page 1114, line 51 “the Classifier type is” should be “the classifier type is”

9.4.2.30, page 1115, line 16 “the Classifier Type is” should be “the classifier type is”

9.4.2.36, page 1128, line 24 “the neighbour report” should be “the Neighbor report”

9.4.2.36, page 1133, line 18 “If the Relative height is unknown” should be “If the relative height is unknown”

9.4.2.38, page 1136, line 17 “indicate Average Access Delay when” should be “indicate the average access delay when”

9.4.2.43, page 1140, line 12 “indicate Average Access Delay when” should be “indicate the average access delay when”

9.42.66.5, page 1181, line 30 “9.4.2.66.5 Vendor Specific event request” should be “9.4.2.66.5 Vendor Specific Event request”

9.4.2.68.5, page 1192, line 4 “the Collocated Radio is” should be “the collocated radio is”

9.4.2.188, page 1358, line 1 “Information to be represented” should be “information to be represented”

9.4.2.216, page 1407, line 21, 24 “Password identifier element” should be “Password Identifier element”

**Clause 10** – Menzo

1688.58

(Quality-of-service management frame (QMF)).

1696.30



Backoff Slots

Busy Medium

Next Frame

Defer Access

Slot Time

Defer Access

1703.28

NDP CMAC Frame type

1714.19



Source

Destination

Other

Backoff Slots

Defer Access

Backoff after Defer

**Clause 11** – Joe

2271.43 – “Frame request” should be frame request or if a proper noun Frame Request. This occurs in other areas of the specification (228.63, 1011.28, 1011.37, 1012.15, 1012.2, 1012.5, 2271.43, 2271.47, 2271.51, 2271.56, 2272.25, 2272.30, 2272.31, 2272.32, 3895.59, 3895.61, 3904.28, 3904.29, 3925.53 (and in some references).

11.23.3.2.5 – “The STA shall include a list of MAC Address/Dialog Token pairs in the Response Map duples subfield of the GAS Extension element included in the Group Addressed GAS Response frame.” Should be: – “The STA shall include a list of MAC Address/Dialog Token pairs in the Response Map Duples subfield of the GAS Extension element included in the Group Addressed GAS Response frame.”

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

### Style Guide 2.8 – Terminology: frame vs packet vs PPDU vs MPDU

Bahar

### Style Guide 2.9 – Use of verbs & problematic words

#### normative, non-normative, ensure

Clause 9 – Carol

9.4.2.24.1, page 1084, lines 3-4 “then none of the subsequent fields is included.” should be “then none of the subsequent fields are included.”

9.4.2.195, page 1370, line 51 “The S1G Sector Operation element in the Beacon frame will provide:” should be “The S1G Sector Operation element in the Beacon frame provides:”

Table 9-298, page 1373, line 14 “if the requested target wake time value and/or other TWT parameters cannot be accommodated, then the TWT setup will not be accepted.” Should be “if the requested target wake time value and/or other TWT parameters cannot be accommodated, then the TWT setup

is not accepted.”

9.6.7.15, page 1513, line 51 “The same status code value will be present” should be “The same status code value is present”

Clause 10 – Menzo

Clause 11 – Joe

[still outstanding]

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

#### which/that

**Clause 9** – Carol

9.2.4.7.3, page 810, lines 38-41 “It carries the addresses of source and destination end station of the end-to-end IEEE 802 communication in cases which either (or both) of the end stations are not mesh STAs at the beginning or end of a single mesh path.”

should be “It carries the addresses of source and destination end stations of the end-to-end IEEE 802 communication if either (or both) of the end stations are not mesh STAs.

9.3.1.7.1, page 821, lines 42-44 “The values of the Multi-TID, Compressed Bitmap, and GCR Mode(11ak) subfields indicate which (#57)BlockAckReq frame variants is used(11ak), as indicated in Table 9-28 (BlockAckReq frame variant encoding((#57)(11ak)).”

should be “The values of the Multi-TID, Compressed Bitmap, and GCR Mode(11ak) subfields indicate the (#57)BlockAckReq frame variants used(11ak), as indicated in Table 9-28 (BlockAckReq frame variant encoding((#57)(11ak)).”

9.3.1.8.1, page 824, lines 43-46 “The values of the Multi-TID, Compressed Bitmap, and GCR Mode(11ak) subfields of the BA Control field determine which of the BlockAck frame variants is represented, as indicated in the Table 9-30 (BlockAck frame variant encoding(#57)(11ak)).”

should be “The values of the Multi-TID, Compressed Bitmap, and GCR Mode(11ak) subfields of the BA Control field determine the BlockAck frame variants represented, as indicated in the Table 9-30 (BlockAck frame variant encoding(#57)(11ak)).”

9.3.2.1.2, page 840, lines 1-2 “NOTE—IEEE Std 802 and IEEE Std 802.1CQ define groupcast MAC addresses with a similar format to a SYNRA, which are DAs in the context of IEEE Std 802.11.” should be “NOTE—IEEE Std 802 and IEEE Std 802.1CQ define groupcast MAC addresses with a similar format to a SYNRA, but the groupcast MAC addresses are DAs in the context of IEEE Std 802.11.”

9.4.1.32, page 922, line 61 “The Mask field specifies which other fields in the Rate Identification field are used by a STA.”

should be “The Mask field specifies the other fields in the Rate Identification field that are used by a STA.”

9.4.1.42, page 930, lines 4-5 “The Finite Cyclic Group is used in SAE to indicate which cryptographic group to use in the SAE exchange as specified in 12.4”

should be ”The Finite Cyclic Group is used in SAE to indicate the cryptographic group to use in the SAE exchange as specified in 12.4”

9.4.1.42, page 930, lines 5-6 “This field is also used in FILS to indicate which cryptographic group to use in FILS authentication as specified in 12.12”

should be ”This field is also used in FILS to indicate the cryptographic group to use in FILS authentication as specified in 12.12”

9.4.2.5.1, page 983, line 1-2 “The Page Slice Number subfield indicates which page slice is encoded in the Partial Virtual Bitmap Field”

should be “The Page Slice Number subfield indicates the page slice encoded in the Partial Virtual Bitmap field

9.4.2.20.8, page 1011, line 63 “The Frame Request Type indicates which subelements are requested in the Frame report.”

should be “The Frame Request Type indicates the subelements requested in the Frame report.”

9.4.2.21.10, page 1061, lines 6-7 “The Co-Located BSSID List subelement is used to report the list of BSSIDs of the BSSs which share the same antenna connector with the reporting STA.”

should be “The Co-Located BSSID List subelement is used to report the list of BSSIDs of the BSSs sharing the same antenna connector with the reporting STA.”

9.4.2.21.10, page 1061, lines 35-36 “When the MaxBSSID Indicator field is equal to zero, the BSSID fields contain an explicit list of the BSSID values of the BSSs which share the same antenna connector with the reporting STA.”

should be “When the MaxBSSID Indicator field is equal to zero, the BSSID fields contain an explicit list of the BSSID values of the BSSs sharing the same antenna connector with the reporting STA.”

9.4.2.21.10, page 1061, lines 38-39 “For example, if there are 4 BSSs which share the same antenna connector and their BSSIDs end with 16, 24, 30 and 31,”

should be “For example, if there are 4 BSSs sharing the same antenna connector and their BSSIDs end with 16, 24, 30 and 31,”

9.4.2.21.11, page 1064, lines 17-18 “For each MSDU successfully transmitted, the measured MSDU Transmit Delay determines which bin is to be incremented”

should be “For each MSDU successfully transmitted, the measured MSDU Transmit Delay determines the bin to be incremented.”

9.4.2.30, page 1115, lines 20-21 “When the target field filter mask is present, it determines which bits of the target field are used in the comparison.”

should be “When the target field filter mask is present, it determines the bits of the target field that are used in the comparison.”

9.4.2.30, page 1119, lines 22-23 “The Filter Mask subfield is an octet string that is used to indicate which bits in the Filter Value subfield are compared.”

should be “The Filter Mask subfield is an octet string that is used to indicate the bits in the Filter Value subfield to be compared.”

9.4.2.36, page 1131, lines 34-35 “when there is at least one other BSS which is co-located with the reporting BSS”

should be “when there is at least one other BSS co-located with the reporting BSS”

9.4.2.47, page 1148, lines 8-9 “The OCI subelement contains the operating channel information which is integrity protected (see procedures in 13.7 (FT reassociation)) as defined in Figure 9-359”

should be “The OCI subelement contains the integrity protected operating channel information (see procedures in 13.7 (FT reassociation)) as defined in Figure 9-359”

9.4.2.55.4, page 1157, line 29 “The Supported MCS Set field of the HT Capabilities element indicates which HT MCSs a STA supports.”

should be “The Supported MCS Set field of the HT Capabilities element indicates the HT MCSs a STA supports.”

9.4.2.70.9, page 1208, line 1-2 “The Options Used field specifies which Indication Parameter fields in the Location Indication Options subelement are used.”

Should be “The Options Used field specifies the Indication Parameter fields in the Location Indication Options subelement that are used.”

9.4.2.112, page 1259, lines 12-13 “The TO subfield defines which mesh STA responds with a PREP

element to the PREQ element containing an individual target address.”

Should be “The TO subfield defines the mesh STA to respond with a PREP element to the PREQ element containing an individual target address.”

9.4.2.127.2, page 1274, line 62 “The Supported MCS Set subfield indicates which MCSs a STA supports.”

should be “The Supported MCS Set subfield indicates the MCSs a STA supports.”

9.4.2.134, page 1292, lines 61-62 “The Interferer Channel Bandwidth Indication subfield indicates which part of the operating channel was interfered during the time interval indicated by the TSCONST subfields.”

should be “The Interferer Channel Bandwidth Indication subfield indicates the part of the operating channel with interference during the time interval indicated by the TSCONST subfields.”

9.4.2.141, page 1299, lines 47-48 “The PCP Handover element is used to indicate which STA becomes the new PCP following an explicit or implicit handover procedure.”

should be “The PCP Handover element is used to indicate the STA becoming the new PCP following an explicit or implicit handover procedure.”

9.4.2.159, page 1325, lines 22-23” N is the number of busy events that occurred during the total measurement time which is less than or equal to dot11ChannelUtilizationBeaconIntervals consecutive

beacon intervals”

should be “N is the number of busy events that occurred during the total measurement time, which is less than or equal to dot11ChannelUtilizationBeaconIntervals consecutive beacon intervals”

9.4.2.173, page 1340, lines 51-53 “The Estimated Service Parameters Inbound(#1160) element is used by a STA to provide information to another STA which can then use the information as input to an algorithm to generate an estimate of (#1160)inbound throughput between the two STAs.”

Should be “The Estimated Service Parameters Inbound(#1160) element is used by a STA to provide information to another STA that can then use the information as input to an algorithm to generate an estimate of(#1160)inbound throughput between the two STAs.”

9.4.2.196, page 1371, lines 57-58 “The Compatibility Information field contains all the subfields defined in 9.4.1.4 (Capability Information field) except for the subfield located in B6 of the field which is defined as the TSF Rollover Flag subfield.”

should be “The Compatibility Information field contains all the subfields defined in 9.4.1.4 (Capability Information field) except for the subfield located in B6 of the field, which is defined as the TSF Rollover Flag subfield.”

9.4.2.199, page 1375, lines 7-9 “When transmitted by a TWT requesting STA, the Target Wake Time field contains a positive integer, which corresponds to a TSF time at which the STA requests to wake, or a value of zero when the TWT Setup Command subfield contains the value corresponding to the command “Request TWT”.”

should be “When transmitted by a TWT requesting STA, the Target Wake Time field contains a positive integer corresponding to a TSF time at which the STA requests to wake, or a value of zero when the TWT Setup Command subfield contains the value corresponding to the command “Request TWT”.”

9.4.2.199, page 1375, lines 9-15 “When a TWT responding STA with dot11TWTGroupingSupport equal to 0 transmits a TWT element to the TWT requesting STA, the TWT element contains a value in the Target Wake Time field which corresponds to a TSF time at which the TWT responding STA requests the TWT requesting STA to wake and it does not contain the TWT Group Assignment field.”

should be “When a TWT responding STA with dot11TWTGroupingSupport equal to 0 transmits a TWT element to the TWT requesting STA, the TWT element contains a value in the Target Wake Time field corresponding to a TSF time at which the TWT responding STA requests the TWT requesting STA to wake and it does not contain the TWT Group Assignment field.”

9.4.2.199, page 1376, lines 57-61 “When transmitted by a TWT requesting STA, the TWT Channel field contains a bitmap indicating which channel the STA requests to use as a temporary primary channel during a TWT SP. When transmitted by a TWT responding STA, the TWT Channel field contains a bitmap indicating which channel the TWT requesting STA is allowed to use as a temporary channel during the TWT SP.”

should be “When transmitted by a TWT requesting STA, the TWT Channel field contains a bitmap indicating the channel the STA requests to use as a temporary primary channel during a TWT SP. When transmitted by a TWT responding STA, the TWT Channel field contains a bitmap indicating the channel the TWT requesting STA is allowed to use as a temporary channel during the TWT SP.”

Tabl 9-301, page 1384, line 24 “The Sectorized Beam-Capable subfield indicates which type of sectorization operation is supported by the STA.”

should be “The Sectorized Beam-Capable subfield indicates the type of sectorization operation supported by the STA.”

9.4.2.202, page 1391, lines 49-52 “indicating a minimum amount of deferred time for channel access which is required before the transmission of an Authentication-Request frame and is set as described in 11.3.9.2”

should be “indicating a minimum amount of deferred time for channel access required before the transmission of an Authentication-Request frame and is set as described in 11.3.9.2”

9.4.2.209, page 1398, lines 17-18 “The PV1 Probe Response Option element is included in the Probe Request frame to indicate which optional information is requested to be included in the PV1 Probe Response frame that is transmitted by the responding STAs.”

should be “The PV1 Probe Response Option element is included in the Probe Request frame to indicate the optional information requested to be included in the PV1 Probe Response frame that is transmitted by the responding STAs.”

9.4.2.209, page 1398, lines 39-40 “The Probe Response Group Bitmap field indicates which Probe Response Option Bitmap subfield is included in the PV1 Probe Response Option element.”

should be “The Probe Response Group Bitmap field indicates the Probe Response Option Bitmap subfield(s) included in the PV1 Probe Response Option element.”

9.4.2.209, page 1398, lines 48-49 “Each Probe Response Option Bitmap subfield is one octet and indicates which optional information is requested to be included in the PV1 Probe Response frame by the responding STAs.”

should be “Each Probe Response Option Bitmap subfield is one octet and indicates the optional information requested to be included in the PV1 Probe Response frame by the responding STAs.”

9.4.2.209, page 1398, lines 60-61 “The Probe Response Group Bitmap field indicates which Probe Response Option Bitmap subfield is included in the PV1 Probe Response Option element.”

Sentence should be deleted, repetition of lines 39-40

9.4.2.213, page 1404, lines 49-50 “The Header Compression element is used by a STA to inform its intended receiver regarding frame header fields that will be compressed and which it needs to store.”

should be “The Header Compression element is used by a STA to inform its intended receiver regarding frame header fields that will be compressed and that it needs to store.”

9.4.2.214, page 1406, lines 41-42 “The SST Enabled Channel Bitmap field contains a bitmap indicating which channels are enabled for SST operation.”

should be “The SST Enabled Channel Bitmap field contains a bitmap indicating the channels that are enabled for SST operation.”

9.4.2.216, page 1407, line 38 “The Identifier field is a variable-length string which identifies a password as specified in 12.4”

should be “The Identifier field is a variable-length string that identifies a password as specified in 12.4”

9.4.2.219.2, page 1409, line 22 “The Supported MCS Set subfield indicates which MCSs a CDMG STA supports.”

should be “The Supported MCS Set subfield indicates the MCSs a CDMG STA supports.”

9.4.2.235, page 1433, lines 45-46 “The Estimated Service Parameters Outbound element is used by a STA to provide information to another STA which can then use the information as input to an algorithm to generate an estimate of outbound throughput between the two STAs.”

should be “The Estimated Service Parameters Outbound element is used by a STA to provide information to another STA that can then use the information as input to an algorithm to generate an estimate of outbound throughput between the two STAs.”

9.4.2.240, page 1438, lines 1-2 “The Fragment ID field, when present in the GAS Comeback Request, indicates which fragment the STA is requesting.”

should be “The Fragment ID field, when present in the GAS Comeback Request, indicates the fragment the STA is requesting.”

9.5.4.12, page 1457, lines 58-59 “The Co-Located BSSID List subelement is present when there is at least one other BSS which is co-located with the reporting BSS.”

should be “The Co-Located BSSID List subelement is present when there is at least one other BSS that is co-located with the reporting BSS.”

9.5.4.12, page 1458, lines 15-16 “The Co-Located BSSID List subelement is present when there is at least one other BSS which is co-located with the reporting BSS.”

should be “The Co-Located BSSID List subelement is present when there is at least one other BSS co-located with the reporting BSS.”

9.5.4.13, page 1458, lines 36-38 “The Co-Located BSSID List subelement is present when there is at least one other BSS which is co-located with the reporting BSS”

should be “The Co-Located BSSID List subelement is present when there is at least one other BSS co-located with the reporting BSS”

9.4.5.17, page 1460, lines 3-4 “The Emergency NAI ANQP-element contains an emergency string, which is available for use by a STA as its identity to indicate emergency access request.”

Should be “The Emergency NAI ANQP-element contains an emergency string that is available for use by a STA as its identity to indicate emergency access request.”

9.4.5.19, page 1460, lines 63-64 “The Co-Located BSSID List subelement is present when there is at least one other BSS which is co-located with the reporting BSS.”

should be “The Co-Located BSSID List subelement is present when there is at least one other BSS co-located with the reporting BSS.”

9.4.5.20, page 1461, lines 4-5 “The Venue URL ANQP-element provides a list of one or more URLs which can be used for web page advertising services or providing information, particular to a venue’s BSS, to a STA.”

should be “The Venue URL ANQP-element provides a list of one or more URLs that can be used for web page advertising services or providing information, particular to a venue’s BSS, to a STA.”

9.4.5.22, page 1463, lines 4-5, “The Local Content ANQP-element provides a list of one or more URLs which can be used to display local content related to the BSS.”

Should be “The Local Content ANQP-element provides a list of one or more URLs that can be used to display local content related to the BSS.”

9.5.3, page 1475, lines 6-7 “The SNR Report subfield is set to the value of the SNR from the frame that was received with best quality during the immediately preceding sector sweep, and which is indicated in the Sector Select field.”

should be “The SNR Report subfield is set to the value of the SNR from the frame that was received with best quality during the immediately preceding sector sweep and is indicated in the Sector Select field.”

Table 9.372, page 1514, lines 54-55 “The Supported Rates and BSS Membership Selectors element

indicates the rates which are supported by the STA.”

should be “The Supported Rates and BSS Membership Selectors element indicates the rates supported by the STA.”

9.6.7.24, page 1521, line 11 “The Group field is used to indicate which cryptographic group was used when generating the public key”

should be “The Group field is used to indicate the cryptographic group used when generating the public key”

9.6.7.33, page 1529, lines 13-14 “when there is at least one other BSS which is co-located withe the

reporting BSS.”

should be “when there is at least one other BSS co-located with the reporting BSS.”

9.6.7.33, page 1529, lines 23-24 “when there is at least one other BSS which is co-located withe the

reporting BSS.”

should be “when there is at least one other BSS co-located with the reporting BSS.”

9.6.19.17, page 1618, lines 4-6 “The Relay Ack Response frame is sent by an RDS to a source REDS participating in a relay operation in order to report which frames have been received by the destination REDS also participating in the relay operation.”

should be “The Relay Ack Response frame is sent by an RDS to a source REDS participating in a relay operation in order to report the frames received by the destination REDS also participating in the relay operation.”

Table 9-528, page 1655, lines 44-46 “QoS Data frames with the same TID, which corresponds to an HT-immediate block ack agreement.”

should be “QoS Data frames with the same TID, corresponding to an HT-immediate block ack agreement.”

**Clause 10** – Menzo

No findings

Clause 11 – Joe

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

#### articles

**Clause 9** – Carol

9.4.2.20.16, page 1028, line 43 “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.20.17, page 1030, line 18 “Operating Class field indicates” should be “The Operating Class field indicates”

9.4.2.20.17, page 1030, line 23 “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.20.18, page 1030, line 57 “Operating Class field indicates” should be “The Operating Class field indicates”

9.4.2.20.18, page 1030, line 62 “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.21.11, page 1063, line 37 / 49, “Bin 0 Range field value” should be “The/the Bin 0 Range field value”

9.4.2.21.13, page 1068, line 50, “Location Civic field is” should be “The Location Civic field is”

9.4.2.21.15, page 1076, line 57, “Operating Class field indicates” should be “The Operating Class field indicates”

9.4.2.21.15, page 1076, line 57-58, “Operating Class and Channel Number together specify” should be “The Operating Class and Channel Number fields together specify”

9.4.2.21.15, page 1076, line 57-58, “values of Operating Class” should be “values of the Operating Class field”

9.4.2.21.15, page 1076, line 62, “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.21.15, page 1076, line 62-63, “Channel Number is” should be “The channel number is”

9.4.2.21.16, page 1077, line 60, “Operating Class field indicates” should be “The Operating Class field indicates”

9.4.2.21.16, page 1077, line 60-61, “Operating Class and Channel Number together specify” should be “The Operating Class and Channel Number fields together specify”

9.4.2.21.16, page 1077, line 62, “values of Operating Class” should be “values of the Operating Class field”

9.4.2.21.16, page 1078, line 10, “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.21.16, page 1078, line 10-11, “Channel Number is” should be “The channel number is”

9.4.2.21.17, page 1079, line 21, “Operating Class field indicates” should be “The Operating Class field indicates”

9.4.2.21.17, page 1079, line 21-22, “Operating Class and Channel Number together specify” should be “The Operating Class and Channel Number fields together specify”

9.4.2.21.17, page 1079, line 23, “values of Operating Class” should be “values of the Operating Class field”

9.4.2.21.17, page 1079, line 26, “Channel Number field indicates” should be “The Channel Number field indicates”

9.4.2.21.17, page 1079, line 26-27, “Channel Number is” should be “The channel number is”

9.4.2.30, page 1118, line 42 “The DSCP field contains the value in the 6 LSBs,” should be “The DSCP field contains a value in the 6 LSBs,”

9.4.2.66.5, page 1181, line 32 “corresponding to Vendor Specific Event request” should be “corresponding to a Vendor Specific Event request”

9.4.2.92, page 1236, line 58 “ANQP supports” should be “The ANQP supports”

9.4.2.92, page 1236, line 63 “MIS Information Service is” should be “The MIS Information Service is”

9.4.2.92, page 1237, line 24 “MIS Command and Event Services capability discovery is” should be “The MIS Command and Event Services capability discovery is”

9.4.2.92, page 1237, line 36 “Advertisement protocol ID(#2540) 221 is reserved for vendor specific advertisement protocols” should be “The Advertisement protocol ID(#2540) is reserved for vendor specific advertisement protocols”

9.4.2.174, page 1342, line 60 “Future Channel Guidance element is” should be “The Future Channel Guidance element is”

9.4.2.185, page 1355, line 38 “Key Delivery element contains” should be “The Key Delivery element contains”

9.4.2.195, page 1370, line 37, “S1G Sector Operation element can be provided in Association Response frame” should be “The S1G Sector Operation element can be provided in an Association Response frame”

9.4.2.236, page 1434, line 61 “Operating Class field is set” should be “The Operating Class field is set”

9.4.2.236, page 1435, line 11 “Primary Channel Number field is” should be “The Primary Channel Number field is”

9.4.2.236, page 1435, line 17 “Frequency Segment 1 Channel Number field is” should be “The Frequency Segment 1 Channel Number field is”

9.4.4.1, page 1440, line 46 “NAI Realm Length subfield is” should be “The NAI Realm Length subfield is”

9.4.5.10, page 1456, line 55 “is specified as single enumerated value” should be “is specified as a single enumerated value”

9.6.7.7, page 1505, line 51 “Mesh Channel Switch Parameters element is” should be “The Mesh Channel Switch Parameters element is”

9.6.7.25, page 1521, line 25 “as part of channel query” should be “as part of a channel query”

9.6.7.36, page 1536, line 53 “Channel Center Frequency Segment 1 subfield is set” should be “The Channel Center Frequency Segment 1 subfield is set”

9.9.2.9.3, page 1682, line 41 “When CSSID/ANO Present field is 0, Compressed SSID/Access Network Option [0:31] are set to Compressed SSID, which is 32-bit CRC calculated as defined in 9.2.4.8 (FCS field)” should be “When the CSSID/ANO Present field is 0, the Compressed SSID/Access Network Option field bits [0:31] are set to the Compressed SSID, which is a 32-bit CRC calculated as defined in 9.2.4.8 (FCS field)”

9.9.2.9.3, page 1682, line 46 “When CSSID/ANO Present field is 1, Compressed SSID/Access Network Option [0:7] are set to Access Network Option” should be “When the CSSID/ANO Present field is 1, the Compressed SSID/Access Network Option field bits [0:7] are set to Access Network Option”

**Clause 10** – Menzo

2059.62

The RAW(s) is used for protecting either TWT(s) scheduled by the AP or specific interval(s) for S1G STAs in non-TIM mode(#1116)

2060.1

When an AP schedules TWT(s) for S1G STAs in non-TIM mode(#1116), the AP may set up RAW(s) to protect the TWT(s) for S1G STAs in non-TIM mode

2060.1

10.49.1.2 Resource protection for S1G STAs in non-TIM mode(#1116) using periodic RAW (PRAW) operation

In resource protection for S1G STAs in non-TIM mode(#1116) specified in 10.49.1 (Resource protection for S1G STAs in non-TIM mode(#1116)), PRAW, which is specified in 10.24.5.8 (Periodic RAW (PRAW) operation) can be used to indicate to S1G STAs in TIM mode(#1116) information related to periodically scheduled RAWs during which no S1G STAs in TIM mode(#1116) are allowed to contend.

An example of the basic operation of PRAW allocation is shown in Figure 10-100 (Example of PRAW operation(11ah)). In this figure, PRAW is allocated at every short beacon interval, but the allocation of the PRAW is indicated at every DTIM Beacon frame. STA1 is an S1G STA in TIM mode(#1116) that is not included in the PRAW allocation and STA2 is an S1G STA in non-TIM mode(#1116) for which the AP has scheduled TWT and is included in the PRAW allocation. When STA1 listens to the Beacon frame, it can identify the allowed user group, start time, duration, and the periodicity of the allocated PRAW. As STA1 is not included in the allowed user group of the PRAW, STA1 will not access the channel during allocated PRAW, which is indicated in the S1G Beacon frame that is transmitted every short beacon interval. And, STA2 wakes up at its scheduled TWT, which is within the PRAW, and send its uplink data if it has a Data frame to send.

2060.12

An S1G STA in non-TIM mode(#1116) with dot11TWTOptionActivated equal to true may request for a

TWT protection to a TWT-protection capable AP when it sets up a TWT agreement with the AP.

2060.21

When the TWT-protection capable AP receives a TWT element from the S1G STA in non-TIM mode(#1116) with the TWT Protection subfield equal to 1 during the TWT setup procedure,

2060.27

When the TWT-protection capable AP receives a TWT element from the S1G STA in non-TIM mode

2060.36

After the TWT-protection capable AP has successfully completed the TWT setup

2060.44

To protect contention for medium access for an S1G STA in non-TIM mode(#1116), the AP with dot11RAWOperationActivated equal to true may schedule their TWTs within a RAW that is not assigned to

any S1G STA in TIM mode(

2060.54

In the generic RAW, medium

2060.58

In the non-TIM RAW, the RAW Group field

2060.59

calculated from RAW Slot Definition field

2062.26

If the Poll Type subfield is equal to 2 and is either sent by a STA that is not a TWT requester STA or is sent by a TWT requester STA not within the negotiated TWT SP then the AP shall either respond with the DL BU or with an NDP Ack frame. The NDP Ack frame may include a wakeup timer value (i.e., its Idle Indication field is equal to 1) that expires at the next TBTT.

2062.32

The AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP Ack or NDP PS-Poll-Ack frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from an S1G STA in non-TIM mode(#1116) that satisfies the criteria above.

2062.42

The UL-Sync capable AP may also respond with a control response frame that includes a Duration field that indicates a wakeup timer (i.e., an NDP Ack or NDP PS-Poll-Ack frame with Idle Indication field equal to 1) if it receives a trigger or NDP PS-Poll frame from an S1G STA in non-TIM mode(#1116) that satisfies the criteria above.

2062.47

The S1G AP shall set More Data field to 1 in the responding control frame if there is BU buffered for the non-TIM S1G STA. If the non-TIM S1G STA receives the responding control frame in which the Idle Indication field is equal to 1 and the Duration field is a nonzero value, there is no frame transmission for the STA in the indicated duration in which the S1G STA may enter the doze state(#2422). After the amount of time that is equal to the value in the Duration field, it shall be in the awake state(#2422).

2062.55

An S1G AP may set the wakeup timer (Duration field) as the duration to a TBTT in the responding control frame (either NDP Ack frame or NDP PS-Poll-Ack frame) and treat the S1G STA in non-TIM mode(#1116) as an S1G STA in TIM mode(#1116) starting from the TBTT if the bit corresponding to the S1G STA in non-TIM mode(#1116) in the traffic indication virtual bitmap is equal to 1 and the STA has indicated support of temporary PS mode switch by setting the Temporary PS Mode Switch subfield to 1 in the S1G Capabilities element it transmitted to the AP. After the amount of time that is equal to the Duration field value in the responding control frame from the S1G AP, the non-TIM S1G STA shall wake up to receive the Beacon frame. Upon receiving the Beacon frame, the S1G STA in non-TIM mode(#1116) infers from the TIM element indicating that there is BU for it that it is treated as an S1G STA in TIM mode(#1116) and operates as an S1G STA in TIM mode(#1116) from then on, setting dot11NonTIMModeActivated to false and switching to TIM mode (see 11.2.3.2 (Non-AP STA power management modes(11ah))). The S1G STA returns to the S1G STA in non-TIM mode(#1116) operation mode by setting dot11NonTIMModeActivated to true if the S1G AP indicates that there is no more data buffered for the S1G STA and the S1G STA indicates to the S1G AP that there is no more data to transmit. The S1G AP treats the S1G STA as an S1G STA in non-TIM mode(#1116) if the STA indicates that there is no more data to transmit and the S1G AP indicates that there is no more data buffered for the STA.

2063.27

A STA may request to an UL-Sync capable AP to transmit a sync frame at the slot boundary of the STA in a RAW or at the target wake time of the STA.

2063.37

A STA may request to stop the sync frame transmission to the UL-Sync capable AP at any time by sending a Sync Control frame in which the Uplink Sync Request field in the Sync Control field is equal to 0.

2063.40

When a STA is requesting for the sync frame transmission, a STA may also request to an AP to protect a RAW slot in a RAW defined in the Slot Duration field (9.4.2.191 (RPS element(11ah))) or a time duration at a TWT defined in the Nominal Minimum TWT Wake Duration field (9.4.2.199 (TWT element(11ah))), or by setting the Time Slot Protection Request field in the Sync Control field to 1. A STA may also request to an AP protection for a TXOP duration after the expiration of a wakeup timer as described in 10.49.2 (Rescheduling of awake/doze cycle). The time slot protection is not requested, if the Time Slot Protection Request field is equal to 0. When an AP receives a Sync Control frame from a STA with the Time Slot Protection Request field equal to 1, the AP shall protect a time slot that is assigned for the STA in a RAW, or a time duration that is assigned for the STA at a TWT, or a TXOP duration after the expiration of a wakeup timer of the STA with NAV-setting frame exchanges. Note that NAV-setting frame exchanges refer to any frame that can set NAV to other third-party stations, and AP has the flexibility to choose any NAV-setting frame exchanges for protection.

2063.63

If the medium is busy at the slot boundary of the STA in the RAW or at the TWT of the STA, or at the expiration of the wakeup timer, or if the UL-Sync capable AP determines that the remaining time in the RAW slot or the TWT SP, or the TXOP duration to be too short to transmit a sync frame, the UL-Sync capable AP shall cancel the scheduled sync frame transmission. When the STA is changing from Doze to Awake in order to transmit, the STA shall follow the rules defined in 11.2.3.2 (Non-AP STA power management modes(11ah)).

The UL-Sync capable AP should use the NDP CTS frame as a sync frame.

When a STA receives an NDP CTS frame with the RA/Partial BSSID field equal to the S1G partial AID of the STA from the UL-Sync capable AP with which the STA is associated, the STA shall transmit a Data frame to the AP a SIFS after the reception of the NDP CTS frame if the STA has a Data frame to transmit to the AP and has requested the AP for a sync frame transmission. When a STA receives an NDP CTS frame with the RA/Partial BSSID field not equal to the S1G partial AID of the STA, the STA shall follow the NAV setting rules defined in 10.3.2.4 (Setting and resetting the NAV). After transmitting the NDP CTS frame, the AP shall wait for an AckTimeout interval (as defined in 10.3.2.11 (Acknowledgment procedure)), starting at the PHY-TXEND.confirm primitive. If a PHY-RXSTART.indication primitive does not occur during the AckTimeout interval, the AP may transmit a CF-End frame or an NDP CF-End frame to reset the NAV provided that the remaining duration is long enough to transmit this frame.

For a STA requesting for the sync frame transmission with the Time Slot Protection Request field set to 0, the AP should not send a sync frame at each slot boundary within a RAW period if the Cross-Slot Boundary field is equal to 0.

Figure 10-101 (Example of uplink sync frame transmission procedure in RAW(11ah)) illustrates an example of the uplink sync frame transmission procedure in a RAW. STA1 is allocated Slot1 in the RAW and STA2 is allocated Slot3 in the RAW. Both STA1 and STA2 have requested the UL-Sync capable AP to transmit a sync frame at the slot boundary. At the slot boundary of Slot1, the medium is idle and thus the AP transmits a sync frame at the slot boundary. However, at the slot boundary of Slot3, the medium is busy and thus the AP cancels the scheduled sync frame transmission for STA2.

2065.31

a) The transmission of one PPDU that is either an NDP PS-Poll-Ack frame or that satisfies the following conditions:

2065.43

An S1G STA that transmits this PPDU is known as the BDT Initiator.

2066.21

A non-AP STA may transition to the doze state(#2422) if it is the intended receiver of a frame with More Data field equal to 0 that is sent by the AP.

Upon receiving a PS-Poll+BDT frame with the More Data field equal to 0, the S1G AP that intends to respond with immediate Data frames may use the RTS/CTS scheme to send buffered data until it transmits a frame with MORE DATA equal to 0 or until the duration of the exchange, including the initial PS-Poll+BDT frame reaches the TXOP limit whichever comes first.

Figure 10-102 (Example of BDT exchange(11ah)) illustrates an example of BDT signaling. STA A initiates the BDT exchange by setting the Response Indication to Long Response in the PS-Poll+BDT frame and in the preamble of two PV0 PPDUs to allow STA B to transmit its BUs. At the end, STA B sends a PPDU with the Response Indication 2 (Normal Response) and STA A will terminate the BDT exchange by sending a PPDU with the Response Indication equal to 0 (No response).

2067.8

If an S1G STA supports the page slicing mechanism as defined in this subclause, then it shall set dot11PageSlicingImplemented to true. Otherwise, an S1G STA that does not support the page slicing mechanism or a non-S1G STA shall set dot11PageSlicingImplemented to false.

An AP with dot11PageSlicingActivated equal to true and that has at least one associated STA with dot11PageSlicingActivated equal to true and whose AID is contained in the

— Final block (32nd block) of a page, and has indicated a Page Slice Count equal to 0 and a Page Length greater than 1 in the Page Slice element shall include in the last S1G Beacon frame that precedes the next scheduled DTIM Beacon frame, a TIM element with Page Index subfield equal to the page index specified in the previously transmitted Page Slice element. The TIM element shall have the Page Slice Number equal to 31 for the indicated page, if there is buffered traffic for at least one of the STA(s) that support page slicing and belong in the final block of the page.

— Any block of a page, and has indicated a Page Slice Count equal to 0 and a Page Length equal to 1 in the Page Slice element shall include in the only S1G Beacon frame that precedes the next scheduled DTIM Beacon frame, a TIM element with Page Index subfield equal to the page index specified in the previously transmitted Page Slice element. The TIM element shall have the Page Slice Number equal to 31 for the indicated page, if there is buffered traffic for at least one of the STA(s) that support page slicing and belong in any block of the page. The setting of the bits in the virtual bitmap of that TIM for STAs that do not support page slicing follows the rules described in 11.2.3.6 (AP operation(M53)).

For each page from which an AP with a value of false for dot11PageSlicingActivated has assigned at least one AID corresponding to STA(s) for which there is buffered traffic, the AP shall include in all the S1G Beacons a TIM element for that page, with Page Slice Number equal to 31 and shall set the bits in the virtual bitmap of that TIM for all the STAs indicated by the Page Index subfield, according to the rules described in 11.2.3.6 (AP operation(M53)).

An AP (#1074)with dot11PageSlicingActiviated equal to true may include more than one TIM representing different page slices within a Beacon frame. An AP (#1074)with dot11PageSlicingActiviated equal to true shall not transmit the Page Slice element in any frame other than a Beacon frame that has DTIM count equal to 0. Each page slice corresponding to a TIM, except the last TIM, shall have a size that is equal to the Page Slice Length subfield indicated in the Page Slice element. However, the length of page slice may vary over multiple page periods. The AP shall transmit the first page slice in the N-th Beacon frame after the DTIM in which the Page Slice element appears, where N is equal to the TIM offset subfield. Subsequent page slices indicated in the Page Slice element appear sequentially in the following Beacons, e.g., the second slice appears in (N+1)th Beacon frame after the DTIM that contained the Page Slice element. The value of zero for TIM offset corresponds to the DTIM Beacon frame. The TIMs can be flexibly scheduled for page slices of different pages over beacon intervals. Figure 10-103 (Illustration of Page Slicing with Page Slice element(11ah)) is an illustration with 4 page slices, which appear in the DTIM Beacon frame and the three following Beacons when the TIM Offset subfield of the Page Slice element is equal to 0.

The Page slice element indicates assignment of STAs in page slices corresponding to their assigned TIMs. STAs within the assigned page slice wake up at corresponding TIM sequentially to receive buffered data from AP. In order to wake up at the appropriate TBTT to receive the Page Slice element, a STA may compute the page slice assignment to the TIMs using the length of the Page Bitmap field and the value in the Page Slice Length and Page Slice Count subfields of the Page Slice element. The length of the page slice that appears in each TIM, except for the last TIM identified by a Page Slice element, is indicated in the Page Slice Length subfield. The last TIM includes the blocks indicated by the bits of the Page Bitmap field that have not appeared in previous TIMs.

An S1G STA with dot11PageSlicingActivated equal to true wakes up to receive DTIM Beacon frame which contains the Page Slice element for its associated page slice from the AP. The STAs check the DTIM frame comprising of the Page Bitmap field and the Block Bitmap fields in Page Slice element and TIM, respectively. The Page Bitmap field in the Page Slice element provides an early indication of buffered data for all blocks in the assigned page slices. If a bit in the Page Bitmap field of the Page Slice element is equal to 0, it indicates that there is no buffered data for STAs with AIDs located in the block corresponding to that bit. These STAs may return to doze state immediately when there is no buffered group addressed data or after receiving buffered broadcast/group data as indicated in the DTIM. If the block bit in the Page Bitmap field is equal to 1, then it indicates that there is buffered data at the AP for at least one of the STAs with AIDs in that block. For STAs that have their AIDs that correspond to a block for which the bit in the Page Bitmap field of the Page Slice element is equal to 1, they compute the length of the page slice and the corresponding TIM to wake up. If they are not assigned in page slice 1 that is allocated to DTIM slice, then these STAs may return to doze state immediately or after receiving buffered broadcast/group data as indicated in the DTIM till their scheduled TIM.

At the assigned page slice, the STAs decode the page slice in order to determine whether there is buffered data available at the AP. When dot11PageSlicingActivated is true, an S1G AP may use the Listen Interval field and Page Slice element information in determining the lifetime of frames that it buffers for an S1G STA in TIM mode(#1116) that supports page slicing.

2070.10

An SST STA is an S1G STA that is associated with an SST AP and that chooses a subset of the operating channels enabled for SST operation on which to operate in the BSS, when SST operating channels are activated by the AP as indicated in the SST element, the SST operation element, or the RPS element.

2070.24

An SST AP that sets up an SST BSS shall include the SST Operation element in (Re)Association Response frames sent during association. The S1G AP may include the SST Operation element in S1G Beacon frames. The SST AP indicates the set of enabled SST operating channels, the offset of the primary channel, and the channel width unit in the SST Operation element as described in 9.4.2.214 (SST Operation element(11ah)). The set of enabled SST operating channels may include channels that are not in use by the BSS as specified by the SST Enabled Channel bitmap of the element. The SST AP that sets up an SST BSS shall choose the subset of allowed SST operating channels from the subset of enabled SST operating channels indicated in the SST Operation element. The set of enabled SST operating channels indicated by the AP is not static. The S1G AP may include the RPS element in S1G Beacon frames to signal additional channels allowed for SST operation within specific RAWs. The channels that are allowed for SST operation in the RPS element can be different from the channels allowed for SST operation in the SST element.

2071.1

An SST AP shall include the SST element in the S1G Beacon frame that immediately precedes a beacon interval or short beacon interval when it allows SST operation within that interval (see Figure 10-104 (Selective Subchannel Transmission channel transmission permission allocation for SST element(11ah))).

2072.9

The AP may signal the presence of a RAW for the purpose of SST sounding for a group of STAs using an SST sounding RAW as indicated within a transmitted RPS information element. Such an SST sounding RAW may be scheduled for periodic or nonperiodic operation. An additional RAW(s) may be scheduled as SST report RAW(s) (see 9.4.2.191 (RPS element(11ah))) after the SST sounding RAW for the transmission of S1G NDP CMAC frames (e.g., NDP PS-Poll frame) by SST STAs on their selected channel(s) for the purpose of communicating a selected subchannel to the AP. The AP is not required to use a RAW for SST sounding.

In the SST report RAW, the STA transmits a report frame to the AP not earlier than the start of its assigned RAW slot, followed by the AP’s response for confirmation after SIFS.

When the AP uses a RAW for SST sounding, the RAW Type subfield is equal to sounding RAW, and the RAW Type Options subfield is equal to SST sounding RAW in the RPS information element (see 9.4.2.191 (RPS element(11ah))) transmitted by the AP. The SST sounding sequence within the SST sounding RAW comprises a series of S1G NDP CMAC frames (e.g., NDP CTS frames), each transmitted on one of the channels among those indicated by the Channel Indication field of the RAW, starting with lowest frequency channel and continuing in sequence with the next higher frequency channel if more than one channel is indicated. The RPS element for the SST sounding RAW specifies a start time, channel(s) and RAW duration for each RAW assignment. The AP shall not transmit any S1G NDP CMAC frame on a channel within an SST sounding RAW before the TxPIFS slot boundary as defined in 10.3.7 (DCF timing relations). If the AP does not observe an idle medium condition within one PIFS after switching to a channel, then the AP shall not transmit an NDP, but shall wait for the duration of an NDP before switching to the next channel. This deterministic channel switching allows listening SST STAs to predict the timing of the sounding transmission for each channel. An AP may schedule multiple SST sounding RAWs to increase the probability that a sounding frame is transmitted on each SST channel. The amount of time allocated in the sounding RAW for the channel switch operations performed by the AP is implementation dependent, and is calculated at the non-AP STA by subtracting the value (#1227)(Ed)N × (PIFS + NDPTxTime) from the total RAW duration and dividing the result by (Ed)N-1, where N is the number of channels to be sounded.

When the AP uses a RAW for SST operation and the RAW is not a sounding RAW, then the RAW Type is generic RAW and the Channel Indication Presence bit is set to 1 and the number of channels indicated in the Channel Indication in the RPS information element (see 9.4.2.191 (RPS element(11ah))) transmitted by the AP shall be one, unless there is only one STA assigned to each slot in the RAW defined by the RPS element. An AP shall not schedule any non-SST STA within a RAW that has a Channel Indication Presence bit equal to 1.

A local S1G Beacon frame is one that was transmitted by the AP with which a STA is associated.

An SST STA may select one or more SST channels from the enabled SST operating channels as indicated in the SST Operation element transmitted by the SST AP with which it is associated. The SST STA may operate on those SST channels for the beacon interval or short beacon interval following a TBTT or TSBTT if a local S1G Beacon frame with an SST element indicating that a subset of the enabled SST channel(s) are allowed for SST operation has been received by the SST STA during that interval. The STA shall not transmit frames on the indicated allowed SST channels with a bandwidth that is wider than the Maximum Transmission Width specified in the SST element. If no local S1G Beacon frame is received following a TBTT or TSBTT, then no SST STA transmission is allowed during the beacon interval or short beacon interval that begins at that TBTT or TSBTT except on the primary channel of the BSS. If an SST STA receives a local S1G Beacon frame which contains no SST element, the SST STA may transmit on the primary channel of the BSS a PPDU of width up to the BSS bandwidth indicated in the S1G Beacon frame during the beacon interval or short beacon interval that immediately follows the reception of the S1G Beacon frame.

An SST STA that has selected an SST operating channel that is not the primary channel for the BSS shall operate on the selected channel as though the channel is the primary channel of the BSS, but only at the times allowed for operation on the selected channel as indicated in this subclause.

An SST STA that selected its best SST operating channel(s) may report its selection to the SST AP by sending an NDP PS-Poll frame on the primary channel of the BSS, including the selected SST channel offset in the UDI field. The transmission of any frame on an allowed subchannel by an SST STA is an implicit indication to the AP as to the subchannel selection made by the SST STA. An SST STA may queue for transmission, a QoS NULL frame addressed to the AP for this purpose. To avoid ambiguity in which subchannel has been selected by the STA as its primary channel, the STA can send the frame using the minimum width channel for the band of operation on the selected primary channel.

An SST STA that has selected a subchannel for operation should operate on that subchannel during times indicated for permitted downlink and uplink operation according to the DL Activity and UL Activity fields and the Activity Start Time field in the SST element. An AP should transmit frames to SST STA on their selected subchannels.

An SST STA shall not transmit to the AP on an SST operating channel that is not indicated as allowed by the AP in the SST element. The set of allowed SST channels indicated by the AP in the SST element is dynamic and can change every beacon interval or short beacon interval.

An SST AP shall not be away from the primary channel of the BSS for a duration of time that exceeds the value of the dot11MaxAwayDuration during a beacon interval or short beacon interval, as defined in 11.2.3.18 (AP Power Management(11ah)).

2073.47

Periodic SST operation shall follow the procedure in 10.53.2 (Aperiodic SST operation) with the additional requirement that the SST AP shall transmit at least one RPS element with the Channel Indication Presence bit set to 1 and the Periodic RAW Indication bit set to 1 preceding the first beacon interval or short beacon interval during which SST operation is permitted and no SST element shall be transmitted. The periodicity, validity, and start offset of the periodic SST operation are indicated in the Periodic Operation Parameters subfield of the RAW Assignment subfield of RPS element. When the RPS element is used to indicate a periodic SST sounding schedule, the RAW Type subfield of the RPS element is set to sounding RAW and the RAW Type Options subfield of the RPS element is set to SST sounding RAW.

2187.27

The PCP may schedule a SP or CBAP within a D-BI

1699.63

Grant (if first transmission and when in a CBAP and not transmitted in response to a SPR frame)

1700.60

A STA shall not allow the space between frames that are defined to be separated by a SBIFS, as measured on the medium, to be less than aSBIFSTime or to be more than aSBIFSTime + aSBIFSAccuracy. Two frames separated by a SBIFS shall both be DMG PPDUs

1712.20

If the TXOP is owned by the AP and dual CTS protection is enabled in the system, the AP may send dual CFEnd frames if it runs out of frames to transmit, provided that the remaining TXOP duration after the transmission of the last frame can accommodate a STBC CF-End frame duration at the lowest STBC basic rate, a CF-End frame that is a non-STBC frame at the lowest basic rate, and two SIFSs.

1732.39

A STA shall maintain a SRC and an LRC for each MSDU or MMPDU awaiting transmission. These counts are incremented and reset independently of each other.

1759.5

A BRP PPDU(#1379) transmitted during beam refinement at the start of a SP

1889.32

unless the transmission occurs within a SP of that STA

The PSMP-DTT and PSMP-UTT allocated to a STA shall occur within a SP of that STA.

1889.61

In addition to the EOSP mechanism, the AP may indicate the end of a SP through the transmission

1960.60

SPRj is a SPR transmission j

1962.38

The AP or PCP may grant a dynamic allocation of service period to a STA that does not transmit a SPR frame during the PP.

2110.18

After transmitting a CF-END frame to truncate a SP or TXOP

2188.27

The PCP may schedule a SP or CBAP within a D-BI

2174.26

An STA may include a MAD element in the Probe Request or (Re)Association Requests frames.

**Clause 11** – Joe

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

#### missing nouns

**Clause 9** – Carol

9.2.4.7.1, page 806, line 6 “The Frame Body is” should be “The Frame Body field is”

9.2.4.8, page 810, line 50, 54, 59 “The FCS is” should be “The FCS field value is”

9.2.4.8, page 811, line 50, 54, 59 “and FCS,” should be “and the FCS field,”

9.4.1.42, page 930, line 4 “The Finite Cyclic Group is” should be “The Finite Cyclic Group field is”

9.4.2.20.7, page 1008, line 12 “Measurement Mode indicates” should be “The Measurement Mode field indicates”

9.4.2.20.9, page 1013, line 1 “Group Identity indicates” should be “The Measurement Mode field indicates”

9.4.2.20.11, page 1021, line 45 “Average is set to 1” should be “The Average bit is set to 1”

9.4.2.20.11, page 1021, line 52 “Consecutive is set to 1” should be “The Consecutive bit is set to 1”

9.4.2.20.11, page 1021, line 59 “Delay is set to 1” should be “The Delay bit is set to 1”

9.4.2.20.11, page 1022, line 28 “Delayed MSDU Range contains” should be “The Delayed MSDU Range field contains”

9.4.2.20.11, page 1022, line 29 “Delayed MSDU Range is” should be “The Delayed MSDU Range field is”

9.4.2.20.11, page 1022, line 50 “Delayed MSDU Count contains” should be “The Delayed MSDU Count field contains”

9.4.2.21.5, page 1038, line 11 “Actual Measurement Start Time is” should be “The Actual Measurement Start Time field is”

9.4.2.21.5, page 1038, line 15 “Measurement Duration is” should be “The Measurement Duration field is”

9.4.2.21.5, page 1038, line 19 “Channel Load is” should be “The Channel Load field is”

9.4.2.21.6, page 1039, line 38 “Actual Measurement Start Time is” should be “The Actual Measurement Start Time field is”

9.4.2.21.6, page 1039, line 41 “Measurement Duration is” should be “The Measurement Duration field is”

9.4.2.21.6, page 1039, line 45 “Antenna ID is” should be “The Antenna ID field is”

9.4.2.21.6, page 1039, line 48 “ANPI is” should be “The ANPI field is”

9.4.2.21.7, page 1041, line 32 “Actual Measurement Start Time is” should be “The Actual Measurement Start Time field is”

9.4.2.21.7, page 1041, line 35 “Measurement Duration is” should be “The Measurement Duration field is”

9.4.2.21.7, page 1041, line 52 “Condensed PHY Type is” should be “The Condensed PHY Type subfield is”

9.4.2.21.7, page 1041, line 57 “Reported Frame Type is” should be “The Reported Frame Type subfield is”

9.4.2.21.7, page 1041, line 60 “RCPI is” should be “The RCPI field is”

9.4.2.21.7, page 1042, line 1 “RSNI is” should be “The RSNI field is”

9.4.2.21.8, page 1044, line 32, “Actual Measurement Start Time is” should be “The Actual Measurement Start Time field is”

9.4.2.21.8, page 1044, line 35, “Measurement Duration is” should be “The Measurement Duration field is”

9.4.2.21.8, page 1045, line 35, “PHY Type is” should be “The PHY Type field is”

9.4.2.21.8, page 1045, line 39, “Average RCPI is” should be “The Average RCPI field is”

9.4.2.21.8, page 1045, line 44, “Last RSNI is” should be “The Last RSNI field is”

9.4.2.21.8, page 1045, line 48, “Last RCPI is” should be “The Last RCPI field is”

9.4.2.21.8, page 1045, line 57, “Frame Count is” should be “The Frame Count field is”

9.4.2.21.10, page 1057, line 56, “Azimuth Type is” should be “The Azimuth Type field is”

9.4.2.21.10, page 1057, line 60, “Azimuth Resolution is” should be “The Azimuth Resolution field is”

9.4.2.21.10, page 1057, line 62, “Azimuth is” should be “The Azimuth field is”

9.4.2.21.11, page 1061, line 46, “The Transmit Stream/Category Measurement applies” should be “The Transmit Stream/Category Measurement report applies”

9.4.2.21.11, page 1062, line 11, “Actual Measurement Start Time is” should be “The Actual Measurement Start Time field is”

9.4.2.21.11, page 1062, line 15, “Measurement Duration is” should be “The Measurement Duration field is”

9.4.2.21.11, page 1062, line 21, “Peer STA Address contains” should be “The Peer STA Address field contains”

9.4.2.21.11, page 1063, line 24, “Average Queue Delay is” should be “The Average Queue Delay field is”

9.4.2.21.11, page 1063, line 30, “Average Transmit Delay is” should be “The Transmit Queue Delay field is”

9.4.2.21.13, page 1069, line 36, “The Location Reference is” should be “The Location Reference field is”

9.4.2.21.13, page 1069, line 55, “from the Location Reference starting point” should be “from the Location Reference value’s starting point”

9.4.2.21.13, page 1069, line 57, 58. 59, and 60 “relative to the Location Reference” should be “relative to the Location Reference value’s starting point” (not sure on the best way to reword this one.)

9.4.2.21.13, page 1070, line 41 “2-Dimension Point Location Shape Value is” should be “2-Dimension Point Location Shape Value field is”

9.4.2.21.13, page 1070, line 56 “3-Dimension Point Location Shape Value is” should be “3-Dimension Point Location Shape Value field is”

9.4.2.21.13, page 1071, line 8 “Circle Location Shape Value is” should be “Circle Location Shape Value field is”

9.4.2.21.13, page 1071, line 26 “Sphere Location Shape Value is” should be “Sphere Location Shape Value field is”

9.4.2.21.13, page 1071, line 46 “Polygon Location Shape Value is” should be “Polygon Location Shape Value field is”

9.4.2.21.13, page 1071, line 61 “List of 2-Dimension Points is” should be “List of 2-Dimension Points field is”

9.4.2.21.13, page 1072, line 1 “Prism Location Shape Value is” should be “Prism Location Shape Value field is”

9.4.2.21.13, page 1072, line 16 “List of 3-Dimension Points is” should be “List of 3-Dimension Points field is”

9.4.2.21.13, page 1072, line 19 “Ellipse Location Shape Value is” should be “Ellipse Location Shape Value field is”

9.4.2.21.13, page 1072, line 42 “Ellipsoid Location Shape Value is” should be “Ellipsoid Location Shape Value field is”

9.4.2.21.13, page 1073, line 6 “Arcband Location Shape Value is” should be “Arcband Location Shape Value field is”

9.4.2.24.1, page 1083, line 35 “The RSNE contains” should be “The RSNE field contains”

9.4.2.24.1, page 1083, line 35 “the RSNE is” should be “the RSNE field is”

9.4.2.24.1, page 1083, line 56 “The size of the RSNE is” should be “The size of the RSNE field is”

9.4.2.24.1, page 1084, line 1 “The RSNE contains up to” should be “The RSNE field contains elements up to”

9.4.2.24.2, page 1086, lines 23, 27, 31, 34 “in the RSNE.” should be “in the RSNE field.”

9.4.2.24.5, page 1094, line 62 “in the RSNE in” should be “in the RSNE field in”

9.4.2.29, page 1106, line 64 “The TSPEC allows” should be “The TSPEC element contains”

9.4.2.29, page 1109, line 4, 20 “under this TSPEC” should be “under this TSPEC element”

9.4.2.29, page 1109, line 30 “when the TSPEC is” should be “when the TSPEC element is”

9.4.2.29, page 1109, line 43 “the Maximum Service Interval to” should be “the Maximum Service Interval field to”

9.4.2.29, page 1110, line 2, 19, 35 “of this TSPEC” should be “of this TSPEC element”

9.4.2.29, page 1111, line 2, 19, 35 “in this TSPEC” should be “in this TSPEC element”

9.4.2.29, page 1111, line 17 “of this TSPEC” should be “of this TSPEC element”

9.4.2.29, page 1111, line 46 “for Surplus Bandwidth Allowance.” should be “for the Surplus Bandwidth Allowance element.”

9.4.2.29, page 1111, line 56, 57, 59 “if this TSPEC was” should be “if this TSPEC element was”

9.4.2.29, page 1111, line 1 “if the TSPEC was” should be “if the TSPEC element was”

9.4.2.29, page 1112, line 2 “of the TSPEC” should be “of the TSPEC element”

9.4.2.29, page 1112, line 4 “in a TSPEC when the BSS to which the TSPEC applies” should be “in a TSPEC element when the BSS to which the TSPEC element applies”

9.4.2.30, page 1114, line 14 “in this TCLAS as” should be “in this TCLAS element as”

9.4.2.30, page 1114, line 54 “affiliated TSPEC” should be “affiliated TSPEC element”

9.4.2.30, page 1115, line 54 “the Classifier Type is equal” should be “the Classifier Type subfield

is equal”

9.4.2.36, page 1127, line 6 “The BSSID is” should be “The value of the BSSID field is”

9.4.2.37, page 1134, line 56” RCPI is a monotonically” should be “The value of the RCPI field is a monotonically”

9.4.2.40, page 1137, line 63 “RSNI is in steps of 0.5 dB.” should be “The value of the RSNI field is in steps of 0.5dB.”

9.4.2.43, page 1139, line 31 “The AC Access Delay is” should be “The value of the AC Access Delay field is”

9.4.2.43, page 1139, line 33 “the Average Access Delay for that AC” should be “the value of the Average Access Delay field for that AC”

9.4.2.53, page 1153, line 22 “The Zero Delimiter is set to 0.” should be “The Zero Delimiter element is set to 0.”

9.4.2.67.4, page 1186, line 13, 15 “If the Peer Status is” should be “If the Peer Status field is”

9.4.2.68.5, page 1191, line 18, “in the AP Descriptior.” should be “in the AP descriptor subelement.”

9.4.2.70.2, page 1202, line 47, “The Normal Report Interval is” should be “The Normal Report Interval field contains”

9.4.2.70.2, page 1202, line 51, “the Normal Report Interval is” should be “the value of the Normal Report Interval field is”

9.4.2.70.2, page 1202, line 47, “The Normal Number of Frames per Channel is” should be “The Normal Number of Frames per Channel field contains”

9.4.2.70.2, page 1203, line 4, “The In-Motion Report Interval is” should be “The In-Motion Report Interval field contains”

9.4.2.70.2, page 1203, line 8, “The In-Motion Number of Frames per Channel is” should be “The In-Motion Number of Frames per Channel field contains”

9.4.2.70.2, page 1203, line 13, “The Burst Inter-frame Interval is” should be “The Burst Inter-frame Interval field contains”

9.4.2.70.2, page 1203, line 18, “The Tracking Duration is” should be “The Tracking Duration field contains”

9.4.2.70.2, page 1203, line 28, “The ESS Detection Interval is” should be “The ESS Detection Interval field contains”

9.4.2.77, page 1216, line 15, “The AC STA Count List comprises” should be “The AC STA Count List field contains”

9.4.2.90, page 1232, line 58, “The U-APSD coexistence provides” should be “The U-APSD Coexistence element contains”

9.4.2.138, page 1237, line 42, “Operating Class indicates” should be “The Operating Class field indicates”

9.4.2.138, page 1237, line 42-43, “Operating Class indicates” should be “The Operating Class and Channel Number fields together”

9.4.2.138, page 1237, line 44, “values of Operating Class are” should be “values of the Operating Class field are”

9.4.2.168, page 1335, line 4, “format of the Device Location Information Body is” should be “format of the Device Location Information Body field is”

9.4.2.170.2, page 1338, line 43, “The BSSID is” should be “The BSSID field is”

9.4.2.170.3, page 1338, line 50, 54, “The Short-SSID is calculated” should be “The value of the Short-SSID field is calculated”

9.4.2.170.3, page 1338, line 59, “The Short-SSID is” should be “The value of the Short-SSID field is”

9.4.2.175, page 1343, line 58, “The Association Delay Info is” should be “The Association Delay Info field is”

9.4.2.186, page 1356, line 52 “FILS User Priority Bit 0 subfield of 1” should be “A value of 1 in the FILS User Priority Bit 0 subfield”

9.4.2.186, page 1356, line 53 “FILS User Priority Bit 1 subfield of 1” should be “a value of 1 in the FILS User Priority Bit 1 subfield”

9.4.2.186, page 1356, line 56 “FILS User Priority Bit 2 subfield of 1” should be “A value of 1 in the FILS User Priority Bit 2 subfield”

9.4.2.191, page 1359, line 61, “The RAW Type indicates” should be “The value of the RAW Type field indicates”

9.4.2.199, page 1378, line 61, “after receiving an NDP Paging with” should be “after receiving an NDP Paging frame with a”

9.4.2.204, page 1393, line 1“The format of Relay Control is” should be “The format of the Relay Control field is”

9.4.2.236, page 1435, line 11 “Primary Channel Number is” should be “The value of the Primary Channel Number is”

9.4.2.236, page 1435, line 18-19 “Frequency Segment 1 Channel Number field is” should be “The value of the Frequency Segment 1 Channel Number field is”

9.4.5.10, page 1454, line 25 “Name is the name” should be “The Name field is the name”

9.4.4.1, page 1440, line 21 “The NAI Realm Data Field Length is” should be “The NAI Realm Data Field Length subfield is”

9.4.4.1, page 1440, line 28 “The NAI Realm Encoding is” should be “The NAI Realm Encoding subfield is”

9.4.4.1, page 1440, line 40 “The EAP Method Count specifies the” should be “The EAP Method Count subfield specifies the”

9.4.4.1, page 1440, line 57 “The NAI Realm Encoding Type is” should be “The NAI Realm Encoding Type subfield is”

9.4.5.13, page 1458, line 35 “The Location Civic Report is” should be “The Location Civic Report field is”

9.6.6.5, page 1497, line 53 “RCPI indicates” should be “The RCPI field indicates”

9.6.6.5, page 1497, line 57 “RSNI indicates” should be “The RSNI field indicates”

9.6.7.31, page 1526, line 20 “A Reason Result Code value of 1” should be “A value of 1 in the Reason Result Code field”

9.6.7.36, page 1532, line 24 “The Short SSID Indicator subfield of 1 indicates” should be “A value of 1 in the Short SSID Indicator subfield”

9.6.7.36, page 1532, line 29 “The AP-CSN Presence Indicator subfield of 1 indicates” should be “A value of 1 in the AP-CSN Presence Indicator subfield”

9.6.7.36, page 1532, line 33 “An Access Network Options (ANO) Presence Indicator subfield of 1indicates” should be “A value of 1 in the Access Network Options (ANO) Presence Indicator subfield of 1”

9.6.7.36, page 1532, line 38 “The Channel Center Frequency Segment 1 Presence Indicator subfield of 1 indicates” should be “A value of 1 in the Channel Center Frequency Segment 1 Presence Indicator subfield of 1”

9.6.7.36, page 1532, line 43 “The Primary Channel Presence Indicator subfield of 1indicates” should be “A value of 1 in the Primary Channel Presence Indicator subfield of 1”

9.6.7.36, page 1532, line 48 “The RSN Information Presence Indicator subfield of 1 indicates” should be “A value of 1 in the RSN Information Presence Indicator subfield of 1”

9.6.7.36, page 1532, line 52 “The Length Presence Indicator subfield of 1 indicates” should be “A value of 1 in the Length Presence Indicator subfield of 1”

9.8.4.2, page 1663, line 6 “The A2 is an SID field” should be “The A2 field is a SID field”

9.8.4.3, page 1663, line 60 “The A2 contains” should be “The A2 field contains”

9.9.2.9.3, page 1682, line 49 “Compressed SSID/Access Network Option [8:31] are reserved” should be “Compressed SSID/Access Network Option field bits [8:31] are reserved”

**Clause 10** – Menzo

See above

**Clause 11** - Joe

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

#### unnecessary nouns

**Clause 9** – Carol

No findings

**Clause 10** – Menzo

1802.18

NOTE 2—For both an HT and a VHT STA, an EDCA TXOP is obtained based on activity on the primary channel (see 10.24.2.4 (Obtaining an EDCA TXOP)). The width of transmission is determined by the CCA status of the nonprimary channels during the PIFS interval before transmission (see VHT description in 10.3.2 (Procedures common to the DCF and EDCAF)).

1805.42

NOTE 4—A PIFS interval is required to be present preceding an RTS transmission by a CMMG STA in order to allow a recipient of the RTS to perform CCA in the secondary 540 MHz channels to determine the appropriate response to the RTS.(11aj)

1813.50

NOTE 2—For CMMG STAs, an EDCA TXOP is obtained based on activity on the primary channel (see 10.24.2.3 (EDCA TXOPs)). The width of transmission is determined by the CCA status of the non-primary channels during the PIFS interval before transmission (see 10.24.2.4 (Obtaining an EDCA TXOP)).

1944.44

A STA that receives a Grant frame and that has the Grant Ack Supported field equal to 1 in the STA’s DMG Capabilities element shall respond with a Grant Ack frame SIFS interval after reception of

1954.17

A destination DMG STA that responds to an RTS frame with a DMG CTS or DMG DTS frame shall transmit the response frame a SIFS interval after the end of the received RTS frame.

1961.18

— SIFS interval following the end of a PP if the PP is present

1997.6

The following rule applies to all channel access in DMG BSSs. A STA shall not transmit a frame as part of a sector sweep comprising at least two sectors if a response is expected within SIFS interval from the STA identified in the RA field of the transmitted frame.

1998.64

The initiator starts the initiator TXSS SIFS interval after transmission of the Grant frame or after the reception of the Grant Ack frame if the Grant Ack Supported field in the responder’s DMG Capabilities element is 1 or PIFS interval after the transmission the Grant frame otherwise.

2000.12

The initiator starts the initiator RXSS SIFS interval after transmission of the Grant frame or after the reception of the Grant Ack frame if the Grant Ack Supported field in the responder’s DMG Capabilities element is 1 or PIFS interval after the transmission the Grant frame otherwise.

2001.34

In the latter case, the next transmission is separated from the previous transmission by LBIFS interval.

2005.53

A beam refinement response is separated from a preceding beam refinement request by at least a SIFS interval and at most a BRPIFS interval provided sufficient time is available for the complete transmission of those frames within the SP allocation or TXOP. Similarly, a beam refinement request, if any, is separated from a preceding beam refinement response by at least a SIFS interval and at most a BRPIFS interval provided sufficient time is available for the complete transmission of the beam refinement request within the SP allocation or TXOP.

2044.33

SBIFS interval following the end of the first TPA Request frame transmission, the destination REDS shall send the second TPA Request

2044.46

SBIFS interval following the end of the transmission of the TPA Response

197.23

sweep: A sequence of transmissions, separated by a short beamforming interframe space (SBIFS) interval, in which the antenna configuration at the transmitter or receiver is changed between transmissions.

832.3

transmit the DMG CTS frame and its SIFS interval

834.18

The Duration field is set to the value obtained from the Duration/ID field of the immediately previous Grant frame minus the time, in microseconds, required to transmit the Grant Ack frame and its SIFS interval.

**Clause 11** – Joe

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

#### unicast and multicast

Emily

See the resolution of CID 2227 for additional fixes.

At 247.64 (x2), 254.10, 2419.13, 2419.53,

Change “unicast MSDUs” to “individually addressed MSDUs”

At 581.42, 586.56:

Change “a unicast GAS frame.” to “an individually addressed GAS frame.”

At 1474.15,

Change “unicast address” to “individual address”

At 1720.2:

Change “Unicast retransmissions of a group addressed BU delivered via DMS use the same sequence

number as the initial unicast transmission of the BU. When a BU is delivered both using group addressing and unicast (e.g., when DMS is active but there are other associated STAs not using DMS), the sequence number might differ between the group addressed and unicast transmissions of the same BU.”

To:

“Individually addressed retransmissions of a group addressed BU delivered via DMS use the same sequence number as the initial individually addressed transmission of the BU. When a BU is delivered both using group addressing and individual addressing (e.g., when DMS is active but there are other associated STAs not using DMS), the sequence number might differ between the group addressed and individually addressed transmissions of the same BU.”

At 2089.10:

Change “Therefore, group addressed MSDUs in a relay network first travel to the root AP as a unicast transmission, after which they travel down the tree as group transmissions by the S1G root AP and the S1G relay AP(s).”

to

“Therefore, group addressed MSDUs in a relay network first travel to the root AP as an individually addressed transmission, after which they travel down the tree as group transmissions by the S1G root AP and the S1G relay AP(s).”

At 2145.63:

Change “unicast frames” to “individually addressed frames”

At 2380.23:

Change “A STA may transmit group addressed GAS Query Request. Multiple STAs that receive a group

addressed GAS Query Request may send a unicast or group addressed GAS Query Response.”

to

“A STA may transmit group addressed GAS Query Request. Multiple STAs that receive a group

addressed GAS Query Request may send an individually addressed or group addressed GAS Query Response.”

At 2499.23:

Change “service class: QoSAck when the destination address is a unicast address. QoSNoAck when the

destination address is not a unicast address”

to

“service class: QoSAck when the destination address is an individual address. QoSNoAck when the

destination address is not an individual address”

At 4481.50, 4481.52:

change “unicast Deauthentication frame” to “individually addressed Deauthentication frame”.

Note that when “unicast” and “multicast” are used for non-MAC entities, they are okay. For example:

* Unicast communication
* All MIB variables including words of “unicast” or “Multicast”
* directed multicast service
* Flexible multicast service
* Multicast parameters for FMS Request
* Multicast Diagnostic
* FMS multicast rate
* multicast integrity protocol
* Multicast Triggered Reporting
* multicast group
* multicast reception
* multicast traffic
* broadcast/multicast transmitter,

### Style Guide 2.10 – Numbers

Edward

[Robert: At least some page/line references here appear to be to D2.0]

[001] At 1061.41, replace “set to zero” with “set to 0”.

[002] At 1285.55, replace “set to zero” with “set to 0”.

[003] At 1061.35, replace “equal to zero” with “equal to 0”.

[004] At 1809.55, replace “equal to zero” with “equal to 0”.

[005] At 1809.58, replace “equal to zero” with “equal to 0”.

[006] At 1809.59, replace “equal to zero” with “equal to 0”.

[007] At 2058.54, replace “equal to zero” with “equal to 0”.

[008] At 2251.40, replace “to zero” with “to 0”.

[009] At 2259.30, replace “to zero” with “to 0”.

[010] At 2411.18, replace “to zero” with “to 0”.

[011] At 1338.59, replace “ones complement” with 1s complement”.

[012] At 956.6, replace “8 octet Membership Status Array field” with “8-octet Membership Status Array field”.

[013] At 956.20, replace “8 octet Membership Status Array field” with “8-octet Membership Status Array field”.

[014] At 956.34, replace “16 octet User Position Array field” with “16-octet User Position Array field”.

[015] At 1070.1, replace “one-octet identifier” with “1-octet identifier”.

[016] At 1153.58, replace “6 octet value,” with “6-octet value”.

[017] At 2057.41, replace “The one-bit Omni field indicator” with “The 1-bit Omni field indicator”.

[018] At 3958.21, replace “an eight-bit value” with “an 8-bit value”.

[019] At 1310.24, replace “The Single AID subfield is one bit in length” with “The Single AID subfield is 1 bit in length”.

[020] At 1311.1, replace “The MM-SME Power Mode subfield is one bit in length” with “The MM-SME Power Mode subfield is 1 bit in length”.

[021] At 1311.13, replace “The BeamLink Cluster subfield is one bit in length” with “The BeamLink Cluster subfield is 1 bit in length”.

[022] At 3310.61, replace “4 bit CRC” with “4-bit CRC”.

[023] At 3314.8, replace “4 bit CRC” with “4-bit CRC”.

[024] At 3316.16, replace “4 bit CRC” with “4-bit CRC”.

[025] At 3956.45, replace “34 bit fixed point value” with “34-bit fixed point value”.

[026] At 3956.58, replace “34 bit fixed point value” with “34-bit fixed point value”.

[027] At 3957.17, replace “34 bit fixed point value” with “34-bit fixed point value”.

[028] At 3957.30, replace “34 bit fixed point value” with “34-bit fixed point value”.

[029] At 3958.6, replace “a 30 bit value” with “a 30-bit value”.

[030] At 3958.61, replace “a 9 bit value” with “a 9-bit value”.

[031] At 3977.3, replace “a 77 bit bitmap” with “a 77-bit bitmap”.

[032] At 4010.25, replace “The remaining 15 bit value” with “The remaining 15-bit value”.

[033] At 4085.52, replace “34 bit fixed point value” with “34-bit fixed point value”.

[034] At 4086.1, replace “34 bit fixed point value” with “34-bit fixed point value”.

[035] At 4086.30, replace “34 bit fixed point value” with “34-bit fixed point value”.

[036] At 4086.45, replace “34 bit fixed point value” with “34-bit fixed point value”.

[037] At 4087.35, replace “a 30 bit value” with “a 30-bit value”.

[038] At 4108.55, replace “34 bit fixed point value” with “34-bit fixed point value”.

[039] At 4109.4, replace “34 bit fixed point value” with “34-bit fixed point value”.

[040] At 4109.32, replace “34 bit fixed point value” with “34-bit fixed point value”.

[041] At 4109.47, replace “34 bit fixed point value” with “34-bit fixed point value”.

[042] At 4110.33, replace “a 30 bit value” with “a 30-bit value”.

[043] At 4150.27, replace “a 48-bit integer.” With “a 48-bit integer”.

[044] At 4150.44, replace “a 48-bit integer.” With “a 48-bit integer”.

[045] At 4151.10, replace “a 48-bit integer.” With “a 48-bit integer”.

[046] At 4151.27, replace “a 48-bit integer.” With “a 48-bit integer”.

[047] At 4234.27, replace “34 bit fixed point value” with “34-bit fixed point value”.

[048] At 4234.42, replace “34 bit fixed point value” with “34-bit fixed point value”.

[049] At 4235.6, replace “34 bit fixed point value” with “34-bit fixed point value”.

[050] At 4235.21, replace “34 bit fixed point value” with “34-bit fixed point value”.

[051] At 4236.3, replace “a 30 bit value” with “a 30-bit value”.

[052] At 4237.6, replace “a 9 bit value” with “a 9-bit value”.

[053] At 4486.45, replace “256-octet \* 8-bit / 128-bit” with “256 octets \* 8 bits / 128 bits”.

[054] At 1017.29, replace “The Location Subject field of an LCI request is a single octet” with “The Location Subject field of an LCI request is 1 octet”.

[055] At 1025.52, replace “The Location Subject field is a single octet” with “The Location Subject field is 1 octet”.

[056] At 1027.31, replace “The Location Subject field is a single octet” with “The Location Subject field is 1 octet”.

[057] At 1115.15, replace “the Classifier Mask subfield is three octets in length” with “the Classifier Mask subfield is 3 octets in length”.

[058] At 1146.3, replace “The MIC Control field is two octets” with “The MIC Control field is 2 octets”.

[059] At 1152.47, replace “all single-octet operating classes” with “all 1-octet operating classes”.

[060] At 1153.24, replace “The Operating Class Duple List subfield lists all two-octet operating classes” with “The Operating Class Duple List subfield lists all 2-octet operating classes”.

[061] At 1153.30, replace “If there are no two-octet operating classes” with “If there are no 2-octet operating classes”.

[062] At 1153.58, replace “The IPN field contains a 6 octet value” with “The IPN field contains a 6-octet value”.

[063] At 1186.8, replace “a 1 octet Subelement ID field, a 1 octet Length field” with “a 1-octet Subelement ID field, a 1-octet Length field”.

[064] At 1186.56, replace “is a 17 octet string” with “is a 17-octet string”.

[065] At 1209.63, replace “is three octets” with “is 3 octets”.

[066] At 1251.3, replace “The MCCAOP Reservation field is a 5 octet field” with “The MCCAOP Reservation field is a 5-octet field”.

[067] At 1251.23, replace “The MCCAOP Offset subfield is three octets in length and” with “The MCCAOP Offset subfield is 3 octets in length and”.

[068] At 1252.1, replace “The MCCA Reply Code field is a 1 octet field” with “The MCCA Reply Code field is a 1-octet field”.

[069] At 1254.29, replace “1 octets in length” with “1 octet in length”.

[070] At 1357.62, replace “The Length field of an Element is one octet” with “The Length field of an Element is 1 octet”.

[071] At 1357.63, replace “single-octet Length count” with “1-octet length count”.

[072] At 1375.54, replace “The Zero Offset of Group subfield is six octets” with “The Zero Offset of Group subfield is 6 octets”.

[073] At 1392.43, replace “The TSF Timer Accuracy field is a 1 octet unsigned integer” with “The TSF Timer Accuracy field is a 1-octet unsigned integer”.

[074] At 1395.30, replace “The Number of STAs field is one octet in length” with “The Number of STAs field is 1 octet in length”.

[075] At 1398.47, replace “Each Probe Response Option Bitmap subfield is one octet” with “Each Probe Response Option Bitmap subfield is 1 octet”.

[076] At 1407.62, replace “The Switch Time field is a 3 octet field indicating” with “The Switch Time field is a 3-octet field indicating”.

[077] At 1440.30, replace “A single octet TLV has a Value field that is a single octet” with “A single octet TLV has a Value field that is 1 octet”.

[078] At 1463.58, replace “The Label Length field is a 1 octet field that” with “The Label Length field is a 1-octet field that”.

[079] At 1564.16, replace “1 octet field” with “a 1-octet field”.

[080] At 1564.18, replace “1 octet field” with “a 1-octet field”.

[081] At 1608.25, replace “The length of the DMG Power Management (DPM) field is one octet” with “The length of the DMG Power Management (DPM) field is 1 octet”.

[082] At 1612.59, replace “The Number of Relay Capable STAs field is one octet in length” with “The Number of Relay Capable STAs field is 1 octet in length”.

[083] At 1614.6, replace “The Number of Channel Measurement Info field is one octet in length” with “The Number of Channel Measurement Info field is 1 octet in length”.

[084] At 1706.8, replace “14 octet MPDU” with “14-octet MPDU”.

[085] At 1706.14, replace “32 octet MPDU” with “32-octet MPDU”.

[086] At 1706.21, replace “14 octet MPDU” with “14-octet MPDU”.

[087] At 1706.29, replace “32 octet MPDU” with “32-octet MPDU”.

[088] At 1716.5, replace “a 32 octet MPDU” with “a 32-octet MPDU”.

[089] At 1737.51, replace “a 14 or 32 octet MPDU” with “a 14-octet or 32-octet MPDU”.

[090] At 1875.1, replace “an unencrypted 2304 octet MSDU” with “an unencrypted 2304-octet MSDU”

[091] At 2058.25, replace “TSF is the 8 octet value” with “TSF is the 8-octet value”.

[092] At 2123.42, replace “the 8 octet TSF timer” with “the 8-octet TSF timer”.

[093] At 2123.43, replace “4 octet TSF Completion field” with “4-octet TSF Completion field”.

[094] At 2426.17, replace “a new 6 octet value” with “a new 6-octet value”.

[095] At 2426.22, replace “the resulting 6 octet value” with “the resulting 6-octet value”.

[096] At 2535.49, replace “the salt shall consist of thirty-two (32) octets” with “the salt shall consist of 32 octets”.

[097] At 2551.59, replace “three reserved octets” with “3 reserved octets”.

[098] At 2763.11, replace “is a four octet string” with “is a 4-octet string”.

[099] At 2763.29, replace “is a four octet string” with “is a 4-octet string”.

[100] At 2764.65, replace “The Selected Pairwise Cipher Suite field shall be set to four octets of zero” with “The Selected Pairwise Cipher Suite field shall be set to 4 octets of zero”.

[101] At 2765.65, replace “The Selected Pairwise Cipher Suite field shall be set to four octets of zero” with “The Selected Pairwise Cipher Suite field shall be set to 4 octets of zero”.

[102] At 3884.32, replace “1 octet type” with “1-octet type”.

[103] At 3886.9, replace “a 17 octet string” with “a 17-octet string”.

[104] At 4020.21, replace “1 octet type” with “1-octet type”.

[105] At 4026.32, replace “a 17 octet string” with “a 17-octet string”.

[106] At 4248.13, replace “The 1 octet identification number” with “The 1-octet identification number”.

[107] At 4372.19, replace “The resulting 100 octet PSDU” with “The resulting 100-octet PSDU”.

[108] At 4401.55, replace “The resulting 100 octet PSDU is” with “The resulting 100-octet PSDU is”.

[109] At 4413.22, replace “The resulting 140 octet PSDU” with “The resulting 140-octet PSDU”.

[110] At 3419.40, replace “11232” with “11 232”.

[111] At 3419.42, replace “11232” with “11 232”.

[112] At 3419.58, replace “11232” with “11 232”.

[113] At 3419.60, replace “11232” with “11 232”.

[114] At 3419.61, replace “11232” with “11 232”.

[115] At 3419.63, replace “11232” with “11 232”.

[116] At 3419.63, replace “14976” with “14 976”.

[117] At 3419.64, replace “14976” with “14 976”.

[118] At 3419.64, replace “12480” with “12 480”.

[119] At 3532.59, replace “10395.00” with “10 395.00”.

[120] At 3532.61, replace “10135.13” with “10 135.13”.

[121] At 3532.61, replace “11261.25” with “11 261.25”.

[122] At 3533.17, replace “10395.00” with “10 395.00”.

[123] At 3533.17, replace “11550.00” with “11 550.00”.

[124] At 3533.19, replace “12474.00” with “12 474.00”.

[125] At 3533.19, replace “13860.00” with “13 860.00”.

[126] At 3533.21, replace “13513.50” with “13 513.50”.

[127] At 3533.21, replace “15015.00” with “15 015.00”.

[128] At 3413.62, replace “10000.0” with “10 000.0”.

[129] At 3414 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[130] At 3415 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[131] At 3416 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[132] At 3417 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[133] At 3418 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[134] At 3419 (whole page), add spaces to group digits into threes with 5 digits in the “Data\_rate” column.

[135] At 1333.52, replace “65536” with “65 536”.

[136] At 1333.53, replace “63488” with “63 488”.

[137] At 1333.53, replace “64511” with “64 511”.

[138] At 1333.53, replace “64512” with “64 512”.

[139] At 1333.53, replace “65535” with “65 535”.

[140] At 1333.53, replace “63487” with “63 487”.

[141] At 4113.7, replace “65536” with “65 536”.

[142] At 4113.27, replace “65536” with “65 536”.

[Robert: Numbers in the MIB must **not** have a space since this will affect compilation. Numbers in a MIB object description can have a space, but this may not be desirable. It would be consistent with 802.11 style, but the description appears on the management station and it may look odd there. I suggest we create an exception in the style guide for numbers in Annex C.]

[143] At 3805.43, replace “(-214748364..214748363)” with “(-214 748 364..214 748 363)”.

[144] At 3855.9, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[145] At 3855.45, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[146] At 3856.24, replace “(-536870912..536870911)” with “(-536 870 912..536 870 911)”.

[147] At 3956.51, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[148] At 3957.23, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[149] At 3957.64, replace “(-536870912..536870911)” with “(-536 870 912..536 870 911)”.

[150] At 4085.58, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[151] At 4086.37, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[152] At 4087.26, replace “(-536870912..536870911)” with “(-536 870 912..536 870 911)”.

[153] At 4108.62, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[154] At 4109.40, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[155] At 4110.27, replace “(-536870912..536870911)” with “(-536 870 912..536 870 911)”.

[155] At 4234.33, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[156] At 4235.12, replace “(-16777215..16777215)” with “(-16 777 215..16 777 215)”.

[157] At 4235.59, replace “(-536870912..536870911)” with “(-536 870 912..536 870 911)”.

[158] At 3781.32, replace “(0..65535)” with “(0..65 535)”.

[159] At 3781.51, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[160] At 3783.17, replace “(0..65535)” with “(0..65 535)”.

[161] At 3783.49, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[162] At 3783.62, replace “(0..65535)” with “(0..65 535)”.

[163] At 3784.24, replace “(0..65535)” with “(0..65 535)”.

[164] At 3784.52, replace “(0..65535)” with “(0..65 535)”.

[165] At 3790.61, replace “(0..65535)” with “(0..65 535)”.

[166] At 3791.51, replace “(0..65535)” with “(0..65 535)”.

[167] At 3801.60, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[168] At 3802.11, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[169] At 3804.19, replace “(0..65535)” with “(0..65 535)”.

[170] At 3804.64, replace “(0..65535)” with “(0..65 535)”.

[171] At 3805.58, replace “(0..65535)” with “(0..65 535)”.

[172] At 3806.9, replace “(0..65535)” with “(0..65 535)”.

[173] At 3827.32, replace “(10..4294967295)” with “(10..4 294 967 295)”.

[174] At 3835.5, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[175] At 3835.20, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[176] At 3836.25, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[177] At 3836.40, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[178] At 3836.54, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[179] At 3837.2, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[180] At 3837.47, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[181] At 3839.16, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[182] At 3839.31, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[183] At 3840.16, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[184] At 3840.32, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[185] At 3840.46, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[186] At 3840.59, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[187] At 3841.9, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[188] At 3841.56, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[189] At 3843.18, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[190] At 3843.51, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[191] At 3844.32, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[192] At 3845.45, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[193] At 3845.65, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[194] At 3852.54, replace “(60..4294967295)” with “(60..4 294 967 295)”.

[195] At 3853.19, replace “(1000..4294967295)” with “(1000..4 294 967 295)”.

[196] At 3857.33 replace “(0..65535)” with “(0..65 535)”.

[197] At 3876.23, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[198] At 3877.14, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[199] At 3877.58 replace “(0..65535)” with “(0..65 535)”.

[200] At 3878.16 replace “(0..65535)” with “(0..65 535)”.

[201] At 3878.28 replace “(0..65535)” with “(0..65 535)”.

[202] At 3879.29, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[203] At 3881.6, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[204] At 3882.31, replace “(0..65535)” with “(0..65 535)”.

[205] At 3883.8, replace “(0..65535)” with “(0..65 535)”.

[206] At 3884.38, replace “(0..65535)” with “(0..65 535)”.

[207] At 3888.49, replace “(0..65535)” with “(0..65 535)”.

[208] At 3898.43, replace “(0..65535)” with “(0..65 535)”.

[209] At 3904.62, replace “(0..65535)” with “(0..65 535)”.

[210] At 3928.40, replace “(0..65535)” with “(0..65 535)”.

[211] At 3954.17, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[212] At 3954.37, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[213] At 3989.57, replace “(0..65535)” with “(0..65 535)”.

[214] At 3990.28, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[215] At 3995.42, replace “(0..65535)” with “(0..65 535)”.

[216] At 3996.27, replace “(0..65535)” with “(0..65 535)”.

[217] At 3997.61, replace “(0..65535)” with “(0..65 535)”.

[218] At 3998.41, replace “(0..65535)” with “(0..65 535)”.

[219] At 4001.15, replace “(0..65535)” with “(0..65 535)”.

[220] At 4002.49, replace “(0..65535)” with “(0..65 535)”.

[221] At 4004.1, replace “(0..65535)” with “(0..65 535)”.

[222] At 4009.30, replace “(0..65535)” with “(0..65 535)”.

[223] At 4009.54, replace “(0..65535)” with “(0..65 535)”.

[224] At 4010.12, replace “(0..65535)” with “(0..65 535)”.

[225] At 4015.51, replace “(0..65535)” with “(0..65 535)”.

[226] At 4016.34, replace “(0..65535)” with “(0..65 535)”.

[227] At 4020.37, replace “(0..65535)” with “(0..65 535)”.

[228] At 4023.52, replace “(0..16777215)” with “(0..16 777 215)”.

[229] At 4037.8, replace “(0..65535)” with “(0..65 535)”.

[230] At 4040.22, replace “(0..65535)” with “(0..65 535)”.

[231] At 4042.11, replace “(0..65535)” with “(0..65 535)”.

[232] At 4048.62, replace “(0..65535)” with “(0..65 535)”.

[233] At 4053.27, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[234] At 4054.16, replace “(1..65535)” with “(1..65 535)”.

[235] At 4056.37, replace “(0..65535)” with “(0..65 535)”.

[236] At 4057.3, replace “(0..16383)” with “(0..16 383)”.

[237] At 4057.32, replace “(0..65535)” with “(0..65 535)”.

[238] At 4058.20, replace “(1..65535)” with “(1..65 535)”.

[239] At 4058.52, replace “(83..65535)” with “(83..65 535)”.

[240] At 4059.30, replace “(0..65535)” with “(0..65 535)”.

[241] At 4059.46, replace “(0..65535)” with “(0..65 535)”.

[242] At 4061.28, replace “(1..65535)” with “(1..65 535)”.

[243] At 4061.44, replace “(1..65535)” with “(1..65 535)”.

[244] At 4061.59, replace “(1..65535)” with “(1..65 535)”.

[245] At 4062.9, replace “(1..65535)” with “(1..65 535)”.

[246] At 4062.26, replace “(1..65535)” with “(1..65 535)”.

[247] At 4062.64, replace “(1..65535)” with “(1..65 535)”.

[248] At 4063.15, replace “(1..65535)” with “(1..65 535)”.

[249] At 4063.48, replace “(1..65535)” with “(1..65 535)”.

[250] At 4063.64, replace “(1..65535)” with “(1..65 535)”.

[251] At 4073.38, replace “(5..18000)” with “(5..18 000)”.

[252] At 4076.31, replace “(0..131071)” with “(0..131 071)”.

[253] At 4076.60, replace “(0..131071)” with “(0..131 071)”.

[254] At 4082.56, replace “(0..10000)” with “(0..10 000)”.

[255] At 4083.6, replace “(0..10000)” with “(0..10 000)”.

[256] At 4083.22, replace “(0..1000000)” with “(0..1 000 000)”.

[257] At 4084.1, replace “(0..100000)” with “(0..100 000)”.

[258] At 4090.53, replace “(1..65535)” with “(1..65 535)”.

[259] At 4091.44, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[260] At 4099.40, replace “(0..65535)” with “(0..65 535)”.

[261] At 4113.63, replace “(256..65535)” with “(256..65 535)”.

[262] At 4114.19, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[263] At 4114.35, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[264] At 4116.8, replace “(1..65535)” with “(1..65 535)”.

[265] At 4116.25, replace “(1..65535)” with “(1..65 535)”.

[266] At 4117.4, replace “(1..65535)” with “(1..65 535)”.

[267] At 4121.51, replace “(200..10000)” with “(200..10 000)”.

[268] At 4122. 1, replace “(200..10000)” with “(200..10 000)”.

[269] At 4138.19, replace “(0..65535)” with “(0..65 535)”.

[270] At 4138.56, replace “(0..65535)” with “(0..65 535)”.

[271] At 4140.53, replace “(0..65535)” with “(0..65 535)”.

[272] At 4141.26, replace “(0..65535)” with “(0..65 535)”.

[273] At 4148.12, replace “(1..100000)” with “(1..100 000)”.

[274] At 4149.19, replace “(1..100000)” with “(1..100 000)”.

[275] At 4149.36, replace “(1..100000)” with “(1..100 000)”.

[276] At 4149.51, replace “(1..64000)” with “(1..64 000)”.

[277] At 4150.50, replace “(1..100000)” with “(1..100 000)”.

[278] At 4151.48, replace “(10..30000)” with “(10..30 000)”.

[279] At 4151.65, replace “(100..36000000)” with “(100..36 000 000)”.

[280] At 4152.16, replace “(0..10000)” with “(0..10 000)”.

[281] At 4153.2, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[282] At 4153.15, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[283] At 4154.16, replace “(0..65535)” with “(0..65 535)”.

[284] At 4154.30, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[285] At 4154.45, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[286] At 4154.60, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[287] At 4155.9, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[288] At 4155.56, replace “(1..64000)” with “(1..64 000)”.

[289] At 4161.34, replace “(0..10000)” with “(0..10 000)”.

[290] At 4161.46, replace “(0..10000)” with “(0..10 000)”.

[291] At 4161.59, replace “(0..10000)” with “(0..10 000)”.

[292] At 4162.6, replace “(0..10000)” with “(0..10 000)”.

[293] At 4162.18, replace “(0..10000)” with “(0..10 000)”.

[294] At 4162.31, replace “(0..10000)” with “(0..10 000)”.

[295] At 4162.43, replace “(0..10000)” with “(0..10 000)”.

[296] At 4162.55, replace “(0..10000)” with “(0..10 000)”.

[297] At 4190.44, replace “(0..64000000)” with “(0..64 000 000)”.

[298] At 4190.63, replace “(0..64000000)” with “(0..64 000 000)”.

[299] At 4191.9, replace “(0..64000000)” with “(0..64 000 000)”.

[300] At 4191.21, replace “(0..65535)” with “(0..65 535)”.

[301] At 4221.56, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[302] At 4222.13, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[303] At 4222.36, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[304] At 4222.58, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[305] At 4223.15, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[306] At 4223.32, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[307] At 4223.50, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[308] At 4224.2, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[309] At 4224.19, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[310] At 4224.37, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[311] At 4225.6, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[312] At 4225.26, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[313] At 4226.3, replace “(1..4294967295)” with “(1..4 294 967 295)”.

[314] At 4248.40, replace “(10..65535)” with “(10..65 535)”.

[315] At 4248.55, replace “(0..65535)” with “(0..65 535)”.

[316] At 4249.6, replace “(0..65535)” with “(0..65 535)”.

[317] At 4150.16, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[318] At 4150.32, replace “(0..65535)” with “(0..65 535)”.

[319] At 4150.55, replace “(0..4294967295)” with “(0..4 294 967 295)”.

[320] At 4151.17, replace “(0..65535)” with “(0..65 535)”.

[321] At 3920.8, replace “dot11ChannelStartingFactor = 10000” with “dot11ChannelStartingFactor = 10 000”.

[322] At 1995.37, replace “2.16GHz” with “2.16 GHz”.

[323] At 3127.8, replace “160MHz” with “160 MHz”.

[324] At 3327.13, replace “1MHz frame format and >=2MHz Short frame format” with “1 MHz frame format and >=2 MHz Short frame format”.

[325] At 3327.29, replace “2MHz” with “2 MHz”.

[326] At 3364.27, replace “160MHz” with “160 MHz”.

[327] At 3479.13, replace “1080MHz” with “1080 MHz”.

[328] At 3479.17, replace “540MHz” with “540 MHz”.

[329] At 3491.11, replace “1080MHz” with “1080 MHz”.

[330] At 3491.15, replace “540MHz” with “540 MHz”.

[331] At 3024.9, replace “0dBr” with “0 dBr”.

[332] At 3024.14, replace “-20dBr” with “-20 dBr”.

[333] At 3024.16, replace “-28dBr” with “-28 dBr”.

[334] At 3024.22, replace “-45dBr” with “-45 dBr”.

[335] At 3024.38, replace “0dBr” with “0 dBr”.

[336] At 3024.44, replace “-20dBr” with “-20 dBr”.

[337] At 3024.47, replace “-28dBr” with “-28 dBr”.

[338] At 3024.51, replace “-45dBr” with “-45 dBr”.

[339] At 3025.6, replace “0dBr” with “0 dBr”.

[340] At 3025.13, replace “-20dBr” with “-20 dBr”.

[341] At 3025.15, replace “-28dBr” with “-28 dBr”.

[342] At 3025.20, replace “-45dBr” with “-45 dBr”.

[343] At 3025.36, replace “0dBr” with “0 dBr”.

[344] At 3025.42, replace “-20dBr” with “-20 dBr”.

[345] At 3025.45, replace “-28dBr” with “-28 dBr”.

[346] At 3025.49, replace “-45dBr” with “-45 dBr”.

[347] At 3061.34, replace “-17dBr” with “-17 dBr”.

[348] At 3061.35, replace “-22dBr” with “-22 dBr”.

[349] At 3061.37, replace “-30dBr” with “-30 dBr”.

[350] At 3423.50, replace “-17dBr” with “-17 dBr”.

[351] At 3423.51, replace “-22dBr” with “-22 dBr”.

[352] At 3423.52, replace “-30dBr” with “-30 dBr”.

[353] At 3075.21, replace “-68dBm” with “-68 dBm”.

[354] At 1359.10, replace “MCS10” with “MCS 10”.

[355] At 1359.23, replace “MCS10” with “MCS 10”.

[356] At 1386.62, replace “MCS10” with “MCS 10”.

[357] At 1403.67, replace “MCS10” with “MCS 10”.

[358] At 1753.59, replace “MCS10” with “MCS 10”.

[359] At 2046.48, replace “MCS10” with “MCS 10”.

[360] At 3292.50, replace “MCS10” with “MCS 10”.

[361] At 3293.2, replace “MCS10” with “MCS 10”.

[362] At 3308.21, replace “MCS10” with “MCS 10”.

[363] At 3308.43, replace “MCS0-9” with “MCS 0-9”.

[364] At 3309.1, replace “MCS10” with “MCS 10”.

[365] At 3309.13, replace “MCS10” with “MCS 10”.

[366] At 3309.30, replace “MCS10” with “MCS 10”.

[367] At 3309.31, replace “MCS10” with “MCS 10”.

[368] At 3309.51, replace “MCS10” with “MCS 10”.

[369] At 3315.19, replace “MCS10” with “MCS 10”.

[370] At 3319.28, replace “MCS10” with “MCS 10”.

[371] At 3319.33, replace “MCS10” with “MCS 10”.

[372] At 3319.46, replace “MCS10” with “MCS 10”.

[373] At 3320.11 replace “MCS10” with “MCS 10”.

[374] At 3320.24, replace “MCS10” with “MCS 10”.

[375] At 3358.63, replace “MCS10” with “MCS 10”.

[376] At 3363.7, replace “MCS10” with “MCS 10”.

[377] At 3363.9, replace “MCS10” with “MCS 10”.

[378] At 3363.32, replace “MCS10” with “MCS 10”.

[379] At 3364.1, replace “MCS10” with “MCS 10”.

[380] At 3364.1, replace “MCS0” with “MCS 0”.

[381] At 3364.8, replace “MCS0 to MCS9” with “MCS 0 to MCS 9”.

[382] At 3364.12, replace “MCS10” with “MCS 10”.

[383] At 3364.13, replace “MCS0” with “MCS 0”.

[384] At 3364.36, replace “MCS10” with “MCS 10”.

[385] At 3412.26, replace “MCS10” with “MCS 10”.

[386] At 3412.31, replace “MCS9” with “MCS 9”.

[387] At 3763.4, replace “MCS0” with “MCS 0”.

[388] At 3763.11, replace “MCS0” with “MCS 0”.

[389] At 3763.18, replace “MCS0” with “MCS 0”.

[390] At 3763.24, replace “MCS0” with “MCS 0”.

[391] At 3763.31, replace “MCS1” with “MCS 1”.

[392] At 3763.38, replace “MCS1” with “MCS 1”.

[393] At 3763.45, replace “MCS1” with “MCS 1”.

[394] At 3763.51, replace “MCS1” with “MCS 1”.

[395] At 3763.58, replace “MCS2” with “MCS 2”.

[396] At 3764.4, replace “MCS2” with “MCS 2”.

[397] At 3764.11, replace “MCS2” with “MCS 2”.

[398] At 3764.17, replace “MCS2” with “MCS 2”.

[399] At 3764.24, replace “MCS3” with “MCS 3”.

[400] At 3764.31, replace “MCS3” with “MCS 3”.

[401] At 3764.38, replace “MCS3” with “MCS 3”.

[402] At 3764.45, replace “MCS3” with “MCS 3”.

[403] At 3764.51, replace “MCS4” with “MCS 4”.

[404] At 3764.58, replace “MCS4” with “MCS 4”.

[405] At 3765.4, replace “MCS4” with “MCS 4”.

[406] At 3765.11, replace “MCS4” with “MCS 4”.

[407] At 3765.17, replace “MCS5” with “MCS 5”.

[408] At 3765.24, replace “MCS5” with “MCS 5”.

[409] At 3765.31, replace “MCS5” with “MCS 5”.

[410] At 3765.38, replace “MCS5” with “MCS 5”.

[411] At 3765.45, replace “MCS6” with “MCS 6”.

[412] At 3765.51, replace “MCS6” with “MCS 6”.

[413] At 3765.58, replace “MCS6” with “MCS 6”.

[414] At 3766.4, replace “MCS6” with “MCS 6”.

[415] At 3766.11, replace “MCS7” with “MCS 7”.

[416] At 3766.17, replace “MCS7” with “MCS 7”.

[417] At 3766.24, replace “MCS7” with “MCS 7”.

[418] At 3766.31, replace “MCS7” with “MCS 7”.

[419] At 3766.38, replace “MCS8” with “MCS 8”.

[420] At 3766.45, replace “MCS8” with “MCS 8”.

[421] At 3766.51, replace “MCS8” with “MCS 8”.

[422] At 3766.58, replace “MCS8” with “MCS 8”.

[423] At 3767.4, replace “MCS9” with “MCS 9”.

[424] At 3767.12, replace “MCS9” with “MCS 9”.

[425] At 3767.20, replace “MCS9” with “MCS 9”.

[426] At 3767.27, replace “MCS9” with “MCS 9”.

[427] At 3767.36, replace “MCS10” with “MCS 10”.

[428] At 4090.3, replace “MCS10” with “MCS 10”.

[429] At 4090.20, replace “MCS10” with “MCS 10”.

[430] At 4401.27, replace “QAM 16” with “16-QAM”.

[431] At 4436.45, replace “MCS1” with “MCS 1”.

[432] At 4437.38, replace “MCS2—MCS12” with “MCS 2—MCS 12”.

[433] At 4437.43, replace “MCS1” with “MCS 1”.

[434] At 4437.48, replace “MCS1” with “MCS 1”.

[435] At 4437.51, replace “MCS1” with “MCS 1”.

[436] At 4438.12, replace “MCS1” with “MCS 1”.

[437] At 4438.19, replace “MCS1” with “MCS 1”.

[438] At 4438.25, replace “MCS1” with “MCS 1”.

[439] At 4438.45, replace “MCS5” with “MCS 5”.

[440] At 4438.54, replace “MCS5” with “MCS 5”.

[441] At 4439.37, replace “MCS7” with “MCS 7”.

[442] At 4439.45, replace “MCS7” with “MCS 7”.

[443] At 4440.27, replace “MCS12” with “MCS 12”.

[444] At 4440.36, replace “MCS12” with “MCS 12”.

[445] At 4442.1, replace “MCS26” with “MCS 26”.

[446] At 4443.1, replace “MCS26” with “MCS 26”.

[447] At 4444.1, replace “MCS30” with “MCS 30”.

[448] At 4444.9, replace “MCS30” with “MCS 30”.

[449] At 4059.26, replace “10000” with “10 000”.

[450] At 4171.20, replace “10000” with “10 000”.

[451] At 4191.30, replace “10000” with “10 000”.

[452] At 3456.49, replace “CBW 540” with “CBW540”.

[453] At 3456.49, replace “CBW 1080” with “CBW1080”.

[454] At 3457.31, replace “CBW 540” with “CBW540”.

[455] At 3457.31, replace “CBW 1080” with “CBW1080”.

[456] At 3460.11, replace “CBW 540” with “CBW540”.

[457] At 3460.22, replace “CBW 1080” with “CBW1080”.

[458] At 3463.5, replace “CBW 540” with “CBW540”.

[459] At 3463.20, replace “CBW 540” with “CBW540”.

[460] At 3463.47, replace “CBW 540” with “CBW540”.

[461] At 3464.40, replace “CBW 540” with “CBW540”.

[462] At 3464.54, replace “CBW 540” with “CBW540”.

[463] At 3464.62, replace “CBW 1080” with “CBW1080”.

[464] At 3465.38, replace “CBW 540” with “CBW540”.

[465] At 3465.48, replace “CBW 540” with “CBW540”.

[466] At 3465.56, replace “CBW 1080” with “CBW1080”.

[467] At 3486.48, replace “CBW 540” with “CBW540”.

[468] At 3486.48, replace “CBW 1080” with “CBW1080”.

[469] At 3502.11, replace “CBW 540” with “CBW540”.

[470] At 3502.11, replace “CBW 1080” with “CBW1080”.

[471] At 3503.32, replace “CBW 540” with “CBW540”.

[472] At 3503.54, replace “CBW 1080” with “CBW1080”.

[473] At 3518.15, replace “CBW 540” with “CBW540”.

[474] At 3518.37, replace “CBW 1080” with “CBW1080”.

[475] At 3124.52, replace “1st column” with “first column”.

[476] At 3136.52, replace “1st column” with “first column”.

[477] At 3329.21, replace “1st Data Symbol” with “First Data Symbol”.

[478] At 3329.24, replace “From 2nd to” with “From second to”.

### Style Guide 2.11 – Maths operators and relations

Edward

[001] Equation (9-2): replace “*round*” with “Round”.

[002] At 4577.52, replace “(i.e., 953.71/(1–0.8), rounded)” with “(i.e., Round(953.71/(1–0.8)))”.

[003] At 988.3, replace “mod(*m*, 8)” with “*m* mod 8”.

[004] At 988.39, replace “modulo” with “mod”.

[005] At 1786.16, replace “*mod*” with “mod”.

[006] At 1790.51, replace “*mod*” with “mod”.

[007] At 1790.54, replace “*mod*” with “mod”.

[008] At 1791.7, replace “*mod*” with “mod”.

[009] At 1790.10, replace “*mod*” with “mod”.

[010] At 1790.42, replace “*mod*” with “mod”.

[011] At 1792.39, replace “*mod*” with “mod”.

[012] At 1827.10, replace “*mod*” with “mod”.

[013] At 1827.37, replace “*mod*” with “mod”.

[014] At 2492.1, replace “1 (modulo 127)” with “(1 mod 127)”.

[015] At 3080.38, replace “*mod*” with “mod”.

[016] At 3340.8, replace “modulo” with “mod”.

[017] At 3353.38, replace “modulo” with “mod”.

[018] At 3362.45, replace “modulo” with “mod”. Note there are twice instances at the same line.

[019] At 3365.41, replace “modulo” with “mod”.

[020] At 3366.59, replace “modulo” with “mod”.

[021] At 4604.37, replace “*modulo*” with “mod”.

[022] At 4598.43, delete the sentence “The modulo arithmetic function mod(x, y) is defined as mod(x, y) = x - y × fix(x/y).”.

[023] At 4489.13, replace “Xor” with “XOR”.

[Robert: These are decibel numbers so the log is base 10. Is there really a requirement to use log10() and not log()? I can’t find it in 1.5. Typically, log() is base 10. If it is base 2, it’s ln() or log2().]

[024] At 4330.2, what is the base of the log? Replace “log” with either “log2” or “log10” whichever approrpiate.

[025] At 4330.5, what is the base of the log? Replace “log” with either “log2” or “log10” whichever approrpiate.

[026] At 4330.8, what is the base of the log? Replace “log” with either “log2” or “log10” whichever approrpiate.

[027] At 4330.11, what is the base of the log? Replace “log” with either “log2” or “log10” whichever approrpiate.

[028] At 4330.13, what is the base of the log? Replace “log” with either “log2” or “log10” whichever approrpiate.

[029] At 4393.26, replace “Real” with “Re”. Note there are four instances at the same line.

[030] At 4394.45, replace “Real” with “Re”. Note there are four instances at the same line.

[031] At 4396.4, replace “Real” with “Re”. Note there are four instances at the same line.

[032] At 4396.47, replace “Real” with “Re”. Note there are four instances at the same line.

[033] At 4397.30, replace “Real” with “Re”. Note there are four instances at the same line.

[034] At 4398.20, replace “Real” with “Re”. Note there are four instances at the same line.

[035] At 4399.4, replace “Real” with “Re”. Note there are four instances at the same line.

[036] At 4399.49, replace “Real” with “Re”. Note there are four instances at the same line.

[037] At 4400.31, replace “Real” with “Re”. Note there are four instances at the same line.

[038] At 4393.26, replace “Imag” with “Im”. Note there are four instances at the same line.

[039] At 4394.45, replace “Imag” with “Im”. Note there are four instances at the same line.

[040] At 4396.4, replace “Imag” with “Im”. Note there are four instances at the same line.

[041] At 4396.47, replace “Imag” with “Im”. Note there are four instances at the same line.

[042] At 4397.30, replace “Imag” with “Im”. Note there are four instances at the same line.

[043] At 4398.20, replace “Imag” with “Im”. Note there are four instances at the same line.

[044] At 4399.4, replace “Imag” with “Im”. Note there are four instances at the same line.

[045] At 4399.49, replace “Imag” with “Im”. Note there are four instances at the same line.

[046] At 4400.31, replace “Imag” with “Im”. Note there are four instances at the same line.

[047] At 3473.47, delete “⎡x⎤ is smallest integer that is larger than or equal to real number x.”.

[048] At 4427.57, replace “±<real>±<imag>j” with “±<re>±<im>j”.

[049] At 2411.39, delete “where || denotes an append operation”.

[050] At 4461.27, replace “(A)>>(32-(n))” with “(A) >> (32-(n))”

[051] At 4492.14, replace “>>24” with “>> 24”.

[052] At 4498.5, replace “x>>i” with “x >> i”.

[053] At 2411.29, delete “, in hexadecimal notation”.

[054] At 1283.5, replace “0x0” with “0 × 0”.

[055] At 1283.6, replace “0x1” with “0 × 1”.

[056] At 1283.7, replace “0x2” with “0 × 2”.

[057] At 1283.8, replace “0x3” with “0 × 3”.

[058] At 1283.45, replace “0x0” with “0 × 0”.

[059] At 1283.46, replace “0x1” with “0 × 1”.

[060] At 1283.47, replace “0x2” with “0 × 2”.

[061] At 1283.48, replace “0x3” with “0 × 3”.

[062] At 150.32, replace “L (*S*, *F*, *N*)” with “L(*S*, *F*, *N*)”.

[063] At 150.36, replace “Truncate-*N* (*S*)” with “Truncate-*N*(*S*)”.

[064] At 150.40, replace “exp (*x*)” with “exp(*x*)”.

[065] At 4384.53, replace “Binary Value” with “Binary value”. Note there are three instances at the same line.

[066] At 4386.14, replace “Binary Value” with “Binary value”. Note there are four instances at the same line.

[Robert: agree that random() should be defined, but how to define it? Uniform distribution? Implementation dependent distribution? I would say this is not an editorial issue.]

[067] In clause 12.4.4.2.2, especially at 2532.7, 2532.12, and 2532.18, there is an operation “random()” that is not defined.

[068] At 2671.24, delete “The scalar operation takes an element and a scalar and is denoted scalar-op(x,**Y**).” because it has been defined in an earlier subclause 12.4.4.1.

[069] At 2677.2, replace “11.3.4.1” with “12.4.4.1”.

[070] At 2530.27, replace “inverse(” with “inverse-op(”.

[071] At 2533.19, replace “inverse(” with “inverse-op(”.

[072] At 2534.63, replace “inverse(” with “inverse-op(”.

### Style Guide 2.12 – Hyphenation

Edward

[001] At 2519.56, replace “sensitive network-identifying information” with “sensitive network identifying information”.

[002] At 3275.11, replace “two non-identical channels” with “two nonidentical channels”.

[003] At 2394.26, replace “non-decreasing Info ID” with “nondecreasing Info ID”.

[004] At 232.60, replace “non-mesh STA” with “nonmesh STA”.

[005] At 2282.38, replace “on non-operating channels” with “on nonoperating channels”.

[006] At 2363.6, replace “co-exist” with “coexist”.

[007] At 2861.24, replace “co-exist” with “coexist”.

[008] At 2075.46, replace “sub-period” with “subperiod”.

[009] At 2081.61, replace “sub-period” with “subperiod”.

[010] At 176.7, replace “power-saving” with “power saving”.

[011] At 318.53, replace “power-saving” with “power saving”.

[012] At 911.8, replace “power-saving” with “power saving”.

[013] At 1109.60, replace “power-saving” with “power saving”.

[014] At 1109.62, replace “power-saving” with “power saving”.

[015] At 1889.6, replace “power-saving” with “power saving”.

[016] At 2144.21, replace “power-saving” with “power saving”.

[017] At 2150.2, replace “power-saving” with “power saving”.

[018] At 2176.62, replace “power-saving” with “power saving”.

[019] At 2191.62, replace “power-saving” with “power saving”.

[020] At 2199.6, replace “power-saving” with “power saving”.

[021] At 2210.25, replace “power-saving” with “power saving”.

[022] At 181.56, replace “non-reserved” with “nonreserved”.

[023] At 1356.36, replace “non-resrved” with “nonreserved”.

[024] At 1546.3, replace “non-robust” with “nonrobust”.

[025] At 1546.8, replace “non-robust” with “nonrobust”.

[026] At 4577.60, replace “bi-directional” wth “bidirectional”.

[027] At 4577.62, replace “bi-directional” wth “bidirectional”.

[028] At 2013.7, replace “re-initiate” with “reinitiate”.

[029] At 301.31, replace “de-aggregation” with “deaggregation”.

[030] At 301.62, replace “de-aggregation” with “deaggregation”.

[031] At 302.28, replace “de-aggregation” with “deaggregation”. Note there are two instances at the same line.

[032] At 302.57, replace “de-aggregation” with “deaggregation”. Note there are two instances at the same line.

[033] At 305.25, replace “de-aggregation” with “deaggregation”. Note there are two instances at the same line.

[034] At 305.55, replace “de-aggregation” with “deaggregation”. Note there are two instances at the same line.

[035] At 4366.5, replace “non-aggregated” with “nonaggregated”.

[036] At 4366.8, replace “non-aggregated” with “nonaggregated”.

[037] At 4436.20, replace “re-scrambled” with rescrambled”.

[038] At 3332.35, replace “multiuser” with “multi-user”.

[039] At 3348.12, replace “multiuser” with “mult-user”.

[040] At 3348.18, replace “multiuser” with “multi-user”.

[041] At 169.14, replace “up-conversion” with “upconversion”.

[042] At 767.35, replace “non-primary” with “nonprimary”.

[043] At 767.57, replace “non-primary” with “nonprimary”.

[044] At 1813.51, replace “non-primary” with “nonprimary”.

[045] At 1287.55, replace “low-frequency” with “low frequency”.

[046] At 1955.8, replace “low-frequency” with “low frequency”.

[047] At 1955.11, replace “low-frequency” with “low frequency”.

[048] At 1287.58, replace “high-frequency” with “high frequency”.

[049] At 1955.15, replace “high-frequency” with “high frequency”.

[050] At 1955.18, replace “high-frequency” with “high frequency”.

[051] At 1473.5, replace “down-counter” with “down counter”.

[052] At 1807.34, replace “DL MU-MIMO” with “DL-MU-MIMO”.

[053] At 1970.33, replace “vice-versa” with “vice versa”.

[054] At 2043.39, replace “vice-versa” with “vice versa”.

[055] At 4131.28, replace “vice-versa” with “vice versa”.

[056] At 1979.52, replace “re-scheduling” with “rescheduling”.

[057] At 1979.56, replace “re-schedule” with “reschedule”.

[058] At 1980.58, replace “re-schedule” with “reschedule”.

[059] At 1494.1, replace “non-interference” with “noninterference”.

[060] At 1993.20, replace “non-interference” with “noninterference”.

[061] At 2045.7, replace “frequency-offset” with “frequency offset”.

[062] At 2071.47, replace “non-sounding” with “nonsounding”.

[063] At 2077.1, replace “back-off” with “backoff”.

[064] At 2672.27, replace “back-off” with “backoff”.

[065] At 2149.47, replace “ramp-up” with “rampup”.

[066] At 2430.50, replace “Re-beamforming” with “Rebeamforming”.

[067] At 2431.38, replace “may re-request the resource allocation” with “may request the resource allocation again”.

[068] At 2500.17, replace “to re-request its IP address” with “to request its IP address again”.

[069] At 2528.38, replace “non-secret” with “nonsecret”.

[070] At 2670.56, replace “non-secret” with “nonsecret”.

[071] At 2670.63, replace “non-secret” with “nonsecret”.

[072] At 2530.52, replace “least-significant bit” with “least significant bit”.

[073] At 2531.60, replace “non-residual” with “nonresidual”.

[074] At 2531.62, replace “non-residual” with “nonresidual”.

[075] At 2532.1, replace “non-residual” with “nonresidual”.

[076] At 2532.37, replace “non-residual” with “nonresidual”.

[077] At 3064.55, replace “base-band” with “baseband”.

[078] At 3074.28, replace “de-spread” with “despread”.

[079] At 3478.2, replace “de-spread” with “despread”.

[080] At 3209.8, replace “sub-channel” with “subchannel”.

[081] At 3209.22, replace “sub-channel” with “subchannel”.

[082] At 3209.26, replace “sub-channel” with “subchannel”.

[083] At 3278.56, replace “multi-channel” with “multi-channel”.

[084] At 4547.30, replace “multi-channel” with “multi-channel”.

[085] At 4547.45, replace “multi-channel” with “multi-channel”.

[086] At 3480.15, replace “Up-convert” with “Upconvert”.

[087] At 3480.42, replace “Up-convert” with “Upconvert”.

[088] At 3491.18, replace “Down-Sampling” with “Downsampling”.

[089] At 3491.21, replace “Down-Sampling” with “Downsampling”.

[090] At 3491.24, replace “Down-Sampling” with “Downsampling”.

[091] At 3491.18, replace “Up-Sampling” with “Upsampling”.

[092] At 3491.21, replace “Up-Sampling” with “Upsampling”.

[093] At 3491.24, replace “Up-Sampling” with “Upsampling”.

[094] At 4452.16, replace “non-linear” with “nonlinear”.

[095] At 4548.35, replace “up-sampling” with “upsampling”.

[096] At 4548.36, replace “up-sampled” with “unsampled”.

[097] At 3172.25, replace “low density parity check” with “low-density parity check”.

[098] At 3360.32, replace “low density parity check” with “low-density parity check”.

[099] At 1618.48, replace “pre-defined” with “predefined”.

[100] At 1323.16, replace “non-contiguous” with “noncontiguous”.

[101] At 1339.52, replace “non-contiguous” with “noncontiguous”.

[102] At 3268.26, replace “space time streams” with “space-time streams”.

[103] At 3268.27, replace “space time stream” with “space-time stream”.

[104] At 3268.28, replace “space time streams” with “space-time streams”.

[105] At 3268.29, replace “space time streams” with “space-time streams”.

[106] At 3268.36, replace “space time stream” with “space-time stream”.

[107] At 3268.37, replace “space time streams” with “space-time streams”.

[108] At 3268.38, replace “space time streams” with “space-time streams”.

[109] At 3268.39, replace “space time streams” with “space-time streams”.

[110] At 3461.13, replace “space time stream” with “space-time stream”.

[111] At 3507.11, replace “space time streams” with “space-time streams”.

[112] At 3157.12, replace “space time block coding” with “space-time block coding”.

[113] At 3471.47, replace “space time block coding” with “space-time block coding”.

[114] At 983.13, replace “low-order” with “low order”.

[115] At 1293.31, replace “low-order” with “low order”.

[116] At 1416.12, replace “low-order” with “low order”.

[117] At 2557.37, replace “high-order” with “high order”

[118] At 2557.38, replace “low-order” with “low order”.

[119] Please add “multi-band” into the list of exceptions.

[120] Please add “non-duplicate” into the list of exceptions.

### Style Guide 2.13 – References to SAP primitives

Bahar

### Style Guide 2.14 – References to the contents of a field/subfield

**Clause 9** – Carol

<still outstanding>

**Clause 10** – Menzo

No findings

**Clause 11** – Joe

2116.60 – delete the phrase “the value of” – so that it reads: “A STA sending a Beacon frame shall set the Beacon frame’s timestamp …”

2116.65 – delete the phrase “the value of” – so that it reads: “A STA sending a DMG Beacon or an Announce frame

shall set the frame’s timestamp field …”

2119.7 – delete the phrase “the value of” – so that it reads: “… in which the STA changes the Beacon Interval field.”

2119.11 – delete the phrase “the value of” – so that it reads: “A STA shall transmit the first DMG Beacon frame of the next BTI at the time indicated by the start of the transmission of the first DMG Beacon frame within the last BTI and the Beacon Interval field contained in the DMG Beacon frame transmitted within the last BTI, unless …”

2124.40 – – delete the phrase “the value of” – so that it reads: “… and the TSF Rollover Flag field in the S1G Beacon Compatibility element is 1, …”

2124.45 – – delete the phrase “the value of” – so that it reads: “… shall be set to the TSF Completion field …”

2125.36 – – delete the phrase “the value of” – so that it reads: “… selection criteria in the MLME-SCAN.request is discovered when the ReportingOption parameter in the MLME-SCAN.request primitive …”

2132.15 – delete the phrase “value of” – so that it reads: “The Max Delay Limit field contains the maximum selected average access delay’

2132.39 – delete the pharase “the value of “ – so that it reads: “The RCPI of the Probe Request frame > –90 dBm + the RCPI Limit field of the FILS Request Parameters element.”

2132.52 – delete the pharase “value of” – so that it reads: “… of the responding STA exceeds the time indicated by the Max Channel Time field of the FILS Request Parameters element of the Probe Request frame.“

2140.15 – delete the phrase “value of” and clean up the sentence so that it reads: “b) If the received AP-CSN element matches the current AP-CSN of the AP, the AP sends an optimized Probe Response frame including mandatory fields (i.e., Timestamp, Capability, and Beacon Interval), the current AP-CSN element, and one or more elements among dynamic elements defined in this subclause.”

2140.20 – delete the word “value” and clean up the sentence so that it reads: “c) If the received AP-CSN element that matches one of the previous AP-CSN in the AP-CSN List, the AP sends an optimized Probe Response frame including mandatory fields, the current AP-CSN element, the information elements that need to be updated at the STA, and one or more elements among dynamic elements defined in this subclause.”

2145.24 – delete the phrase “value of the” also remove the “their” replacing with “the”– so that it reads: “… on the Page Index and Page Slice Number subfields in the Bitmap Control field.”

2147.52 – delete the phrase “value of the” – so that it reads: “… the AID Switch Count field to 0, and the AID Response Interval field to the Listen Interval field.”

2148.19 - delete the phrase “value of the” – so that it reads: “… with the AID Response Interval field in the AID Response element of the (Re)Association Response frame.”

2154.18 - delete the phrase “value of the” – so that it reads: “ An S1G AP should set the Duration field in the S1G Beacon frame to the estimated time required for all the S1G STAs that are indicated in the TIM elements …”

2154.59 – delete the word “value” – so that it reads: “… after the DTIM that has the Current Count field of the FMS Counter field set to 0 for that particular FMS stream.”

2168.36 - delete the phrase “value of the” – so that it reads: “The TIM Broadcast Interval field from the latest received TIM Broadcast Response element (N\_TBI) together with dot11BeaconPeriod …”

2171.20 - delete the phrase “value of the” – so that it reads: “The Action Type field of the WNM Sleep Mode element in the WNM Sleep Mode Response frame shall be set to “Enter WNM sleep mode”.

2172.56 - delete the phrase “value of the” – so that it reads: “the frame’s More Data subfield is 0;”

2174.12 - delete the phrase “value of the” – so that it reads: “An AP may reject a (re)association of a STA if the Max Away Duration field in the MAD element in the (Re)Association Request frame transmitted by the STA is considered unacceptable.”

2176.25 - delete the phrase “value of the” – so that it reads: “…. the ATIM Window field in the IBSS Parameter Set …”

2177.48 - delete the phrase “value of the” – so that it reads: “… shall set the ATIM Window field of the IBSS Parameter Set element within the Beacon frames transmitted to the value of its ATIM window.”

2177.56 - delete the phrase “value of the” – so that it reads: “… where ATIMWindow is the ATIM Window field of the IBSS Parameter Set …”

2185.17 - delete the phrase “value of the” (two locations) – so that it reads: “… where *n* is the Sleep Cycle field of the DMG Wakeup Schedule element contained in the PSC-RSP frame received from the AP or PCP during the frame exchange that established the WS, and *m* is the Number of Awake BIs field …”

2188.1 - delete the phrase “value of the” – so that it reads: “The first PCP A-BI(#1268) of a sleep cycle in a WS starts at the instant specified by the BI Start Time field of the announced DMG Wakeup Schedule element …”

2189.47 - delete the phrase “value of the” – so that it reads: “If present, the awake window starts from the beginning of a CBAP and has a duration that is defined by the Awake Window Duration field …”

2197.57 - delete the phrase “value of the” – so that it reads: “The value of the Association Delay Info field shall be larger than dot11HLPWaitTime(11ai).”

2198.53- delete the phrase “value of the” – so that it reads: “… the non-AP STA sets (#2198)dot11AssociationResponseTimeOut equal to or larger than the Association Delay Info field(11ai).”

2200.35 - “If an MM-SME coordinated STA receives an Association Response frame with a result code equal to SUCCESS and with the Single AID field within MMS element equal to 1, …”

2201.27 - delete the phrase “value of the” – so that it reads: “d) If an Association Response frame is received with a status code of SUCCESS, a DMG STA shall write to each of the following MIB attributes the corresponding subfield of the DMG BSS Parameter Configuration field …”

2201.49 - delete the phrase “value of the” – so that it reads: “If an Association Response frame is received with a status code of SUCCESS at an (Ed)MM-SME coordinated STA and the Single AID field within the MMS element is equal to 1 …”

2202.2 - delete the phrase “value of the” – so that it reads: “… MIB attributes the corresponding subfield of the DMG BSS Parameter Configuration field of the DMG Operation element ..”

2206.18 - delete the phrase “value of the” – so that it reads: “… and the Single AID field within the MMS element is equal to 1 …”

2212.45 - delete the phrase “value of the” and clean up the grammer – so that it reads: “A STA that transmits the Centralized Authentication Control subfield of the S1G Capabilities Information field set to 0 is not constrained by the requirements specified in this subclause.”

2213.19 - delete the phrase “value of the” – so that it reads: “If v is less than the Authentication Control Threshold subfield …”

2250.18 - delete the phrase “value of the” (two locations) – so that it reads: “A (#1486)Spectrum Measurement Report frame shall contain the same value in its Dialog Token field as the Dialog Token field in the corresponding (#1486)Spectrum Measurement Request frame, and each Measurement Report element shall contain the same value in its Measurement Token field as the Measurement Token field in the corresponding Measurement Request element.”

2251.38 - delete the phrase “value of the” – so that it reads: “When the AP sets the Channel Switch Count field of the Channel Switch Announcement element to zero, it shall not include the Max Channel Switch Announcement element into the Beacon frame.”

2255.1 - delete the phrase “value of the” – so that it reads: “— A mesh channel switch is already running and the mesh STA has not yet moved into the new channel and/or operating class and the current precedence value is greater than or equal to the received Precedence Value field.”

2257.62 - delete the phrase “value of the” – so that it reads: “… shall set to 1 the Extended Channel Switching field in the Extended Capabilities elements it transmits.

2259.29 - delete the phrase “value of the” – so that it reads: “When the AP sets the Channel Switch Count field …”

2266.42 - delete the phrase “value of the” – so that it reads: “… the same Dialog Token field as in the Dialog Token field of the corresponding Radio Measurement Request frame.”

2267.43 - delete the phrase “value of the” – so that it reads: “Measurement Report element and the Dialog Token field in the …”

2271.35 - delete the phrase “value of the” (two locations) – so that it reads: “… and set the Data field of the subelement to 1 when that is the last frame of the sequence of frames generated as a response to a Beacon request. Otherwise the Data field is set to 0.”

2274.56 - delete the phrase “value of the” (two locations) – so that it reads: “… the Trigger Timeout field shall be set to greater or equal to dot11MinTriggerTimeout. If the Trigger Timeout field is less than dot11MinTriggerTimeout, the STA shall reject the measurement request by returning a report where the Measurement Report Mode field is “Incapable.””

PHY Clauses – Peter (mostly 11aj, 11ah)

Everything else – Bahar

### Style Guide 2.15 – References to MIB variables/attributes

Mark

For discussion:

[Robert: I suggest we delete “MIB table” so that it reads: A set of Neighbor List elements derived from the dot11RMNeighborReportTable …]

One instance similar to the issue in 2.15 found, in 6.3.31.3.2 (semantics of MLME-NEIGHBORREPRESP.indication):

NeightbotListSet parameter is described as: “A set of Neighbor List elements derived from the MIB table dot11RMNeighborReportTable …”

This could arguably be shortened to “… derived from dot11NeighborReportTable …”. But, this situation is not as clear as what 2.15 intended to (directly) address.

* 2300.56: replace “An HT STA shall set the following MIB attributes to true” with “An HT STA shall set the following to true”
* 2736.9: replace “When dot11MeshActivated is true, following MIB attributes shall be true” with “When dot11MeshActivated is true, following shall be true”
* 2736.14: replace “When dot11MeshActivated is true, following MIB attributes shall be false” with “When dot11MeshActivated is true, following shall be false”
* 4544.51: replace “The particulars of OBSS scanning are controlled by the following MIB attributes” with “The particulars of OBSS scanning are controlled by the following”
* P4545.30: replace “(The MIB attribute dot11FortyMHzIntolerant determines the setting…” with “(dot11FortyMHzIntolerant determines the setting …”
* 4560.50: replace “This interface results in parameters being set in the dot11InterworkingTable MIB” with “This interface results in parameters being set in dot11InterworkingTable”
* 4562.14, 4562.29, 4562.41, 4563.1, 4563.13, 4563.18, 4563.53, 4564.5: replace “[Tt]he following MIB attribute is used:” with “[Tt]he following is used:”
* 4563.33, 4564.17, 4564.33, 4565.1: replace “[Tt]he following MIB attributes are used:” with “[Tt]he following are used:”
* 4565.13: replace “The following MIB attributes are used:” with “The following MIB attribute is used:”
* 4563.15: replace “dot11NonAPStationAuthAccessCategories MIB attribute” with “dot11NonAPStationAuthAccessCategories”
* 4564.51: replace “dot11NonAPStationMulticastOctetCount MIB attributes” with “dot11NonAPStationMulticastOctetCount”

### Style Guide 2.16 – Hanging Paragraphs

Emily

At 247.47, add a subclause title “4.3.24.1 Introduction”. Increase subsequent subclause numbers correspondingly.

At 1440.41, add a subclause title “9.4.4.2.1 General”. Increase subsequent subclause numbers correspondingly.

At 3332.40, add a subclause title “23.3.8.2.1 Introduction”. Increase subsequent subclause numbers correspondingly.

At 3332.46, add a subclause title “23.3.8.2.2.1 General”. Increase subsequent subclause numbers correspondingly.

At 3340.53, add a subclause title “23.3.8.2.3.1 General”. Increase subsequent subclause numbers correspondingly.

At 3354.2, add a subclause title “23.3.8.3.1 Introduction”. Increase subsequent subclause numbers correspondingly.

At 4401.19, add a subclause title “I.2.1 Introduction”. Increase subsequent subclause numbers correspondingly.

At 4412.44, add a subclause title “I.3.1 Introduction”. Increase subsequent subclause numbers correspondingly.

At 4428.40, add a subclause title “I.5.2.1 General”. Increase subsequent subclause numbers correspondingly.

At 4431.3, add a subclause title “I.5.3.1 General”. Increase subsequent subclause numbers correspondingly.

At 4433.3, add a subclause title “I.6.2.1 General”. Increase subsequent subclause numbers correspondingly.

At 4435.38, add a subclause title “I.6.3.1 General”. Increase subsequent subclause numbers correspondingly.

At 4442.2, add a subclause title “I.7.3.1 General”. Increase subsequent subclause numbers correspondingly.

At 4504.15, add a subclause title “K.4.1 General”. Increase subsequent subclause numbers correspondingly.

At 4561.32, add a subclause title “R.4.2.1 General”. Increase subsequent subclause numbers correspondingly.

[Robert: We might want to update the style guide to disallow a single child subclauses. A no one child policy.]

At 2063.14, Clause 10.50 has only one child clause (10.50.1). Should “10.50.1” clause title be deleted?

**10.50 Sync frame operation**

**10.50.1 Sync frame transmission procedure for uplink traffic**

At 3369.22, clause 23.3.9.11 has only one child clause 23.3.9.11.1. Should 23.3.9.11 clause title be deleted?

**23.3.9.11 OFDM modulation**

**23.3.9.11.1 Transmission in S1G format**

At 3521.44, clause 25.13 has onlu one child clause, 25.13.1. Should 25.13.1 clause title be deleted?

**25.13 Receive procedure**

**25.13.1 SC mode receive procedure**

At 4573.53, clause S.2 has onlY one child clause, S.2.1. Should S.2.1 clause title be deleted?

**S.2 Operational considerations for interworking**

**S.2.1 Formation and maintenance of the IEEE 802.1D spanning tree**

### Style Guide 2.17 – Abbreviations

Peter

### Style Guide 2.18 – Format for code/pseudocode

Menzo

Several occurrences of pseudocode are not in courier, but since this is a should requirement in the style guide this should not be a problem. Also, it appears that some pseudocode uses bold and italics to optimize reading, which would be lost when refonting to courier.

1965.37 - 1968.45, 2559.9 - 2559.44, etc.

### Style guide 3 – Style applicable to specific Clauses

#### Definitions (Clause 3)

Bahar

#### General Description (Clause 4)

Bahar

#### Frame formats (Clause 9)

Carol

9.3.1.7.3, page 822, figure 9-37 is splitting a paragraph

9.4.2.20.7, page 1010, Table 9-108 breaks apart a paragraph

9.4.2.20.19, page 1032, Table 9-108 breaks apart a paragraph

9.4.2.30, page 1118, Figure 9-306, Octets label is distorted.

9.4.2.30, page 1121, Paragraph lines 46-60 should be broken up to put a sentence above each referenced figure. Also for page 1123, paragraph lines 34-44

9.4.2.40, pages 1136-1137, Equation and Figure are out of order on the page.

9.4.2.92, pages 1236-1237, table 9-237 is out of place in the middle of the description of the table

9.4.2.142.2, pages 1300-1301, table 9-267 is in the next but refers to this section

9.4.2.177, pages 1346-1347, table 9-289 is out of place, breaking apart a paragraph

9.9.2.6.2, pages 1678-1688, figure 9-983 is splitting a paragraph

Table 9-83, page 955, line 8 “(see requirements R1 and R2)”

should be “(see notes NSS1 and NSS2)”

Table 9-83, page 955, line 36 “R1: NSS support shall be rounded down to the nearest integer.”

should be “NSS1: NSS support is rounded down to the nearest integer.”

Table 9-83, page 955, line 37 “R2: The maximum NSS support shall be 8.”

should be “NSS2: The maximum NSS supported is 8.”

9.4.2.127.5, page 1278, lines 52-54 “A STA that indicates support for MCSs with a data rate higher than the data rate of MCS 9.1 in the Maximum Extended SC Tx MCS subfield shall set the value of the Maximum SC Tx MCS subfield of the Supported MCS Set subfield to 12.”

should be “A STA that indicates support for MCSs with a data rate higher than the data rate of MCS 9.1 in the Maximum Extended SC Tx MCS subfield sets the value of the Maximum SC Tx MCS subfield of the Supported MCS Set subfield to 12.”

9.4.2.127.5, page 1279, lines 4-7 “A STA that indicates support for MCSs with a data rate higher than the data rate of MCS 9.1 in the Maximum Extended SC Rx MCS subfield shall set the value of the Maximum SC Rx MCS subfield of the Supported MCS Set subfield to 12.”

should be “A STA that indicates support for MCSs with a data rate higher than the data rate of MCS 9.1 in the Maximum Extended SC Rx MCS subfield sets the value of the Maximum SC Rx MCS subfield of the Supported MCS Set subfield to 12.”

Table 9-273, page 1319, line 8 “(see requirements R1 and R2)”

should be “(see notes NSS1 and NSS2)”

Table 9-273, page 1319, line 23 “R1: NSS support shall be rounded down to the nearest integer.”

should be “NSS1: NSS support is rounded down to the nearest integer.”

Table 9-273, page 1319, line 24 “R2: The maximum NSS support shall be 8.”

should be “NSS2: The maximum NSS supported is 8.”

Carol may have additional findings here

#### SAP interfaces (Clause 6)

Peter

#### New top level clauses

Peter (mostly 11ah, 11aj)

#### Annex A – Bibliography

Bahar

#### Annex B – PICS

Edward

[Robert: For discussion: can PICS entries be renumbered in an 802.11 revision, i.e., are the PICS entry names editorial? If yes, should we require contiguous numbering? Field names are editorial but we might avoid changing a field name because it is present in existing implementations, sniffers, etc.]

[001] Do we still need CF2.3, CF3, CF5, and CF24? We are no longer using number to enumate these CF entries.

[002] At 3567.25, there is no PC4 defined.

[003] At 3567.29, there is no PC4 defined.

[004] At 3567.33, there is no PC4 defined.

[005] At 3567.37, there is no PC4.3 defined.

[006] At 3567.40, there is no PC4.3 defined.

[007] At 3567.44, there is no PC4 defined.

[008] At 3567.48, there is no PC4.3 defined.

[009] At 3567.51, there is no PC4.3 defined.

[010] At 3574.63, there is no PC4 defined.

[011] At 3575.25, there is no PC4 defined.

[012] At 3567.35, there is no PC5 defined.

[013] At 3567.46, there is no PC5 defined.

[014] At 3574.64, there is no PC5 defined.

[015] At 3575.14, there is no PC5 defined.

[016] At 3575.18, there is no PC5 defined.

[017] At 3575.25, there is no PC5 defined.

[018] At 3575.28, there is no PC5 defined.

[019] At 3575.31, there is no PC5 defined.

[020] At 3605.62, fix the fone size of “4” of “OF3.3.4”.

[021] At 3606.6, fix the fone size of “5” of “OF3.3.5”.

[022] At 3607.21, fix the fone size of “4” of “OF3.6.4”.

[023] At 3609.44, replace “db” with “dB”.

[024] At 3610.33, replace “OF4.13a” with “OF4.13.1”.

[025] At 3610.36, replace “OF4.13b” with “OF4.13.2”.

[026] At 3610.42, replace “OF4.13c” with “OF4.13.3”.

[027] At 3610.47, fix the fone size of “4” of “OF4.14.4”.

[028] At 3623.13, ERP4 supports the following feature “Support of ERP3 required PPDU formats as described in reference”. However, ERP3 is reserved!

[029] At 3639.6, replace “OC 8” with “OC 8”.

[030] At 3539.26, why does “R” come prior to “Q”? Swap the orders of RL, RM, QB, QD, QMF, and QP accordingly.

[031] There is no CMMG-M PICS.

[032] Delete “TVWS” from the list of items and support in B.2.2 because “TVHTM” and “TVHTP” have been used.

#### Annex G – Frame exchange sequences

Mark

## ANA

Check for correct use of numbers against database.

Check names against database (update database if names have changed).

Robert Stacey

## MIB

Conformance to 09/533r1 and 15/355r13 – Mark Hamilton

Looking only at TruthValue type MIB attributes (hey, it’s a start…).

There are 124 MIB TruthValue attributes that are not used in the body text.

* 60 of these are easily identified as related RM reporting (including Neighbor Reports), and should probably stay as is.
* dot11ImmediateBlockAckOptionImplemented and dot11DelayedBlockAckOptionImplemented should be deprecated (I think – there are still mentions of “immediate block ack” and “delayed block ack” in the text, though; did we get rid of these, or not?)
* These are new, since 802.11-2016, and should be considered for removal/deprecation:
  + dot11S1GCACDeferral
  + dot11CDMGSpatialsharingActivated
  + dot11CDMGClusteringActivated
  + dot11CMMGControlFieldOptionImplemented
  + dot11CMMGClusteringActivated
  + dot11S1GLONGOptionImplemented
  + dot11CDMGLowPowerSCPHYImplemented
  + dot11CDMGLowPowerSCPHYActivated
* The rest have been carried in the MIB since at least REVmc, and are probably not worth trying to clean-up at this point.

**11-09-533r1:**

In reference to the recommendations in 11-09/0533r1, we start the analysis by (for now), ignoring attributes that are part of the 11k/11v Location Services, Wireless MGT or RM, as these are known to be “magic” attributes that are provided for external management or query purposes (and don’t entirely fit the standard structure). We also ignore attributes that are for WEP since it is deprecated. Finally, we ignore attributes that are used as an index into a table (the presumed writer is the writer of the table entries), and attributes which are capabilities need not specify the writer.

After the above filtering, the following attributes are lacking an identified “type” (capability, status, or control), or the “written by” information:

* dot11TunneledDirectLinkSetupImplemented
* dot11TDLSPeerUAPSDBufferSTAActivated
* dot11TDLSPeerPSMActivated
* dot11TDLSPeerUAPSDBufferSTAActivated
* dot11TDLSPeerPSMActivated
* dot11TDLSChannelSwitchingActivated
  + Add “This is a capability variable” as the first line in the DESCRIPTION to each of the above.
* dot11TDLSPeerUAPSDIndicationWindow
* dot11TDLSPeerSTAMissingAckRetryLimit
* dot11TDLSResponseTimeout
* dot11OCBActivated
* dot11TDLSNavSync
* dot11TDLSDiscoveryRequestWindow
* dot11TDLSACDeterminationInterval
  + Add “This is a control variable” as the first line in the DESCRIPTION to each of the above.
* dot11GroupAddressesStatus: similar to an index, this is for a table with a “status” column, written by the table entry writer.
* dot11ResourceTypeIDName: this is a read-only, fixed value, there is no writer.
* dot11TIThreshold: is deprecated.
* dot11STATransmitPowerClass: Missing both type and “written by”.
  + At 4172.54, insert new first lines in DESCRIPTION: “This is a capability variable.  
    Its value is determined by device capabilities.”
* dot11CurrentChannelWidth:
  + At 4192.39, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11CurrentChannelCenterFrequencyIndex0:
  + At 4192.50, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11CurrentChannelCenterFrequencyIndex1:
  + At 4192.64, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11TVHTCurrentChannelWidth:
  + At 4199.17, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11TVHTCurrentChannelCenterFrequencyIndex0:
  + At 4199.28, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11TVHTCurrentChannelCenterFrequencyIndex1:
  + At 4199.42, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11CMMGCurrentChannelWidth:
  + At 4215.9, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11CMMGCurrentChannelCenterFrequencyIndex:
  + At 4215.20, insert a second line in DESCRIPTION: “Written by the PHY.”
* dot11APMacAddress: This is the topic of (stagnated) discussion in ARC, about how MLME-START.request interacts with this MIB attribute and thusly the BSSID. TGmd could take up this discussion, to clarify how to resolve this, or request ARC to come to a conclusion.
* dot11RoamingConsortiumRowStatus: similar to an index, this is for a table with a “status” column, written by the table entry writer.
* dot11DomainNameRowStatus: similar to an index, this is for a table with a “status” column, written by the table entry writer.
* dot11DomainNameOui: this is an index into the dot11DomainNameTable (just not spelled like one)
* dot11GASQueryRate: this says it is “updated” by the SME.
  + At 4249.62 change “updated” to “written”.
* dot11GASResponseRate: this says it is “updated” by the SME.
  + At 4250.25 change “updated” to “written”.
* dot11GASNoRequestOutstanding: this says it is “updated” by the SME.
  + At 4250.41 change “updated” to “written”.
* dot11GASResponsesDiscarded: this says it is “updated” by the SME.
  + At 4250.56 change “updated” to “written”.
* dot11GASFailedResponses: this says it is “updated” by the SME.
  + At 4251.6 change “updated” to “written”.
* dot11MSCENonAPStationMacAddress: this is an index into the dot11MACStateConfigEntry (just not spelled like one)
* dot11MSPENonAPStationMacAddress: this is an index into the dot11MACStateParameterEntry (just not spelled like one)
* dot11MSELDENonAPStationMacAddress: this is an index into the dot11MACStateESSLinkDetectedEntry (just not spelled like one)

**11-15-355r13:**

This document has additional recommendations on naming of MIB attributes (continuing the theme started in 11-09-533), and additional recommentations on the MAX-ACCESS and DESCRIPTION sections of MIB attribute defintions, along with how the attribute should best be referenced in the body of the Standard.

At this point in time, trying to change the naming of existing attributes from 802.11-2016 is very difficult, due to the need to track down any uses of the existing naming, and take into account an appropriate transition, if even possible. As such, only attributes from the amendments rolled into the REVmd draft are considered here. The following are found to not be in compliance:

* dot11ShortBeaconInterval:
  + From the usage, this appears to be an example of dot11<XXX>Required, per 11-15-355. Recommendation is to change this attribute’s definition to the following:

dot11ShortBeaconInterval OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

This is a primary/secondary variable. Its value on an AP or IBSS initiator is written by external management entity and changes take effect for the next MLME-START.request primitive. Its value on non-AP STA is written by the MLME, adopted from the information received in a Beacon, Probe Response or PV1 Probe Response, when joining an S1G BSS or S1G IBSS.

This attribute, when true, indicates that that the AP schedules for transmission a Beacon frame in a TSBTT that is not a TBTT."

::= { dot11S1GStationConfigEntry 7 }

* dot11MCSNegotiation, and dot11NDPPSPollSupport:
  + From the usage, these appear to be examples of dot11<XXX>Activated. The rest of their definitions are consistent with that pattern. Only a name change is needed.
  + Change “dot11MCSNegotiation” to “dot11MCSNegotiationActivated” throughout.
  + Change “dot11NDPPSPollSupport” to “dot11NDPPSPollSupportActivated” throughout.
* dot11TXOPSharingImplicitACKImplemented, and dot11S1GSectorTrainingOperationImplemented:
  + From the usage, these appear to be (correct) examples of dot11<XXX>Implemented. So, the definitions needs to be adjusted to match.
  + Change “MAX-ACCESS” to “read-only”
  + Replace the first three lines of the DESCRIPTION with:
    - "This is a capability variable.
    - Its value is determined by device capabilities.
* dot11SelectiveSubchannelTransmissionPermitted, and dot11BDTImplemented:
  + Hard to tell from the usage, if these are intended to be dynamic (settable) or static (capability). Since the definitions appear to be dynamic (settable), assuming these are examples of dot11<XXX>Activated. Change the names to match the pattern, and the MAX-ACCESS if needed.
  + Change “dot11SelectiveSubchannelTransmissionPermitted” to “dot11SelectiveSubchannelTransmissionActivated” throughout.
  + Change “dot11BDTImplemented” to “dot11BDTActivated” throughout.
  + Change “dot11BDTImplemented”’s MAX-ACCESS to “read-write”
* dot11APPMActivated:
  + This is described as a control variable, and settable by an external management entity. The MAX-ACCESS needs to allow for this.
  + Change MAX-ACCESS from “read-only” to “read-write”
* dot11S1GCACDeferral:
  + The behaviour associated with this attributed appears to be completely described with direct reference to the Authentication Control element. There is no reference to the MIB attribute in the body text.
  + Delete the MIB definition of dot11S1GCACDeferral.
* dot11FILSOmitReplicateProbeResponses:
  + This appears to be an example of dot11<XXX>PolicyActive.
  + To fit that pattern, make the following changes:
    - Change “dot11FILSOmitReplicateProbeResponses” to “dot11FILSOmitReplicateProbeResponsesPolicyActive” throughout.
    - Change the first line of the DESCRIPTION to: “This is a policy variable.”

Yongho does the rest.

Check that the MIB compiles.

Check against style guide.

### Detailed proposed changes

The old MIB text, corrected (new) MIB text, and difference files are embedded below.

**ACTION ITEM: TGmd Editor changes Annex C as shown in the embeded REVmd\_An\_c\_diff.txt.**







But, there is an open topic that needs a technical submission.

dot11CMMGOperationsComplianceGroup is included in dot11CMMGCompliance STATEMENT.

So, for MIB compiling, dot11CMMGOperationsComplianceGroup is required.

For making dot11CMMGOperationsComplianceGroup, dot11CMMGOperationTable is needed.

However, dot11CMMGOperationTABLE is missing. Please refer Page 4156 Line 9 of REVmd Draft 2.1.

***-- Editor Note: dot11CMMGOperation TABLE is missing.***

At this moment, for checking the syntax of current Annex C MIB, the following dot11CMMGOperationsComplianceGroup is created. But, please remind that the OBJECTS list of the dot11CMMGOperationsComplianceGroup is just a placeholder.

dot11CMMGOperationsComplianceGroup OBJECT-GROUP

OBJECTS {dot11CMMGOptionImplemented }

STATUS current

DESCRIPTION

"Attributes that configure the CMMG Operation for IEEE Std 802.11."

::= { dot11Groups 98 }

**ACTION ITEM: REVmd requests a submission to fill dot11CMMGOperationTable and correct the OBJECTS list of the dot11CMMGOperationsComplianceGroup.**

Additional request to REBmd Editor is that dot11MACbase6 needs dot11Groups’s ANA assignment. As shown in the below, dot11Groups 110 has been assigned in duplicate.

dot11SMTRMReport2 OBJECT-GROUP

OBJECTS {

…

}

STATUS current

DESCRIPTION

"The SMTRMReport package is a set of attributes that are present if the STA supports the Radio Measurement service."

::= { dot11Groups 110 }

dot11MACbase6 OBJECT-GROUP

OBJECTS {

…

}

STATUS current

DESCRIPTION

"The MAC object class provides the necessary support for the access control, generation, and verification of frame check sequences (FCSs), and proper delivery of valid data to upper layers."

::= { dot11Groups 110 }

Based on the ANA Database (11-11-270r45), dot11Groups 115 for dot11MACbase6 is proposed.

**ACTION ITEM: TGmd Editor asks the ANA assignment for dot11MACbase6.**

# Collateral findings

Joe

2390.40 – There is a Response Map Duple subfield and a Response Map Duples field, but no Response Map Duples subfield. “(11aq)If the query response is received from the Advertisement Server before the PostReplyTimer expires, and if the query response's length is less than or equal to the maximum MMPDU size and the query response is an aggregated response, the STA shall transmit a Group Addressed GAS Response frame containing a dialog token set to 0, a Status Code set to SUCCESS, an Advertisement Protocol element containing the Advertisement Protocol ID field(#2540) used in the GAS Initial Request frame or the Group Addressed Request frame, a GAS Comeback Delay set to 0, the Query Response and a Query Response Length set to the query response length, and a GAS Extension element containing a list of MAC Address/Dialog Token pairs in the Response Map Duples subfield of the GAS Extension element, identifying the requesting STAs and their Query Requests to which the Group Addressed GAS Response frame responds.” Change “Response Map Duples subfield” to “Response Map Duple subfield”

In 9.4.2.36 Neighbor Report element – there are numerous references to Table 9-125 - at most one is necessary in the clause and it should be clear it is a reference for the Measurement Type field values. 1131.16, 27

In 9.6.6.6 Neighbor Report Request frame format – there are numerous references to Table 9-100 - at most one is necessary in the clause and it should be clear it is a reference for the Measurement Type field values. 1498.38, 50

In 9.6.7.32 Fine Timing Measurement Request frame format – there are numerous references to Table 9-100 - at most one is necessary in the clause and it should be clear it is a reference for the Measurement Type field values. 1526.56, 1527.2

In 9.6.7.33 Fine Timing Measurement frame format – there are numerous references to Table 9-125 - at most one is necessary in the clause and it should be clear it is a reference for the Measurement Type field values. 1529.7, 18.

2132.10 – “1)” does not make much sense as it is should be a criterea for why a FILS STA shall not respond to to a Probe Request frame. It starts out as a criterea and then contains several definitions and defineds behavior. This should be reworked to provide a clear criterea, definitions should be and are elsewhere.

2274.23 - Measurement Duration is a field – hence should read:

“If dot11RMStatisticsMeasurementActivated is true and a station accepts a Radio Measurement Request frame with a Measurment Type element equal to 7 (STA Statistics), it shall respond with a Radio Measurement Report frame including a Measuremetn Report element with a Measurement Type element equal to 7. If the Measurement Duration field of the accepted Radio Measurement Request frame is 0, the STA shall report the current values for the requested Statistics Group Data field. If the Measurement Duration field is greater than 0, the STA reports the change in the requested statistics group data measured within that nonzero measurement duration. The reported change in data value shall be the value of the data at the end of the actual measurement duration minus the value of the data at the beginning of the actual measurement duration. If a STA accepts a Radio Measurement Request frame with a Measurment Type element equal to 7 with nonzero, positive Measurement Duration field, the STA shall perform the measurement over the requested measurement duration without regard to the Duration Mandatory bit in the Measurement Request Mode field. If a STA cannot measure over the requested measurement duration, the STA shall refuse the request.”

# IEEE-SA MEC

At the time of writing this report, the IEEE-SA mandatory editorial coordination (MEC) is ongoing. When complete, the findings will be added to this report.

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