IEEE P802.11
Wireless LANs

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| 802.11IEEE P802.11bc/D3.0 Mandatory Draft Review (MDR) Report |
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**Abstract**

This document contains the report of the TGbc Mandatory Draft Review.

r0: section headings

r1: volunteers added for most section

r2: Jonathan Segev update

r3: Peter Eccleisne update

r4: Included Edward’s findings. Included Yongho’s findings. Included MEC response. Included Emily’s findings. Included ANA findings.

r5: Mark Hamilton update

r6: Carol Ansley, editor’s response and actions

# Introduction

## Purpose of this document

This document is the report from the group of volunteers that participated in the P802.11bc/D3.0 mandatory draft review.

This document contains recommendations for changes to the P802.11bc draft to bring it into improved compliance to IEEE-SA and WG11 style.

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

## Process / references

The MDR process is described in:

* 11-11/615r6 – WG802.11 MEC Process

And references:

* 11-09/1034r19 – 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:

* Emily Qi
* Edward Au
* Jonathan Segev
* Yongho Seok
* Mark Hamilton

# Findings

## Style

### Style Gude 2.1 – Frames

Emily Qi

At 48.31, add “format” at the end of the title of Figure 9-144d.

Comment accepted. CJA

At 49.44, add “format” at the end of the title of Figure 9-144g.

Comment accepted. CJA

### Style Guide 2.2 – Naming Frames

Emily Qi

The draft looks good. Don’t find any issues in this regard.

### Style Guide 2.2 – true/false

Jonathan Segev

Complies with style guide, no findings where identified.

### Style Guide 2.3 – “is set to”

Jonathan Segev

D3.0 P.46 L.1 *If the STA is an AP with dot11MultiBSSIDImplemented set to true and the Address 1 field is*

*set to the broadcast address, then this address is the transmitted BSSID.*

Change to:

*If the STA is an AP with dot11MultiBSSIDImplemented is equal to true and the Address 1 field is*

*equal to the broadcast address, then this address is the transmitted BSSID.*

Comment accepted. CJA

D3.0 P.51 L.27 *The TBTT Information Field Type subfield identifies, together with the TBTT Information Length subfield,*

*the format of the TBTT Information field. It is set to 0 or 1. Values of 1, 2, and 3 are reserved.*

*The TBTT Information Length subfield, when the TBTT Information Field Type subfield is set to 0, is*

*interpreted as shown in Table 9-231 (TBTT Information field contents when TBTT Information Field Type*

*subfield set to 0).*

Change to:

*The TBTT Information Field Type subfield identifies, together with the TBTT Information Length subfield,*

*the format of the TBTT Information field. It is equal to 0 or 1. Values of 1, 2, and 3 are reserved.*

*The TBTT Information Length subfield, when the TBTT Information Field Type subfield is set to 0, is*

*interpreted as shown in Table 9-231 (TBTT Information field contents when TBTT Information Field Type*

*subfield set to 0).*

This use of “is set to” acceptable because it is a list of options available. CJA

D3.0 P.52 L.117 *The TBTT Information Length subfield, when the TBTT Information Field Type subfield is set to 1, is interpreted as shown in Table 9-231a (TBTT Information field contents when TBTT Information Field Type*

*subfield set to 1).*

Change to:

 *The TBTT Information Length subfield, when the TBTT Information Field Type subfield is equal to 1, is interpreted as shown in Table 9-231a (TBTT Information field contents when TBTT Information Field Type*

*subfield set to 1).*

Comment accepted. CJA

D3.0 P.56 L.12 *In case the Association Required bit in the Control field included in the same Enhanced Broadcast Services Tuple field is set to 1, the only allowed request method is through EBCS Content Request/Response frames, therefore the EBCS Content Request Frame bit is set to 1 and EBCS Request ANQP Element bit is set to 0..*

Change to:

*In case the Association Required bit in the Control field included in the same Enhanced Broadcast Services Tuple field is equal to 1, the only allowed request method is through EBCS Content Request/Response frames, therefore the EBCS Content Request Frame bit is set to 1 and EBCS Request ANQP Element bit is set to 0..*

Comment accepted. CJA

D3.0 P.76 L.64 *The Negotiation Address subfield contains a MAC address if the Negotiation Address Type is set to 0.*

Change to:

*The Negotiation Address subfield contains a MAC address if the Negotiation Address Type is equal to 0.*

Comment accepted. CJA

D3.0 P.77 L.1 *The format of the Negotiation Address subfield when the Negotiation Address Type is set to 1 is shown in Figure 9-909ax (Negotiation Address subfield format for a Negotiation Address Type of 1).*

Change to:

*The format of the Negotiation Address subfield when the Negotiation Address Type is equal to 1 is shown in Figure 9-909ax (Negotiation Address subfield format for a Negotiation Address Type of 1).*

Comment accepted. CJA

D3.0 P91 L33 *An EBCS non-AP STA should include the Frame Count field in an EBCS UL frame that it transmits to*

*reduce the possibility of a successful replay attack. When the STA provides a frame count, the Frame Count field shall carry a value that is set to 1 in the first EBCS UL frame that the STA transmits and shall be incremented for each subsequent transmission of an EBCS UL frame.*

Change to:

*An EBCS non-AP STA should include the Frame Count field in an EBCS UL frame that it transmits to*

*reduce the possibility of a successful replay attack. When the STA provides a frame count, the Frame Count field shall carry a value that is set to 1 in the first EBCS UL frame that the STA transmits and shall be incremented for each subsequent transmission of an EBCS UL frame.*

Comment accepted. CJA

D3.0 P.95 L.24 *if the Frame Signature Type subfield of the EBCS UL frame is set to a nonzero value, then one of the following public key algorithms is used to generate the frame signature.*

*— RSASSA-PSS*

*— ECDSA*

*— Ed25519*

Change to:

*if the Frame Signature Type subfield of the EBCS UL frame is equal to a nonzero value, then one of the following public key algorithms is used to generate the frame signature.*

*— RSASSA-PSS*

*— ECDSA*

*— Ed25519*

Comment accepted. CJA

Other (not related to “is set to”):

D3.0 P.46 L.53 the highlighted reference has a typo *The HT Control field is defined in 4.2.4.6 (HT Control field).The presence of the HT Control field is*

*determined by the +HTC subfield of the Frame Control field, as specified in 9.2.4.1.10 (+HTC subfield).*

Should be 9.2.4.6.

Comment accepted. CJA

### Information Elements/Subelements

Edward Au

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

No findings

#### Style Guide 2.4.2 – Definition Conventions

No findings

#### Style Guide 2.4.3 – Element Inclusion Conventions

No findings

### Style Guide 2.5 – Removal of functions and features

Jonathan Segev

Complies with style guide, no findings where identified.

### Style Guide 2.6 – Capitalization

Edward Au

[01] Page 48, line 46: Please replace “Content ID” with either “Content ID subfield” or “content ID”.

Comment accepted (Content ID subfield). CJA

[02] Page 55, line 52: Please replave “Out of Band Request” with “Out Of Band Request”.

Comment accepted. CJA

[03] Page 55, line 52: Please replave “Content with Restriction” with “Content With Restriction”.

Comment accepted. CJA

[04] Page 56, line 6: Please replave “Out of Band Request” with “Out Of Band Request”.

Comment accepted. CJA

[05] Page 56, line 18: Please replace “The Service URL” with “The service URL”.

Comment accepted with revision. Change to: “The URL used for off-line registration is contained in the Service URL subfield in the EBCS Info frame.” CJA

[06] Page 57, line 10: Replace “The Content Address Length” with “The length of the Content Address subfield”.

Comment accepted with revision. Change to: “The Content Address Length subfield contains” CJA

[07] Page 58, line 33: Please replace “Operating Band” with “Operating band”.

Comment accepted. CJA

[08] Page 58, line 57: Please replace “TX rate subfield” with “TX Rate subfield”.

Comment accepted. CJA

[09] Page 59, line 18: Please replace “HT MCS Index” with “HT MCS index”.

Comment accepted. CJA

[10] Page 60, line 31: Please replace “Channel Bandwidth” with “Channel bandwidth”.

Comment accepted. CJA

[11] Page 63, line 11: Replace “SBTC” with “STBC”. It is a typo.

Comment accepted. CJA

[12] Page 64, line 46: Replace “Guard Interval” with “Guard interval”. ~~It is a typo~~.

Comment accepted. CJA

[13] Page 66, line 38: Replace “EBCS Response Information List” with either “EBCS Response Information List field” or “EBCS response information list”.

Comment accepted. Change to “EBCS Response Information List field” CJA

[14] Page 67, line 7: Replace “EBCS Termination Notice” with “EBCS termination notice”.

Comment accepted. CJA

[15] Page 68, line 4: Replace “Frame Signature Length” with “Frame signature length”.

Comment accepted. CJA

[16] Page 68, line 29: Replace “Destination URI length” with “Destination URI Length”.

Comment accepted. CJA

[17] Page 68, line 38: Replace “Destination URI” with “destination URI”.

Comment accepted. CJA

[18] Page 70, line 12: Replace “EBCS TIME field” with “EBCS TIM field”.

Comment accepted. CJA

[19] Page 70, line 23: Replace “Certificate Present” with “Certificate present”.

Comment accepted. CJA

[20] Page 70, line 23: Replace “Signature Length” with “Signature length”.

Comment accepted. CJA

[21] Page 71, line 26: Replace “Time of Termination” with “Time Of Termination”.

Comment accepted. CJA

[22] Page 71, line 44: Replace “Content Authentication Algorithm” with “Content authentication algorithm”.

Comment accepted. CJA

[23] Page 72, line 41: Replace “Out Of BandContent Request” with “Out Of Band Content Request”. Comment accepted. CJA

[24] Page 74, line 2: Replace ‘Instant Authenticator List” with “instant authenticator list”.

Comment accepted with revision. Change to: “Instant Authenticator List subfield” CJA

[25] Page 76, line 63: Replace “the Negotiation Address Type” with “the negotiation address type”.

Comment accepted with revision. Change to: “Negotiation Address Type subfield” CJA

[26] Page 77, line 1: Replace “the Negotiation Address Type” with “the negotiation address type”.

Comment accepted. CJA

[27] Page 77, line 9: Replace “a Negotiation Address Type” with “a negotiation address type”.

Comment accepted. CJA

[28] Page 77, line 19: Replace “the Negotiation Address Type” with “the negotiation address type”.

Comment accepted. CJA

[29] Page 77, line 27: Replace “a Negotiation Address Type” with “a negotiation address type”.

Comment accepted. CJA

[30] Page 77, line 37: Replace “the Negotiation Address Type” with “the negotiation address type”.

Comment accepted. CJA

[31] Page 77, line 45: Replace “a Negotiation Address Type” with “a negotiation address type”.

Comment accepted. CJA

[32] Page 78, line 26: Replace “EBCS Content Request” with “EBCS content request”.

Comment accepted. CJA

[33] Page 78, line 29: Replace “EBCS Content Response” with “EBCS content response”.

Comment accepted. CJA

[34] Page 79, line 37: Replace “an EBCS Content Response” with “an EBCS content response”.

Comment accepted. CJA

[35] Page 82, line 13: Replace “Out of Band Request” with “Out Of Band Request”.

Comment accepted. CJA

[36] Page 82, line 58: Replace “EBCS Addressing” with “EBCS addressing”.

Comment accepted. CJA

[37] Page 82, line 61: Replace “an EBCS Content MAC address or EBCS Info MAC address” with “an EBCS content MAC address or EBCS info MAC address”.

Comment accepted. CJA

[38] Page 82, line 62: Replace “the EBCS Content MAC address and EBCS Info MAC address” with “the EBCS content MAC address and EBCS info MAC address”.

Comment accepted. CJA

[39] Page 83, line 1: Replace “EBCS Info MAC address” with “EBCS info MAC address”.

Comment accepted. CJA

[40] Page 83, line 6: Replace “The EBCS Content MAC address” with “The EBCS content MAC address”.

Comment accepted. CJA

[41] Page 83, line 11: Replace “Content ID” with “content ID”.

Comment accepted. CJA

[42] Page 83, line 51: Replace “EBCS Content MAC Address” with “EBCS content MAC address”.

Comment accepted. CJA

[43] Page 84, line 9: Replace “an EBCS Content MAC address” with “an EBCS content MAC address”.

Comment accepted. CJA

[44] Page 84, line 13: Replace “the EBCS Content MAC address” with “the EBCS content MAC address”.

Comment accepted. CJA

[45] Page 84, line 24: Replace “the EBCS Content MAC address” with “the EBCS content MAC address”.

Comment accepted. CJA

[46] Page 85, line 61: Replace “desired EBCS Content MAC addresses” with “desired EBCS content MAC addresses”.

Comment accepted. CJA

[47] Page 86, line 31: Replace “the EBCS Info MAC address” with “the EBCS info MAC address”.

Comment accepted. CJA

[48] Page 88, line 44: Replace “Broadcaster MAC Address” with either “Broadcaster MAC Address subfield” or “broadcaster MAC address”.

Comment accepted. Change to “broadcaster MAC address” CJA

[49] Page 88, line 52: Replace “Content ID” with “content ID”.

Comment accepted. CJA

[50] Page 88, line 53: Replace “Content ID” with “content ID”.

Comment accepted. CJA

[51] Page 91, line 15: Replace “The EBCS Content MAC address” with “The EBCS content MAC address”.

Comment accepted. CJA

[52] Page 91, line 20: Replace “The EBCS Content MAC address” with “The EBCS content MAC address”.

Comment accepted. CJA

[53] Page 91, line 23: Replace “EBCS Proxy” with “EBCS proxy”.

Comment accepted. CJA

[54] Page 91, line 42: Replace “EBCS UL Operation at an EBCS Proxy” with “EBCS UL operation at an EBCS proxy”.

Comment accepted. CJA

[55] Page 92, line 18: Replace “Instant Authentication” with “instant authentication”.

Comment accepted. CJA

[56] Page 92, line 20: Replace “Instant Authentication” with “instant authentication”.

Comment accepted. CJA

[57] Page 95, line 21: Replace “non-APSTA” with “non-AP STA”.

Comment accepted. CJA

[58] Page 96, line 3: Replace “Frame Count” with “frame count”.

Comment accepted. CJA

[59] Page 96, line 18: Replace “Frame Count” with “frame count”.

Comment accepted. CJA

[60] Page 96, line 19: Replace “Frame Count” with “frame count”.

Comment accepted. CJA

[61] Page 99, line 29: Replace “Example HCFA Key Delivery” with “Example HCFA key delivery”.

Comment accepted. CJA

[62] Page 100, line 29: Replace “Example Instant Authenticator Delivery” with “Example instant authenticator delivery”.

Comment accepted. CJA

[63] Page 102, line 13: Replace “HCFA Authenticator” with “HCFA authenticator”.

Comment accepted. CJA

[64] Page 102, line 23: Replace “Instant Authenticator” with “Instant authenticator”.

Comment accepted. CJA

[65] Page 104, line 30: Replace “Enhanced Broadcast Services Receive only” with “Enhanced Broadcast Services receive only”.

Comment accepted. CJA

[66] Page 106, line 53: Replace “EBCS termination notice frame” with “EBCS Termination Notice frame”.

Comment accepted. CJA

[67] Page 22, line 37: Replace “Info MAC Address” with “info MAC address”.

Comment accepted. CJA

[68] Page 22, line 40: Replace “Content MAC Address” with “content MAC address”.

Comment accepted. CJA

### Style Guide 2.7 – Terminology: frame vs packet vs PPDU vs MPDU

Edward Au

[01] Page 95, line 7: Replace “PKFA MPDU frame” with “PKFA MPDU”.

Comment accepted. CJA

### Style Guide 2.8 – Use of verbs & problematic words

#### normative, non-normative, ensure

#### which/that

#### articles

#### missing nouns

#### unnecessary nouns

#### unicast and multicast

### Style Guide 2.9 – Numbers

Edward Au

[01] Page 64, line 63: Please replace “65535” with “65 535”.

Comment accepted. CJA

[02] Page 65, line 5: Please replace “65535” with “65 535”.

Comment accepted. CJA

[03] Page 69, line 20: Please italicize r.

Comment accepted. CJA

[04] Page 69, line 20: Please italicize s.

Comment accepted. CJA

[05] Page 75, line 62: Please replace “65535” with “65 535”.

Comment accepted. CJA

[06] Page 90, line 11: Please replace “65535” with “65 535”.

Comment accepted. CJA

[07] Page 98, line 43: Please italicize N.

Comment accepted. CJA

[08] Page 98, line 53: Please italicize N.

Comment accepted. CJA

[09] Page 98, line 56: Please italicize N.

Comment accepted. CJA

[10] Page 115, line 1: Please replace “65535” with “65 535”.

Comment accepted. CJA

[11] Page 115, line 17: Please replace “65535” with “65 535”.

Comment accepted. CJA

### Style Guide 2.10 – Maths operators and relations

Edward Au

[01] Page 40, line 12: Replace “1-255” with “1–255”.

Comment accepted. CJA

[02] Page 40, line 54: Replace “1-255” with “1–255”.

Comment accepted. CJA

[03] Page 41, line 30: Replace “1-255” with “1–255”.

Comment accepted. CJA

[04] Page 42, line 9: Replace “1-255” with “1–255”.

Comment accepted. CJA

[05] Page 52, line 35: Replace “0-1” with “0–1”.

Comment accepted. CJA

[06] Page 52, line 40: Replace “3-255” with “3–255”.

Comment accepted. CJA

[07] Page 53, line 53: Please use the multiplication operator rather than “x”.

Comment accepted. CJA

[08] Page 56, line 47: Replace “4-255” with “4–255”.

Comment accepted. CJA

[09] Page 57, line 6: Replace “3-255” with “3–255”.

Comment accepted. CJA

[10] Page 58, line 46: Replace “4-255” with “4–255”.

Comment accepted. CJA

[11] Page 60, line 44: Replace “5-7” with “5–7”.

Comment accepted. CJA

[12] Page 61, line 32: Replace “5-7” with “5–7”.

Comment accepted. CJA

[13] Page 62, line 24: Replace “5-7” with “5–7”.

Comment accepted. CJA

[14] Page 68, line 24: Replace “6-7” with “6–7”.

Comment accepted. CJA

[15] Page 69, line 43: Please use the multiplication operator rather than “x”.

Comment accepted. CJA

[16] Page 70, line 43: Replace “7-255” with “7–255”.

Comment accepted. CJA

[17] Page 71, line 59: Replace “4-255” with “4–255”.

Comment accepted. CJA

[18] Page 76, line 29: Replace “4-255” with “4–255”.

Comment accepted. CJA

[19] Page 76, line 54: Replace “4-255” with “4–255”.

Comment accepted. CJA

[20] Page 78, line 31: Replace “2-255” with “2–255”.

Comment accepted. CJA

[21] Page 94, line 45: Replace “>=” with “≥”.

Comment accepted. CJA

### Style Guide 2.11 – Hyphenation

Edward Au

[01] Page 56, line 17: Please replace “off-line” with “offline”.

Comment accepted. CJA

[02] Page 56, line 19: Please replace “off-line” with “offline”.

Comment accepted. CJA

[03] Page 74, line 44: Replace “In case of Pre-negotiated” with “In case of Prenegotiated”.

Comment accepted. CJA

[04] Page 86, line 37: Replace “co-hosted” with “cohosted”.

Comment accepted. CJA

[05] Page 86, line 38: Replace “co-hosted” with “cohosted”.

Comment accepted. CJA

[06] Page 90, line 62: Replace “co-hosted” with “cohosted”.

Comment accepted. CJA

[07] Page 93, line 48: Replace “Pre-negotiated” with “Prenegotiated”.

Comment accepted. CJA

[08] Page 94, line 2: Replace “Pre-negotiated” with “Prenegotiated”.

Comment accepted. CJA

### Style Guide 2.12 – References to SAP primitives

Peter Eccelsine

No issue found

### Style Guide 2.13 – References to the contents of a field/subfield

Emily Qi

At 95.24, change “if the Frame Signature Type subfield of the EBCS UL frame is set to a nonzero value, then one of the following public key algorithms is used to generate the frame signature.”

 To “If the Frame Signature Type subfield of the EBCS UL frame is a nonzero value, then one of the following public key algorithms is used to generate the frame signature.”

Comment accepted. CJA

### Style Guide 2.14 – References to MIB variables/attributes

Jonathan Segev

D3.0 P.109 L.38 *dot11EBCSRelayingServiceSupported TruthValue,*

Change to:

*dot11EBCSRelayingServiceImplemented TruthValue* andall of usages of the MIB change to reflected the name modification refer to 11-15-0355 section 3 patterns (3.1 dot11xxx implemented Static implementation capability. Also consider other option *dot11EBCSRelayingServiceActivated* if the variable is intended to be dynamically changing.

Comment accepted. CJA

D3.0 P.111 L.65 *dot11EBCSTIMInBeacon … This attribute when true, indicates that the EBCS TIM element is included in the Beacon*

*frame.* – this is a dynamic capability control variabgle and hence name should include an Activated suffix; refer to 11-15-355r13 clause 3.2 dot11xxxActivated Dynamically operational capability.

Change to:

*dot11EBCSTIMInBeaconAcitvated* andalign all uses of the variable in the draft accordingly.

Comment accepted. CJA

D3.0 P.112 L.63 *dot11EBCSTrafficStreamBufferable*

According to its definition: *This variable, when true, the EBCS traffic stream is buffered and transmitted*

*in EBCS DTIM period.* Hence this variable is a dynamic capability and should have an Activated suffix.

Change to: *dot11EBCSTrafficStreamBufferableActivated* andalign all uses of the variable in the draft accordingly.

Comment accepted. CJA

D3.0 P.112L.64 *dot11EBCSTrafficStreamEnabled*

According to its definition: *“This variable, when false, indicates that the EBCS receiver filters the*

*EBCS traffic stream.”* Hence this variable is a dynamic capability and should have an Activated suffix.

Change to: *dot11EBCSTrafficStreamActivated* and align all uses of the variable in the draft accordingly.

Comment accepted. CJA

### Style Guide 2.15 – Hanging Paragraphs

Emily Qi

The draft looks good, No issue identified.

### Style Guide 2.16 – Abbreviations

Edward Au

[01] Page 22, line 20: Replace “IDs” with “identifiers (IDs)”.

Comment accepted. CJA

[02] Page 22, line 26: Replace “APs” with “access points (APs)”.

Comment accepted. CJA

[03] Page 22, line 33: Replace “DS” with “distribution system (DS)”.

Comment accepted. CJA

[04] Page 22, line 41: Replace “UL” with “uplink (UL)”.

Comment accepted. CJA

[05] Page 22, line 60: Replace “UL” with “uplink (UL)”.

Comment accepted. CJA

[06] Page 23, line 1: The correct subclause number is 3.4, not 3.2.

Comment accepted. CJA

[07] Page 92, line 34: Delete “(Certificate Authority)” because it has been defined in subclause 3.4 of IEEE 802.11-2020.

Comment accepted. CJA

### Style Guide 2.17 – Format for code/pseudocode

N/A

### Style guide 3 – Style applicable to specific Clauses

#### Definitions (Clause 3)

Peter Ecclesine

**enhanced broadcast services (EBCS) Info MAC Address: and**

**enhanced broadcast services (EBCS) Content MAC Address:**

MAC addressing should refer to **11.55.2** **EBCS Addressing,** not 11.55.1a

Comment accepted. CJA

#### General Description (Clause 4)

Peter Ecclesine

No issues noted

#### Frame formats (Clause 9) – shall or may?

Emily Qi

#### SAP interfaces (Clause 6)

Mark Hamilton

[01] N/A is not a very useful information/reference for the Valid range column. Replace N/A with a “As defined in xx.yy.zz”, with a reference to a clause 9 or 12 description of what is valid in these sequences. Make these changes:

* MLME-EBSINFO.request, PrivateKey row should be “As defined in 12.14.1”

Comment accepted. CJA

* MLME-EBCSINFO.request Certificate row, replace “N/A” with “As defined in 9.6.7.54”. Comment accepted. CJA
* MLME-EBCSUL.request HLPPayload row, replace “N/A” with “As defined in 9.6.7.53”. Comment accepted. CJA
* MLME-EBCSUL.request “STA Certificate row, replace “N/A” with “As defined in 9.6.7.53”. Comment accepted. CJA
* MLME-EBCSUL.request PrivateKey row should be “As defined in 12.14.1”

Comment accepted. CJA

* MLME-EBCSUL.indication HLPPayload row, replace “N/A” with “As defined in 9.6.7.53”. Comment accepted. CJA
* [02] Recommend that each subclause of 6.3 contain just one named MLME service, and its primitives (request, confirm, etc.), to make it easier to understand the scope of that service and its primitives pattern. Specifically, separate into distinct 6.3.XXX subclauses for MLME-EBCSINFO, MLME-EBCSTERMINATIONNOTICE, and MLME-EBCACONTENT, rather than combining all these into 6.3.126.

Comment accepted. CJA

[03] If any parameters to primitives are not always present, the presence conditions should be specified:

* MLME-EBCSINFO.request, in the Certificate row, add a new sentence, “Present if the EBCS Info Authentication Algorithm subfield indicates that a certificate is present”.

Comment accepted. CJA

* MLME-EBCSUL.request, for the STACertificate, FrameTxTime, FrameCount and PrivateKey rows, 11.55.4.3 is rather vague about when these parameters (and resulting fields in the protocol) will be included and seems that it could be a bit more explicit than just a list of “should”s, but that is a technical comment out of scope of the MDR. Based on the 11.55.4.3 language, it seems these fields are simply optional. So, add “This parameters is optionally present and” to start of each of the Description entries on these rows.

Comment accepted. CJA

* In the MLME-EBSUL.indication, since this primitive is generated when a frame is received, the FrameTxTime and FrameCount parameters are present in the primitive when they are present in the frame. In those rows, change the Description from “When present, specifies …” to “Present when the Frame Tx Time was present in the received EBCS UL frame. Specifies …” and “Present when the Frame Count was present in the received EBCS UL frame. Specifies …”, respectively.

Comment accepted. CJA

[04] When comparing the SAP primitive parameters to the frame fields, an inconsistency is found in the MLME-EBCSCONTENT primitives. The request and indication both contain the PeerSTAAddress, and also a DialogToken. However, the response includes a PeerSTAAddress and DialogToken but the confirm has only the DialogToken and no PeerSTAAddress. It seems it could be argued that the PeerSTAAddress can be determined based on saved information attached to the DialogToken at the requester, and thus is not needed in the confirm. However, by that logic, then the PeerSTAAddress should not be needed in the response. So, either delete PeerSTAAddress from the response, per the above logic, or add PeerSTAAddress to the confirm if that logic is not sufficient/desired logic.

* Comment accepted. CJA

#### New top level clauses

#### Annex A – Bibliography

Not applicable. There are neither normative nor informative references.

#### Annex B – PICS

#### Annex G – Frame exchange sequences

N/A

## ANA

* Check for correct use of numbers against database. Comment accepted. CJA
* Check names against database (update database if names have changed). Comment accepted. CJA

Robert Stacey

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| **Resource** | **Value** | **Name** | **Status** |
| InfoIDs | 283 | Enhanced Broadcast Services | Allocated value not reflected in D3.0. Name differs in draft |
|  | 284 | Enhanced Broadcast Services Request | Allocated value not reflected in D3.0. Name differs in draft |
|  | 285 | Enhanced Broadcast Service Response | Allocated value not reflected in D3.0. Name differs in draft |
| Element ID Extension 1 | 111 | EBCS Parameters | Allocated value not yet reflected in D3.0 |
|  | 112 | EBCS TIM | Allocated value not yet reflected in D3.0 |
| dot11StationConfigEntry | 208 | dot11EBCSSupportActivated | Allocated value not reflected in D3.0. |
|  | 209 | dot11EBCSContentList | Name does not appear in D3.0 |
|  | 210 | dot11EBCSInfoInterval | Allocated value not reflected in D3.0. |
|  | 211 | dot11EBCSHCFAKeyChangeInterval | Allocated value not reflected in D3.0. |
|  | 212 | dot11EBCSHCFAHashDistance | Allocated value not reflected in D3.0. |
|  | 213 | dot11EBCSInfoTxRate | Allocated value not reflected in D3.0. |
|  | 214 | dot11EBCSDTIMPeriod | Allocated value not reflected in D3.0. |
|  | 215 | dot11EBCSTerminationNoticeTime | Allocated value not reflected in D3.0. |
|  | 216 | dot11EBCSTerminationNoticeMinimumInterval | Allocated value not reflected in D3.0. |
|  | 217 | dot11EBCSTerminationNoticeMaximumInterval | Allocated value not reflected in D3.0. |
|  | 218 | dot11EBCSRelayingServiceSupported | Allocated value not reflected in D3.0. |
| dot11Groups | 124 | dot11EBCSComplianceGroup | Incorrectly appears under dot11Compliances in D3.0 |
| dot11Compliances | 26 | dot11EBCSCompliance | Allocated value not reflected in D3.0. |
| Extended Capabilities | 98 | EBCS Support | Incorrectly using value 90 in D3.0 |
|  | 99 | EBCS Relaying Supported | Incorrectly using value 91 in D3.0 |
| DataSubTypes | 1 | EBCS Data | Not yet present in D3.0 |
| **The following are present but have no value allocated** |
| dot11StationConfigEntry |  | dot11EBCSAPGroupID |  |
|  |  | dot11EBCSInfoPHYType |  |
| dot11smt |  | dot11EBCSTrafficStreamTable |  |

Additional Actions:

## MIB

Conformance to 09/533r1 and 15/355r13

The compiled MIB is embedded as the following. Please refer the proposed changes in the following section to fix errors.

Yongho Seok

The compiled MIB is embedded as the following. Please refer the proposed changes (see the embedded word field) in the following section to fix errors.

* Comments accepted. CJA



### Detailed proposed changes

* MIB Detail



# Collateral findings

# IEEE-SA MEC

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| --- |
| Hello RobertFirst off, my apologies on the delay for this, I thought I had completed this one already.Please let this email serve as my official comment for P802.11bc.This draft meets all editorial requirements and therefore can proceed to ballot.If the draft contains registration of options, please submit to the IEEE Registration Authority for review before final ballot.If you have any questions, please feel free to contact me. Thank you!--Michelle TurnerManager, Content Production and ManagementIEEE Standards Associatione-mail: m.d.turner@ieee.orgPH: +1 732 562 3825; FAX: +1 732 562 1571Cell: +1 732 540 2992 |