IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB 203 Comment Resolution for CIDs assigned to Editor | | | | |
| Date: 2014-09-14 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Dr, San Diego, CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |

Abstract

This submission proposes resolutions for comments in clause 11 of TGah Draft 2.0 with the following CIDs (23 CIDs):

* 3015, 3932, 3016
* 3041, 3045, 3047, 3048, 3053
* 3119, 3120, 3253, 3291, 3342, 3390, 3393, 3428, 3460, 3462, 3463, 3476, 3478, 3526, 3606,

Revisions:

* Rev 0: Initial version of the document

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGah Editor: Editing instructions preceded by “TGah Editor” are instructions to the TGah editor to modify existing material in the TGah draft. As a result of adopting the changes, the TGah editor will execute the instructions rather than copy them to the TGah Draft.***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3015 | Adrian Stephens | 129.38 | 8.4.2.170b | Please note that 802.11 style doesn't allow mixed octet-aligned and bit-aligned structures. | Split the bit-aligned structures off into a separate figure. | Revised –  Agree in principle with the comment. Resolution accounts for suggested change.  TGah editor to make the changes shown in 11-14/1288r0 under all headings that contain CID 3015. |
| 3932 | Mitsuru Iwaoka | 111.00 | 8.4.2.6.4 | "802.11 Style Guide" (11-09/1034r9) clause 2.1.1 (Frame Format Figures) recommends to break a figure into two or more parts if a mixture of an "octet aligned" or a "bit aligned" structure is required. There are several mixed format figures in the 11ah draft. These figures should be broken into "octet aligned" figures and "bit aligned" figures. | Break following figures into "octet aligned" figures and "bit aligned" figures. - Figure 8-122i (P111L41) - Figure 8-401q (P129L38) - Figure 8-401am (P154L20) - Figure 8-401an (P154L45) | Revised –  Agree in principle with the comment. Resolution accounts for suggested change.  TGah editor to make the changes shown in 11-14/1288r0 under all headings that contain CID 3932. |
| 3016 | Adrian Stephens | 130.01 | 8.4.2.170b | The formatting of the equations requires attention. 1. Equations are indented 2. Variables are italic 3. where clause is a vertical list 4. use "multiplication symbol" rather than asterisk for multiplication | Please read the IEEE-SA style guide and apply throughout this subclause. | Revised –  Agree with comment.  TGah editor to make the following changes:  - indent the content of the equations,  - italize the variables,  - format as vertical lists those paragraphs that start with “where”  - replace the “asterisk” symbol with the “multiplication” symbol throughout this subclause. |

***Discussion:*** *None.*

**8.4.2.170c Page Slice element**

The Page Slice element contains a subset of blocks from a single page, called a page slice. The STAs included in a page slice and indicated by the Page Slice element are served during the beacon intervals within a page period, starting from the beacon that carries the Page Slice element for the page (see 9.42e (Page Slicing). The frame format of the Page Slice element is defined in Figure 8-575a9 (Page Slice element format).

**TGah Editor: *Change the figure below as follows (#3015, 3932):***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Element  ID | Length | Page  Period |  |  | Page  Slice  Control |  |  |  | Page  Bitmap |
| Octets: | 1 | 1 | 1 | 3 | | | | | | 0-4 |
| **Figure 8-575a9—Page Slice element format** | | | | | | | | | | |

**TGah Editor: *Insert the following paragraph and figure after the 3rd paragraph as follows (#3015, 3932):***

The Page Slice Control field format is shown Figure 8-575a9a (Page Slice Control field format).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | B0 B1 | B2 B6 | B7 B11 | B12 B16 | B17 B20 | B21 B23 |
|  | Page  Index | Page Slice Length | Page  Slice  Count | Block Offset | TIM  Offset | Reserved |
| Bits: | 2 | 5 | 5 | 5 | 4 | 3 |

**Figure 8-575a9a—Page Slice Control field format**

**TGah Editor: *Replace “field” with “subfield” when referring to Page Index, Page Slice Length, Page Slice Count, Block Offset, and TIM Offset throughout this subclause and 9.42e (Page Slicing)(#3015, 3932).***

**TGah Editor: *Change the figure below as follows(#3932).***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | B0 B2 | B3 B7 |  |  |  |  |
|  | EWL | Length | *∆*AID1 | … | *∆*AIDn | Padding |
| Bits: | 3 | 5 | 1-8 |  | 1-8 | 0-7 |
| : |  | | |  |  |  |
| **8-124i -- Encoded Block Information (ADE Block)** | | | | | | |

**TGah Editor: *Change the figure below as follows (#3932).***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | Element ID | Length (=2) | l |  |  | Centralized Authentication Control  Parameters |
| Octets: | 1 | 1 | 2 | | | |

Figure 8-401am—Authentication Control element format (Control subfield = 0)

**TGah Editor: *Insert the following paragraph and figure after the 4th paragraph as follows (#3932):***

The Centralized Authentication Control Parameters field format is shown Figure 8-401am1 (Centralized Authencation Control Parameters field format).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 B5 | B6 B15 |
|  | Control  (0) | Deferral | Reserved | Authentication Control Threshold |
| Bits: | 1 | 1 | 4 | 10 |

**Figure 8-401am1—Centralized Authentication Control Parameters field format**

**TGah Editor: *Change the figure below as follows (#3932).***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | Element ID | Length  (=3) |  |  | Distributed Authentication Control Parameters |  |
| Octets: | 1 | 1 | 3 | | | |

Figure 8-401an—Authentication Control element format (Control subfield = 1)

**TGah Editor: *Insert the following paragraph and figure after the 6th paragraph as follows (#3932):***

The Distributed Authentication Control Parameters field format is shown Figure 8-401an1 (Distributed Authencation Control Parameters field format).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | B0 | B1 B7 | B8 B15 | B16 B23 |
|  | Control  (1) | Authentication Slot Durationl | Maximum Transmission Interval | Minimum Transmission Interval |
| Bits: | 1 | 7 | 8 | 8 |

**Figure 8-401an1—Distributed Authentication Control Parameters field format**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3041 | Adrian Stephens |  | Generally | The S1G study group started with the intent of "re-banding" .11 for the use case of meter reading, i.e., to support existing proprietary functionality. I believe the assumption at the time was this would be a small and quick project.  But I look at what we have - a 582 page draft, which is bigger than .11n, .11ac, .11ad. It has morphed into something that includes multiple kitchen sinks and re-invents mesh and other MAC features like RD.  I believe it has gone way beyond the orginal expectations in terms of scope, and exceeds the scope in the PAR.  I realize that the comment resolution group have no workable way of responding positively to this comment. However, that doesn't invalidate my comment on scope. | Reduce the size of the draft to <300 pages. | Rejected –  The comment fails to identify a technical issue. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined.  Please note that IEEE802.11ad ended up with 679 pages in D9.0. |
| 3045 | Adrian Stephens | 315.00 | 10.1.3.2 | The insertion of a condition between "The" and "AP" renders it ungrammatical in this context.  "The AP" refers to an antecedent nearby that established pre-conditions. | If you want to continue to refer to the antecedent, replace with "If the AP is a non-S1G AP, it shall define..."  Or if there is really no antecedent, replace "The" with "An".  Review all insertions between "The" and "[AP|STA]" and reword as necessary. | Revised –  TGah editor to review all insertions between “The” and “[AP|STA]” and reword as necessary.  Note to editor: This is an inline instruction. |
| 3047 | Adrian Stephens | 317.00 | 10.3.2.10.2 | "An AP may further define"  This makes no sense. How can you give permission for an AP to define anything? The problem comes because you are trying to mix a normative statement ("by sending") with the intended outcome or reason for doing so ("define the timing"). Such mixture creates these confusions. | Reword as to what the AP can do, not what it can define. And separate out the effect of this into a separate sentence. | Revised –  Proposed resolution is to use the same normative text as in REVmc D3.0 in 10.1.3.2:  “The AP shall define the timing for the entire BSS by transmitting Beacon frames according to  dot11BeaconPeriod.”  TGah editor to make the changes shown in 11-14/1288r0 under all headings that contain CID 3047. |
| 3048 | Adrian Stephens | 317.00 | 10.1.3.10.2 | "This defines a series"  "This" should always be followed with a <type of thing or action> to which it refers. | In this case, change to "This S1G Beacon frame defines a series"  Review all "This <verb>" and insert any missing <type of thing or action>. | Revised –  Went through the D2.1 draft to identify any occurrence of “this” and made the appropriate changes when necessary. Regaring the sentence identified by the commenter we did not change it because it is the same language that can be found in REVmc D3.0 in 10.1.3.2:  “This defines a series of TBTTs exactly dot11BeaconPeriod TUs apart. Time 0 is defined to be a TBTT with the Beacon frame being a DTIM.”  TGah editor to make the changes shown in 11-14/1288r0 under all headings that contain CID 3048. |
| 3053 | Adrian Stephens | 318.00 | 10.1.4.1 | " A STA may include ShortProbeResponseOption in the MLME-SCAN.requestprimitive"  As a matter of consistency with the baseline, parameters of primitives are always refered to as such. | Replace with " A STA may include the ShortProbeResponseOption parameter in the MLME-SCAN.requestprimitive"  Review all references to primitives in the clauses > 6 (search for .req/.ind/.conf/.resp) and ensure any named parameters are accompanied by "parameter". | Accepted |

**Discussion:** *None.*

**10.1.3.10.2 Generation of S1G Beacon frames**

**TGah Editor: *Change the paragraph below as follows (#3047):***

S1G Beacon frames shall be transmitted in an S1G BSS and S1G IBSS. An AP with dot11ShortBeaconInterval equal to true shall further define the timing for the BSS by sending S1G Beacon frames according to the dot11ShortBeaconPeriod. The value for the dot11ShortBeaconPeriod shall be such that dot11BeaconPeriod = *n* x dot11ShortBeaconPeriod, where *n* is a positive integer. This defines a series of TSBTTs exactly dot11ShortBeaconPeriod TUs apart. If *n* is greater than 1, the Next TBTT Present field shall be set to 1 and the Next TBTT field shall be present in S1G Beacon frames. Time 0 is defined to be a TBTT or TSBTT with the S1G Beacon frame being a DTIM. At each TBTT or TSBTT, the AP shall schedule an S1G Beacon frame as the next frame for transmission. At each TBTT or TSBTT the AP should suspend the decrementing of the backoff timer for any pending non-beacon transmission and transmit the S1G Beacon frame according to the medium access rules specified in Clause 9 (MAC sublayer functional description). The beacon period is included in S1G Beacon and (Short) Probe Response frames, and a STA shall adopt that beacon period when joining the S1G BSS and S1G IBSS, i.e., the STA shall set its dot11BeaconPeriod variable to that beacon period. If dot11ShortBeaconInterval is equal to true, the Short Beacon Interval element is included in an S1G Beacon and (Short) Probe Response frames, and a STA shall adopt that short beacon period when joining the S1G BSS or S1G IBSS, i.e., the STA shall set its dot11ShortBeaconPeriod variable to that short beacon period.

**TGah Editor: *Change the paragraph below in P39L53 of D2.1 as follows (#3048):***

On receipt of this primitive, the MLME constructs an AID Switch(#3922) Request frame. The STA then attempts to transmit this frame to the AP with which it is associated.

**TGah Editor: *Replace “transmit this to” with “transmit this frame to” throughout clause 6.***

**TGah Editor: *Change the sentence below in P295L38 of D2.1 as follows (#3048):***

If the AP does not observe an idle medium condition within one slot time(#Ed) 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.

**TGah Editor: *Change the sentence below in P381L5 of D2.1 as follows (#3048):***

Add the reserved bits, append the calculated 4 bit CRC, then append the Ntail tail bits as shown in 24.3.8.2.2.1.4 (SIG-A definition). This operation gives as a result 48 uncoded bits.

**TGah Editor: *Replace “This results in” with “This operation gives as a result” throughout clause 24 (#3048).***

**TGah Editor: *Change the sentence below in P464L17 of D2.1 as follows (#3048):***

The typical transmit procedure is shown in Figure 24-27 (PHY transmit procedure for a SU transmission using S1G\_1M preamble), Figure 24-28 (PHY transmit procedure for a SU transmission using S1G\_SHORT preamble), and Figure 24-29 (PHY transmit procedure for a SU transmission using S1G\_LONG preamble). For this transmit procedure, the FORMAT parameter of the PHY-TXSTART.request(TXVECTOR) primitive is S1G. These transmit procedures do not describe the operation of optional features, such as LDPC, STBC or MU.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3119 | Alfred Asterjadhi | 1.00 |  | There are still grammatical errors in the draft. | Run the spellchecker looking for missing spaces between words, mispelled words, etc., as the last operation prior to generating the PDF version of 802.11ah D3.0. | Accepted |
| 3120 | Alfred Asterjadhi | 1.00 |  | This draft is an amendment to D2.5 of REVmc. But IEEE 802.11REVmc D3.0 is available\_ | Update the baseline from D2.5 to D3.0 of IEEE802.11REVmc. Also update the instructions to the editor accordingly. | Accepted |
| 3253 | Alfred Asterjadhi | 131.00 | 8.4.2.170c | The first sentence of this subclause can be re-written for better clarity. Replace it with " The AID Request element contains information related to the device's characteristics of the non-AP STA requesting an AID." Also add "the" before "AID Request element" in 2nd sentence and capitalize "request" in caption of Figure 8-401r. | As in comment. | Accepted |
| 3291 | Alfred Asterjadhi | 186.00 | 8.6.25.2 | the reference of the "reachable address element" is missing | ADD REFREENCE TO "reachable address element" format definition 8.4.2.170o | Revised –  TGah editor: Replace “specify” with “(as specified by 8.4.2.170o (Reachable Address element)) contain”.  Note to editor: this is an inline instruction. |
| 3342 | Alfred Asterjadhi | 229.00 | 9.3.2.7 | The RA field of the NDP CTS. Actually the field is called RA/Partial BSSID field. Keep consitency between 8.9.1 and this subclause. | As in comment. | Revised –  TGah editor:Replace  “RA field” with “RA/Partial BSSID field”.  Note to editor: this is an inline instruction. |
| 3390 | Bo Sun | 130.00 | 8.4.2.170b | change"4(16-3\*4)" to"4(=16-3\*4),change"4(16-6\*2)" to"4(=16-6\*2), | as the comment suggests. | Revised –  TGah editor: Replace: "4(16-3\*4)" with "4 (=16-3x4)”, and"4(16-6\*2)" to"4 (=16-6x2)” where “x” is the multiplication operation, |
| 3393 | Bo Sun | 179.00 | 8.6.24.3 | add "element" after "AID Response" in Table 8-388c and line 38 | as the comment suggests. | Accepted |
| 3428 | David Hunter | 3.00 | 3.2 | "sensor type station": the word "type" appears to be extraneous (this is not a 'type' in the 802.11 sense, a formally defined value that is used in a type field of some elements). And "using data frames with small payload size" can be put more simply. | Replace "sensor type" with "sensor" throughout the draft -- at page.lines: 3.35, 3.36, 8.11 (twice), 8.19, 113.47, 113.48, 113.50, 113.51, 146.52 (twice), 146.54, 146.56, 146.60, 146.61, 220.56, 221.37, 221.28, 221.32 (twice), 221.60, 222.2, 252.44, 258.34, 258.35 (twice), 258.37, 327.57 (twice; also replace "Sensor" with "sensor"), 338.10, 338.12, 338.15, 338.17, 338.20 (twice), 338.44 (three times), 503.43, 503.46, 503.48, 503.49, 503.51, and 503.53. And replace "using data frames with small payload size" with "that exclusively uses small data frames". | Revised –  Agree in principle with the comment. But “using data frames with small payload size” is correct.  TGah editor to replace every occurrence of “Sensor type” and Sensor” with “sensor” except when it is part of a frame, field, element.  TGah editor to replace every occurrence of “non-Sensor type” and non-Sensor” with “non-sensor” except when it is part of a frame, field, element.  Note to editor: this is an inline instruction. |
| 3460 | David Hunter | 73.00 | 8.2.4.1.8 | "non-DMG STA that is not an S1G STA": since this phrase is repeated many times, it needs to be stated much more succinctly. Likewise for other simiar phrases. | Replace "non-DMG STA that is not an S1G STA" with "non-DMG, non-S1G STA" here and on page.lines: 73.5, 73.11, 73.17, 73.40, 73.43, 82.48 and 255.13. Replace "non-DMG STA which is not an S1G STA" with "non-DMG, non-S1G STA" on page 219 line 42. Replace "BSS that is neither DMG nor S1G" with "non-DMG, non-S1G BSS" on page.lines 315.15 and 316.29. Replace "non-VHT STA that is not an S1G STA" with "non-VHT, non-S1G STA" on page 229 line 10. Replace "STA that is not an S1G STA" with "non-S1G STA" on page.lines 254.43 and 287.64. | Revised –  TGah editor to replace “non-DMG STA that is not an S1G” with non-DMG and non-S1G”. Replace “non-DMG STA which is not an S1G STA” with “non-DMG and non-S1G STA”. Replace non-VHT STA that is not an S1G STA” with non-VHT and non-S1G STA. Replace STA that is not an S1G STA with “non-S1G STA”. Apply these changes throughout the draft.  Note to editor: this is an inline instruction. |
| 3462 | David Hunter | 95.00 | 8.4.1.6 | "STA with dot11... equal to" sounds like the STA is matching an external object. | Replace "with dot11... equal to" with "whose dot11... is" on page.lines 95.43, 95.45, 132.1, 132.6, 133.10, 133.17, 138.46, 138.52, 217.44, 218.37, 232.38, 243.55, 243,56, 257.26, 257.27, 257.31, 261.37, 261.42, 264.37, 271.49, 272.63, 273.1, 273.7, 273.55, 277.12, 280.21, 280.54, 280.60, 281.5, 282.56, 286.5, 286.6, 288.24, 288.25, 288.29, 288.30, 289. 41, 290.31, 303.43 (twice), 304.29, 304.33, 304.35, 304.43, 305.1, 305.16, 305.34, 305.39, 310.27, 310.35, 310.56, 311.2, 311.3, 311.18, 311.22, 312.26, 312.28, 313.32, 313.33, 319.8, 319.13, 319.20, 320.11, 320.55, 321.45, 322.10, 322.19, 323.5, 323.11, 324.42, 324.45, 326.6, 326.8, 326.30, 326.39, 326.46, 328.37, 329.5, 329.15, 332.45, 332.56, 332.62, 333.6, 333.9, and 338.33. | Rejected –  The comment fails to identify an issue.  Please note that the same terminology can be found in REVmc D3.0. If this is thought to be an issue please submit the comment to REVmc. |
| 3463 | David Hunter | 132.00 | 8.4.2.170d | "to request Multicast AID": missing article and, except when the term is part of the name of a field, "multicast AID" is not the name of a frame, field, etc., so does not use initial caps. | Replace "to request Multicast AID" with "to request a multicast AID" and replace "Multicast AID" with "multicast AID" throughout the draft -- on page.lines 132.42, 133.1 (second instance), 179.6, 195.1, 249.46, 249.51, 250.21, 250.56, 251.15, 310.57 (twice; insert "a" before the first "multicast AID"), page 310 lines 58, 59 and 62, and page 311 lines 1, 4, 9 and 12. | Accepted |
| 3476 | David Hunter | 173.00 | 8.4.2.170y | Per the Style Manual each defined object needs to have a single name. This subclause is titled "MAD element", but the name is defined as "Max Away Duration element". So that name needs to be used exclusively. | Replace "MAD element" with "Max Away Duration element" throughout the draft -- including this location and page.lines 88.29, 89.39, 90.20, 91.40, 93.7, and several locations in subclause 10.2,2.20. | Revised –  The MAD element contains the Max Away Duration field. For consistency the proposed resolution is to use MAD throughout.  TGah editor to replace “Max Away Duration” with “MAD” when it refers to the element and not to the field.  Note to the editor: this is an inline instruction. |
| 3478 | David Hunter | 221.00 | 9.2.42 | Needs to be more specific about what fields are in what elements: "An S1G STA that receives an EDCA Parameter Set element shall update its MIB values of the EDCA parameters if the value of the STA Type subfield in the EDCA Parameter Set element includes the STA Type of the STA (see 10.48 (Sensor Only BSS))." Also "includes the STA Type" is not talking about the subfield. | Replace "update its MIB values of the EDCA" with "update the MIB values of its EDCA"; replace "of the STA Type subfield in the EDCA Parameter Set element includes the STA Type of the STA" with "of the element's STA Type subfield includes the STA's type" | Revised –  The terminology “update its MIB values of the EDCA” is used in REVmc D3.0 so for consistency it is better to use the same in this amendment.  TGah editor: Replace "of the STA Type subfield in the EDCA Parameter Set element includes the STA Type of the STA" with "of the element's STA Type subfield includes the STA's type".  Note to the editor: this is an inline instruction. |
| 3526 | Edward Reuss | 1.00 | All | I cannot tell the normative requirements from the informative description in many of the sections of this draft because they do not adhere to the convention defined in section 1.4 of IEEE 802.11-2012. If I was asked to write a conformance test plan for this document, I can't tell what is a normative requirement that requires a specific conformance test procedure from informative description of the operation of an 11.ah device. Since this is an amendment to IEEE 802.11-2012, it must conform to the requirements described in section 1.4. | Use normative language to identify the normative requirements for each section in this draft, as described in IEEE 802.11-2012, section 1.4. | Rejected –  The comment fails to identify a specific issue to be addressed. It fails to identify changes in sufficient detail so that the specific wording of the changes that will satisfy the commenter can be determined. |
| 3606 | Jens Tingleff | 396.00 | 24.3.7 | Gamma in table title (table 24-7) is not working well | I don't like it, but elsewhere we use "Gamma subk,M" . When we find a good typography for this, use it here. | Revised –  It is a formatting issue of the references which do not accept greek letters. Proposed resolution is to use the same formatting as in REVmc D3.0.  TGah editor: Replace the greek symbol “gamma” with “Gamma sub” in the table caption. |