IEEE P802.11
Wireless LANs

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| 802.11[LB240 CR for Various Unassigned Comments](relative to P802.11az/D1.4 ) |
| Date: 2018-09-14 |
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**Abstract**

This submission contains proposals to resolve LB#240 CIDs 1003, 1130, 1244, 1413, 1448, 1452, 1453, 1463, 1682, 1713, 1714, 1721, 1812, 1815, 1848, 1855, 1885, 1889, 1896, 1920, 1938, 1988, 1991, 1998, 2000, 2001, 2002, 2003, 2005, 2014, 2015, 2020, 2022, 2030, 2031, 2036, 2037, 2060, 2062, 2075, 2080, 2084, 2086, 2087, 2089, 2097, 2098, 2111, 2119, 2122, 2131, 2137, 2138, 2142, 2143, 2144, 2154, 2155, 2211, 2224, 2314, 2316, 2317, 2326, 2386, 2398, 2400, 2402, 2411, 2443, 2458, 2459 and 2491.

Comments:

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| CID | Page | Clause | Comment | Proposed change | Resolution |
| 1003 |  |  | When referencing an external clause numbers to 11ay, REVmd, 11ax etc.  Include the Clause title with the number in parenthesis e.g. 29.9.3.7 (Transmission of an PEDMG secure ranging PPDU). The clause numbers may change on subsequent drafts. If the clause number changes, at least searching the title will help find the referenced text. | Change update all clause title references throughout D1.0 as commented | Revised, agree with the commenter in principal, this practice has been cleaned out throughout the draft moving from D1.0 to D1.4, however the comment is an editorial as it has no observable impact on STAs meeting the 11az spec. the draft will go through MDR where 802.11 style issues are managed. |
| 1130 | 54.00 | 9.4.2.280 | The text "The Range Measurement SAC field is the same value as in the LTF Generation SAC subfield in the STA Info SAC field in the Ranging NDP Announcement frame that solicited the UL NDP and the DL NDP (see 11.22.6.4.6 (Secure Non-TB and -TB Ranging Measurement Exchange Protocol))" is not completely correct. | The STA Info SAC for TB Ranging is in the location trigger subvariant secure sounding frame and not in the NDPA. Edit the paragraph to indicate the TB case correctly. | Revised, refer to submission 11-19-1455 which deals with a duplicate. |
| 1244 | 84.16 | 11.22.6.3.2 | "For EDMG ranging, the ISTA shall indicate, in the Ranging Priority subfield of the Fine Timing Measurement Parameters field of the Fine Timing Measurement Parameters element in the initial Fine Timing Measurement Request frame, its ranging priority according to Table x1 in 19 9.4.2.167. " - this sentence is about the ISTA the paragraph is about the RSA | Move this sentence to a separate pargraph before "if the request was succesful" | Revise, this is a duplicate to comment CID 1801 resolved by submission 11-19-1559r1.  |
| 1413 | 87.34 | 11.22.6.3.3 | "The ISTA shall set the Max DL Rep and Max UL Rep subfields to a value greater than 0 if the Secure LTF Required subfield of the Ranging Parameters field is equal to 1." - Why is that, seems arbitrary. The number of repeated LTFs are only to the benefit of the STA receiving them, since it needs to take advantage of them in its processing. Therefore it does not make sense for the other STA to dictate this setting. | Remove this sentence/requirement | Reject, 1. The ability to perform repetition in both the secured and non-secured has limitations of buffer and memory sizes in acceptable implementations. Accordingly the ISTA needs to be able to communicate its limitation to the RSTA during the negotiation. the resulting negotiation can then fail if it does not meet the required level of confidence. 2. In addition for secured TB and NTB ranging the minimum repletion to enable detection is repetition of 2 which translates to encoding of value 1. |
| 1448 | 20.32 |  | it says the secure variant is described in 11.22.6.4 but it actually isn't. | define the secure variant | Rejected, the specified page and line number did not net any reference to 11.22.6.4 or had a L32 (both in the file p.# and PDF p.#. Proposed to bring it at a future comment if issue still exists. |
| 1452 | 100.34 |  | Secure-LTF-bits will be generated differently by the RSTA and ISTA. | if each side generates a different key then name it apppropriately. If they are supposed to generate the same key then reconcile the computation | Revised, agree with the commenter refer to section 11.22.6.3.4 Secure LTF measurement setup and 11.22.6.4.6.3 Secure LTF Generation Information that define key generation and usage. |
| 1453 | 107.38 |  | what is the length? | SAC is a fixed 16 octets, what's the length of Secure-LTF-bits? | Rejected. Refer to P.91 L.11: "The SAC transmitted and used in 11 deriving Secure-LTF-bits shall also be of exactly 2 octets in length." Please refer to section 11.22.6.4.6.3 Secure LTF Generation Information for full details on the generation of the sequence bits.  |
| 1463 | 83.08 | 11.22.6.3.1 | Measurement sessions should be able to indicate a sounding only session by including a flag during the sounding negotiation. | The inclusion of a "sounding only session" flag during the Range measurement negotiation in the initial fine timing measurement request indicates that no LMR is expected at the end of the measurement phase, even if the RSTA is capable of providing the LMR. | Rejected. This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. In addition the commenter seems to allude to a sounding mechanism used not for location purposes and as such it is not within the TGaz PAR.  |
| 1682 | 66.27 | 9.4.2.289 | How is the estimation of LoS or non-LoS probablility related to a resolution (dB/4 in this case)? What probability is estimated here: is it the probablility that the estimate is LoS/non-LoS? Or that the estimate is LoS/non-LoS at some signal strength? In the latter case the dB/4 resolution makes sense not in the former. | No change needed in the draft. This is just a clarification question. | Rejected, This is an invalid comment.The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 1713 |  |  | 802.11az timetable::   Range Accuracy Coverage in <6Ghz | 802.11ax is working till 7.125GHz. I suggest to change 6GHz to 7.125 GHz | Rejected, the timetable of TGaz is not part of the amendment. Operation in the <7GHz is part of 11az as it is a valid band for the PHY the 11az uses. The 11az PAR reflects that. |
| 1714 |  |  | What's target accuracy? What are the methods in 11az compared to legacy FTM to improve accuracy? |  | Rejected, This is an invalid comment.The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 1721 |  |  | Need to resolve discrepancies between 11ax and 11az specs, as both are working on making Physical layer modifications |  | Rejected. This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined.  To the commenter point, all amendments are concurrently modifying sections under consideration and modifications by other TG e.g. TGmd vs. TGax, TGay vs. TGax. the order of publication and WG editors process prevents any indiscrepanc. |
| 1812 |  |  | Inconsistent boarders around figures with field sizes (i.e. bit, octet, etc..). | An inconsistent example is Figure 9-617 (Page 38) vs. Figure 9-618 (Page 39). | Revised, fixed |
| 1815 | 87.00 | 11.22.6.3.3 | "An RSTA shall reject a request for TB Ranging from an ISTA if the RSTA cannot assign the ISTA to an availability window that does not overlap with a 10 TU interval in which the ISTA is unavailable (as signalled by the ISTA Availability Window element in the IFTMR). "double negation makes the sentence illogical. | Change unavaiable to available. | Reject, the commenter withdrew the comment. |
| 1848 |  |  | Page numbering on the pages does not match page number in the Acrobat file - this makes tracking the comments confusing - I have used the Acrobat page number in my comments | Please match Acrobat and printed page numbers in the draft | Revised, this is an editorial/style issue which was fixed going into D1.4, the IEEE template was the cause of that. |
| 1855 |  |  | The introduction of a new type of authentication is out of scope for TGaz - the TGaz  PAR only call for modifications ".. that enables determination of absolute and relative position with better accuracy with respect to the Fine Timing Measurement (FTM) protocol executing on the same PHY-type, while reducing existing wireless medium use and power consumption and is scalable to dense deployments." | Remove PASN and use an existing authentication capability. | Reject, this is a duplicate refer to submission 11-19-1402. the PAR refers to modifications allowed in order to support the unassociated operation including a secured mode. Unassociated operation is fundamental to the FTM protocol usage scenarios.  |
| 1885 | 170.17 | C.3 | Definition of the dot11TriggedBasedRangingRespImplemented is missing | Please define the MIB variable | Revised, agree with the commenter. Changes to D1.4 were made to reflect this. Refer to Annex C.3 Dot11WirelessMgmtOptionsEntry and 11.22.6.2 |
| 1889 |  |  | It seems the mandatory and optional requirement of ISTA and RSTA is not clearly defined. | Cliarify it in subclause 11. | Reject,Annex B PICS captures dependencies within the spec, features which are optional are called out in clause 11. The comment fails to identify changes in sufficient detail so that the specific wording of the changes can be determined.  |
| 1896 |  |  | The mandatory and optional requirement of ISTA and RSTA  needs more clarifications. | Clarify it in Subclause 11 | Rejected, this is a duplicate of 1889. |
| 1920 |  |  | Running the 11az/D1.0 ballot with significant overlap with 11ax and 11ay ballots, and with a significant industry meeting, does not allow for proper review and hence is not conducive to what should be the desired outcome of a technically and editorially sound amendment | Do not run a ballot on what is an amendment in the early stages of its process (non-recirculation letter ballot) with significant overlap with any other ballot, or with a significant industry meeting | Reject,This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. |
| 1938 |  |  | Logical and physical page numbers should match, otherwise half the comments will be against the "wrong" page | As it says in the comment | Revised, agree with commenter.Refer to draft 1.4 where this was fixed. Also note D1.0 was using the IEEE 802.11 template which created this problem. |
| 1988 |  |  | All xrefs should be live xrefs, or they will go stale | Make sure that all refs to Figures/Tables/Equations/Subclauses/etc. are actual hyperlinks, not just text | Reject, references in the spec are meeting the 802.11 style guide. The commenter failed to identify a change to the spec it simply provides recommendation on how to manage drafts.  |
| 1991 |  |  | 100.28 "If the PHY of an RSTA issues a PHY-RXEND.indication (IntegrityCheckError) primitive, the  28RSTA shall set  the Invalid Measurement field in  the RSTA-to-ISTA LMR frame carrying  the 29TOA  measured  from the UL  NDP to 1. Similarly,  if ISTA-to-RSTA LMR was  negotiated 30between  the ISTA  and RSTA and  the PHY of an  ISTA issues a PHY-RXEND.indication  31(IntegrityCheckError) primitive, the ISTA shall set the Invalid Measurement field in the ISTA-to- 32RSTA LMR carrying the TOA measured from the DL NDP to 1.  " duplicates 104.28 "If the PHY of an RSTA issues a  PHY-RXEND.indication(IntegrityCheckError) primitive, the 28RSTA shall set  the Invalid Measurement field in  the RSTA-to-ISTA LMR frame carrying  the TOA measured from the UL NDP to 1. Correspondingly, if ISTA-to-RSTA LMR was negotiated  1between  the ISTA  and RSTA and  the PHY of the  ISTA issues a PHY- 2RXEND.indication(IntegrityCheckError) primitive, the ISTA shall set the Invalid Measurement  3field in the ISTA-to-RSTA LMR carrying the TOA measured from the DL NDP to 1 " | Remove one of the cited blocks of text | Reject, the first reference and 2nd references are in different contexts. The first deal with ISTA2RSTA LMR the other with RSTA2ISTA LMR |
| 1998 | 111.16 |  | "sounding sequence" is undefined | As it says in the comment | Revised, agree in principal with the commenter. refer to submission 11-19-1483 which aligns the terminology. Sounding sequence is replaced by measurement exchange, either EDCA Based, TB or NTB. |
| 2000 | 59.19 |  | "The range of valid values for MaxToAAvailableExp  19is  0 to  15 with  corresponding  maximum time duration  values ranging from 256  msec to 140 20minutes.  " -- since it's a 4-bit field this sentence adds nothing of value | Delete the cited text | Revise, Refer to D1.4 section 9.4.2.279 Ranging Parameters element, where the parameter no longer exists for NTB. For TBa valid range with a 4 bit field can vary e.g only value 1..12 are used, in addition the encoding of the field needs to be provided. This practice is part of good interoperability spec development.  |
| 2001 | 81.16 |  | "the current validPassive Location LCI Table.  " -- what's an invalid Passive Location LCI Table? | Clarify | Reject,This is an invalid comment. The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording". |
| 2002 | 118.16 |  | "Invalid Measurement Indication subfield" -- no such subfield | "Invalid Measurement subfield"?  Also 2x on p.123 | Revise, agree with the commenter, this is a duplicate of CID 1686. fixed in D1.4 |
| 2003 | 146.26 |  | "Otherwise, if the validation is successful, the AP " is missing some words | Add some words | Reject,This is an invalid comment. The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording". It is not clear what kind of “additional words” does the comment refers to? Is it what constitutes a successful validation is it what is the validation itself? |
| 2005 | 123.16 |  | "theRSTA shall not use the ToA value of the  HE Ranging NDP and set the Invalid Measurement  18Indication subfield to 1 in the ToA Error field in the Location Measurement Report carrying the  19ToA value of the HE TB Ranging NDP. " is ambiguous.  Is it "theRSTA shall not use the ToA value of the  HE Ranging NDP and [shall not] set the Invalid Measurement  18Indication subfield to 1 in the ToA Error field in the Location Measurement Report carrying the  19ToA value of the HE TB Ranging NDP. " or "When a RSTA receiving an HE TB Ranging NDP sets the LTFVECTOR parameter in the PHY- 16RXLTFSEQUENCE.request primitive to Secure HE-LTF with predetermined sequence, the  17RSTA shall not use the ToA value of the  HE Ranging NDP and [shall] set the Invalid Measurement  18Indication subfield to 1 in the ToA Error field in the Location Measurement Report carrying the  19ToA value of the HE TB Ranging NDP. " or "When a RSTA receiving an HE TB Ranging NDP sets the LTFVECTOR parameter in the PHY- 16RXLTFSEQUENCE.request primitive to Secure HE-LTF with predetermined sequence, the  17RSTA shall not [both] use the ToA value of the  HE Ranging NDP and set the Invalid Measurement 18Indication subfield to 1 in the ToA Error field in the Location Measurement Report carrying the  19ToA value of the HE TB Ranging NDP. " or what? | Clarify.  Also two paras down | Reject,The receiving STA is either an ISTA or an RSTA, when it uses the LTF Vector This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. Specifically it is not clear what is not  |
| 2014 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]The change tracking is not accurate: it should show deletions | Use standard 802.11 change-tracking | Reject,This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. |
| 2015 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]The change tracking is not accurate: it should use underline for additions | Use standard 802.11 change-tracking | Reject,This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. |
| 2020 | 11.10 | 6.3.58.4.1 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]No new parameter is apparent (except strange comma at 12.5) | Use standard 802.11 change-tracking.  Also in 6.3.70 subclauses | Reject,This is an invalid comment.It fails to locate and identify the issue.  Fails to identify changes in sufficient detail so that the specific wording of the changes can be determined. |
| 2022 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]The LTFVECTOR needs to be added to Table 8-3 | As it says in the comment | Revised, agree with the commenter. Refer to 11-19-1504 which removes the LTFVECTOR from table 8-4 and adds it to table 8-3. |
| 2030 | 20.12 | 9.3.1.20 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What is TBD?  Who selects it?  Or whether it is used? | Clarify | Reject, the referred text and TBD references does not exists in D1.0, the commenter failed to identify a problem and a solution of sufficient detail. |
| 2031 | 20.12 | 9.3.1.20 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"The Sounding Dialog Token Number field in the Sounding Dialog Token field contains a value in  10the range of 0 to 31; the MSB (B7) of the Sounding Dialog Token Number field is reserved"  -- b7 is not the MSb of the SDTN field, since that field only has 5 bits | Delete "; the MSB (B7) of the Sounding Dialog Token Number field is reserved" or change "B7" to "B5" | Reject, the sounding dialog token as shown in D1.0 is in the range of 0-63 and not 0-31. This makes the 8bit field range used completely. There is no reserved or unused values. |
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| 2036 | 21.23 | 9.3.1.20 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]Don't make informative stuff normative | Make " to  prevent a non-HE  VHT STA from wrongly determining its AID in the NDP Announcement frame. The Disambiguation subfield coincides with the MSB of the AID12 subfield of an expected VHT NDP Announcement when the Ranging NDP Announcement field is parsed by a non-HE VHT STA. The MSB of the AID12 subfield is always 0 for a non-HE VHT STA due to the limitation of the AID to a maximum of 2007. " into a NOTE | Reject,The resolver performed couple of searches through the D1.4 and failed to identify the text referred to, as references are to CC version it is not clear what the commenter is referring to. As a result the comment fails to identify a problem and is thus invalid comment.  |
| 2037 | 21.01 | 9.3.1.20 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"The HEz-LTF field offset subfield, Number of space-time streams subfield and repetition of HEz-LTF field subfield  are used to indicate the HEz-LTF field allocation for the ISTAs in the DL sounding NDP of secured HEz ranging.  " -- and what are they set to for VHTz? | State that these fields are reserved for VHTz | Reject,The resolver performed couple of searches through the D1.4 and failed to identify the text referred to, as references are to CC version it is not clear what the commenter is referring to. As a result the comment fails to identify a problem and is thus invalid comment.  |
| 2060 | 32.27 | 9.4.2.246 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"The Status Indication field indicates the responding STA's response to the Fine Timing Request. " -- huh?  There will be two Status Indication fields, one in the Fine Timing Measurement Parameters field of the Fine Timing Measurement Parameters element and one in the Ranging Parameters field of the Ranging Parameters element | Delete "Status Indication" and "Value" from Figure 9-610b and surrounding text | Reject, it is not clear why there should be in view of the comment distinction between NDPA for purpose of NTB sounding and NDPA for purpose of TB sounding as they are part of separate measurement exchanges and hence negotiated mode of operation. The comment fails to locate and identify the issue.  |
| 2062 | 33.06 | 9.4.2.246 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]How do these Secure LTF bits relate to the Secure LTF bits in a different structure a couple of pages back? | Clarify | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 2075 | 35.23 | 9.4.2.246 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"One or more of the  VHTz specific or the HEz specific subelements are included in the initial  FTM Request." is not clear. Does it mean you can have one of each, or one or more of one of them but not the other, or one or more of both? | Clarify | Revised,Agree in principal with the commenter, changes are reflected in D1.4 to limit the instances of each to 1 at most. Refer to p71L17.Also note the comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
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| 2080 | 35.21 | 9.4.2.246 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"that an RSTA transmit.   " -- so the RSTA has to be an AP? | Clarify | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 2084 | 36.12 | 9.4.2.251 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"followed after a Ranging NDPA frame" is not clear.  Does it mean "followed by"? Or "following after"? Ditto "followed after a Location variant HEz Uplink Sounding Trigger frame" | Clarify | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording”. The sentence does not exists. |
| 2086 | 36.16 | 9.4.2.251 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"(The keys or cipher sequence (if needed) for LTF Sequence Generation  are the result of the FTM negotiation)". It's not clear how this is relevant to either the LTF  Sequence Generation Information field, and how this is format rather than behaviour | Clarify.  If behaviour, move to Clause 10 | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 2087 | 36.18 | 9.4.2.251 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"This  field is  present in  the Location Measurement Report frame transmitted from an RSTA to an ISTA and is reserved otherwise. " -- what does it mean for the field to be reserved as opposed to be present?  Ditto at 37.1 | Change to "This  field is present  in the Location Measurement Report frame transmitted from an RSTA to an ISTA and is not present otherwise. " | Reject, a reserved field means it is not in use and bits are reserved for possibly other purposes whereas present means the field value need to satisfy protocol behavior. |
| 2089 | 36.30 | 9.4.2.251 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]" a  reliable  LTF Sequence  Generation Information" -- spurious caps and broken grammar.  Ditto spurious caps at line 31 | Change to "reliable  LTF sequence generation  information" | Revised, refer to resolution of CID 2289 in 9.4.2.280 Secure LTF Parameters element. |
| 2097 | 41.28 | 9.6.7.37 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"The Location Measurement Report frame is an Action No Ack frame of category Ranging" -- no such category exists, and the figure below says the category is in fact Public Action | Either make this and  Passive Location Measurement Report frames Public Actions, or define the new Category and fix the figures | Reject, the comment refers to changes to baseline 802.11-2016 text which is out of scope of the 11az protocol modifications. |
| 2098 | 42.15 | 9.6.7.37 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"The Secure LTF Parameters field is present if an ISTA and RSTA activates a secure LTF  15measurement exchange mode of the 802.11az ranging protocols for the ranging phase. If present, " -- shouldn't refer to the amendment name.  And anyway this is behaviour | Change to just "The Secure LTF Parameters field, if present, " | Revised, the relevant text no longer exists in D1.4 |
| 2111 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]The concept "legacy" is not clear and should not be used | Delete all instances of "legacy" | Revised, agree with the commenter the term Legacy device was replaced with EDCA Based Ranging and no longer exists in D1.4 |
| 2119 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]There are three references to a "measurement instance".  This term is not used in the baseline, and is not defined here | Define the term | Reject, this is common use of technical English language. Same as 802.11-2016 FTM usage of "The sessions’ burst instance periodicity" a burst instance is an instantiation of the group of bursts, same way measurement instance is an instantiation of the group of measurements composing the measurement part. defining the measurement instance to be an element of the set composed from  measurement will not yield a more understandable std. |
| 2122 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What is the difference between an "availability window" and an "availability window instance"? | Clarify | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording” |
| 2131 | 48.39 | 11.22.6.3.1 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What is a "range  measurement parameter"?  Also missing preposition | Clarify, and prepend "of" | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording”. Range measurement parameters are defined in D1.4 "a set of scheduling parameters in a Fine Timing Measurement Parameters element or a set of 34 range measurement parameters in... |
| 2137 | 50.00 | 11.22.6.3.2 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"in the Ranging Parameters field" -- but there might not be such a field.  Ditto "the Ranging Parameters field" below. Ditto next page | Maybe change "the" to "a", or say "if present" | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording”. Range measurement parameters are always present in the negotiation for TB and NTB measurement exchanges.  |
| 2138 | 51.03 | 11.22.6.3.2 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]" when one of the following conditions is met:" -- what if both are? | Change to "when at least one of the following conditions is met" | Reject,The comment refers to an unofficial draft (CC), could not identify the sentence "when one of the following conditions is met:" in D1.0 or D1.4. |
| 2142 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What is the difference between "RTT", "TOF" and "ToF"? | Clarify | Reject,The comment is asking a question.  It is not proposing a change that can in any sense be interpreted as “specific wording”.On top of that, the use of RTT and FTM was introduced as part of 802.11-2016, and a similar comment discussed then. RTT is a term used widely in the industry and is well defined (redefined) in the spec. |
| 2143 | 51.29 | 11.22.6.3.3 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]"shall not be set by both the ISTA and RSTA" -- I don't think that's what's actually intended | Change to "shall not be set by either the ISTA and RSTA", and also delete the preceding comma | Reject,The comment refers to an unofficial draft (CC), could not identify the sentence in D1.0 or D1.4. |
| 2144 | 51.19 | 11.22.6.3.3 | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]Do lines 19 to 34 only apply to EDMG STAs?  The fact that "EDMG" is not used, but it is used from line 35, suggest that they apply to non-EDMG STAs | Add "EDMG" before every "STA" or "ISTA" or "RSTA" | Reject,The referencing of CC revision makes it impossible to identify where that text. The comment fails to identify the relevant text. |
| 2154 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What is "TF"? | Assuming this is "Trigger frame", expand to this everywhere | Revised, agree with the commenter in principal. This is a duplicate of CID 1977. "The Ranging Trigger Frame of subvariant Sounding is called the22 TF Ranging Sounding (#1977)." also The Ranging Trigger Frame of subvariant Poll is called14 the TF Ranging Poll (#1977). |
| 2155 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]What's a "poll rsp"? | Clarify | Reject,The comment refers to an unofficial draft (CC), could not identify the the term "Poll rsp" in D1.0 or D1.4 |
| 2211 |  |  | [Re-raising this comment from the comment collection, as it is not possible to determine from 18/1544r8 whether/how it was addressed.  References are to the CC draft and hence may be wrong against D1.0.]VHTz does not require the RSTA to be an AP (unlike HEz, but like FTM).  But in that case, what do "DL" and "UL" mean in the context of VHTz? | Clarify.  Maybe say DL means to RSTA and UL means to ISTA? | Revised, agree in principal. This is a duplicate of CIDs 2337 and 2338. refer to fixes in the draft. DL NDP and UL NDP replaced with R2I NDP and I2R NDP to reflect this. |
| 2224 |  |  | The amendment style is different from other amendments. For example, the heading section needs to be removed. Font and size needs to be unified. | Please follow the editing style of 802.11WG. | Revised, agree with commenter. The style used the IEEE word template. Going to D1.4 inconsistencies were fixed as part of the editorial process. |
| 2314 | 146.06 | 27.5.3.5 | The CS Required subfield should only be allowed to be set to 0 when the responding HE TB PPDU is short (584 uS), otherwise there is a potential of the response interfering with OBSS transmissions. It should not be allowed to be set to 0 for any arbitrary length HE TB PPDU. | Only allow the CS Required subfield to be set to 0 if the responding HE TB PPDU is shorter than 584 uS. | Revised, refer to submission 11-19-1454r1 by Dibakar. The transmission of RSTA2ISTA LMR is only permitted in accordance with general TB channel access (582usec). Other parts of the measurement sequence are also shorter. |
| 2316 | 6.12 | 4 | It will be helpful if clause 4 also listed the mandatory and optional features introduced by 11az. | List the mandatory and optional features introduced by 11az. | Reject, there is no specific single style mandate by 802.11 for identifying mandatory and optional. 11az is identifying the optional parts, all else are mandatory to implement an 802.11az compliant STA. Please refer to relevant PICS section to identify intra protocol dependencies.  |
| 2317 | 7.02 |  | This is the 11az Task Group leadership and not the 802.11 Working Group. Also Technical editor and secretary are missing | Change to Task Group. Add 11az Technical editor and secretary. | Revised, agree with the commenter. Under participants change the WG section to reflect the WG officers and under TG section to reflect TG officers. |
| 2326 | 0.00 | 0 | The CSD states that a CA document will be created as part of the WG balloting process, but there is none. | Create a CA document. | Reject, a modification to the CSD was approved by the EC to reflect a CA is not needed as the CA is that of the relevant PHY (i.e. 11ay and 11ax). Refer to the latest CSD for details. |
| 2386 |  |  | Add "positioning" to the Keywords. | As in comment. | Revised, agree with commenter. TGaz editor add the word ‘Positioning’ to P3 L10 of D1.4 under keywords. |
| 2398 | 13.01 | 6.3.56.1 | A Trigger frame with Location Poll variant is used in Figure 16-7c but in 9.3.1.23 Trigger frame format, there is no such variant defined. Change Location Poll to Ranging.Change also "Passive Location Polling-Sounding-Reporting triplet" in pp.ll 126.24, 11.22.6.4.10.3, to "Passive Location Ranging-Sounding-Reporting triplet". | As in comment. | Revise, agree with commenter. Changes were made throughout the draft to reflect Raging variant of the TF  this is a duplicate of 1395 and 1397 |
| 2400 | 13.11 | 6.3.56.1 | "HE TB Ranging NDP and/or HE Ranging NDP"Firstly, these don't appear in Figures 16-7b and 16-7c. Why not add them in the figures?Secondly, Figure 16-7b uses HE Randing NPD and Figure 16-7c uses HE TB Ranging NDP, so the terms should align with the figure order.Thirdly, is there a case when both HE TB Ranging NDP and HE Randing NDP are transmitted? I think there isn't, so "and/or" should be fixed to "or". | As in comment. | Reject.Figure 6-17b and 6-17a are at the (MLME) MAC layer level, NDPs are a PHY layer entities and are transparent to the MAC (Null Data Packet).Also contrary to the comment TB measurement exchange use both TB Ranging NDP for the I2R sounding and HE Ranging NDP for R2I sounding |
| 2402 | 13.20 | 6.3.56.1 | "HE TB Ranging NDP and/or HE Ranging NDP"Firstly, Figure 16-7b uses HE Randing NPD and Figure 16-7c uses HE TB Ranging NDP, so the terms should align with the figure order.Secondly, is there a case when both HE TB Ranging NDP and HE Ranging NDP are transmitted? I think there won't be such a case, so "and/or" should be fixed to "or". | As in comment. | Reject.Duplicate of 2400, refer to resolution there. |
| 2411 | 17.15 | 6.3.56.3.1 | The baseline text in 6.3.56.3.1 now should add a condition that it applies to those except determined in 11.22.6.4.3 and 11.22.6.4.4. And then the new meaning for 11.22.6.4.3 and 11.22.6.4.4 should be added. Maybe it's good to define a new term to cover exchanges described in 11.22.6.4.2 and that to cover exchanges described in 11.22.6.4.3 and 11.22.6.4.4. | As in comment. | Revise, refer to terminology alignment as adopted in submission 11-19-1483. There are 3 FTM measurement exchange types: EDCA Based Measurement exchange, TB measurement exchange and NTB measurement exchange. The overview and division of procedure was realigned to reflect that. |
| 2443 |  |  | What is IFTMR? Clarify. Add the description in 3.4. | As in comment. | Revised, agree with the commenter. Editor add the definition to section 3.4 acronym: "IFTMR - Initial FTM Request frame." |
| 2458 |  |  | Add the description of RSTA in 3.4. | As in comment. | Revised, agree with the commenter, refer to D1.4 which have this definition in section 3.4 |
| 2459 |  |  | Add the description of ISTA in 3.4. | As in comment. | Revised, agree with the commenter, refer to D1.4 which have this definition in section 3.4 |
| 2491 | 22.14 | 6.3.56.2.1 | It is unclear which of the three options was the one that was already included in RevMD. If it is "RSTA centric" one, then RevMD didn't define what a RSTA is. It is quite confusing. Also, the new amendment should also include the FTM for legacy STA already defined in RevMD 2.0. | please clarify the text. | Revise, refer to terminology alignment as adopted in submission 11-19-1483. There are 3 FTM measurement exchange types: EDCA Based Measurement exchange (which covers the “legacy FTM” operation, TB measurement exchange and NTB measurement exchange. The overview and division of procedure was realigned/re-worded to reflect that. |

***TGaz Editor: Modify the subclause as shown below:***

**3.4 Abbreviations and acronyms**

IFTMR – Initial FTM Request