**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **LB207/D01 comment resolution -- Reassignment requests -- CIDs 31, 40, 53, 55, 56, 57, 58, 61, 62, 64, 65, 66, 67, 75, 116, 118, 125, 127, 128, 187, 197, 239, 240, 241, 242, 288, 291, 405, 411, 440, 444, 488, 497, 499, 501, 505, 506, 512, 513, 519, 520, 549, 550, 551, 554, 557, 655, 665, 871, 912, 917, 918, 997, 998, 1002, 1166, 1168, 1172, 1173, 1178, 1198, 1206, 1207, 1208, 1219, 1220, 1349, 1353, 1354, 1362, 1363, 1365, 1366, 1400, 1404, 1434** |
| Date Submitted | Sep 12, 2024 |
| Sources | Alex Krebs (Apple)krebs @ apple.com |
| Re: |   |
| Abstract |  |
| Purpose | To propose resolution for MMS related comments for “P802.15.4ab™/D (pre-ballot) C Draft Standard for Low-Rate Wireless Networks”. |
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# Reassign to D01 text contributors or feature experts

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Recommendation** |
| Mickael Maman | 31 | 55 | 10.38.1 | 21 | In UWB driven UWB MMS, a value of 1 ms shall be supported for time interval A. Does it means that UWB packet for Initiator and responder are interleaved in 1ms? | two options: clarify interleaved UWB SP0 packet or define two values for A as done in NBA UWB MMS. In the first case, new values for macMmsRcpPollNSlots, macMmsRcpRespNSlots and optionnaly macMms1stReportNSlots in Table 20 should be defined. | Reassign Riku |
| Tero Kivinen | 411 | 59 | 10.38.3.2 | 12 | Message sequence chart is missing.  | Add message sequence chart for initialization when coordination is active. | Reassign Youngwan |
| Pooria Pakrooh | 1353 | 66 | 10.38.3.7 | 10 | This sentence is Mandating a behaviour to upper layer. Change shall to should. | As in the comment | Reassign Rojan |
| Pooria Pakrooh | 1354 | 66 | 10.38.3.7 | 19 | This design for the behaviour of the short term parameters has several issues:1. If the devices need to switch the parameters for the remainder of the ranging session, they need to keep sending the short term parameters.2. What is the jusfification for changing the parameters other than NB channel map (such as ...). for one single round? 3. The way short term parameters behaviour is defined, it can lead to extensive airtime without proper justification. | 1. Limit the short term change parameters to NB channel map. 2. Explain the need for changing the other parameters in the middle of the session.3. Specify that the parameters changed will take effect until changed back again, and not only in the susequent round. | Reassign Rojan |
| Carlos Aldana | 997 | 66 | 10.38.3.7 | 66 | I see value in changing channel map in the short-term parameters. Please limit changing the short-term parameters to include \*only\* channel map. May want to create a Message content field with just NB Channel Map. | As in comment | Reassign Rojan |
| Mickael Maman | 40 | 67 | 10.38.4 | 21 | Clarify if the UWB MMS control phase is defined for both PHYs (UWB and OQPSK) and if they are using the same packet format (POLL and RESP compact frame) | as in comment | Reassign Carl+Riku |
| Billy Verso | 1166 | 67 | 10.38.4 | 21 | Clause 10.38.8 is covering Procedures for one-to-many MMS ranging, and I am wondering the content from 10.38.4 to 10.38.7 shou be combined under a single umbrella of "Procedures for one-to-one MMS ranging" | Consider whether this makes sense to help the read/user better understand the standard, and if so provide instructions to the editor to guide which parts would be appropriate to a common general section, and which parts should be made one-to-one case specific. | Reassign Jinjing+Rojan+Youngwan |
| Tero Kivinen | 444 | 67 | 10.38.4.1 | 35 | How is this short term operating parameter update done inside the device?  | Provide message sequence chart that shows what MLME calls are needed to set things up. | Reassign Rojan |
| Billy Verso | 1168 | 67 | 10.38.4.1 | 35 | The phrase "carrier coherent transmissions" appears six times, in the text. This should be defined. Actually the phrasing is the same in all six cases "serves toenable carrier coherent transmissions" the meaning of this phrase should be explained.  | Add an appropriate definition for "carrier coherent transmissions" into clause 3.1 and since I expect this is one of the key feature requirements of NBA UWB MMS add some paragraph(s) into the introduction 10.38.1 to explain what it is. Also, consider whether "serves to enable carrier coherent transmissions" is a correct phrase and either explain its meaning or revise if necessary and explain the revised phrasing. | Reassign to Xiliang, depends on CID 15 |
| Wenzheng Li | 197 | 67 | 10.28.4.1 | 36 | poll Compact and Response Compact frame can be used for short-term operating parameters negotiation. But for NBA MMS, LBT may be mandatory before transmitting poll compact or response compact frame for initiator and responder. In this case, a short Compact frame length should be preferred. In the current poll Compact frame and response compact frame, the management PHY/MAC, Ranging PHY/MAC parameters and other parameters should be included for short-term operating parameters negotiation, which may lead to a very long frame. | An index related to a set of management PHY/MAC, ranging PHY/MAC or other parameters may be introduced in the MMS control phase for short-term operating parameters negotiation, in order to shorten the compact frame.  | Reassign Wenzheng |
| Wenzheng Li | 187 | 68 | 10.38.5 | 23 | In this sub-clause, the ranging phase only for NBA UWB MMS is stated. For the UWB driven UWB MMS, the initial exchanged MMS fragment shall be SYNC+SFD.  | The UWB driven UWB MMS with initial SYNC+SFD fragments exchange shall be added to be described in this sub-clause  | Reassign Carl+Riku |
| Billy Verso | 1172 | 70 | 10.38.?.? | 15 | Not sure where it should go, but noting that we have secure format of some messages, maybe we need a clause on the "high integrity" use case. | Add appropriate clause, to cover the "high integrity" use case and consider what compart frames are used for it and make sure all if these frames can be properly protected from attack by rogues. | Reassign Rojan |
| Billy Verso | 1173 | 70 | 10.38.?.? | 15 | Given secured compact frames only covers one aspect of the ranging (the reply times) which may be insufficient to be sure of secured ranging, lets remove all mention of compact frame security.  | Remove the secured compact frames and all changes to clause 9. And used base line frame format (adding IE if necessary) to have all necessary frames properly covered with security. | Reassign Rojan |
| Billy Verso | 1178 | 71 | 10.38.7.4.1 | 25 | This sentence says the channel switching occurs per ranging block. Is this the case that irrespective of how many active ranging rounds, or sub-rounds there are (e.g., there might be quite a few transmissions from initiator in the one-to many cases), that the swich only occurs before the next ranging block,  | Consider one-to-many and hyper-block cases and clearly specify what switching is appropriate, and especially for any regulatory domains where such hopping is required. (another reason for higher layer to be in control of this). | Reassign Jinjing. |
| Alex Krebs | 1404 | 72 | 10.38.7.4.2 | 7 | Updating the allowed channel list for just one ranging round as described in 10.38.9.3.7 is not efficient, since only one channel is used during one ranging round anyways. It's also contradicting lines 25-26 of the channel switching protocol on the same page. | Remove the sentence "The list..." in line 7-8, and propose a change to the short-term parameter update protocol (e.g. sending the channel number (one byte) explicitly instead of sending a 2, 5, or 6-byte channel map.) | Reassign Rojan |
| Carl Murray | 871 | 72 | 10.38.7.4.3 | 11 | This section purports to describe the channel switching protocol but it does not describe how a change in the macMmsNbChannelAllowList via short term parameters is meant to work as indicated on line 7 "The list of allowed channels may be updated during an ongoing ranging session using short-term signaling, as described in 10.38.3.7." Section 10.38.3.7 doesn't describe this either. | Describe how the channel switching protocol works when there is a change in macMmsNbChannelAllowList via short term parameters | Reassign Rojan (see also 1404) |
| Billy Verso | 1198 | 79 | 10.38.9.2.1  | 11 | This is talking about resolving RPA, and discarding frames. This needs to be part of the general receive frame processing.  | Add text about compact frame address filtering / receive frame processing into a revised (reviewed) subclause 6.2.2 Reception and rejection, including editorial marks to apply the necessary changes so that MAC can work with Compact Frames and other frames pre-existing and newly added by 4ab. | Reassign to Rojan (as he was the one suggesting we needed to introduce packet discarding as consequence to unresolved RPA) |
| Tero Kivinen | 499 | 82 | 10.38.9.3.8 | 27 | This repeats same procedure which was already described in the 10.38.9.3.7. If the pieces of the NB Channel Map would be split in different parts ((macMmsNbChannelsLow, macMmsNbChannelsUnii3, macMmsNbChanneslHigh, macMmsNbChannelsUnii5) then the mapping from those mac variables to list of channels could be defined once, and NB Channel Map field, NB Lower Channel Map and NB Higher Channel Map structures could be defined by just concatenation of those mac fields. The constructions of the allow list from those separate mac PIB entries could be done once in 10.38.7.4.2.  | Split macMmsNbChannelMap to separate PIB entries, describe construction of allow list once, and define these NB {,Lower,Higher} Channel Map structures to be just concatenation of those pib entries. | Reassign Pooria. |
| Li-Hsiang Sun | 239 | 83 | 10.38.9.3.9 | 25 | 0<=y<=249, should be 50<=y<=249  | as in comment | Reassign Pooria. |
| Li-Hsiang Sun | 240 | 83 | 10.38.9.3.9 | 25 | y = x × NB\_channel\_step + NB\_channel\_start, but the NB\_channel\_start=0~7 | change to "y = x × NB\_channel\_step + NB\_channel\_start +50" | Reassign Pooria. |
| Mickael Maman | 53 | 84 | 10.38.9.3.9 | 6 | the lower limit of y is 50 for NB higher channel map | change 50<=y<=249 | Reassign Pooria. |
| Mickael Maman | 55 | 86 | 10.38.9.3.12 | 24 | RcpPollSlots field can be used by the initiator form transmission of the One-To-May Poll compact Frame  | add "or One-to-many" | Reassign Jinjing |
| Mickael Maman | 56 | 86 | 10.38.9.3.12 | 26 | RcpResponseSlots field can be used by the initiator form transmission of the One-To-May Response compact Frame  | add "or One-to-many" | Reassign Jinjing |
| Mickael Maman | 57 | 86 | 10.38.9.3.12 | 27 | RpDuration shall be fixed for one-to-many MMS in order to avoid a shift of the subround | add, In One-to-Many MMS Ranging, the RpDuration field shall be keept and the number of UWB MMS fragment transmissions of the ranging round shall be adjusted. | Reassign Jinjing |
| Alex Krebs | 1400 | 87 | 10.38.9.3.14  | 25 | We discussed/agreed limiting time offset to 1s before to improve responder energy consumption. I wonder if it is too strict to mandate this, since 1. SOR time offset is a one-time process hence impact on overall energy consumption is scanning once per ranging session 2. energy consumption wrt to SOR time offset is determined by the responder's crystal accuracy which is an implementation choice. My suggestion is to not prohibit use, but rather make a more practical recommendation in the standard, allowing higher accurcy devices to take advantage of the full value range. | Replace "The maximum...second." byA value of 0-300ms is recommended for this field to limit packet arrival time uncertainty for the responder device. | Reassign Carl+Riku |
| Mickael Maman | 58 | 87 | 10.38.9.3.15 | 28 | SOR Time offset is between ADV conf and not ADV Poll | This is a four-octet, 32-bit field that specifies the time offset in 1/499.2 MHz resolution between the start of the Advertising Confirmation Compact frame, or the Public Advertising Confirmation Compact frame, and the start of the Start of Ranging Compact frame. | Reassign Youngwan+Hongwon |
| Lei HUANG | 1434 | 87 | 10.38.9.3.15 | 28 | The SOR Time Offset field indicates the time offset between the start of the Advertising Confirmation Compact frame and the start of the Start of Ranging Compact frame. | Change "the start of the Advertising Poll Compact frame, or the Public Advertising Poll Compact frame" to "the start of the Advertising Confirmation Compact frame". | Reassign Youngwan+Hongwon |
| Pooria Pakrooh | 1363 | 89 | 10.38.9.3.22 | 3 | This newly added field can cause unnecessary overhead, how long can this be? | Limit the maximum duration. | Reassign Hongwon |
| Rojan Chitrakar | 116 | 94 | 10.38.9.5 | 1 | NB channel Map field is 6 octets long, either the field here should be renamed to a different name or the 6-octet bitmap should be called something else (e.g., Full NB Channel Map). | As in comment | Reassign Pooria |
| Mickael Maman | 61 | 94 | 10.39.9.5 | 1 | In figure 67, the presence bitmap is 1/2 because of extended presence bitmap for SMC TLVs and MMS Ranging mode configuration fields | as in comment | Reassign Rojan |
| Rojan Chitrakar | 118 | 94 | 10.38.9.5 | 5 | Only the 6 octet version the NB channel Map field (10.38.9.3.7) is referenced. | Add the other versions of the NB channel Map field. | Reassign Pooria |
| Pooria Pakrooh | 1365 | 94 | 10.38.9.5 | 5 | This could be lower and upper NB channel maps as well | Change to "per 10.38.9.3.7, 10.38.9.3.8 and 10.38.9.3.9" | Reassign Pooria (to keep all in one place, as this is not a sufficient resolution, other related CIDs 116 & 118 also reassigned to Pooria) |
| Tero Kivinen | 550 | 95 | 10.38.9.6 | 15 | It might be better to split the figure 70 to 3 different figures, one for case where Status is success, one when the status is config change, and one for all other cases.  | Split figure 70 to three. | Reassign Rojan |
| Tero Kivinen | 551 | 95 | 10.38.9.6 | 15 | Presence bitmap can also be 2 octet long if the Starting Block Index or MMS Ranging Mode Configuration are included, as they are in the extended parts of the Presence bitmap.  | Change 0/1 to 0/1/2 for Presence Bitmap. | Reassign Rojan |
| Carlos Aldana | 1002 | 95 | 10.38.9.6 | 15 | Figure 70 is very flexible but there is no indication if the fields are present or not. Need to add a presence indicator, similar to the one in 10.38.9.3.24, to allow for parsing of the field at the receiver. | As in comment | Reassign Rojan |
| Pooria Pakrooh | 1366 | 95 | 10.38.9.6 | 15 | In Figure 70, change "NB Channel Map" field length to 0/2/5/6. | As in the comment | Reassign Rojan+Pooria (Note: Jinjing has submitted resolutions to similar comments in DCN 458) |
| Mickael Maman | 62 | 95 | 10.39.9.6 | 15 | In figure 70, the presence bitmap is 0/1/2 because of extended presence bitmap for MMS Ranging mode configuration fields and NB channel Map is 0/2/5/6 | as in comment | Reassign Rojan+Pooria(Note: Jinjing has submitted resolutions to similar comments in DCN 458) |
| Tero Kivinen | 549 | 95 | 10.38.9.6 | 18 | The text says that if the status is success then we continue, but not all configuration values are transmitted, but I think they still can be transmitted even when some of them can also be omitted.  | Remove "but ...explictly".  | Reassign Rojan |
| Rojan Chitrakar | 125 | 96 | 10.38.9.6 | 14 | In the previous LB round, much effort was made to consolidate the different message variants; variant 0x20 can be easily combined into variant 0x10 by adding a presence bit: Block Description List Present. | Combine variant 0x20 into variant 0x10 by adding the Block Description List Present in the Presence Bitmap field. | Reassign Youngwan |
| Billy Verso | 1219 | 96 | 10.38.9.6 | 15 | "In this case, the responders assume" is strange, not sure what it should be (or even if it should be in this clause). can assume, may assume, should assume ? | Change to "should assume" ? | Reassign Youngwan |
| Tero Kivinen | 554 | 96 | 10.38.9.6 | 27 | As this is talking about the hyper blocks, I assume the 8-bit field called Block Index is really a Relative Block Index, not Block Index.  | Change Block Index to Relative Block Index. | Reassign Youngwan |
| Billy Verso | 1220 | 97 | 10.38.9.6 | 5 | This be talking about "ranging slots", "ranging blocks" etc.Also somewhere in the text MMS slots were constrained to 300 RSTU multiples, so maybe we want to make that constraint in the slot duration field here (and elsewhere) | Add in "ranging" before block, round, slot as appropriate.Consider if appropriate to constrain slot durations to 300 RSTU multiples and update accordingly. Here and everywhere. | Reassign Youngwan |
| Tero Kivinen | 557 | 97 | 10.38.9.7 | 14 | When is the one to one poll compact frame sent to multiple recipient?  | Remove text about one to one poll compact frame to sent to multiple recipients. | Reassign Rojan |
| Rojan Chitrakar | 127 | 98 | 10.38.9.7 | 1 | NB channel Map field is 6 octets long, either the field here should be renamed to a different name or the 6-octet bitmap should be called something else (e.g., Full NB Channel Map). | As ini comment | Reassign Pooria. |
| Rojan Chitrakar | 128 | 98 | 10.38.9.7 | 6 | Only the 6 octet version the NB channel Map field (10.38.9.3.7) is referenced. | Add the other versions of the NB channel Map field. | Reassign Pooria. |
| Mickael Maman | 64 | 98 | 10.39.9.7 | 7 | Management PHY Configuration and Management MAC Configuration shall not be short term parameters. There is a consensus to not switch from UWB driven MMS to NBA MMS. Another case is for one-to-may MMS ranging, we shall not modify them in one-to-one POLL compact frame when used in one-to-many subround. | list of change: In figure 75 remove Management PHY Configuration and Management MAC Configuration. Line 3, add" except that the Management PHY Configuration present field and Management MAC Configuration present field shall be set to 0" and remove line 7 and 8. | Reassign Rojan |
| Mickael Maman | 65 | 99 | 10.39.9.8 | 7 | Management PHY Configuration and Management MAC Configuration shall not be short term parameters. There is a consensus to not switch from UWB driven MMS to NBA MMS. Another case is for one-to-may MMS ranging, we shall not modify them in one-to-one RESP compact frame when used in one-to-many subround. | list of change: In figure 78 remove Management PHY Configuration and Management MAC Configuration. Line 7, add" except that the Management PHY Configuration present field and Management MAC Configuration present field shall be set to 0" and in line 16 remove"Management PHY Configuration, Management MAC Configuration" | Reassign Rojan |
| Libra Xiao | 918 | 100 | 10.38.9.9 | #3,#4,#5 | Original text is :"The Round-trip Time field value is an unsigned integer that reports the time difference, measured at the initiator, between the RMARKERs of the initiator's MMS fragments and the responder's MMS fragments "It should be clarified how to obtain the value of the Round-trip Time parameter in the UWB MMS ranging phase with multiple RSFs and/or RIFs (as shown in the example in Figure 36), as the value of the Round-trip Time parameter can be the cumulative or mean value of multiple RSFs and/or RIFs. | "The Round-trip Time field value is an unsigned integer that reports the time difference, measured at the initiator, between the RMARKERs of the initiator's MMS fragments and the responder's MMS fragments For the multiple RSFs and/or RIFs of the UWB MMS ranging phase,the value of the Round-trip Time should be the mean value of several Round-trip Time parameters measured at the responder. " | Reassign Xiliang |
| Mickael Maman | 66 | 101 | 10.39.9.8 | 6 | Management PHY Configuration and Management MAC Configuration shall not be short term parameters. There is a consensus to not switch from UWB driven MMS to NBA MMS. Another case is for one-to-many MMS ranging, we shall not modify them in one-to-one REPORT compact frame when used in one-to-many subround. | list of change: In figure 83 remove Management PHY Configuration and Management MAC Configuration. Line 7, add" except that the Management PHY Configuration present field and Management MAC Configuration present field shall be set to 0" and in line 11 remove "Management PHY Configuration, Management MAC Configuration" | Reassign Rojan |
| Libra Xiao | 912 | 101 | 10.38.9.10 | #3,#4,#5 | Original text is :"The Reply Time field value is an unsigned integer reporting the time difference, measured at the responder, between the RMARKERs of the MMS fragments received from the initiator and the MMS fragments transmitted by the responder. "It should be clarified how to obtain the value of the Reply Time parameter in the UWB MMS ranging phase with multiple RSFs and/or RIFs (as shown in the example in Figure 36), as the value of the Reply Time parameter can be the cumulative or mean value of multiple RSFs and/or RIFs. | "The Reply Time field value is an unsigned integer reporting the time difference, measured at the responder, between the RMARKERs of the MMS fragments received from the initiator and the MMS fragments transmitted by the responder. For the multiple RSFs and/or RIFs of the UWB MMS ranging phase, the Reply Time should be the mean value of several Reply Time parameters measured at the responder. " | Reassign Rojan |
| Mickael Maman | 67 | 102 | 10.38.9.11 | 1 | In advertising confirmation compact frame, the responder address is missing. | add 1 octet for responder address in Figure 85 and the following text "The Responder Address field identifies the address of a responder selected by the initiator to be involved in the following ranging session." | Reassign Youngwan |
| Tero Kivinen | 655 | 124 | 10.38.10.1 | 16 | Why is the macMmsNbChannelMap describes in this kind of encoded format. It would be much easier if the PIB entries would actually have the separate fields (macMmsNbChannelsLow, macMmsNbChannelsUnii3, macMmsNbChanneslHigh, macMmsNbChannelsUnii5) and the macMmsNbChannelMap would be constructed from them when needed. | As specified in comment | Reassign Pooria |
| Libra Xiao | 917 | 124 | 10.38.9.24 | #9,#10,#11 | Original text is :"The Reply Time field value is an unsigned integer reporting the time difference, measured at the responder, between the RMARKERs of the MMS fragments received from the initiator and the MMS fragments transmitted by the responder. "It should be clarified how to obtain the value of the Reply Time parameter in the UWB MMS ranging phase with multiple RSFs and/or RIFs (as shown in the example in Figure 36), as the value of the Reply Time parameter can be the cumulative or mean value of multiple RSFs and/or RIFs. | "The Reply Time field value is an unsigned integer reporting the time difference, measured at the responder, between the RMARKERs of the MMS fragments received from the initiator and the MMS fragments transmitted by the responder. For the multiple RSFs and/or RIFs of the UWB MMS ranging phase,the value of the Reply Time should be the mean value of several Reply Time parameters measured at the responder. " | Reassign Rojan |
| Mickael Maman | 75 | 125 | 10.38.10.1 | 1 | Poll and Resp slot are mandatory. Then the range of macMmsRcpPollNslots and macMmsRcpRespNslots shall start at 1 | as in comment | Reassign Alex |
| Tero Kivinen | 665 | 125 | 10.38.11 | 2 | This whole clause looks more like a clause that should be inside the clause 16, not in 10.38.  | Move to clause 16. | Reassign Billy |
| Pooria Pakrooh | 1349 | 57 | 10.38.3.3 | 22 | If the initiator likes to use paramteres suggested in the ADV\_RESP message, what is the point of repeating the content? Change to: "If initiator wants to use any of the suggested params in the adv-resp, it does not need to include them in the SOR message. |  Change to: "If initiator wants to use any of the suggested params in the adv-resp, it does not need to include them in the SOR message." | Reassign to Rojan: Only applies to MsgCtrl!=0  |

# Reassign to commenter to provide actionable text change proposal

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| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** | **Recommendation** |
| Tero Kivinen | 288 | 16 | 7.2.2 | 9 | The format proposed for the frame type 100 is not very compact, and does not intended to be compact.  | Rename to something that actually describes what the new format is trying to do (legacyblecopiedstuff?). | Reject. The group does not agree with the commenter, the current name is immaculate. |
| Tero Kivinen | 291 | 17 | 7.3.7.1 | 3 | Adding a new frame format that does not allow security or privacy in 2024 is really bad. We must not do such thing. Security and privacy is required for the modern 802.15.4 operating environments, especially on the phones etc. Privacy cannot be provided without security, and the currently defined security and privacy features in compact frames are not suitable for the use these frames are intended for.  | Define compact frame format so that it can use the 802.15.4 security and reuse the privacy to be defined in TG4ac. It is known that IEEE has long standing tradition of making insecure and broken standards, but lets try to get away from that tradition. | Reassign Tero. |
| Tero Kivinen | 405 | 58 | 10.38.3.2 | 10 | The initialization process figure is nice, but the message sequence chart would also be needed, i.e., the figure that shows what higher layers and MLMEs do to initiate sending those messages.  | Add message sequence chart for initialization showing which MLME calls are needed to initialize things in initiator and responder, and what MLME calls are used to transmit and receive those frames. My understanding is that at least some of the MLME calls are not defined yet, so making this chart would find out the gaps in the specification. Also as there are tight timing requirements between SOR and POLL frames that means all this should be done in the MAC, thus MLME call is needed to do the whole transaction. | Reassign Tero |
| Tero Kivinen | 440 | 66 | 10.38.3.8 | 27 | How is this done inside the MAC, i.e., how does the upper layer configure this information.  | Provide message sequence chart that shows how this indication procedure is done. | Reassign Tero |
| Carlos Aldana | 998 | 81 | 10.38.9.3.7 | 18 | To simplify design, there should be a way to signal the end of the NB channel map. Please add a field to Figure 49 to signal NB channel end. | As in comment | Reassign to Carlos. |
| Tero Kivinen | 488 | 81 | 10.38.9.3.7 | 21 | The nbChannelBitmaskSet is not obtained from the bits 0 to 41, it is constructed from there by returning list of integers in such way that for each bit from 0 to 41 it returns the bit number which are set.  | Properly define the generation of the NbChannelBitMaskSet. | Reassign Tero. |
| Billy Verso | 1206 | 82 | 10.38.9.3.7 | 1 | Using bit numbers to talk about the sub fields e.g. "Bits 0 to bit 3 set to 1...." is not matching the normal style for fields in the rest of the standard. The bit numbers should be just specified in the figure and then field names should be used to describe what the sub-fields signify. | Rework the text accordingly. | Reassign Billy. |
| Billy Verso | 1207 | 82 | 10.38.9.3.9 | 22 | Using bit numbers to talk about the sub fields e.g. "Bits 32 to 34 encode...." is not matching the normal style for fields in the rest of the standard. The bit numbers should be just specified in the figure and then field names should be used to describe what the sub-fields signify. | Rework the text accordingly. | Reassign Billy. |
| Tero Kivinen | 497 | 82 | 10.38.9.3.8 | 25 | The nbChannelBitmaskSet is not obtained from the bits 0 to 9, it is constructed from there by returning list of integers in such way that for each bit from 0 to 9 it returns a channel number.  | Properly define the generation of the NbChannelBitMaskSet. | Reassign Tero. |
| Billy Verso | 1208 | 83 | 10.38.9.3.8 | 3 | Using bit numbers to talk about the sub fields e.g. "Bits 10 to 12 encode...." is not matching the normal style for fields in the rest of the standard. The bit numbers should be just specified in the figure and then field names should be used to describe what the sub-fields signify. | Rework the text accordingly. | Reassign Billy. |
| Tero Kivinen | 501 | 83 | 10.38.9.3.9 | 15 | The nbChannelBitmaskSet is not obtained from the bits 0 to 31, it is constructed from there by returning list of integers in such way that for each bit from 0 to 31 it returns the bit number which are set.  | Properly define the generation of the NbChannelBitMaskSet. | Reassign Tero. |
| Tero Kivinen | 505 | 84 | 10.38.9.3.10 | 4 | Text description of how to map different values to different tables is hard to parse, especially if new values are added in the future.  | Change the text to table, where first column is Sequence Code Index and second is description, i.e., first row will say "9-24" and description will say "Length-127 ternary codes from Table 16-8" etc.  |  Reassign Huan-Bang. |
| Tero Kivinen | 506 | 84 | 10.38.9.3.10 | 10 | The text here is again hard to parse, make it table.  | Add this information to the previous table for Sequence Code Index values, i.e., instead of description to 2nd column would be sequence code index reference, and there would be third field preamble code index which would then explain what preamble code index shall be used when using specific sequence code index value. |  Reassign Huan-Bang. |
| Tero Kivinen | 512 | 85 | 10.38.9.3.11 | 4 | The table 14 defines more than just the valid range.  | Change text to say that Number of RSF values are defined in table 14. | Reassign Ben. |
| Tero Kivinen | 513 | 85 | 10.38.9.3.11 | 8 | The table 15 defines more than just the valid range.  | Change text to say that table defines the values, not range. | Reassign Ben. |
| Tero Kivinen | 519 | 88 | 10.38.9.3.17 | 8 | This information from mapping 1-8 and 14, and 15 is now in at least 4 different locations. Repeating same information in multiple locations is bad.  | Create a table that provides mapping from the values to references where the modulation modes can be found, i.e. for values 1-8 the description would say modulation modes 1-8 from table 58. etc. Then change Control Phase Config field, Report Phase Config fiield, macMmsControlPhaseMode, and macMmsReportPhaseMode descriptions to use that same table. |  Reassign Huan-Bang. |
| Li-Hsiang Sun | 241 | 88 | 10.38.9.3.17 | 15 | To be consistent with p56 L10~13there should normative requirements that when value 1~8 is selected for Control Phase Config, values other than 1~8 cannot be selected for Report phase Config.Similarly, if value 14~15 is selected for Control Phase Config, then values other than 14~15 cannot be selected for Report Phase Config. | as in comment | Reassign Li-Hsiang. |
| Pooria Pakrooh | 1362 | 88 | 10.38.9.3.17 | 16 | This sequence mapping can be applied to control sequence since it is HPRF, but SYNC/SFD sequence for the MMRS packet is better to be 127 for RSF=127 to keep PRF consistent.. | As in the comment | Reassign Pooria? |
| Tero Kivinen | 520 | 88 | 10.38.9.3.17 | 18 | This mapping from sequence control index field is already defined in the 10.38.9.3.10.  | After the table of mapping from sequence code index values to preamble code index is added there, this text can directly refer to that table, without copying the text here. |  Reassign Huan-Bang. |
| Li-Hsiang Sun | 242 | 88 | 10.38.9.3.17 | 19 | The case of Sequence code index 9~24 should also be mention here to use the conversion formula, to be consistent with p84 L11 | as in comment | Reassign Li-Hsiang. |