**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **LB213/D02 comment resolution -- CIDs 174, 471, 472** |
| Date Submitted | July 1, 2025 |
| Sources | Alex Krebs (Apple)  krebs @ apple.com |
| Re: |  |
| Abstract |  |
| Purpose | To propose resolution for MMS related comments for “P802.15.4ab™/D02 Draft Standard for Low-Rate Wireless Networks”. |
| Notice | This document does not represent the agreed views of the IEEE 802.15 Working Group or IEEE 802.15.4ab Task Group. It represents only the views of the participants listed in the “Sources” field above.It is offered as a basis for discussion and is not binding on the contributing individuals. The material in this document is subject to change in form and content after further study. The contributors reserve the right to add, amend or withdraw material contained herein. |

**Table of contents**

[CID 174, 471, 472 3](#_Toc203417407)

# CID 174, 471, 472

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Index #** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** |
| MAMAN, MICKAEL | 174 | 84 | 10.39.8.4.1 | 10 | the channel switching mechanism dynamically switch among the coordinated channels on each successive ranging round but not block. | change "block" by "round" |
| VERSO, BILLY | 471 | 84 | 10.39.8.4 | 3 | I don't think it is clear where the channel switch occurs, i.e., it seems to be once per ranging block, but what happens when there are multiple ranging rounds involving same or different devices. Initiator may use different rounds to range to different responders, if the switch only happens per block does the initiator and all the responders stay on the same NB channel for the whole block? | This should be clarified, i.e. stated whether the initiator & multiple responders stay on same channel for the possible multiple ranging rounds and sub-rounds in single ranging block in one to many cases, interleaved and not, or if they switch for each interaction. Ideally some example figures should be added to clarify it. |
| VERSO, BILLY | 472 | 85 | 10.39.8.4.3 | 5 | This is only talking about one initiator and one responder, the other cases should be included too... is there one seed for all nodes in a group so they all follow the hopping, or separate pair for each par of communicating devices. This is complex to specify correctly, and is probably in the domain of the NHL anyway (which knows what is going) to correctly set phyCurrentChannelInfo for the next message it wants to TX or RX. | Probably good to also capture the general operation of switching protocol in these more complex cases. |

Discussion: This paragraph has been written for one-to-one ranging, where only one round per block is used for a ranging exchanged. Since round numbers are not unique, the channel switching function would not be able to pick more channels than the number of rounds per block, which would be well below 250 in most cases. If a specific non one-to-many ranging mode needs a different channel switching function then a change should/can be proposed against that section. The section referenced here is clearly assigning each block a channel number.

Proposed resolution: Rejected.

Disposition detail: Inefficient.