**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Wireless Specialty Networks (WSNs) |
| Title | **Acknowledgment Sequence Chart** |
| Date Submitted | 17 May 2022 |
| Source | Bober, Kai LennertFraunhofer HHI | Voice: -Fax: -E-mail: bober@ieee.org |
| Re: |  |
| Abstract | This document contains a sequence chart, illustrating the acknowledgment and retransmission procedure |
| Purpose | Aid comment resolution |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

**Legend:**

* Arial size 13 indicates subsections for individual comments
* Red underlined text needs to be adapted during the comment implementation (e.g., because it is a reference).
* Bold italic text is an instruction to the editor to implement the text

R2-30

Add the following figures under 6.7.1:

**Figure X**: Acknowledgment and retransmission sequence chart for a successful transmission

**Figure Y**: Acknowledgment and retransmission sequence chart for a failed transmission and successful retransmission

Add the following paragraph at the end of 6.7.1:

Figure X depicts a frame exchange between two devices A and B, where device A transmits an MPDU with sequence number one to device B. The successful reception of that MPDU is acknowledged by device B in its next GTS. Device A subsequently removes the MPDU from its buffer.

Figure Y depicts a failed MPDU transfer with sequence number two. The subsequent MPDU with sequence number three is successful. Device B does not send an acknowledgment for sequence number two to device A. After the timeout, device A retransmits the MPDU with sequence number two. The retransmission is successful and device B acknowledges sequence numbers two and three through a block ACK.