**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Wireless Specialty Networks (WSNs) |
| Title | **Acknowledgment Sequence Chart** |
| Date Submitted | 17 May 2022 |
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| Re: |  |
| Abstract | This document contains a sequence chart, illustrating the acknowledgment and retransmission procedure |
| Purpose | Aid comment resolution |
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**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

Make macRetransmitTimeout 24 bits wide and update range interval to the highest representable number (16777215).

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. 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 and another MPDU with sequence number three. Device B acknowledges sequence numbers two and three through a block ACK after successful reception.

*Note – An implementation should set macRetransmitTimeout to a high enough value that devices have at least one GTS before the timeout expires.*