**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | UWB based Report in NBA-MMS |
| Date Submitted | July 2023 |
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| Re: | Contribution to IEEE 802.15.4ab |
| Abstract |  |
| Purpose | This submission proposes text to for the IEEE Std 802.15.4ab specification framework document. |
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## Introduction

In NBA-UWB MMS [15-22-0381-05-04ab], NB 250 kbps is used as default for Report. However, if PTData field of report is long (e.g., 32 byte), it may exceed 1 ms slot duration which is generally used. Among the newly considered UWB data rates, 1.95 Mbps data rate provides enough link budget to support MMS. If UWB 1.95 Mbps is used for report instead of NB 250 kbps, air time for report can be reduced and support 1 ms slot duration easily. In this document we propose the way to provide UWB based report in NBA-UWB

## Proposal

*Revise NB PHY Config in the table of 1.6.3.2 Compressed PSDU message fields* [*15-22-0381-05-04ab*]

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| --- | --- | --- |
| NB PHY Config | 8 | Sets O-QPSK PHY #1-#9 referring to [1]  {#1: 250k uncoded, …, #9}  Bits 0-3: NB Control Phase  Bits 4-7: NB Report Phase (Bit 4-7 : 0b1111 - NB is not used, UWB for Report) |

Add at the end of the table of 1.6.3.2 Compressed PSDU message fields  
[15-22-0381-05-04ab] with the references correspond to [15-23-0307-00-04ab] Table 15-7a [IEEE 802.15.4z] in the following texts.

Note : If Bits 4-7 of NB PHY Config is 0b1111, Set #1 in [Table in slide 14 of 15-23-0307-00-04ab] with Code index #32 in Table 15-7a [IEEE 802.15.4z] is used.