**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Proposed Resolution for Comments #998** |
| Date Submitted | February 13, 2025 |
| Sources | Carlos Aldana (Meta)  |  |
| Re: |   |
| Abstract |  |
| Purpose | To propose resolution to comment with CID #988 for “P802.15.4ab™/Draft 1.0 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. |

***Comment Index #998***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 998 | Technical | 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 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Bits: 0–3   | 4–9 | 10–17   | 18–41 | 42–44 | 45–46 | 47   |
| NB channels0–3 | WLAN channel bitmask (UNII-3) | NB channels50–57 | WLAN channel bitmask (UNII-5) | NB channel start | NB channel step | Reserved |

**Discussion:** Agree in principle with commenter and it is desired to reduce the bitwidth of the field. Therefore, we propose a simple channel\_start and channel\_end configuration with decimation capability that results in 50% reduction of bitwidth.

**Proposed Resolution : Revise.**

**Editor : Change Figure 49 to the following:**

|  |  |  |  |
| --- | --- | --- | --- |
| Bits: 0–7 | 8-9 | 10-17 | 18-23 |
| NB channel start | NB channel step | NB channel end | Reserved |

**Please make the following text changes:**

The allowed list of NB channels is defined as

 *macMmsNbChannelAllowList = NbChannelAffineSet*

where NbChannelAffineSet = {y: y = x × NB\_channel\_step + NB\_channel\_start}, such that NB\_channel\_start ≤ y ≤ NB\_channel\_end and x ∈ ℕ0, where ℕ0 is the set of natural numbers, additionally including zero.

Bits 0 to 7 encode the value of NB\_channel\_start in the range 0 to 249.

Bits 8 to 9 encode the enumeration of NB\_channel\_step {1, 2, 4, 8}.

Bits 10 to 17 encode the value of NB\_channel\_end in the range 0 to 249. The value of NB\_channel\_end shall be greater than or equal to the value of NB\_channel\_start.