**IEEE P802.15**

**Wireless Specialty Networks**

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| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSNs) | |
| Title | Resolution to CID 254 from P802.15.4ab-D02 ballot | |
| Date Submitted | 15-May-2025 | |
| Source | [Benjamin A. Rolfe] [Blind Creek Associates] | E-mail: [ben.rolfe @ ieee.org ] |
| Re: | Comments: 254 | |
| Abstract | Some more almost easy ones | |
| Purpose | Resolve comments 254 | |
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Recommended Resolutions

# Resolution to CID 254

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| --- | --- | --- | --- | --- | --- |
| 254 | 16 | 6.6.3.4 | 18 | This paragraph mentioned three times about the AIFS value being xxx, but we see both "is" and "shall be" and "equal to". Should keep consistent, say "The value of AIFS shall be xxx" or "The value of AIFS is equal to xxx" or something suitable. | As in comment |

Proposed resolution:

Revised

## Resolution Detail:

Replace the current 6.6.3.3 in P802.15.4ab-D02 with:

***Change the third paragraph of 6.6.3.3 as shown:***

The transmission of an Ack frame outside the CAP shall commence AIFS after the reception of the last symbol of the Data frame or MAC command. The transmission of an Ack frame in the CAP shall commence either AIFS after the reception of the last symbol of the Data frame or MAC command or at a backoff period boundary. In the latter case, the transmission of an Ack frame shall commence between AIFS and (AIFS + macUnitBackoffPeriod) after the reception of the last symbol of the Data frame or MAC command. ~~The value of AIFS is 1 ms for the SUN PHYs, LECIM PHYs, or TVWS PHYs. The value of AIFS is equal to macSifsPeriod for all other PHYs.~~

The value of AIFS is set as follows:

* For SUN PHYs, LECIM PHYs, or TVWS PHYs AIFS is equal to 1ms.
* For the high-rate pulse repetition frequency UWB PHY when operating as an enhanced modulations device (HRP-EMDEV) sending Imm-Ack, the AIFS value is equal to the value of the *macEmdevImmAckAifs* Period attribute in Table 8-36
* For the HRP UWB PHY when operating as other than an HRP-EMDEV sending Imm-Ack, the value of AIFS is equal to macSifsPeriod.
* The value of AIFS is equal to *macSifsPeriod* for all other PHYs.

## Discussion:

The first part of the paragraph in the base standard uses AIFS in normative statements. There are two cases enumerated, one for three specific PHYs and one for “all other PHYS”. HRP falls into “all other PHYs”. We now introduce two cases for HRP, HRP-EMDEV operation and other than HRP-EMDEV operation. For the later AIFS is still macSifsPeriod. The result is 4 distinct cases for AIFS, and it is clearer to enumerate these as a list.