IEEE 802.11 Coexistence SC

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| Proposed LS to ETSI BRAN related to *PD/ED in 6 GHz*  |
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Abstract

*This document contains a draft Liaison Statement to ETSI BRAN in relation to the use of PD/ED in 6 GHz in EN 303 687*

## Proposed LS to ETSI BRAN

TO:

* Guido Hiertz, ETSI BRAN Chair, guido.hiertz@ericsson.com

CC:

* Paul Nikolich, IEEE 802 Chair, p.nikolich@ieee.org
* Andrew Myles, Chair, IEEE 802.11 Coexistence Standing Committee, amyles@cisco.com

SUBJECT: **Use of PD/ED in 6 GHz[[1]](#footnote-1)**

DATE: 17 January 2019

Dear Guido,

The IEEE 802.11 Working Group would like to thank ETSI BRAN for participating in the collaboration between our two organizations during the development of the ETSI Harmonized Standards for 5 GHz (EN 301 893) and 6 GHz (EN 303 687), particularly in the context of promoting good coexistence in Europe for all technologies.

One of the key issues during the development of these standards has been whether *PD/ED* and/or *ED-only* (and associated *PD* and *ED* thresholds) should be specified as part of a *listening* mechanism enabling good coexistence between systems using the same or different technologies.

The IEEE 802.11 Working Group understands that the current draft of the next revision of EN 301 893 allows the use of both the *ED-only* (at -72 dBm) and the *PD/ED* (at -62/-82 dBm) *listening* mechanisms by any technology. There is ample evidence from various submissions to both ETSI BRAN and 3GPP RAN1 that this compromise will result in good coexistence between 802.11 (using *PD/ED*) and 3GPP LAA/NR-U (using *ED-only*), which is expected to be the most common multi-technology sharing scenario. This compromise is also flexible in that it allows LAA/NR-U to use *PD/ED* if desired, and it allows 802.11 to use *ED-only* for applications like spatial reuse if desired. IEEE 802.11 Working Group supports this compromise by ETSI BRAN for EN 301 893.

The IEEE 802.11 Working Group is aware that ETSI BRAN recently started discussions related to the use of *ED-only* and/or *PD/*ED in the context of EN 303 687, and that some participants in ETSI BRAN are proposing EN 303 687 should specify the use of *ED-only* (at -72 dBm) as the only specified *listening* mechanism. We have reviewed and evaluated the various arguments that have been made at ETSI BRAN both for and against this proposal. It is the IEEE 802.11 Working Group’s view that there is insufficient evidence at this time to change the compromise established for 5 GHz (in EN 301 893) when considering 6 GHz operation (in EN 303 687). The IEEE 802.11 Working Group therefore recommends that ETSI BRAN use the 5 GHz *listening* mechanism (as defined in EN 301 893) for 6 GHz operation (as defined in EN 303 687) too. This approach is aligned with the current draft of 802.11ax. Of course, the IEEE 802.11 Working Group will consider changing its recommendation if additional compelling evidence becomes available.

For your information, the IEEE 802.11 Working Group will be meeting at the times and locations specified at [802.11 Working Group Meeting Plan](http://www.ieee802.org/11/Meetings/Meeting_Plan.html). Interested participants of ETSI BRAN are encouraged to attend to assist the definition of the next generation of IEEE 802.11 standards.

Regards,

/s/

Dorothy Stanley (dstanley@ieee.org) Chair of IEEE 802.11 WG

1. This document represents the views of the IEEE 802.11 Working Group and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802. [↑](#footnote-ref-1)