

LIAISON STATEMENT

Title: LS on 5 GHz channel access mechanism

Date: 2021-06-25

From (source): ETSI TC BRAN

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Response to: -
(if applicable)

Attachments: -
(if applicable)

1. Overall description:

ETSI Technical Committee (TC) BRAN has reached a consensus [1] with regard to the energy detection threshold for the channel access mechanism in the next revision of Harmonised Standard (HS) EN 301 893 and on possible future work related to channel access mechanisms as follows:

1. The text proposal as referred to by [1] is accepted to be included in draft EN 301 893.
2. *EDT requirements may be further updated by ETSI TC BRAN in the future. It is the current understanding that such updates would most likely be considered in the context of a future work item. The following alternatives are among those that may be considered:*
 - *Alt 1: common EDT = -85 dBm/MHz for all technologies, possibly as a function of P_H .*
 - *Alt 2: common EDT = -75 dBm/MHz for all technologies.*

Following the above consensus [1], ETSI TC BRAN has accepted the following clause 4 text for inclusion in the draft HS EN 301 893; ETSI TC BRAN has also accepted the related test procedure description clause 5 text for inclusion in the draft HS EN 301 893.

<start specification text>

4.2.7.3.2.5 ED Threshold Level (Energy Detection Threshold Level)

An *Operating Channel* is an *Occupied Channel* as long as transmissions in that channel are present at a power level greater than the *ED Threshold (EDT)*. The power level is determined by integrating the received power over the channel, and then normalized to per MHz power. The received power shall be measured at the interface between the device and the antenna assembly. If no transmissions are present at a power level greater than the *ED Threshold (EDT)*, the *Operating Channel* is an *Unoccupied Channel*. Equipment may consist of one or more devices. A device shall operate according to one of the following categories. The EDT depends on the category of operation.

Category 1: For a device operating only in conformance to IEEE 802.11ax/D8.0 [REF] clause 27, IEEE 802.11™-2016 [9], clause 17, clause 19 or clause 21, or any combination of these clauses, independent of the device's maximum transmit power (P_H), the EDT shall be:

$$\text{EDT} = -75 \text{ dBm/MHz} \quad (1)$$

Category 2: Else, the EDT shall be proportional to the device's maximum transmit power (P_H):

For $P_H \leq 13 \text{ dBm}$:	$\text{EDT} = -75 \text{ dBm/MHz}$	
For $13 \text{ dBm} < P_H < 23 \text{ dBm}$:	$\text{EDT} = -85 \text{ dBm/MHz} + (23 \text{ dBm} - P_H)$	(2)
For $P_H \geq 23 \text{ dBm}$:	$\text{EDT} = -85 \text{ dBm/MHz}$	

A device capable of operating in either category, when changing operation from Category 2 to Category 1, shall not increase the EDT for a period of at least [60] s.

The EDT levels defined above are absolute levels that apply at all times independent of background noise of other signals being present in the channel.

<end specification text>

2. Actions:

The recipients of this Liaison Letter are respectfully requested to consider the provided information.

3. Date of next meetings of the originator:

- ETSI TC BRAN #111, 2021-09-27 until 2021-10-02, e-meeting
- ETSI TC BRAN #112, 2021-12-13 until 2021-12-17, e-meeting
- ETSI TC BRAN #113, 2022-02-04 until 2022-02-14, Sophia Antipolis, France
- ETSI TC BRAN #114, 2020-06-03 until 2022-06-10, Sophia Antipolis, France

References

- [1] Cablelabs, "Way forward on EDT in EN 301 893," BRAN(21)109059, 2021-03-12