

LIAISON STATEMENT

Title: Information regarding Harmonised Standard
EN 303 687 (license-exempt 6 GHz operation)

Date: 2020-06-26

From (source): ETSI TC BRAN

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1. Overall description:

ETSI Technical Committee (TC) BRAN has reached an agreement on the channel access mechanism adopted in Harmonised Standard (HS) EN 303 687. ETSI TC BRAN has agreed that the best way of achieving fair sharing is through a common Energy Detection (ED) Threshold (EDT) value.

- A common ED threshold of -85 dBm/MHz retains currently known, negotiated, and tested protection of dissimilar technologies from interfering with each other.
- Detection mechanisms specific to a particular technology are the province of its respective Standards Developing Organization (SDO) and shall not be included in the HS EN 303 687.
- Additional technology specific detection mechanisms may be employed at sensing levels below the common ED threshold and are outside the scope of HS EN 303 687.

Best regards,

Dr. Guido R. Hiertz
Chair of ETSI TC BRAN

2. Actions:

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

3. Text approved by ETSI TC BRAN and included in draft HS EN 303 687

4.2.6.2.2.x 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 equipment 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*.

The *EDT* is proportional to the equipment's maximum configured transmit power (P_H):

$$\text{For } P_H \leq 14 \text{ dBm:} \quad EDT = -[76 \text{ or } 75] \text{ dBm/MHz}$$

$$\text{For } 14 \text{ dBm} < P_H \leq [23 \text{ or } 24] \text{ dBm:} \quad EDT = -85 \text{ dBm/MHz} + ([23 \text{ or } 24] \text{ dBm} - P_H)$$

$$\text{For } P_H \geq [23 \text{ or } 24] \text{ dBm:} \quad EDT = -85 \text{ dBm/MHz}$$

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.

4. Explanatory note:

Values expressed in square brackets (“[” or “]”) indicate values that ETSI TC BRAN has not finally decided about.

5. Date of next meetings of the originator:

ETSI TC BRAN #107, 2020-09-24 until 2020-10-02, online