IEEE 802.11 Coexistence SC

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| Proposed LS to ETSI ERM TG11 in response to a LS wrt “IEEE 802.11 section in TR 103 665 – 2.4 GHz SRDoc” |
| Date: 20200707 |
| Editor: |
| Name | Affiliation | Email |
| Andrew Myles | Cisco | amyles@cisco.com |
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Abstract

*This document contains a draft Liaison Statement to ETSI ERM TG11 in response to a Liaison Statement wrt “IEEE 802.11 section in TR 103 665 – 2.4 GHz SRDoc”. It will be considered by the IEEE 802.11 Coexistence SC at its virtual meeting in July 2020.*

## Proposed LS to ETSI ERM TG11

TO:

* Edgard Vangeel, ETSI ERM TG11 Chair, evangeel@cisco.com

CC:

* Holger Butscheidt, ETSI ERM Chair, Holger.Butscheidt@BNetzA.de
* Andrew Myles, IEEE 802.11 Coexistence Standing Committee Chair, amyles@cisco.com
* Paul Nikolich, IEEE 802 LMSC Chair, p.nikolich@ieee.org

SUBJECT: **LS from ETSI ERM TG11 wrt “IEEE 802.11 section in TR 103 665 – 2.4 GHz SRDoc”**

DATE: xx July 2020

Dear Edgard,

The IEEE 802.11 Working Group (WG) would like to thank ETSI ERM TG11 for their Liaison Statement (ERMTG11(20)000018r2) in which you highlight the ongoing work in ERM TG11 relating to the System Reference Document on 2.4 GHz Wideband Data Transmission Systems (TR 103 665).

As requested, the WG has conducted a review of clause 8.1 in the TR 103 665 draft and the proposal in ERMTG11(20)000016 from Qorvo for a new clause 8.1.4 on “*Current challenges*” for IEEE 802.11.

* Various IEEE 802.11 WG members have reviewed the clause 8.1 in the TR 103 665 draft. Few issues with the draft text were highlighted, although for many participants it was difficult to make an informed judgement on the suitability of the material as input into preparation for the 8th update of the European Commission Decision on SRDs. A few suggestions for the text in clause 8.1 are recorded in an appendix to this Liaison Statement.
* The IEEE 802.11 WG notes that the challenges asserted in ERMTG11(20)000016 justifying a new clause 8.1.4 are not recognised by the WG as important challenges that need to be addressed at this time. The WG recommends that the proposal for a new clause 8.1.4 is not accepted on the basis that the associated proposed regulatory change for a per transmitter power limit could unnecessarily risk the ongoing success of the 2.4 GHz band in Europe.

The WG notes in reviewing the TR 103 665 draft that some stakeholders seem to believe the existing Power Density limit of 10 dBm/MHz is too restrictive, particularly for systems with narrower bandwidths. The WG notes that the acceptance of any proposal to remove or relax existing Power Density requirements for non-hoppers could have a serious adverse effect on Wi-Fi operations in the 2.4 GHz band in Europe. A wide band Wi-Fi device would be subject to interference from the full power of a narrower band device, whereas the narrower band device would only be subject to interference from a portion of the power of a wide band Wi-Fi device.

The existing 2.4 GHz band regulations were designed to enable the operation of wide-band systems using polite access mechanisms. The regulations have been in place for more than 20 years and have enabled the development of multiple multi-billion-dollar industries with significant socio-economic impact across Europe. The WG notes that it is not aware of any justification to put this success at risk by allowing any significant regulatory changes, including to the Power Density limits. The WG suggests using any new clause 8.1.4 discussing “*Current challenges*” for IEEE 802.11 to describe the potential risk from the removal of Power Density requirement for non-hoppers.

Yours sincerely,

Dorothy Stanley
Chair, IEEE 802.11 Working Group
dorothy.stanley@hpe.com

#### Appendix

* 8.1.1: Change to “*This includes desktop PCs, laptops, IoT devices, printers and other ancillary devices*, …”
* 8.1.1: Change to “*One of the latest additions to the IEEE 802.11 [i.14] standard is the IEEE 802.11ax amendment …*”
* 8.1.1: Change to “*In fact, the IEEE 802.11 committee has started to look into the next evolution of “Wi-Fi” known as the Extremely High Throughput IEEE 802.11be amendment.*”
* 8.1.2.1.2: Delete “*This regulatory limit is more restrictive in Europe compared to the US*” because it does not appear to be relevant
* 8.1.2.1.4.3: Change to “The theoretical lowest data rate is 1 Mbps (DSSS mode) will result in a maximum transmission time of about 18.6 msec. However, this mode is hardly used. The lowest OFDM rate (6 Mbps) will result in the maximum transmission time being reduced to about 3.1 ms”
* <add additional suggestions, maybe based on Dick Roy’s comments>