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Wireless LANs

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| Proposal for a workshop between IEEE 802.11 WG and 3GPP related to the co-existence of 802.11ax and NR-U in the 6 GHz unlicenced spectrum | | | | |
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Abstract

This document contains a proposal for a workshop between IEEE 802.11 WG and 3GPP RAN related to the co-existence of 802.11ax and NR-U in the 6 GHz unlicenced spectrum.

# Background

The successfull deployment of NR-U and 802.11 technologies in the sub-7 GHz unlicensed spectrum relies on an efficient and fair access to the spectrum. 802.11 technologies are treated as incumbent in the 5 GHz band by standard bodies (i.e. 3GPP) and regulatory entities (i.e. ETSI BRAN), ensuring a ‘fair coexistence’ between 802.11 and newly developed (LTE-LAA) or future technologies (NR-U). However, the 6 GHz band is often considered as a green field amoung 3GPP community, where 802.11ax should expect no “incumbency” based protection.

If proper actions are not taken, it could result in a sub-optimal use of the spectrum while postponing the definition of adaptativity mechanisms to regulatory entities as 6 GHz unlicenced bands become available. This is highlighting the need for a close collaboration between the 3GPP and the IEEE 802.11 to agree on a fair and efficient access to the the 6 GHz spectrum. The conduct of a joined workshop is proposed with a tentative agenda and schedule provided below.

# Objectives

The objectives of the workshop are as follows:

* To raise the awareness of both the 3GPP and the IEEE 802.11 that the 6 GHz band is not a green field
* To define the coexistence methodology to be used for the 6 GHz band by 3GPPand IEEE
* To evaluate the possible impacts of no action
* To review coexistence mechanism proposals including the use of 802.11a or new preamble, ED only, or status quo (5 GHz rules)
* To agree on a fast communication channel between the 3GPP & the IEEE 802.11

# Possible Date/Location

The timeline for 3GPP RAN plenary and IEEE 802.11 sessions are provided below. The workshop could be either collocated with the 3GPP RAN session in December 2018 or the IEEE 802.11 session in November 2018. Alternatively, a dedicated worshop could be conducted outside these dates with a location and date yet to be defined.

