IEEE P802.11  
Wireless LANs

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| Draft LS from 802.11 to 3GPP RAN and SA on IMT-2020 | | | | |
| Date: YYYY-MM-DD | | | | |
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Abstract

This document contains draft text for a possible liaison by IEEE 802.11 to 3GPP RAN and SA in relation to the inclusion of 802.11 radio interfaces in the 3GPP proposal to IMT-2020.

Rev 1 – Target this LS to be at the 802.11 level. Remove all references to the 802.11 air interface. Clarify that 802.11 would be using unlicensed spectrum. State that 802.11 would like to work with 3GPP to improve how WLAN and LTE/NR can work together to provide an improved wireless networking experience for IMT-2020. Request 3GPP RAN’s thoughts on how 802.11 and 3GPP RAN can work together.

Rev 2 – Add additional relevant use cases. Add references to WLAN integration with 3GPP core network (in addition to RAN aggregation). Request response from SA (in addition to RAN). Typo fixes.

To: 3GPP RAN

3GPP SA

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CC: 802 EC

Subject: IEEE 802.11 Working Group Liaison on the role of WLAN in IMT-2020

Date: 2016-09-16

**Discussion:**

The IEEE 802.11 Working Group (WG) invites 3GPP RAN and SA to consider that 802.11 WLAN in unlicensed spectrum may provide a practical low cost means of meeting the performance requirements for some IMT-2020 use cases. IMT-2020 use cases that may benefit from the use of WLAN include the high data rate indoor hotspot use case and potentially other high data rate use cases, as well as low latency and high device density IoT type use cases. 802.11 WLAN currently provides 3GPP users with high data rate offload capability in many existing 3GPP networks. Recently completed 3GPP RAN WIs on LWA and LWIP and the currently active eLWA WI will provide improvements in the way WLAN (802.11) resources can be aggregated with the 3GPP radio interface resources in the 3GPP network. In addition, the recently completed 3GPP SA WI on NBIFOM will provide improvements in the integration of WLAN access with the 3GPP core network. IEEE 802.11 believes that it is possible to further improve on the way WLAN integrates with 3GPP RAN (LTE and NR) and CN (EPC and Next Generation CN), to meet the performance goals of IMT-2020 and we believe that doing so would be mutually beneficial to both 3GPP and IEEE 802.11. Hence, the IEEE 802.11 WG would like to investigate ways that the IEEE 802.11 WG and 3GPP can work together towards this goal. The IEEE 802.11 WG is hopeful that 3GPP will also see the benefit in working with the IEEE 802.11 WG towards improving the integration of WLAN in the 3GPP network, thus enabling WLAN in unlicensed spectrum to meet some requirements for some of the IMT-2020 use cases. IEEE 802.11 WG invites 3GPP to respond to this liaison with the 3GPP opinion on the desirability of improving WLAN integration for IMT-2020 and suggestions on how 3GPP and the 802.11 WG can work together to this end.

**Actions:**

To 3GPP RAN:

The 802.11 WG respectfully asks 3GPP RAN and SA to:

* Provide the 3GPP RAN and SA opinions, respectively, on the desirability of improving WLAN integration to assist 3GPP in providing alternative ways of meeting some IMT-2020 use case requirements.
* Provide suggestion on how 3GPP RAN and the 802.11 WG can work together to improve WLAN integration.

**Date of Next IEEE 802.11 WG Meetings:**

802 Plenary #160 November 6-11 2016 in San Antonio, TX, USA

802 Interim #161 January 15-20 2017 in Atlanta, GA, USA

Sincerely,

Adrian Stephens  
IEEE 802.11 Working Group Chair

**References:**

1. **Recommendation ITU-R M.2083-0 (09/2015), “IMT Vision – Framework and overall objectives of the future development of IMT for 2020 and beyond”, M Series, Mobile, radiodetermination, amateur and related satellite services**