IEEE P802.11
Wireless LANs

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| Reply LS to Reply LS from 3GPP RAN2 on Estimated Throughput (11-17/315r0) |
| Date: 2017-05-04 |
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Abstract

This document contains draft text for a proposed liaison statement (LS) response by IEEE 802.11 to the 3GPP RAN2 reply LS R2-1702389 (11-17/315r0), received by 802.11 on 03 March 2017. This LS response thanks RAN2 for their response to our reply LS to RAN2 and provides a response to the 3GPP RAN WG2 requirements for WLAN performance metrics provided. Actions requested by 3GPP RAN WG2 in the LS:

1. RAN2 would like to ask IEEE to consider whether accuracy requirements can be defined for the throughput metric.
2. RAN2 would like to ask IEEE to consider whether additional metrics are beneficial for the above functionalities and whether additional metrics and corresponding accuracy requirements can be defined.
3. If IEEE agrees on additional metrics, RAN2 asks IEEE to provide definition of such metric(s), along with description whether it can be used for configuration (activation/deactivation), mobility or scheduling, along with accuracy requirements.

A fuller discussion of these actions is provided in the LS: 11-17/0315r0.

Rev 1 – of this document assumes that 802.11 TGmd will consider the RAN2 requested actions and will keep 3GGP RAN WG 2 informed as to progress made with regard to: establishing accuracy requirements for the throughput metric and defining additional metrics. This has yet to be agreed in TGmd. In addition, several editorial changes were made to improve readability and accuracy.

To: 3GPP RAN WG2
 3GPPliaison@etsi.org, 3GPP Liaisons Coordinator
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 richard.c.burbidge@intel.com – RAN WG2 Chair
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CC: Wi-Fi Alliance

Subject: IEEE 802.11 Working Group reply LS to 3GPP RAN2 Reply LS on Estimated WLAN Throughput

**Discussion:**

The IEEE 802.11 Working Group (WG) thanks 3GPP RAN WG2 for its reply Liaison Statement (LS) on Estimated WLAN Throughput, related to RAN WG2 Release 14 work item LTE-WLAN\_aggr-Core [1]. Prior related correspondence includes [2], [3], [4] and [5].

The LS asks the IEEE to:

* consider whether accuracy requirements can be defined for the throughput metric
* consider whether additional metrics are beneficial for the 3GPP features enumerated below
* consider whether additional metrics and corresponding accuracy requirements can be defined
* provide a definition of such metric(s), along with description whether it can be used for configuration (activation/deactivation), mobility or scheduling, along with accuracy requirements

The LS informs the IEEE that:

* if metrics are defined by IEEE, RAN2 intends to use the throughput metric or additional metrics for the 3GPP features enumerated below

The IEEE 802.11 WG is considering adding accuracy requirements to the 802.11 standard for the throughput metric and defining additional metrics to support 3GPP features for:

1. LWA activation/deactivation

2. Mobility across WLANs cells and

3. Traffic scheduling decisions such as forwarding to WLAN

To progress this work the 802.11 Task Group for Maintenance and Revision (TGmd) [6] has agreed to consider additions and changes to the 802.11 specification, to support the 3GPP features listed above. Please note that all 802.11 activity is participation driven, therefore the progress made toward this goal will depend on member contributions. IEEE 802.11 will keep 3GPP RAN WG2 advised as to IEEE 802.11’s progress and will provide an estimate of the scope and duration of this activity once these are determined.

**Actions:**

To 3GPP RAN WG2: None, at this time.

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

802 Plenary – 9-14 July 2017 in Berlin, Germany

802 Interim - 10-15 September 2017 in Waikoloa, Hawaii, USA

Sincerely,

Adrian Stephens
IEEE 802.11 Working Group Chair

**References:**

1. 3GPP RAN WG2 LS on “Reply LS on Estimated WLAN Throughput” (IEEE 802.[11-16/1384r0](https://mentor.ieee.org/802.11/dcn/16/11-16-1384-00-0000-liaison-from-3gpp-ran2-on-estimated-throughput.doc)) and (R2-1702389)
2. IEEE 802.11 LS on “Reply to Liaison from 3GPP RAN2 on Estimated Throughput 11-16-1384” (R2-1700673)
3. 3GPP RAN WG2 LS on “Estimated WLAN Throughput” ([IEEE 802.11-16/1384r0](https://mentor.ieee.org/802.11/dcn/16/11-16-1384-00-0000-liaison-from-3gpp-ran2-on-estimated-throughput.doc)) and ([R2-167306](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_95bis/Docs/R2-167306.zip))
4. IEEE Std 802.11-2016 -: “Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY)”
5. IEEE 802.11 LS on “Liaison Response followup to 3GPP TSG RAN WG2” (IEEE 802.[11-14/0936r3](https://mentor.ieee.org/802.11/dcn/14/11-14-0936-03-000m-liaison-response-followup-to-3gpp-tsg-ran-wg2.docx))
6. Revision to IEEE Standard 802.11-2016 (PAR: [802.11](https://development.standards.ieee.org/P989100033/par)) – approved 23 March 2017