IEEE P802.11  
Wireless LANs

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| Draft of 2nd Liaison response to NGMN | | | | |
| Date:2015-05-15 | | | | |
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Abstract

This document is the second response to the liaison (11-14-1366r0) from NGNM (Next Generation Mobile Networks).

To: NGMNc/o Klaus Moschner([klaus.moschner@ngmn.org](mailto:klaus.moschner@ngmn.org)) and

Philipp Diebert ([philipp.diebert@ngmn.org](mailto:philipp.diebert@ngmn.org))

Subject: Liaison on NGMN

Date: 2015-05-15

Dear Klaus and Philipp,

As a follow up to our January 16, 2015 response to your Liaison Statement of September 2, 2015, we would like to provide you with an update of the steps that IEEE 802.11 has taken regarding such Liaison Statement.

1. An initial overview of the “NGMN 5G White Paper” was presented to a subset of the IEEE 802.11 members as part of the on REG SC (Standing Committee) on March 12, 2015 in Berlin. At this meeting an action was taken to solicit volunteers for reviewing the 5G White Paper and provide comments.
2. A second overview of the “NGMN 5G White Paper” was presented to a larger audience at the IEEE 802.1 WNG (Wireless Next Generation) SC on May 12, 2015 in Vancouver.
3. Some initial comments on the “NGMN 5G White Paper” have been received and are listed here as feedback to the NGMN:
   1. According to the white paper the 5G is supposed to accommodate devices that are very different in their characteristics, e.g. sensors with limited power and perhaps limited rate capabilities, to smart phone and other potentially high speed devices. It was mentioned that single RAN and multiple RANs are possible. Would 5G define a single access method that fits all devices?
   2. The Business Model on page 19 doesn’t include customer billing. In particular would the customer be billed for the use of the license-exempt spectrum in the same way as he/she is billed for the licensed spectrum?
   3. There is no discussion on the coexistence of various technologies.
   4. On page 95, for M2M, 802.11ah is also working for IoT/M2M use cases. In that sense, it is recommended that technologies for small packet transmissions in the technology building blocks (Annex D, R2) should mention the activities on the IEEE 802.11 (TGah and TGax).
   5. Also on page 95, in addition to the signaling overhead issue of the small packet transmissions, the energy efficiency of the device should be analyzed because it is a key requirement of IoT/M2M market.
   6. Page 42: “Higher frequencies (e.g., centimetre and **millimetre waves**) and licence-exempt spectrum should be exploited to complement endeavours to use any spare bandwidth at lower frequencies and as a complement to the available exclusively licensed mobile spectrum resource.” Are the expectations that Licensed Assisted Access (LAA) currently being studied at the 3GPP at 5GHz will eventually use mmWave frequencies at, say, beyond 24GHz? If so, coexistence issues with 802.11ad and derivatives need to be considered as well.

We would also like to also inform you that the IEEE 802.11 is planning on a Panel Session on the NGMN 5G White Paper on July 14, 2015 in Waikoloa, Hawaii as part of the WNG SC meeting. Would it be possible for the NGMN to send a representative for this Panel Session event? Among the questions to be asked to the panel are:

1. Is 802.11 relevant to 5G?
2. Can 5G meet its goals without 802.11?
3. Is 802.11 sufficiently influential in those behind 5G?

Sincerely,