IEEE P802.11  
Wireless LANs

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| AANI July 2018 Meeting Minutes | | | | |
| Date: 2018-07-10 | | | | |
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**Abstract**

This document contains the [draft] minutes of the IEEE 802.11 AANI SC meetings held the week of 9 July 2018 in San Diego, CA.

**Chair: Joseph Levy, InterDigital**

# Monday 9 July 16:00

The Chair called the meeting to order at 16:00. The Chair introduced himself and called for a volunteer secretary for this meeting. Graham Smith (SR Technologies) volunteered.

The Chair presented Agenda slides 802.11-18/1039r1 which will be revised to r2. The Chair first noted the rules and procedures. The Chair then declared that the position of Vice Chair is open and Chair will not be present at next meeting.

The agenda on Slide 4 was described and then, without objection, approved.

The Chair presented the slides 5 - 7, guidelines, resources, participation,

The minutes of the May 2018 meeting were approved with no objection.

Per Slide 9, the Chair sought candidates for Vice Chair and Secretary. The Chair noted that he will not attend the September 2018 interim session and hopes for a Vice Chair to serve as Acting Chair at that session. No candidates were identified. The Chair invited interest and asked for potential Vice Chairs to contact him.

The Chair then reviewed the AANI Background, as per Slides 10-12.

The Chair then addressed Slide 13, Nendica status” chaired by Roger Marks, meeting 2 times this week.

Roger was then invited to present a report. Roger referred to Document 36 in 802.1 “Nendica Meeting Plan, 9-10 July 2018. Key meeting topics for this week are:

* Lossless Data Center Networks
* Flexible Factory IoT
* Background for opossibe new topics
  + IEEE Std 802.1CM-2018 (Time Sensitive Networking for Fronthaul)
  + TIA Smart Buildings Program

**Contributions**

**First Contribution’**

18/1240r0 “Benchmarking of 802.11ax against eMBB Indoor Hotspot requirements using IMT-2020 simulation methodology” was presented by Sindhu Verma (Broadcom).

This presentation is a continuation of the benchmarking of 802.11ax capabilities vis-à-vis the IMT-2020 requirements for eMBB Indoor Hotspot and Dense Urban scenarios ([1] and [2]).

Conclusions:

* 802.11ax in its current configuration, satisfies the IMT-2020 Indoor Hotspot DL 5%ile and Average spectral efficiency requirements of 0.21 bits/s/Hz and 6.75 bits/s/Hz respectively.
* 802.11ax in its current configuration, satisfies the IMT-2020 Indoor Hotspot DL 5%ile and Average spectral efficiency requirements of 0.3 bits/s/Hz and 9 bits/s/Hz respectively.
* 802.11ax in its current configuration, satisfies the IMT-2020 Indoor Hotspot DL and UL User Experience Data requirements of 100 Mb/s and 50 Mb/s respectively
* The Area Traffic Capacity requirement of 10 Mbps/m2 can be met by 802.11ax with an aggregate DL bandwidth of 501 MHz, the bandwidth being aggregated over all DL TRxPs.
* The simulations show that 802.11ax in its current configuration, satisfies the IMT-2020 Indoor Hotspot mobility requirement of 1.5 bits/s/Hz.

Finally, the conclusion is that

* **802.11ax even in its currently standardized form satisfies the IMT-2020 requirements for Indoor Hotspot.**

Questions:

Scott Bloom Microsoft. Agree with this but what do we do with it? We are beyond the end of the process and this may be destructive and the operators will hate us. Chair, speaking personally, responded there is probably not a consensus to submit this as an IMT 2020 proposal, but could share with 3GPP.

Chair asked for any other points of view.

Sindhu asked if any technical questions on the work and simulations. Important to note that current configuration does satisfy the indoor hotspot requirements.

**Second Contribution**

[11-18/1243r0](https://mentor.ieee.org/802.11/dcn/18/11-18-1243-00-AANI-3gpp-update-status-release-15-june-2018.pptx) “3GPP Update/Status (Release 15 – June 2018)” (Joseph Levy)

This document provides a brief update of 3GPP, specifically the activity of 3GPP SA TSG and 3GPP CT TSG, related to 3GPP 5G use cases and “Non-3GPP Access Networks”.

* 3GPP TS 24.502 V15.0.0 (2018-06)  
  “3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Access to the 3GPP 5G Core Network (5GCN) via Non-3GPP Access Networks (N3AN); Stage 3 (Release 15)” [1]
* 3GPP TS 22.261 V15.5.0 (2018-06)  
  “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Service requirements for the 5G system; Stage 1 (Release 15)” [3]

Joseph asked if any questions on these documents and the direction which they point us in? No response

Chair then referred to Slide 15 of 18/1039 **Topics for Contribution**

Teleconferences:

Chair saw no need to schedule any as at this moment there are no reactions to the Topics for Contributions.

AANI is contribution driven. Note: IMT-2020 proposals are due June 2019

Will request just one session for next meeting in Waikoloa.

“Any further comments”

Shubhodeep Adhikari, Broadcom - there is another use case, dense urban. Do we want to do the evaluations? Chair responded that he needs guidance from the floor and members. Until there is a proposal can’t address.

Sindhu Verma – does the group endorse these simulations? Chair asked if a straw poll might be needed.

Straw Poll: “Do you endorse the EMBB indoor hotspot self evaluation results for 802.11ax as presented in 18/1240r0 “Benchmarking of 802.11ax against eMBB Indoor Hotspot requirements using IMT-2020 simulation methodology”

Questions?

Rolf Devegt (Qualcomm) – What does “yes” mean? What are the implications?

Sindhu – Agrees with the results, or not.

George (Hauwei) – No cross check. Response from Chair is that authors have spelled out very clearly and shared assumptions. No one has come forward to contrary.

Scott Bloom Microsoft – this is a hand grenade by a company that does not turn up in Geneva.

Sindhu – Clearly goal was to evaluate and shame that no one else came forward to carry out the evaluations. Is this effort simply wasted?

Rolf – I hear that do we agree with validity of the analysis? This is different to the question as put.

Change Poll to

Straw Poll: “Do you agree with the validity of the conclusions of the EMBB indoor hotspot self evaluation results for 802.11ax as presented in 18/1240r0 “Benchmarking of 802.11ax against eMBB Indoor Hotspot requirements using IMT-2020 simulation methodology”

Results:

Yes: 22

No: 0

Abst:20

Chair asked if any other straw polls?

Sindhu – is anyone else planning to produce results or comment on these results.

Chair asked for indication(s), none resulted.

Without objection, the Chair announced adjournment at 17:18.