IEEE P802.11
Wireless LANs

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| AANI Conference Call Minutes  |
| Date: 2017-11-27 |
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**Abstract**

This document contains the minutes of the IEEE 802.11 AANI conference call held on 11/27/2017.

**Chair: Joseph Levy, InterDigital**

**Vice Chair: Roger Marks, EthAirNet Associates**

**Meeting Secretary: Sigurd Schelstraete, Quantenna Communications**

**Participants** (as recorded from joinme – list may be incomplete)

Joe Levy (Interdigital)

Roger Marks (EthAirNet)

Sigurd Schelstraete (Quantenna)

Rakesh Taori (PHAZR)

George Calcev (Huawei)

Jiayn Zhang

Jun Hoon Suh (Huawei)

Necati Canpolati (Intel)

Osama Aboul-Magd (Huawei)

Paul Nikolich

Song An

Sue Leicht (NSA)

Sungeun Lee (Cypress)

Yonggan

And a number of anonymous callers

**Meeting minutes**

The Chair called the meeting to order at 11:00AM EDT.

The agenda document is: <https://mentor.ieee.org/802.11/dcn/17/11-17-1819-02-AANI-aani-sc-agenda-27-november-2017-teleconference.pptx>

The proposed agenda was approved without objection

Patent policy was reviewed.

Participation guidelines were reviewed.

The chair provides the background for the current discussion. Following a motion in the Orlando F2F meeting, AANI is invited to prepare draft documents for the Jan IEEE interim meeting with the goal of preparing a submission of IEEE 802.11 technology as a candidate RIT to IMT-202..

The following submissions are considered for this meeting:

1. [11-17/1820r0](https://mentor.ieee.org/802.11/dcn/17/11-17-1820-00-AANI-imt-2020-usage-scenarios-test-environments-and-evaluation-configurations.pptx) - IMT-2020 Usage Scenarios, Test Environments and Evaluation Configurations – Roger Marks (EthAirNet Associates)
	* See <https://mentor.ieee.org/802.11/dcn/17/11-17-1820-00-AANI-imt-2020-usage-scenarios-test-environments-and-evaluation-configurations.pptx>
2. 11-17/1823r0 - IMT-2020 Requirements and Thoughts on Submissions [–](https://mentor.ieee.org/802.11/dcn/17/11-17-1814-00-AANI-preparation-for-imt-2020-5g-candidate-submission.pptx) Rakesh Taori (Phazr)
	* See <https://mentor.ieee.org/802.11/dcn/17/11-17-1823-00-AANI-imt-2020-requirements-and-thoughts-on-submissions.pptx>

[**11-17/1820r0**](https://mentor.ieee.org/802.11/dcn/17/11-17-1820-00-AANI-imt-2020-usage-scenarios-test-environments-and-evaluation-configurations.pptx) **- IMT-2020 Usage Scenarios, Test Environments and Evaluation Configurations – Roger Marks (EthAirNet Associates)**

This submission summarizes usage scenarios, test environments and evaluation criteria in the context of the IMT-2020 process.

IMT-2020 specifies 3 usage scenarios: eMBB, mMTC and URLLC.

A Test environment consists of one usage scenario and a given geographic environment. There are a total of 5 such test environments.

In order to qualify, a RIT needs to fulfill at least three test environments, two of which in the eMBB usage scenario. However, it also needs to fulfil the minimum requirements of all five test environments.

For each test environment, a number of evaluation configurations is defined. The presenter goes over the differences between some of the evaluation configurations. One evaluation configuration can be chosen per test environment. However, there are additional special requirements for e.g. mobility and average spectral efficiency.

In conclusion, there is a wide range of possibly extreme conditions and it may difficult for a single RIT to meet all demands.

The presentation issues a call to action to review information provided in this submission and to consider a set of IEEE technologies that will satisfy the full range of requirements.

**11-17/1823r0 - IMT-2020 Requirements and Thoughts on Submissions** [**–**](https://mentor.ieee.org/802.11/dcn/17/11-17-1814-00-AANI-preparation-for-imt-2020-5g-candidate-submission.pptx) **Rakesh Taori (Phazr)**

This submission starts with a similar review of key terms in the IMT-2020 (usage scenario, test environment, evaluation configuration, …). It groups the requirements in a number of categories (Mobility, Range, Number of antenna elements, Spectral efficiency, Reliability, …).

The presenter further points out that the 11ac/ax numerology matches the ones considered for 5G, such as Verizon 5GTF and 5G-NR.

Mobility needs further evaluation and may be the most difficult feature. Range requirements are not restricted to power levels available in unlicensed bands. Instead, range can be met with higher EIRPs that are allowed in the bands under discussion.

The number of Tx/Rx elements are not limited by the standard, but are implementation specific.

The presentation ends with offering some thoughts on contributions. While the submission period only ends in June 2019 and strictly speaking nothing is due before that, the presenter believes that it may be beneficial to make submission indicating IEEE 802’s intent to submit a proposal, an overview of how the proposal works, configurations that will be tested, etc. …

Q&A:

The question is asked whether there is any potential downside to making an early submission to ITU. One participant believes that we first need to come to understanding what the proposal would be and that there needs to be a consensus first that there is a configuration that will work. The chair notes that if we go in too early, there is a risk that initial claims may have to be retracted later. This situation can probably be mitigated.

The chair summarizes the proposed way forward: make a submission to ITU along the lines of what was discussed in document 11-177/1823. This includes:

* Intent to submit
* Overview of proposal
* Configurations
* Decide who will present at ITU.

A call is made for volunteers, but no explicit responses are received at this time. Someone notes that people may have volunteered via email, but apparently these emails have not reached the reflector. People are invited to review the 3GPP and DECT presentations (made during the IMT-2020 workshop in October) as an example. Links to the workshop will be sent out by chair.

The chair reviews the schedule of calls and F2F meetings.

The question is asked what needs to be approved by 802.18. The chair clarifies that the submission will have to go through the IEEE liaison and that it is therefore better to submit any presentation to 802.18 for review of content and format.

The chair adjourns the meeting at 12:05 pm.