IEEE P802.11  
Wireless LANs

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| IEEE 802.11 AMP TIG teleconference minutes for Oct 22 | | | | |
| Date: 2022-10-25 | | | | |
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Abstract

This document includes minutes of AMP TIG Session of October 2022 IEEE 802 teleconference meetings.

Version Tracking:

R0: Creating minutes.

# Tuesday 25 October 2022 @ 10:00-12:00 EST

## Opening (IEEE 802.11-22/1801r1)

* 1. Call to order 10:00 EST.
  2. Chair instructed members to record attendance in IMAT.
  3. Chair introduced the patent policy, copyright policy and other meeting rules (slides 3-13).
  4. No response to the call for patents.
  5. Chair reviewed current AMP TIG teleconference submissions. Chair/Secretary and Agenda of Teleconference (slides 14 ~ 16).
  6. Chair call for approval of the agenda of AMP session.

## Agenda (IEEE 802.11-22/1801r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/22/11-22-1801-01-0amp-amp-tig-tc-agenda-for-oct-2022.pptx. (Slide 16)
     + Call meeting to order and remind the group to record attendance on imat.ieee.org
     + IEEE-SA IPR policies and meeting rules
     + Approval of agenda
     + Call for comments to tech report draft (11-22/1562r1)
       - Call for comments was announced on Oct 08 in reflector
     + Contribution presentation and discussion
       - 11-22/1800, New use cases for AMP IoT devices smart-grid, Yinan Qi (OPPO)
       - 11-22/1799, On energy harvesting and the differentiation with RFID, Weijie Xu (OPPO)
     + Any other business?
     + Adjourn
     + No objection, Agenda approved.

## Call for comments to tech report draft (11-22/1562r1)

Chair introduced the email announcement of call for comments to tech report in reflector and encourage the group to review the tech report and provide comments.

## Contribution discussion

* 1. 11-22/1800, New use cases for AMP IoT devices smart-grid, by Yinan Qi (OPPO):

Q(uestion): How much power need for Sensor of the AMP device.

A(nswer): It may depend on the kind of sensor. We also have data on needed power in earlier contributions.

Q(uestion): Would be good to provide exact power.

A(nswer): In some case could be around few hundreds micro-Watt.

Q(uestion): Number of APs needed for deploying into the area.

A(nswer): Depending on the area size and the communication distances of AP with AMP devices. For area like 100 meters wide, few dozen APs needed. It also depends on the radio environment.

Q(uestion): AMP focus on indoor and small distance. How you deal with long distance for outdoor.

A(nswer): Some proto types shown, in outdoor case, it can reach long distance. And those are in lower band like below 1GHz. The AMP can have back scattering or active transmission. Active transmission can boost distance.

* 1. Presentation of 11-22/1799, On energy harvesting and the differentiation with RFID, by Weijie Xu(OPPO)

Q(uestion): Would you look at the case that upgrading the current RFID devices to meet the use case.

A(nswer): May be feasible case by case. But there are 2 important factors: power harvesting & backscattering. RFID may not satisfy wide band harvesting for more power. Backscattering on multicarrier is also not supported by RFID. If the use case doesn’t require those, it can apply RFID.

C(omment): The contribution gives very good insight on RFID and why enhancement. Wifi AMP could have higher efficiency for reusing current WiFi technologies.

Q(uestion): Difference between RFID and AMP IoT.

A(nswer): In some case the power harvest by AMP IoT can be higher, by multi-carrier etc.

Q(uestion : The topology for the power grid can be generalized, in stead of showing much about power plant devices. Other use case could also do the same. This will help for 802.11 standardization.

A(nswer): The use cases could be the earlier step. Topologies can be provided based on the agreed use cases. We can have more related information in the TR latter.

Q(uestion): To chair. Would consider discussing those in TIG or SG

A(nswer): By Chair. The TIG have broader scope to discuss, including use cases. We will work on further on the linkage between use cases and WiFI technologies in the TR.

## Closing

* 1. The Chair adjourned the session at 11:45 EST.