IEEE P802.11  
Wireless LANs

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| Wireless Next Generation (WNG) Standing Committee Meeting Minutes for November-2022 Bangkok Hybrid Meeting | | | | |
| Date: November 15, 2022 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Lei Wang | Futurewei / Huawei | 2220 Central Expressway, Santa Clara, CA 95050, USA | +1-858-205-7286 | Lei.wang1@futurewei.com |
| Jim Lansford | Qualcomm | 7775 N Topeka Ave  Cascade, CO 80809, USA | +1-719-286-8660 | Jim.lansford@ieee.org |

Abstract

Meeting Minutes for the WNG SC meeting held in mixed-mode with in-person meeting in Bangkok, Thailand, and with electronic meeting access, on November 15th, 2022.

**WNG Meeting: November 15th, 2022, 8:00am to 10:00am Bangkok Time**

Chair: Jim Lansford (Qualcomm)

Vice Chair & Secretary: Lei Wang (Futurewei / Huawei)

**Meeting Agenda:**

The meeting agenda for WNG 2022-November meeting is shown below, and also published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/22/11-22-1734-01-0wng-agenda-for-wng-sc-2022-november.pptx>

* Call Meeting to Order
* Agenda approval
* Attendance reminder
* Documentation reminder
* Announcements
* Approval of Previous meeting minutes
  + Minutes from September 2022 WNG Meeting
* Presentations
  + Tuesday 15 November 2022, 8:00-10:00 Bangkok Time
* Plans for January 2023
* Adjourn

In addition, the detailed agenda with the list of presentations is included in the agenda file, and also as shown below:

* Announcements
* Approval of Previous meeting minutes
  + Minutes from September:
    - <https://mentor.ieee.org/802.11/dcn/22/11-22-1607-00-0wng-wng-meeting-minutes-2022-september-waikoloa-meeting.docx>
* Presentations
  + “S1G+,” Dave Halasz (Morse Micro)
  + “Roaming handoff time reduction to improve user experience,” Xiaokun Hu (Ruijie Networks Inc)
  + “Support for high-bandwidth and multi-Tx CFR capture,” Lihua Zhu (Ruijie Networks Inc)
  + “User offloading problem between multiple APs,” Gang Xie (BUPT)
* Plans for January 2023
  + Chair will make a call for presentations in advance
* Adjourn

**Meeting Minutes:**

* Chair called the meeting to order at 8:00am Bangkok time on Tuesday, November 15th, 2022, and showed the group the agenda file.
* Chair reminded the group to record the attendance of this meeting by using the IEEE Attendance Tool. The link to the attendance tool is also provided in the chat window of the electronic meeting.
* Agenda approval:

<https://mentor.ieee.org/802.11/dcn/22/11-22-1734-01-0wng-agenda-for-wng-sc-2022-november.pptx>

* The agenda was approved by unanimous consent.
* Chair also noted the affiliation FAQ, anti-trust FAQ, ethics code, IEEE 802.11 policies and procedures, and IEEE 802 policies and procedures.
* Chair covered the voting rules for WNG SC, being a standing committee.
* Approval of previous meeting minutes for September WNG meeting.
  + Minutes from 2022-September WNG Meeting

<https://mentor.ieee.org/802.11/dcn/22/11-22-1607-00-0wng-wng-meeting-minutes-2022-september-waikoloa-meeting.docx>

* + The 2022-September WNG SC meeting minutes was approved by unanimous consent.
* Attendance:
  + In the meeting room: ~ 85.
  + Webex attendance: 164 (at the peak)
  + IMAT attendance: 174.
* Presentation #1: “S1G+,” Dave Halasz (Morse Micro)

[https://mentor.ieee.org/802.11/dcn/22/11-22-1831-00-0wng-s1g.pptx](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F22%2F11-22-1831-00-0wng-s1g.pptx&data=05%7C01%7Clei.wang1%40futurewei.com%7C7044fa1930f1445c4c6408dac52b05b4%7C0fee8ff2a3b240189c753a1d5591fedc%7C1%7C0%7C638039085824278518%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=G5mC1d3TD4gcEqzaM2WEWDd4pghoRsxys96ncB9Pzbw%3D&reserved=0)

* + Dave presented the contribution in-person.
  + Summary of Discussion
    - Questioned how much bandwidth can be skipped by puncturing in 2MHz in Sub 1 GHz band, and also questioned the goals of increasing throughputs as Sub 1 GHz operation is designed for long range and low power IoT applications.
    - Clarified that this presentation is to stimulate discussion. The proposed Study Group will define scope. Several features are proposed to be added to 11ah to expand the use cases. The proposed increasing throughput is intended to enable new applications in Sub 1 GHz band, e.g., video, currently not in 802.11ah.
    - Indicated that 11ah is available in Japan, and would support to start next-gen discussion for Sub 1 GHz.
    - Suggested to identify the market feedback about 11ah adoption, e.g., the pain points.
    - Discussed where is the right place to conduct further discussion/study on this topic with 4 proposals: forming a Study Group (SG), forming a Topic Interest Group (TIG), TGm (IEEE 802 maintenance Task Group), and 802.11 AMP TIG.
    - Had two straw polls as described below.
  + Straw Poll #1: “Do you agree to the formation of a Study Group to develop a PAR and CSD for addition of functionality from existing PHYs, such as 1024-QAM, Uplink MU-MIMO and puncturing to Sub 1 GHz operation, to enable increased throughput operation?*”*
    - Straw Poll Result (Webex poll): 39 yes, 48 no, 41 abstain, 35 no-answer
  + Straw Poll #2: “Do you agree to develop the addition of functionality in TGm from existing PHYs, such as 1024-QAM, Uplink MU-MIMO and puncturing to Sub 1 GHz operation, to enable increased throughput operation?”
    - Straw Poll Result (Webex poll): 28 yes, 49 no, 48 abstain, 43 no-answer.
  + After the straw polls, 802.11 WG chair suggested the group to focus on two questions below sequentially:
    1. Whether or not to do the proposed work?
    2. Where to do it?
* Presentation #2: “Roaming handoff time reduction to improve user experience,” Xiaokun Hu (Ruijie Networks Inc)

<https://mentor.ieee.org/802.11/dcn/22/11-22-1874-02-0wng-roaming-handoff-time-reduction-to-improve-user-experience.pptx>

* + Xiaokun presented the contribution remotely.
  + Summary of Discussion
    - Suggested this is a good topic for UHR SG.
    - Pointed out that Current implementations vary in performance, and suggest the group to take a deeper look.
* Presentation #3: “Support for high-bandwidth and multi-Tx CFR capture,” Lihua Zhu (Ruijie Networks Inc)

<https://mentor.ieee.org/802.11/dcn/22/11-22-1852-02-0wng-support-for-high-bandwidth-and-multi-tx-cfr-capture.pptx>

* + Lihua presented the contribution remotely
  + Summary of Discussion
    - Clarified that CFR = Channel Frequency Response.
    - Clarified that “set priority” on slide 7 means that CFR is given a higher priority than data traffic.
    - Suggested the contributors to bring this contribution to TGbf.
* Presentation #4: “User offloading problem between multiple APs,” Gang Xie (BUPT))

[https://mentor.ieee.org/802.11/dcn/22/11-22-1905-00-0wng-user-offloading-problem-between-multiple-aps.pptx](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F22%2F11-22-1905-00-0wng-user-offloading-problem-between-multiple-aps.pptx&data=05%7C01%7Clei.wang1%40futurewei.com%7C7044fa1930f1445c4c6408dac52b05b4%7C0fee8ff2a3b240189c753a1d5591fedc%7C1%7C0%7C638039085824278518%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=kFp%2BRfIG4SQCDItBntHATCNCDLLsgE1W9fTDawR2pWA%3D&reserved=0)

* + Mengshan presented the contribution remotely.
  + Summary of Discussion
    - Pointed out the presented file is not in IEEE 802.11 contribution file format; and clarified that the version on the 802.11 file server is in the right format.
    - Discussed that the identified problem has solutions in IEEE 802.11. AP’s can communicate out of band to coordinate loading. Also, Multi-AP has addressed this problem.
* Plans for January 2023:
  + Call for contributions: WNG chair will issue a call for contributions before 802.11 2023-Janjuary meeting.
* Any other business
  + There is a question from a member in the meeting room: noticed there is another newly uploaded contribution in WNG website, why not presented here in WNG meeting?
  + The answer is that there is no presentation request for it. The WNG SC leaders will reach out to the contributor(s) after this meeting. If needed, will schedule the corresponding presentation in January WNG meeting.
* Adjourned at 9:30am Bangkok Time.