IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Wireless Next Generation (WNG) Standing Committee Meeting Minutes for March-2022 Electronical Meeting | | | | |
| Date: 03-08-2022 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Lei Wang | Futurewei | 2220 Central Expressay, 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 electronically, on March 8th, 2022.

**WNG Meeting: March 8th, 2022, 11:15am to 1:15pm ET**

Chair: Jim Lansford (Qualcomm)

Vice Chair & Secretary: Lei Wang (Futurewei)

**Meeting Agenda:**

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

<https://mentor.ieee.org/802.11/dcn/22/11-22-0281-01-0wng-agenda-for-wng-sc-2022-march.pptx>

* Call Meeting to Order
* Agenda approval
* Attendance reminder
* Documentation reminder
* Announcements
* Approval of Previous meeting minutes
  + Minutes from January 2021 WNG Meeting
    - <https://mentor.ieee.org/802.11/dcn/22/11-22-0106-00-0wng-wng-meeting-minutes-2022-january-electronic-meeting.docx>
* Presentations
  + Tuesday 8 March 2022, 11:15 – 13:15 EST
* Plans for May 2022
* Adjournment

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

* Announcements
* Approval of Previous meeting minutes
  + Minutes from January:
    - <https://mentor.ieee.org/802.11/dcn/22/11-22-0106-00-0wng-wng-meeting-minutes-2022-january-electronic-meeting.docx>
* Presentations
  + “Overview of Wi-Fi 6/6E for Industrial IoT: Enabling Wi-Fi determinism in an IoT world” – Bruno Tomas, et al (Wireless Broadband Alliance)
  + “Making the Case for Open, Softwarized, Data-Driven 802.11 Networks” – Francesco Restuccia (Northeastern University)
  + “Considerations of Next Generation Beyond 11be” – Jianhan Liu (Mediatek)
  + “Look ahead to next generation – part 2” – Ming Gan (Huawei)
* Plans for May 2022
  + Chair will make a call for presentations in advance
* Adjourn

**Meeting Minutes:**

* Chair called the meeting to order at 11:15am ET on Tuesday, March 8th, 2022.
* 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/22/11-22-0281-01-0wng-agenda-for-wng-sc-2022-march.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
  + Minutes from 2022-January WNG Meeting

<https://mentor.ieee.org/802.11/dcn/22/11-22-0106-00-0wng-wng-meeting-minutes-2022-january-electronic-meeting.docx>

* + The 2022-January WNG SC meeting minutes was approved by unanimous consent.
* Approximately 277 people attended the WNG meeting electronically.
* Discussion on how to voice opinions for WNG meeting time:
  + A question was asked on how to voice opinions for WNG meeting time.
  + Chair explained that WNG meeting time is decided in 802.11 CAC (Chair’s Advisory Committee) meeting by consensus. 802.11 CAC meetings are open to all 802.11 participants. Please participate in CAC meetings to voice opinions on meeting schedules. 802.11 CAC meeting information is available in the 802.11 Calendar website, same as all other 802.11 meetings.
  + Another question was asked about 802 Technical Workshop.
  + Chair explained that 802 workshop is not part of 802.11 WNG and suggested to look at 802 website.
* Presentation #1: “Overview of Wi-Fi 6/6E for Industrial IoT: Enabling Wi-Fi determinism in an IoT world” – Bruno Tomas, Malcom Smith, (Wireless Broadband Alliance)

[https://www.ieee802.org/1/files/public/docs2022/liaison-WBA-WiFi6E-WTSN-IIOT-0322-v02.pdf](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ieee802.org%2F1%2Ffiles%2Fpublic%2Fdocs2022%2Fliaison-WBA-WiFi6E-WTSN-IIOT-0322-v02.pdf&data=04%7C01%7Clei.wang1%40futurewei.com%7C8284c17d01d742df5fff08da01e522e2%7C0fee8ff2a3b240189c753a1d5591fedc%7C1%7C1%7C637824380904537715%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=jLHQHF4ozcVcihwMd2RaRhLcgalbhA%2F86pvmIyXODgQ%3D&reserved=0)

* + Burno and Malcom presented the contribution as liaison to IEEE 802.11.
  + Summary of Discussion
    - Questioned how to achieve 1ms latency by using 11ax. The answer was to use 802.1 TSN on top of 11ax, and use scheduling / triggered based channel access.
    - Clarified that “.11 FTM/TM (time-sync)” mentioned in the presentation does not include 802.11az right now. Agreed that 802.11az will help for sure.
    - Discussed how the systems designed for more controlled environment, e.g., industry environment, handle legacy devices and BYOD (Bring You Own Device); and the suggestions include Wi-Fi certifications with mandated features, on-boarding process with factory owner control, stay-away from peer-to-peer configurations, etc.
* Schedule change announcement:
  + Chair announced a schedule change, i.e., due to some difficult to have Francesco’s contribution uploaded to the file server, let’s put Francisco’s presentation after Jianhan’s and Ming’s presentations.
* Presentation #2: “Considerations of Next Generation Beyond 11be” – Jianhan Liu (Mediatek)

[https://mentor.ieee.org/802.11/dcn/22/11-22-0418-00-0wng-considerations-of-next-generation-beyond-11be.pptx](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F22%2F11-22-0418-00-0wng-considerations-of-next-generation-beyond-11be.pptx&data=04%7C01%7Clei.wang1%40futurewei.com%7C8284c17d01d742df5fff08da01e522e2%7C0fee8ff2a3b240189c753a1d5591fedc%7C1%7C1%7C637824380904537715%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=L4LWfX9rR%2BvmYaFWHhVxnjSlDJWJo4NG1tl58NQsb%2B0%3D&reserved=0)

* + Jianhan presented the contribution.
  + Chair suggested to combine the Q&A for this presentation and Presentation #3 below, considering these two presentations are on the same topic.
    - No objection.
* Presentation #3: “Looking ahead to next generation: follow-up” – Ming Gan (Huawei)

[https://mentor.ieee.org/802.11/dcn/22/11-22-0458-01-0wng-looking-ahead-to-next-generation-follow-up.pptx](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmentor.ieee.org%2F802.11%2Fdcn%2F22%2F11-22-0458-01-0wng-looking-ahead-to-next-generation-follow-up.pptx&data=04%7C01%7Clei.wang1%40futurewei.com%7C8284c17d01d742df5fff08da01e522e2%7C0fee8ff2a3b240189c753a1d5591fedc%7C1%7C1%7C637824380904537715%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=9fz%2BakWUC8SwyZHXBTEq9PpKeYsjsREm5EZzKh%2FowI0%3D&reserved=0)

* + Ming presented the contribution.
  + Summary of Discussion for a combined Q&A of Presentation #2 and Presentation #3:
    - Discussed what may need to be standardized when applying AI in 802.11 as proposed in Ming’s presentation, and answers included: basically it will depend on the group discussions and decisions, possible examples may include ML (Machine Learning) models, input parameters, etc.
    - Discussed the range extension as proposed in Jianhan’s presentation; clarified that it is not a relay, it is just a range extension by one AP, by 6dB to 10dB. Markets show people want one AP. No specific range number yet at this time. Open to channel bandwidth, 20MHz vs 11ah channel bandwidth, depending on the group; also emphasise range for required performance, not only for low data rate.
    - Discussed how to handle different categories of use cases, e.g., create different profiles for different use cases. Some might be optional, and some might be mandatory.
    - Discussed that it may use both centralized ML and distributed ML for roaming use cases; and agreed that sometimes ML needs the info of whole network to make a better decision.
* Schedule change announcement:
  + Francesco’s contribution, “Making the Case for Open, Softwarized, Data-Driven 802.11 Networks”, is now on the 802.11 file server at

<https://mentor.ieee.org/802.11/dcn/22/11-22-0460-00-0wng-making-the-case-for-open-softwarized-data-driven-802-11-networks.pdf>

* + Will postpone Francesco’s presentation to a WNG teleconference call which will be announced soon.
* Plans for May 2022:
  + Call for contributions: WNG chair will issue a call for contributions before 802.11 plenary meeting in May 2022.
* Adjourned at 1pm ET.