IEEE P802.11  
Wireless LANs

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| Minutes of the IEEE P802.11 Full Working Group | | | | |
| Date: 2021-11-08 | | | | |
| Author(s): | | | | |
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Abstract

This document constitutes the minutes of the IEEE 802.11 full working group for the November 2021 meeting.

Please note that all affiliations at this meeting are shown in Annex A.

**IEEE 802.11 Plenary Meeting – Session #190**

**November 8th – 16th, 2021**

**IEEE 802.11 Opening Plenary, Monday November 8th 2021**

Presiding chair: Dorothy Stanley (Hewlett Packard Enterprise) opened the meeting at 09:00 Eastern Time (ET) and declared quorum for the session.

2nd Vice-chair (VC2): Not available today

1st Vice-chair (VC1): Jon Rosdahl Qualcomm

Secretary: Stephen McCann Huawei Technologies Co., Ltd

There are 467 voting members and 11 Ex Officio voters of IEEE 802.11\*

There were 412 people present in the meeting.

\*who ask to be recognized as such in the 802.11 voters list.

1. **Notices** (11-21-1604r0 slide #3)
   1. Chair: Please note the information about the meeting decorum.
   2. Are there any members of the press present?
      1. None.
   3. IEEE Staff present
      1. None
      2. Chair: Christy Bahn is the IEEE Staff representative for IEEE 802.11.
   4. Please note that this meeting requires a registration fee to be paid.
   5. Chair: Please contact me if you require the credentials for the “Members Area”.
2. **Approve/modify working group agenda** (11-21-1603r3)
   1. This is a summary of the meeting today. Please note the schedule for this session on the separate tab “Schedule”.
   2. Chair: I suggest we approve this agenda.
   3. **Move to approve the agenda 11-21-1603r3 for the Monday opening plenary**
      1. Moved: Marc Emmelmann, 2nd: Allan Jones
      2. No objection to approving by unanimous consent
3. **September 2021 WG Minutes**
   1. **Move to approve the September 2021 WG minutes document 11-21-1497r0**
   2. Moved: Stephen McCann, 2nd: Stuart Kerry
   3. Following neither discussion nor dissent the minutes were approved by unanimous consent.
4. **New Attendees** (11-21-1335r0 slide #4)
   1. Straw Poll:
   2. **Are you a new attendee to IEEE 802.11?**
      1. Yes: 20, No: 120, No answer: 148
   3. There is a new members meeting on Tuesday November 9th at 09:00 ET. This is a useful tutorial for those new members to learn about IEEE 802.11.
5. **Call for essential Patents** (11-21-1642r0)
   1. The current PatCom rules were read out, including the call for essential patents information, as shown by:
   2. <https://development.standards.ieee.org/myproject/Public/mytools/mob/patut.pdf>
      1. There were no issues raised regarding the call for essential patents.
      2. There was no response to the call for essential patents.
6. **Participation and Attendance** (11-21-1642r0)
   1. The slides about IEEE 802 meeting participation and IEEE SA copyright were also read.
   2. Expected participant behavior was also announced.
   3. VC2: Please note the slide about the valid abstain response in ballots and also all voting members’ obligations to respond to ballots.
7. **Announcements** (11-21-1604r0)
   1. **Liaisons** (slide #4)
      1. Chair: There 1 incoming liaison from ITU-T CITS (11-21-1564). Members of 802.11bd have been considering this document.
   2. **EC and standard board decisions** (slides #5 and #6)
      1. Chair: The EC approved the items on the slides.
8. **Logistics and Key events/activities**
   1. **Working group session documents** (11-21-1604r0 slide #7)
   2. **Joint meetings & reciprocal credit with IEEE 802 groups** (slide #8)
      1. Reminder that there are topics relevant to IEEE 802.11 to be covered in IEEE 802.18, IEEE 802.19, IEEE 802.24, NENDICA Industry Connections Activity and some of the other IEEE 802 groups.
      2. Chair: This IEEE 802.11 session does count towards attendance credit. You will require 9 slots to obtain attendance credit over the next 7 days.
      3. Chair: Please remember to record your attendance for each meeting during this session.
   3. **M3.3 Other WG meeting plans** (11-21-1621r1 slide #6 and slide #8)
      1. This slide shows information about other WG meetings, future meetings and logistics during this plenary.
      2. Please use the online schedule at the IEEE 802 website for the online meeting times during this plenary. It can be adjusted to show times in your own time zone (slide #5)
      3. Please remember to record your attendance for each slot during this plenary, using the IMAT tool: <https://imat.ieee.org/802.11>
   4. **M3.3 Audio Visual Etiquette** (slide #7)
      1. VC1: Please remember this advice when you are presenting during online calls.
   5. **M3.6 Meeting Registration** (slide #9)
      1. VC1: Please note that paid registration is required for this meeting. At the moment there are 1056 registered people for this November interim.
      2. No questions
   6. **M3.7 Recording attendance** (slide #10)
      1. VC1: Please note the rules about recording attendance at each IEEE 802.11 meeting during this plenary.
      2. No questions
9. **Status of all groups** (11-21-1604r0)
   1. **Group summary** (slide #13)
      1. Chair: This is a review of the current IEEE 802.11 groups.
   2. **Sub-Group Officer Status** (slide #16)
      1. Chair: Please note the changes to sub-group officers for this plenary. I would like to acknowledge all the assistance from the volunteers mentioned on this slide. Please note that Tuncer Baykas will be chairing 802.11bb this session.
   3. **Summary of Ballots** (slide #19)
      1. There have been two letter ballots (TGbc, TGaz), a comment collection (TGbb) and an SA ballot (TGaz), since the September 2021 meeting.
10. **Membership** (11-21-1604r0 slide #20)
    * 1. These slides show the IEEE 802.11 membership numbers, by affiliation and whether members have been recently active.
      2. No questions
11. **Timelines**
    1. There have been some recent updates for TGba and TGbc to the timeline chart:
    2. <https://www.ieee802.org/11/Reports/802.11_Timelines.htm>
    3. Chair: Regarding IEEE 802.11ba you can still obtain a few copy of the recently published IEEE 802.11ba-2021, using this link: <https://ieee-sa.imeetcentral.com/p/eAAAAAAAR72BAAAAADM1-ns>
    4. No questions
12. **Group Summaries** (11-21-1643r1)
    1. Special notes were mentioned for the following groups:
    2. **Editors’ meeting and ANA** (slides #3 & #4)
       1. There is an editors’ meeting later today at 16:00 ET, as per the online schedule. Other topics include the ANA status (11-11-0270r57).
       2. No questions
    3. **AANI SC** (slide #5)
       1. There are two main items for this session:
       2. 1) Wrap up AANI SC
       3. 2) Discuss AANI SC Shutdown
       4. No questions
    4. **ARC SC** (slide #6)
       1. There have been several teleconferences since the September 2021 meeting, basically discussing various architecture topics. There will be a discussion about removing Annex G this session.
       2. Chair: Regarding the 802/802EC activity on slide #6, 802.1 will have a technical plenary during the 1st week of December to discuss a future IEEE Std 802 revision.
       3. No questions
    5. **Coex** **SC** (slide #8)
       1. This standing committee will meet once this session.
       2. No questions
    6. **PAR SC** (slide #9)
       1. There are 4 PARs to be considered this session, including 802.11bb.
       2. No questions
    7. **WNG** (slide #10)
       1. There is one presentation planned for this session:
          1. “OpenRoaming: One Global Wi-Fi Network”
       2. No questions
    8. **JTC1** **SC** (slide #11)
       1. There is 1 meeting during this session.
       2. You will notice that are some IPR related issues with 802.11ax, 802.11ay and 802.11ba. There has been a partial resolution in moving forward with these issues.
       3. No questions
    9. **REVme** (slide #14)
       1. The objective for this session is to continue considering comments from the D0.0 comment collection.
       2. There will also be a discussion about a “Corrigenda 1 – 11ay correction”. This is to correct an ANA assignment.
       3. No questions
    10. **TGaz** (slide #15)
        1. An initial SA ballot has now finished with 93% approval. There were 364 comments in total.
        2. The work this session will be to start work on SA ballot comment resolution.
        3. No questions
    11. **TGbb** (slide #17)
        1. The group would like to go for an initial letter ballot in November 2021.
        2. No questions.
    12. **TGbc** (slide #18)
        1. A re-circulation letter ballot (LB 257) recently completed on D2.0 with 90% approval and 294 comments.
        2. No questions
    13. **TGbd** (slide #20)
        1. The goal is to complete all the LB 254 comments. The pool is now open for the initial SA Ballot. It is hoped to produce D3.0 from this session.
        2. Question (Q): regarding slide #23, the mandatory draft review normally updates the draft. As it takes about 2 months, it is highly unlikely that D3.0 will be ready in January 2022.
        3. Answer (A): Perhaps that can be discussed at the editors’ meeting.
        4. Comment (C): The current 11bd draft is about 100 pages long.
    14. **TGbe** (slide #24)
        1. Draft 1.2 has been published in October meeting and about 40% of the comments from the initial comment collection (CC36) have now been completed.
        2. No questions
    15. **TGbf** (slide #27)
        1. There have been 7 teleconference calls since the September 2021 meeting on various topics. The SFD is still in development.
        2. No questions
    16. **TGbh** (slide #29)
        1. There are three meetings during this session.
        2. A response to the WBA (Wireless Broadband Alliance) will be worked on this session, together with some other topics. It is hoped to approve some material for D0.1.
        3. No questions.
    17. **TGbi** (slide #30)
        1. There are three meetings during this session.
        2. No questions.
    18. **ITU ad-hoc** (slide #31)
        1. There have been no meetings recently and there are none planned this session. However, topics within the ITU are being monitored.
        2. No questions.
13. **IEEE 802.18 Liaison** (11-21-1749r0)
    1. This document shows the details of the IEEE 802.18 meetings this session.
    2. There will an 11-21-1749r1 correcting some small typos.
    3. ETSI BRAN has been very busy with 5 and 6 GHz standards in Europe.
    4. ITU-R WP 1A and WP 5A will have meetings in November and these will be monitored.
    5. The submission “Table of Frequency Ranges” continues to be updated in conjunction with IEEE 802.19.
    6. No questions.
14. **IEEE 802.19 Liaison** (11-21-1812r0)
    1. In ITU WP 1A, a liaison from 802.19 was presented regarding 802.11bb (light communications).
    2. There is only 1 WG meeting this session.
    3. No questions.
15. **Officer Election March 2022** (11-21-1604r0)
    1. The WG officers will be re-elected during the March 2022 plenary.
    2. The current officers have stated that they will seek re-election.
16. **AoB**
    1. Q: On November 4th there was an 802 future planning discussion. Can you comment on this please?
    2. Chair: The IEEE 802 chair invited various WG chairs to talk about WNG (Wireless Next Generation) activities within each WG. Examples of the material presented include the following:
    * <https://mentor.ieee.org/802-ec/dcn/21/ec-21-0257-01-00EC-802-next-gen-workshop-opening-deck.pptx>
    * <https://mentor.ieee.org/802-ec/dcn/21/ec-21-0256-01-00EC-ieee-802-11-wng-activities-and-status.pptx>
    1. 802 Chair: I would like to develop a more coordinated approach for bringing in new material to each of the WGs. I would also like to encourage people to join in the discussion at an earlier stage. Hopefully this will bring in some more experimental technology.
    2. No questions
17. **Recess**
    1. Meeting recessed at 10:54 ET.

**Tuesday, November 16th 2021**

**IEEE 802.11 Closing Plenary**

Call to order at 09:00 Eastern Time (ET) by Dorothy Stanley (HPE).

285 people present in the meeting.

1. **Approve/modify working group agenda** (11-21-1603r4)
   1. Chair: There have been some minor changes to the agenda since the opening plenary.
   2. **Approve the agenda for the Tuesday meeting as shown in 11-21-1603r4**
      1. Moved: Stuart Kerry, 2nd: Stephen Palm
      2. No objection to approving by unanimous consent.
2. **Announcements** (11-21-1605r0)
   1. **Participation** (slides #4 - #6)
      1. Please can you all remember to read this slide and understand that everyone is here as an individual subject matter expert.
   2. **Call for Essential Patents** (slide #7)
      1. This is the Call for Essential Patents
      2. No statements
      3. No questions
   3. **Meeting Decorum** (slide #8)
      1. No questions
   4. **Next meeting and CAC meetings** (slide #9)
      1. The next meeting of the IEEE 802.11 working group is from January 17th – 25th, 2022 and will be an electronic meeting. Please note the slightly updated dates.
      2. Please be aware of the future chair’s committee meetings (CAC), the first one of which will be on December 6th 09:00 ET. Please note the deadline for the sub-group agendas.
   5. **Sub-group minutes**
      1. Please note that sub-group minutes should be completed within 30 days from the close of this plenary.
   6. **Letters of Assurance (LoA)** (slide #10)
      1. Chair: please remember about the LoA requirements.
      2. There is one LoA request open at the moment.
      3. A new LoA request and receipt has been added.
   7. **IEEE Store and ISO SC6** (slides #11 - #12)
      1. Chair: IEEE 802.11ba is now published. IEEE 802.11-2020 is now available for free through the “Get 802” scheme.
      2. IEEE 802.11ax-2021 and IEEE 802.11ay-2021 have been submitted to ISO under the PSDO process.
      3. IEEE 802.11ba-2021 will be submitted later in the year.
   8. **Press Releases** (slide #13)
      1. There have been no recent press releases or blog statements since the May 2021 meeting.
   9. **Public Visibility Standing Committee** (slides #14 - #16)
      1. This IEEE 802 group is designed to increase the external visibility of IEEE 802.
3. **Treasury Report** (ec-21-0228-00)
   1. VC1: This shows the treasurers’ report and is correct up to October 31st 2021.
   2. There are still some issues regarding receiving funds from CVENT.
   3. Regarding those people (“deadbeats”) who did not pay for the September Interim and/or this November Plenary, the number has been dropping. Please note that these people are no longer allowed to attend any future meetings.
   4. Q: Why is CVENT not paying?
   5. A: The IEEE changed its bank account and also some of its tools at the same time as the 802.11/11 treasury also changed. On top of this there are over 5000 IEEE events per year and it is not clear which project the IEEE has to pay when money is received from CVENT. It’s basically confusion between various accounts within the IEEE.
   6. Chair: regarding slide #6, I would like to emphasize that everyone should pay their registration fees. There is a process to sort out some people from the July 802.11 plenary who have not yet paid and this does take time. On December 1st, these people from July will be removed from the 802.11 roster and mailing groups.
4. **March 2022 Venue Straw Poll** (11-21-1621r1)
   1. T3.1.2 Straw Poll:
      1. **1. If the 2022 March Plenary Session is held in Orlando, Florida as an in-person only session, will you attend?**
      2. Yes: 89
      3. No: 109
      4. No answer: 67
      5. **2. If the 2022 March Plenary Session is held in Orlando, Florida as a mixed-mode session, will you attend:**
      6. Attend In-person: 75
      7. Attend Virtually (remotely): 121
      8. Will not attend plenary: 4
      9. No answer: 65
   2. The straw poll was run for a second time, as there were technical issues with the online tool.
   3. VC1: These answers will now be provided to the EC during their Friday meeting. A final decision will be made by the EC on December 7th.
5. **Future Venues Manager Report** (11-21-1621r1, slide #13)
   1. VC1: These slides shows the current status of future venues.
   2. No questions.
6. **Timelines**
   1. TGbd will have an updated to the timeline shortly.
   2. No questions
7. **Attendance statistics** (11-21-1644r2 slide #4)
   1. VC2: These slides are a summary of the attendance statistics and sub-group activities during this session. The numbers have been increasing slowly over the last year or so.
8. **WG Committee Reports** (11-21-1644r2)
   1. **Editors** (slide #10)
      1. On November 8th, all of the draft were reviewed in the editors’ meeting. The Mandatory Draft Review (MDR) was started for 802.11bd D3.0.
      2. Please remember that some recent updates have been made to the MIB style, Visio and Framemaker practices.
      3. Q: Regarding slide #17, is TGme in the correct place?
      4. A: Yes, based on the current understanding.
      5. No questions
   2. **AANI** **SC** (slide #18)
      1. Work on two options is now complete:
         1. Interworking between 3GPP 5G network and WLAN.
         2. The reply LS to the WBA LS.
      2. There is no more work for the AANI SC and there was a discussion about closing the AANI SC during the meeting itself.
      3. Thank you to all who contributed and participated in the AANI SC.
      4. Chair: I would like to thank Joseph Levy for chairing this group over the last 5 years.
      5. Chair: I declare that the AANI SC is now closed.
      6. Chair: If future liaisons are received from WBA (and other entities) on 5G/WLAN topics, then I propose that an ad-hoc be created or another group address them.
      7. Chair: I appreciate the efforts of everyone as this group has had some difficult discussions over the years.
      8. No questions
   3. **ARC SC** (slide #24)
      1. Regarding Annex G, there is now an ARC submission that will be given to REVme with the intent of removing Annex G.
      2. An alternative to Annex G will now continue within ARC SC.
      3. There are some other future items regarding IEEE 802.1CQ and IEEE Std 802 revision.
      4. No questions
   4. **Coex SC** (slide #28)
      1. There were several discussions during the meeting and there is still work to be done going forward regarding 802.11ax and 802.11be co-existence for operation in the 6 GHZ band in Europe.
      2. No questions
   5. **PAR** **SC**
      1. The group have not completed their work, as their final meeting for this IEEE 802 session will be tomorrow (Wednesday November 17th)
      2. For details, please see:
      3. <https://mentor.ieee.org/802.11/dcn/21/11-21-1627-02-0PAR-par-review-sc-meeting-agenda-and-comment-slides-nov-2021-electronic-plenary.pptx>
      4. No questions
   6. **WNG** **SC** (slide #32)
      1. There was one presentation this session:
      2. “OpenRoaming: One Global Wi-Fi Network” <https://mentor.ieee.org/802.11/dcn/21/11-21-1804-03-0wng-openroaming-tutorial.pptx>
      3. No motions or straw polls
      4. No questions
   7. **JTC1 SC** (slide #35)
      1. There have been some interesting activities this session.
      2. 73 IEEE 802 standards have now completed the PSDO process.
      3. At the moment, there are some IPR issues regarding the IEEE 802.11ax ISO ballot. Until these are resolved, other IEEE 802.11 amendments will not be sent to ISO.
      4. No questions
   8. **REVme** (slide #39)
      1. This session was spent resolving comments from CC35.
      2. The group approved an initial letter ballot for REVme 1.0.
      3. The remaining comments from CC35 will continue to be resolved at the same time as the initial letter ballot is open.
      4. No questions
   9. **TGaz** (slide #43)
      1. The TG passed an SA ballot just before the start of this session. Processing of the comments from that ballot have started.
      2. The group also created a liaison response for the Wi-Fi Alliance (WFA).
      3. Q: Did the SA ballot pass?
      4. A: Yes.
      5. No questions
   10. **TGbb** (slide #48)
       1. All of the comments from D0.7 were completed and the group would like to move forward with an initial letter ballot.
       2. No questions
   11. **TGbc** (slide #55)
       1. The comments from the D2.0 re-circulation ballot were worked on this session.
       2. No questions
   12. **TGbd** (slide #61)
       1. There were 4 conference calls during this session.
       2. The comments from LB 254 have been completed and the group approved a 15 day re-circulation ballot for D3.0.
       3. It is likely that the TGbd timeline will be changed.
       4. No questions
   13. **TGbe** (slide #68)
       1. There were 4 conference calls during this session.
       2. The work involved the continuation of comment resolution and the group approved the creation of D1.3.
       3. No questions
   14. **TGbf** (slide #72)
       1. There were 3 meetings during this session.
       2. The SFD is continuing to be developed.
       3. No questions
   15. **TGbh** (slide #77)
       1. Reviewed some contributions about various technical topics, resulting in some updated requirements.
       2. Some analysis was performed on a Wireless Broadband Alliance (WBA) liaison that will be finished in a future meeting.
       3. The target to produce a D0.1 has slipped this meeting, but hopefully can be competed in January 2022.
       4. Q: Do you know what technical contributions will go into D0.1?
       5. A: Yes.
       6. No questions
   16. **TGbi** (slide #84)
       1. The group produced an updated Requirements Tracking Document.
       2. The plan for January 2022 is to approve the Use Case and Issues document.
       3. No questions
9. **Liaison Reports** (11-21-1644r2)
   1. **Wi-Fi Alliance** (slide #104)
      1. There are several certifications based on IEEE 802 programs.
      2. No questions
   2. **IETF** (slide #108)
      1. The last meeting was last week and the next meeting will be in March 2022.
      2. There was an IEEE-IETF co-ordination meeting in October.
      3. Q: Perhaps you can something about the MADINAS working group looking at MAC address randomization (<https://datatracker.ietf.org/wg/madinas/charter>). I think it will be addressing some of the IEEE 802.11 activities.
   3. **IEEE 1609** (slide #126)
      1. IEEE 1609 provides a light weight middle layer between 802.11p/bd and upper layers as shown in slide #111.
      2. No questions
10. **Break**
    1. Chair: At this point we will have a 5 minute recess
11. **Working Group Motions (Old Business)** (11-21-1624r1)
    1. **REVme Initial Letter Ballot** (slide #6)
       1. **Instruct the TGme editors to prepare P802.11REVme D1.0 by incorporating P802.11REVme D0.4 and all accepted changes per motions contained in** [**https://mentor.ieee.org/802.11/dcn/21/11-21-0758-15-000m-revme-motions.pptx**](https://mentor.ieee.org/802.11/dcn/21/11-21-0758-15-000m-revme-motions.pptx) **,**
       2. **and**
       3. **Approve a 40-day Working Group Technical Letter Ballot asking the question “Should REVme D1.0 be forwarded to SA Ballot?”**
       4. Moved by Michael Montemurro on behalf of TGme, 2nd: Stephen Palm
       5. Q: What is the starting date of this ballot?
       6. A: Not sure, but probably mid December.
       7. No objection to approving by unanimous consent
       8. [TGme Moved: Emily Qi, 2nd: Stephen McCann, Result: Y:18, N:0, A:1]
    2. **TGaz Response to WFA** (slide #7)
       1. **Move to approve document** [**11-21-1837-01-00az-response to communication from WFA RE 802.11az.docx**](https://mentor.ieee.org/802.11/dcn/21/11-21-1837-01-00az-response-to-communication-from-wfa-re-p802-11az.docx) **as the IEEE 802.11 response to Wi-Fi Alliance Location Task Group Communication to IEEE 802.11 WG, and grant the chair editorial license.**
       2. Moved: Jonathan Segev on behalf of TGaz, 2nd: Harry Bims
       3. Result: Yes: 86, No: 1, Abstain: 25 (Motion passes)
       4. [TGaz Moved: Peter Yee, 2nd: Ian Sherlock, Result: Y:17, N:0, A:1]
    3. **TGbb CAD approval** (slide #8)
       1. **Move to approve** [**https://mentor.ieee.org/802.11/dcn/21/11-21-1876-00-00bb-ieee-802-11tgbb-coexistence-assessment-document.docx**](https://mentor.ieee.org/802.11/dcn/21/11-21-1876-00-00bb-ieee-802-11tgbb-coexistence-assessment-document.docx)**, as the P802.11bb Coexistence Assessment Document.**
       2. Moved: Nikola Serafimovski, 2nd: Tuncer Baykas
       3. Result: Yes: 64 , No: 3, Abstain: 40 (Motion passes)
    4. **TGbb Re-affirm CSD** (slide #9)
       1. **Move to reaffirm the TGbb CSD as contained in** [**https://mentor.ieee.org/802.11/dcn/17/11-17-1603-09-00lc-a-csd-proposal-for-light-communications.docx**](https://mentor.ieee.org/802.11/dcn/17/11-17-1603-09-00lc-a-csd-proposal-for-light-communications.docx)**.**
       2. Moved: Nikola Serafimovski on behalf of TGbb
       3. No objection to approving by unanimous consent
       4. [TGbb: Moved: Matthias Wendt, 2nd: Marc Emmelmann, Results (Y/N/A): 8/0/0]
    5. **TGbb Initial Letter Ballot** (slide #10)
       1. **Instruct the TGbb editor to prepare P802.11bb D1.0 by incorporating P802.11bb D0.7 and all accepted changes as contained in 11-21/1813r3 and 11-21/1783r2,**
       2. **and**
       3. **Approve a 40-day Working Group Technical Letter Ballot asking the question ‘‘Should P802.11bb D1.0 be forwarded to SA Ballot?”**
       4. Moved: Nikola Serafimovski on behalf of TGbb, 2nd: Matthias Wendt
       5. Result: Yes: 84, No: 2, Abstain: 16 (Motion passes)
       6. [TGbb: Moved: Volker Jungnickel, 2nd: Matthias Wendt, Results (Y/N/A): 7/0/1]
    6. **TGbc Move D2.0 to IEEE Store** (slide #11)
       1. **Approve making P802.11bc D2.0 available for purchase.**
       2. Moved: Marc Emmelmann on behalf of TGbc, 2nd: Nikola Serafimovski
       3. Q: What was the percentage pass rate for the initial ballot?
       4. A: 90%
       5. Result: Yes: 90, No: 1, Abstain: 9 (Motion passes)
       6. [TGbc Moved: Stephen McCann, 2nd: Hitoshi Morioka, Result: unanimous]
    7. **TGbd Re-circulation Letter Ballot** (slide #12)
       1. **Having approved comment resolutions for all of the comments received from LB 254 on P802.11bd D2.0 as contained in document**
       2. [**https://mentor.ieee.org/802.11/dcn/20/11-21-1296-06-00bd-tgbd-lb251-comments.xlsx**](https://mentor.ieee.org/802.11/dcn/20/11-21-1296-06-00bd-tgbd-lb251-comments.xlsx) **,**
       3. **instruct the TGbd editor to create P802.11bd D3.0 and approve a 15-day Working Group Recirculation Ballot asking the question “Should P802.11bd D3.0 be forwarded to SA Ballot?”**
       4. Moved: Bo Sun on behalf of TGbd
       5. Q: I think that the number of pages of this amendment is quite low and there are a minimal amount of changes to review. Is that correct?
       6. A: Yes, it’s not that extensive.
       7. No objection to approving by unanimous consent
       8. [TGbd: Moved: Joseph Levy, 2nd: John Kenney, Results (Y/N/A): 16/0/3]
12. **Working Group Motion (New Business)** (11-21-1624r1)
    1. **P802.11-2020/Corrigendum-1 PAR** (slide #13)
       1. **Believing that the PAR contained in the document referenced below meets IEEE-SA guidelines,**
       2. **Request that the PAR contained in** [**https://mentor.ieee.org/802.11/dcn/21/11-21-1750-01-000m-par-corrigendum-1-correct-802-11ay-assignment-of-protected-announce-support-bit.docx**](https://mentor.ieee.org/802.11/dcn/21/11-21-1750-01-000m-par-corrigendum-1-correct-802-11ay-assignment-of-protected-announce-support-bit.docx) **be posted to the IEEE 802 Executive Committee (EC) agenda for EC approval to submit to NesCom, granting the WG chair editorial license.**
       3. C: This corrigendum PAR is required, because there was an ANA assignment error in 802.11ay that conflicts with an existing number assigned to the Wi-Fi Alliance. Unfortunately the corrigendum has to apply to 802.11-2020 with the 802.11ay roll in, as opposed to just 802.11ay itself.
       4. C: This PAR has been reviewed in REVme.
       5. Q: This seems to be a lot of work to correct a single bit. Is it really necessary?
       6. A: There was a similar corrigendum in 802.3 that took 10 months, as these changes need to be formally made.
       7. Chair: This process makes it public and ensures that everyone knows about it.
       8. C: There is a typo in section 5.4.
       9. A: Yes, sure. I’ll update the document.
       10. Moved: Michael Montemurro, 2nd: Jon Rosdahl
       11. Result: Yes: 78, No: 3, Abstain: 13 (Motion passes)
13. **Wireless Chairs Meeting** (11-21-1605r0 slide #16)
    1. The next meeting will be on December 1st at 15:00 ET.
    2. Please note that the January 2022 meeting will be electronic.
14. **Next Meeting** (slide #17)
    1. The proposed date of the next IEEE 802.11 meeting is January 17th – 25th, 2022. Please note that there is a registration fee for this meeting.
    2. Attendance credit will be available at this interim, as the IEEE 802 rules have been updated to clarify this.
    3. Q: Regarding the attendance credit, is the January 2022 meeting treated as an interim or a plenary?
    4. A: It’s an interim meeting. Therefore voting rights cannot be given at the January interim, as these are only given to potential voters at the next plenary.
    5. Q: When will the January session registration be open?
    6. A: It should be available in the next 24 hours.
15. **IEEE ComSoc WLAN Edition** (11-21-1257r0 slide #18)
    1. Please refer to the link on the slide, regarding a future IEEE ComSoc WLAN edition about the recent and future evolution of Wi-Fi.
    2. If you are interested in contributing towards this magazine, please look at this link.
    3. No questions
16. **Any other Business (AoB)**
    1. **802.1 Technical Plenary**
       1. There is an 802.1 technical plenary on the 2nd December from 16:00 – 18:00 ET regarding 802.1 architecture topics. Please contact Glenn Parsons if you wish to have an agenda item.
       2. There are 2 volunteers from 802.11 who will represent 802.11 at that meeting.
    2. **Holidays**
       1. Chair: I would also like to wish everyone a very happy holiday season and a happy new year to everyone.
17. **Adjournment**
    1. Having completed the agenda, the chair announced that the meeting was adjourned at 11:47 ET.

**Annex A: Attendance & Affiliation**

| **Name** | **Affiliation** | **Attended >= 75%?** | **Status** |
| --- | --- | --- | --- |
| Abdelaal, Rana | Broadcom Corporation | FALSE | Voter |
| AbidRabbu, Shaima' | Istanbul Medipol University; Vestel | TRUE | Voter |
| Aboulmagd, Osama | Huawei Technologies Co., Ltd | TRUE | Voter |
| Adachi, Tomoko | TOSHIBA Corporation | TRUE | Voter |
| Adhikari, Shubhodeep | Broadcom Corporation | TRUE | Voter |
| Agardh, Kare | Acconeer AB | TRUE | Aspirant |
| Ahmad, Tufail | koc university, vestel | FALSE | Non-Voter |
| Aio, Kosuke | Sony Corporation | TRUE | Voter |
| Ajami, Abdel Karim | Qualcomm Incorporated | TRUE | Potential Voter |
| Akhmetov, Dmitry | Intel Corporation | TRUE | Voter |
| Al Falujah, Iyad | ON Semiconductor | TRUE | Voter |
| Aldana, Carlos | Facebook | TRUE | Voter |
| Alpert, Yaron | Texas Instruments Inc. | TRUE | Potential Voter |
| Amalladinne, Vamsi | Qualcomm Incorporated | TRUE | Potential Voter |
| An, Song-Haur | INDEPENDENT | TRUE | Voter |
| ANANDAKUMAR, KRISHNASAMY | Maxlinear Inc | FALSE | Voter |
| Andersdotter, Amelia | Sky UK Group | TRUE | Voter |
| Ansley, Carol | Cox Communications Inc. | TRUE | Voter |
| Anwyl, Gary | MediaTek Inc. | TRUE | Voter |
| Arlandis, Diego | Maxlinear Corp | TRUE | Voter |
| Arregui, Antonio | Maxlinear | TRUE | Voter |
| Arrington, Arthur | Air Network Solutions | TRUE | Voter |
| Asai, Yusuke | Nippon Telegraph and Telephone Corporation (NTT) | FALSE | Voter |
| Asterjadhi, Alfred | Qualcomm Incorporated | TRUE | Voter |
| Au, Kwok Shum | Huawei Technologies Co., Ltd | TRUE | Voter |
| Au, Oscar | Origin Wireless | TRUE | Voter |
| Auluck, Vijay | Self | TRUE | Voter |
| Avallone, Stefano | University of Napoli | FALSE | Aspirant |
| Avital, Ziv | MaxLinear | TRUE | Voter |
| Avrillon, Matthieu | Self | TRUE | Voter |
| Awater, Geert | Qualcomm Incorporated | TRUE | Voter |
| Aygul, Mehmet | Vestel | TRUE | Voter |
| B, Hari Ram | NXP Semiconductors | TRUE | Voter |
| Badenes, Agustin | Maxlinear Corp | TRUE | Voter |
| Baek, SunHee | LG ELECTRONICS | TRUE | Voter |
| Bahn, Christy | IEEE STAFF | FALSE | Aspirant |
| Baik, Eugene | Qualcomm Incorporated | TRUE | Voter |
| Bajko, Gabor | MediaTek Inc. | TRUE | Voter |
| Baker, Roman | Infineon Technologies | TRUE | Aspirant |
| Banerjea, Raja | Qualcomm Incorporated | TRUE | Voter |
| Bankov, Dmitry | IITP RAS | TRUE | Voter |
| baron, stephane | Canon Research Centre France | TRUE | Voter |
| Barr, David | MaxLinear | TRUE | Voter |
| Batra, Anuj | Apple, Inc. | TRUE | Voter |
| Baykas, Tuncer | Kadir Has University, Hyperion Technologies | TRUE | Voter |
| Beg, Chris | Cognitive Systems Corp. | TRUE | Voter |
| Bei, Jianwei | NXP Semiconductors | TRUE | Voter |
| Ben Arie, Yaron | Toga networks (a huawei company) | TRUE | Voter |
| Berens, Friedbert | FBConsulting Sarl | TRUE | Voter |
| Berger, Christian | NXP Semiconductors | TRUE | Voter |
| Berkema, Alan | HP Inc. | TRUE | Voter |
| Berner, Stephan | PureLiFi | TRUE | Voter |
| Bhandaru, Nehru | Broadcom Corporation | TRUE | Voter |
| Bims, Harry | Bims Laboratories, Inc. | TRUE | Voter |
| Bluschke, Andreas | Signify | TRUE | Voter |
| Bober, Lennert | Fraunhofer Heinrich Hertz Institute | FALSE | Voter |
| Boldy, David | Broadcom Corporation | TRUE | Voter |
| Borges, Daniel | Apple, Inc. | TRUE | Aspirant |
| Bouchet, Olivier | Orange | TRUE | Voter |
| Bravo, Daniel | Intel Corporation | TRUE | Voter |
| Bredewoud, Albert | Broadcom Corporation | TRUE | Voter |
| Canchi, Radhakrishna | Kyocera International Inc | TRUE | Voter |
| Cao, Rui | NXP Semiconductors | TRUE | Voter |
| Cariou, Laurent | Intel Corporation | TRUE | Voter |
| Carney, William | Sony Group Corporation | TRUE | Voter |
| Carter, Edward | Infineon Technologies | TRUE | Aspirant |
| Cavalcanti, Dave | Intel Corporation | TRUE | Voter |
| Cepni, Gurkan | Apple, Inc. | TRUE | Voter |
| CHAN, YEE | Facebook | TRUE | Voter |
| Chang, Chen-Yi | Mediatek | TRUE | Potential Voter |
| Chaplin, Clint | Self | FALSE | ExOfficio |
| Chayat, Naftali | Vayyar Imaging | TRUE | Voter |
| Chemrov, Kirill | IITP RAS | TRUE | Potential Voter |
| Chen, Cheng | Intel Corporation | TRUE | Voter |
| Chen, Cheng-Ming | Qualcomm Incorporated | FALSE | Voter |
| Chen, Evelyn | Ericsson AB | TRUE | Voter |
| Chen, Xiaogang | Intel Corporation | TRUE | Voter |
| Cheng, Paul | MediaTek Inc. | TRUE | Voter |
| cheng, phoebe | MediaTek Inc. | TRUE | Potential Voter |
| Cheng, Xilin | NXP Semiconductors | TRUE | Voter |
| CHERIAN, GEORGE | Qualcomm Incorporated | FALSE | Voter |
| Chiang, James | MediaTek Inc. | TRUE | Potential Voter |
| Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. | TRUE | Voter |
| Chiu, Lin-Kai | MediaTek Inc. | TRUE | Potential Voter |
| Chiu, WenHsien | MediaTek Inc. | FALSE | Non-Voter |
| Cho, Hanbyeog | Electronics and Telecommunications Research Institute (ETRI) | FALSE | Non-Voter |
| Cho, Hangyu | LG ELECTRONICS | FALSE | Voter |
| Choi, Jinsoo | LG ELECTRONICS | TRUE | Voter |
| Choo, Seungho | Senscomm Semiconductor Co., Ltd. | TRUE | Voter |
| Chu, Liwen | NXP Semiconductors | TRUE | Voter |
| CHUN, JINYOUNG | LG ELECTRONICS | TRUE | Voter |
| Chung, Bruce | Realtek Semiconductor Corp. | TRUE | Voter |
| Chung, Chulho | SAMSUNG | TRUE | Voter |
| Ciochina, Dana | Sony Corporation | TRUE | Voter |
| Coffey, John | Realtek Semiconductor Corp. | TRUE | Voter |
| Cordeiro, Carlos | Intel Corporation | TRUE | Voter |
| Cortes, Diana | Google | TRUE | Potential Voter |
| da Silva, Claudio | Meta Platforms, Inc. | TRUE | Voter |
| Das, Dibakar | Intel Corporation | TRUE | Voter |
| Das, Subir | Peraton Labs | TRUE | ExOfficio |
| Dash, Debashis | Apple, Inc. | TRUE | Voter |
| Dave, Brajesh | Apple, Inc. | FALSE | Non-Voter |
| de Vegt, Rolf | Qualcomm Incorporated | TRUE | Voter |
| DeLaOlivaDelgado, Antonio | InterDigital, Inc. | TRUE | Voter |
| Derham, Thomas | Broadcom Corporation | TRUE | Voter |
| Di Taranto, Rocco | Ericsson AB | TRUE | Voter |
| Ding, Yanyi | Panasonic corporation | TRUE | Voter |
| Dogukan, Ali | Vestel | FALSE | Voter |
| Dong, mingjie | Huawei Technologies Co., Ltd | TRUE | Potential Voter |
| Dong, Xiandong | Xiaomi Inc. | TRUE | Voter |
| Du, Rui | Huawei Technologies Co., Ltd | TRUE | Voter |
| Du, Zhenguo | Huawei Technologies Co., Ltd | TRUE | Voter |
| Duan, Ruchen | SAMSUNG | TRUE | Voter |
| Ecclesine, Peter | Cisco Systems, Inc. | TRUE | Voter |
| Edgar, Richard | Imagination Technologies Ltd. | TRUE | Voter |
| Eitan, Alecsander | Qualcomm Incorporated | TRUE | Voter |
| ElSherif, Ahmed | Qualcomm Incorporated | TRUE | Voter |
| Emmelmann, Marc | Self Employed / Koden-TI / Fraunhofer FOKUS | TRUE | Voter |
| Erceg, Vinko | Broadcom Corporation | FALSE | Voter |
| Erell, Assaf | Vayyar Imaging Ltd. | TRUE | Voter |
| Fang, Juan | Intel Corporation | TRUE | Voter |
| Fang, Yonggang | MediaTek Inc. | TRUE | Voter |
| feng, Shuling | MediaTek Inc. | TRUE | Voter |
| Feng, Xiang | Keysight Technologies | TRUE | Voter |
| Fernandez, Olivia | SR Technologies | TRUE | Aspirant |
| Ferruz, David | Maxlinear Corp | TRUE | Voter |
| Fischer, Matthew | Broadcom Corporation | TRUE | Voter |
| Fridman, Roi | Vayyar Imaging Ltd | TRUE | Voter |
| Gan, Ming | Huawei Technologies Co., Ltd | TRUE | Voter |
| Gangur, Trivikram | Infineon Technologies | TRUE | Aspirant |
| Gao, Ning | Guangdong OPPO Mobile Telecommunications Corp.,Ltd | TRUE | Aspirant |
| Garg, Lalit | Broadcom Corporation | TRUE | Voter |
| Ghaderipoor, Alireza | MediaTek Inc. | TRUE | Voter |
| Ghosh, Chittabrata | Facebook, Inc. | TRUE | Voter |
| Gidvani, Ravi | SAMSUNG | TRUE | Voter |
| Gilb, James | General Atomics Aeronautical Systems, Inc., University of San Diego | FALSE | ExOfficio |
| Godbole, sachin | Broadcom Corporation | TRUE | Voter |
| Godfrey, Tim | Electric Power Research Institute, Inc. (EPRI) | TRUE | ExOfficio |
| Gong, Bo | Huawei Technologies Co., Ltd | TRUE | Voter |
| Goodall, David | Morse Micro | FALSE | Non-Voter |
| GOTO, Fumihide | DENSO | TRUE | Voter |
| Grandhe, Niranjan | NXP Semiconductors | TRUE | Voter |
| Grigat, Michael | Deutsche Telekom AG | TRUE | Voter |
| Gu, Xiangxin | UNISOC | TRUE | Voter |
| GUIGNARD, Romain | Canon Research Centre France | TRUE | Voter |
| Guntupalli, Lakshmikanth | Ericsson AB | TRUE | Voter |
| Guo, Jing | NXP Semiconductors | TRUE | Aspirant |
| Guo, Yuchen | Huawei Technologies Co., Ltd | TRUE | Voter |
| Gupta, Binita | Meta Platforms, Inc. | TRUE | Aspirant |
| Haasz, Jodi | IEEE SA | FALSE | Non-Voter |
| Haider, Muhammad Kumail | Facebook | TRUE | Voter |
| Halasz, David | Morse Micro | TRUE | Aspirant |
| Hall, Robert | Carrier corporation | TRUE | Voter |
| Hamilton, Mark | Ruckus/CommScope | TRUE | Voter |
| HAN, CHONG | pureLiFi | TRUE | Voter |
| Han, Jonghun | SAMSUNG | TRUE | Voter |
| HAN, Xiao | Huawei Technologies Co., Ltd | TRUE | Voter |
| Han, Zhiqiang | ZTE Corporation | TRUE | Voter |
| Handte, Thomas | Sony Group Corporation | TRUE | Voter |
| Hansen, Christopher | Covariant Corporation | TRUE | Voter |
| Harkins, Daniel | Aruba Networks, Inc. | TRUE | Voter |
| Harrison, Edward | Anritsu Company | TRUE | Voter |
| Hart, Brian | Cisco Systems, Inc. | TRUE | Voter |
| Haskou, Abdullah | InterDigital, Inc. | TRUE | Voter |
| Hawkes, Philip | Qualcomm Incorporated | FALSE | Non-Voter |
| Henry, Jerome | Cisco Systems, Inc. | TRUE | Voter |
| Hernandez, Marco | National Institute of Information and Communications Technology (NICT) | TRUE | Voter |
| hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) | TRUE | Voter |
| Hiertz, Guido | Ericsson GmbH | TRUE | Voter |
| Hirata, Ryuichi | Sony Group Corporation | TRUE | Voter |
| Ho, Duncan | Qualcomm Incorporated | TRUE | Voter |
| Hoffman, Damian | Vayyar Imaging | TRUE | Potential Voter |
| Holcomb, Jay | Itron Inc. | TRUE | ExOfficio |
| Holland, Oliver | Advanced Wireless Technology Group, Ltd. | FALSE | Voter |
| Hsieh, Hung-Tao | MediaTek Inc. | TRUE | Voter |
| Hsu, Chien-Fang | MediaTek Inc. | TRUE | Voter |
| Hsu, Mengta | Mediatek | TRUE | Potential Voter |
| Hsu, Ostrovsky | Xiaomi Inc. | TRUE | Aspirant |
| Hu, Chunyu | Facebook | TRUE | Voter |
| Hu, Mengshi | Huawei Technologies Co., Ltd | TRUE | Voter |
| Hu, Shengquan | MediaTek Inc. | FALSE | Non-Voter |
| HUANG, CHIHAN | MediaTek Inc. | TRUE | Potential Voter |
| Huang, Guogang | Huawei Technologies Co., Ltd | TRUE | Voter |
| Huang, Lei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd | TRUE | Voter |
| Huang, Po-Kai | Intel Corporation | TRUE | Voter |
| Huang, Qisheng | ZTE Corporation | TRUE | Aspirant |
| Hwang, Sung Hyun | Electronics and Telecommunications Research Institute (ETRI) | TRUE | Potential Voter |
| Ibrahim, Ahmed | Samsung Research America | TRUE | Potential Voter |
| Ibrahim, Mostafa | SAMSUNG ELECTRONICS | TRUE | Voter |
| Ikegami, Tetsushi | Meiji University | TRUE | Voter |
| Inohiza, Hirohiko | Canon | TRUE | Voter |
| Iranzo, Salvador | MaxLinear Corp | TRUE | Voter |
| Jang, Insun | LG ELECTRONICS | TRUE | Voter |
| Jeffries, Timothy | Futurewei Technologies | TRUE | Voter |
| Jeon, Eunsung | SAMSUNG ELECTRONICS | TRUE | Voter |
| Jia, Jia | Huawei Technologies Co., Ltd | TRUE | Voter |
| jiang, feng | Apple, Inc. | TRUE | Voter |
| Jiang, Jinjing | Apple, Inc. | TRUE | Voter |
| Jianjun, Guo | Horizon Semiconductor Co., Ltd. | TRUE | Aspirant |
| Joh, Hanjin | KT Corp. | TRUE | Potential Voter |
| Jones, Allan | Activision | TRUE | Voter |
| Jones, Vincent Knowles IV | Qualcomm Incorporated | TRUE | Voter |
| Jung, hyojin | Hyundai Motor Company | FALSE | Non-Voter |
| Jung, Insik | LG ELECTRONICS | TRUE | Aspirant |
| Jungnickel, Volker | Fraunhofer Heinrich Hertz Institute | TRUE | Voter |
| Kadampot, Ishaque Ashar | Qualcomm Technologies, Inc. | TRUE | Voter |
| Kain, Carl | USDOT; Noblis, Inc. | TRUE | Voter |
| Kakani, Naveen | Qualcomm Incorporated | TRUE | Voter |
| Kamel, Mahmoud | InterDigital, Inc. | TRUE | Voter |
| Kancherla, Sundeep | Infineon Technologies | TRUE | Aspirant |
| Kandala, Srinivas | SAMSUNG | TRUE | Voter |
| Kang, HaoHua | MediaTek Inc. | TRUE | Potential Voter |
| KANG, Kyu-Min | Electronics and Telecommunications Research Institute (ETRI) | TRUE | Voter |
| Kang, Sugbong | Apple, Inc. | TRUE | Voter |
| Kasargod, Sudhir | Infineon Technologies | TRUE | Aspirant |
| Kasher, Assaf | Qualcomm Incorporated | TRUE | Voter |
| Kedem, Oren | MaxLinear | TRUE | Voter |
| Kennedy, Richard | IEEE member / Self Employed | TRUE | Voter |
| Kenney, John | Toyota Motor North America | TRUE | Voter |
| Kerry, Stuart | OK-Brit; Self | TRUE | Voter |
| Khorov, EVGENY | IITP RAS | TRUE | Voter |
| Kim, Jeongki | Ofinno | TRUE | Voter |
| Kim, Myeong-Jin | SAMSUNG | TRUE | Voter |
| kim, namyeong | LG ELECTRONICS | TRUE | Voter |
| Kim, Sang Gook | LG ELECTRONICS | TRUE | Voter |
| Kim, Sanghyun | WILUS Inc | TRUE | Voter |
| Kim, Wonjung | LG Uplus | TRUE | Aspirant |
| Kim, Yongho | Korea National University of Transportation | TRUE | Voter |
| Kim, Youhan | Qualcomm Incorporated | TRUE | Voter |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) | TRUE | Voter |
| Kitazawa, Shoichi | Muroran IT | TRUE | Voter |
| Klein, Arik | Huawei Technologies Co., Ltd | TRUE | Voter |
| Klimakov, Andrey | Huawei Technologies Co., Ltd | TRUE | Voter |
| KNECKT, JARKKO | Apple, Inc. | TRUE | Voter |
| Ko, Geonjung | WILUS Inc. | TRUE | Voter |
| Kondo, Yoshihisa | Advanced Telecommunications Research Institute International (ATR) | TRUE | Voter |
| Kota, Prashant | Infineon Technologies | TRUE | Aspirant |
| Koundourakis, Michail | Samsung Cambridge Solution Centre | TRUE | Voter |
| Kozarev, Aleksandra | MaxLinear Corp | TRUE | Voter |
| Krieger, Ann | US Department of Defense | FALSE | Non-Voter |
| Ku, Susan | MediaTek Inc. | TRUE | Aspirant |
| Kuo, Chih-Chun | MediaTek Inc. | TRUE | Potential Voter |
| Kureev, Aleksey | IITP RAS | TRUE | Voter |
| Kwak, Jin-Sam | WILUS Inc. | TRUE | Voter |
| Lal, Kunal | Synaptics Incorporated | TRUE | Potential Voter |
| Lalam, Massinissa | SAGEMCOM SAS | TRUE | Voter |
| Lan, Zhou | Broadcom Corporation | TRUE | Voter |
| Lanante, Leonardo | Ofinno | TRUE | Potential Voter |
| Lansford, James | Qualcomm Incorporated; University of Colorado at Boulder | TRUE | Voter |
| Le Houerou, Brice | Canon Research Centre France | TRUE | Voter |
| Lee, Hong Won | LG ELECTRONICS | TRUE | Voter |
| Lee, Hyeong Ho | Netvision Telecom Inc. | TRUE | Voter |
| Lee, Nancy | Signify | TRUE | Voter |
| Lee, Wookbong | SAMSUNG | TRUE | Voter |
| Lepp, James | BlackBerry | FALSE | Voter |
| Levesque, Chris | qorvo | TRUE | Aspirant |
| Levitsky, Ilya | IITP RAS | TRUE | Voter |
| Levy, Joseph | InterDigital, Inc. | TRUE | Voter |
| Li, Bo | Northwestern Polytechnical University | TRUE | Voter |
| Li, Jialing | Qualcomm Technologies, Inc. | TRUE | Voter |
| Li, Qinghua | Intel Corporation | TRUE | Voter |
| Li, Wanyi | TP-Link Corporation Limited | TRUE | Aspirant |
| Li, Yan | ZTE Corporation | TRUE | Aspirant |
| Li, Yapu | Guangdong OPPO Mobile Telecommunications Corp.,Ltd | TRUE | Aspirant |
| Li, Yiqing | Huawei Technologies Co., Ltd | TRUE | Voter |
| Li, Yunbo | Huawei Technologies Co., Ltd | TRUE | Voter |
| Lim, Dong Guk | LG ELECTRONICS | TRUE | Voter |
| lim, taesung | LG ELECTRONICS | TRUE | Voter |
| Lin, Hsin-De | MediaTek Inc. | TRUE | Potential Voter |
| Lin, Wei | Huawei Technologies Co., Ltd | TRUE | Voter |
| Lin, Yousi | Huawei | TRUE | Aspirant |
| Lin, Zinan | InterDigital, Inc. | TRUE | Voter |
| Lindskog, Erik | SAMSUNG | TRUE | Voter |
| LIU, CHENCHEN | Huawei Technologies Co., Ltd | FALSE | Voter |
| Liu, Der-Zheng | Realtek Semiconductor Corp. | TRUE | Voter |
| Liu, Jianhan | MediaTek Inc. | TRUE | Voter |
| Liu, Ying | NXP Semiconductors | TRUE | Voter |
| Liu, Yong | Apple, Inc. | TRUE | Voter |
| Loginov, Vyacheslav | IITP RAS | TRUE | Voter |
| long, yan | southwest jiaotong university | TRUE | Aspirant |
| Lopez, Miguel | Ericsson AB | TRUE | Voter |
| Lorgeoux, Mikael | Canon Research Centre France | TRUE | Voter |
| Lou, Hanqing | InterDigital, Inc. | TRUE | Voter |
| Lou, Hui-Ling | NXP Semiconductors | TRUE | Voter |
| Lu, Kaiying | MediaTek Inc. | TRUE | Voter |
| Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd | TRUE | Voter |
| Lu, Yi | Huawei Technologies Co., Ltd | FALSE | Non-Voter |
| LU, Yuxin | Huawei Technologies Co., Ltd | TRUE | Voter |
| Lumbatis, Kurt | CommScope, Inc. | TRUE | Voter |
| Luo, Chaoming | Beijing OPPO telecommunications corp., ltd. | TRUE | Voter |
| Lv, Lily | Huawei Technologies Co., Ltd | TRUE | Voter |
| Lyakh, Mikhail | ON Semiconductor | TRUE | Voter |
| Ma, Li | MediaTek Inc. | TRUE | Voter |
| Ma, Mengyao | Huawei Technologies Co., Ltd | TRUE | Voter |
| Malichenko, Dmitrii | ON Semiconductor | TRUE | Potential Voter |
| Malinen, Jouni | Qualcomm Incorporated | TRUE | Voter |
| Mano, Hiroshi | Koden Techno Info K.K. | TRUE | Voter |
| Marks, Roger | EthAirNet Associates | TRUE | ExOfficio |
| Martinez Vazquez, Marcos | MaxLinear Corp | TRUE | Voter |
| Max, Sebastian | Ericsson AB | TRUE | Voter |
| Mazor, Nadav | Vayyar Ltd | TRUE | Potential Voter |
| McCann, Stephen | Huawei Technologies Co., Ltd | TRUE | Voter |
| Mcconnell, Ray | bluwireless technology | FALSE | Aspirant |
| McGuire, Colin | The MathWorks, Inc. | TRUE | Aspirant |
| Medda, Daniele | International Hellenic University | TRUE | Potential Voter |
| Mehrnoush, Morteza | Facebook | TRUE | Voter |
| MELZER, Ezer | Toga Networks, a Huawei company | TRUE | Voter |
| Memisoglu, Ebubekir | Istanbul Medipol University; Vestel | TRUE | Voter |
| Minotani, Jun | Panasonic Corporation | TRUE | Voter |
| Mirfakhraei, Khashayar | Zeku | TRUE | Voter |
| Moelker, Dignus-Jan | Broadcom Corporation | TRUE | Voter |
| Mohanty, Bibhu | Qualcomm Incorporated | TRUE | Voter |
| Monajemi, Pooya | Cisco Systems, Inc. | TRUE | Voter |
| Montemurro, Michael | Huawei Technologies Co., Ltd | TRUE | Voter |
| Montreuil, Leo | Broadcom Corporation | TRUE | Voter |
| Moon, Juseong | Korea National University of Transportation | TRUE | Voter |
| Moran, Ashley | IEEE Standards Association (IEEE-SA) | FALSE | Non-Voter |
| Morioka, Hitoshi | SRC Software | TRUE | Voter |
| Motozuka, Hiroyuki | Panasonic Corporation | TRUE | Voter |
| Mueller, Robert | Technische Universitaet Ilmenau | TRUE | Voter |
| Myles, Andrew | Cisco Systems, Inc. | TRUE | Voter |
| Nagai, Yukimasa | Mitsubishi Electric Corporation | TRUE | Voter |
| nagata, kengo | Nippon Telegraph and Telephone Corporation (NTT) | TRUE | Voter |
| Naik, Gaurang | Qualcomm Incorporated | TRUE | Voter |
| Nakano, Hiroki | CAHI Corporation; Kyoto University | TRUE | Voter |
| Nam, Junyoung | Qualcomm Incorporated | TRUE | Voter |
| Namboodiri, Vamadevan | SAMSUNG ELECTRONICS | TRUE | Voter |
| Nandagopalan, SAI SHANKAR | Synaptics | TRUE | Voter |
| Naribole, Sharan | Apple, Inc. | FALSE | Voter |
| Nassiri Toussi, Karim | Broadcom Corporation | TRUE | Voter |
| Nayak, Peshal | Samsung Research America | TRUE | Potential Voter |
| Nezou, Patrice | Canon Research Centre France | TRUE | Voter |
| Ng, Boon Loong | Samsung Research America | TRUE | Voter |
| Nguyen, An | U.S. Department of Homeland Security | TRUE | Voter |
| Nikolich, Paul | SAMSUNG | FALSE | ExOfficio |
| Noh, Yujin | Senscomm | TRUE | Voter |
| Numan, Ahmed Bilal | Peraso Technologies Incorporated | TRUE | Aspirant |
| Oh, Hyun Seo | Electronics and Telecommunications Research Institute (ETRI) | FALSE | Voter |
| Okada, Hiraku | Nagoya University | TRUE | Voter |
| Omar, Hassan | Huawei Technologies Co., Ltd | TRUE | Voter |
| Orlando, Christian | IEEE STAFF | FALSE | Non-Voter |
| Orlovsky, Michael | Vayyar Imaging LTD | TRUE | Voter |
| Orr, Stephen | Cisco Systems, Inc. | TRUE | Voter |
| Ouchi, Masatomo | Canon | TRUE | Voter |
| Oyama, Satoshi | Association of Radio Industries and Businesses (ARIB) | TRUE | Voter |
| Ozbakis, Basak | VESTEL Electronics Corp. | TRUE | Voter |
| OZDEN ZENGIN, OZLEM | VESTEL | TRUE | Voter |
| Ozpoyraz, Burak | Vestel | TRUE | Potential Voter |
| Pakrooh, Pooria | Qualcomm Technologies, Inc. | FALSE | Non-Voter |
| Palayur, Saju | Maxlinear Inc | TRUE | Voter |
| Palm, Stephen | Broadcom Corporation | TRUE | Voter |
| Pandey, Sheetal | ON Semiconductor | TRUE | Aspirant |
| PANG, KUN | Honor Device Co., Ltd. | TRUE | Aspirant |
| Pare, Thomas | MediaTek Inc. | TRUE | Voter |
| Parekh, Jatin | Arista Networks, Inc. | FALSE | Voter |
| Park, Eunsung | LG ELECTRONICS | TRUE | Voter |
| Park, Minyoung | Intel Corporation | TRUE | Voter |
| Parsons, Glenn | Ericsson AB | TRUE | ExOfficio |
| Patil, Abhishek | Qualcomm Incorporated | TRUE | Voter |
| Patwardhan, Gaurav | Hewlett Packard Enterprise | TRUE | Voter |
| Peng, Lan | Huawei Technologies Co., Ltd | TRUE | Aspirant |
| Peng, Ronny | MediaTek Inc. | TRUE | Potential Voter |
| Perahia, Eldad | Hewlett Packard Enterprise | TRUE | Voter |
| PESIN, ANTHONY | InterDigital, Inc. | TRUE | Voter |
| Petranovich, James | ViaSat, Inc. | TRUE | Voter |
| petrick, Albert | InterDigital, Inc. | TRUE | Voter |
| Petry, Brian | Broadcom Corporation | TRUE | Voter |
| Pettersson, Charlie | Ericsson AB | TRUE | Voter |
| Pirhonen, Riku | NXP Semiconductors | TRUE | Voter |
| Porat, Ron | Broadcom Corporation | TRUE | Voter |
| Prabhakaran, Dinakar | Broadcom Corporation | TRUE | Voter |
| Ptasinski, Henry | Element78 Communications LLC | TRUE | Aspirant |
| Puducheri, Srinath | Broadcom Corporation | TRUE | Voter |
| Pulikkoonattu, Rethnakaran | Broadcom Corporation | FALSE | Voter |
| Pushkarna, Rajat | Panasonic Asia Pacific Pte Ltd. | TRUE | Voter |
| Qi, Emily | Intel Corporation | TRUE | Voter |
| Rafique, Saira | Istanbul Medipol University, Vestel | TRUE | Voter |
| Rai, Kapil | Qualcomm Incorporated | TRUE | Voter |
| Raissinia, Alireza | Qualcomm Incorporated | TRUE | Voter |
| Ranganath, Ashok | SAMSUNG | FALSE | Aspirant |
| Rantala, Enrico-Henrik | Zeku | TRUE | Voter |
| Ratnam, Vishnu | Samsung Research America | TRUE | Potential Voter |
| Redlich, Oded | Huawei Technologies Co., Ltd | TRUE | Voter |
| Rege, Kiran | Perspecta Labs | TRUE | Voter |
| Regev, Dror | Toga Networks (a Huawei Company) | TRUE | Voter |
| REICH, MOR | Huawei Technologies Co., Ltd | TRUE | Voter |
| Rezk, Meriam | Qualcomm Incorporated | TRUE | Voter |
| Riegel, Maximilian | Nokia | TRUE | Voter |
| Riley, Jared | Infineon Technologies | FALSE | Non-Voter |
| Rison, Mark | Samsung Cambridge Solution Centre | TRUE | Voter |
| Robert, Joerg | TU Ilmenau, Fraunhofer IIS | TRUE | Voter |
| Roder, Patricia | IEEE Standards Association (IEEE-SA) | FALSE | Non-Voter |
| Rolfe, Benjamin | Blind Creek Associates | TRUE | Voter |
| Rosdahl, Jon | Qualcomm Technologies, Inc. | TRUE | Voter |
| Roy, Sayak | NXP Semiconductors | TRUE | Voter |
| Ryu, Kiseon | Ofinno | TRUE | Potential Voter |
| Sahoo, Anirudha | National Institute of Standards and Technology | FALSE | Non-Voter |
| Sakoda, Kazuyuki | Sony Corporation | TRUE | Voter |
| Salem, Mohamed | Huawei Technologies Co., Ltd | TRUE | Voter |
| Salman, Hanadi | Istanbul Medipol University; VESTEL | TRUE | Voter |
| Sambasivan, Sam | AT&T | TRUE | Voter |
| Sand, Stephan | German Aerospace Center (DLR) | TRUE | Voter |
| Sandhu, Shivraj | Qualcomm Incorporated | TRUE | Voter |
| Sarris, Ioannis | Adveos | TRUE | Voter |
| Sato, Naotaka | Sony Group Corporation | TRUE | Voter |
| Sato, Takuhiro | SHARP CORPORATION | TRUE | Aspirant |
| Satrasala, Rajeshwari | NXP Semiconductors | TRUE | Potential Voter |
| Schelstraete, Sigurd | Maxlinear | TRUE | Voter |
| Schiessl, Sebastian | Apple, Inc. | TRUE | Voter |
| Schmidhammer, Martin | German Aerospace Center (DLR) | TRUE | Voter |
| Scott, Andy | NCTA | TRUE | Voter |
| Sedin, Jonas | Ericsson AB | TRUE | Voter |
| Segev, Jonathan | Intel Corporation | TRUE | Voter |
| Seo, Sangho | Infineon Technologies | TRUE | Aspirant |
| Seok, Joseph | Self | TRUE | Potential Voter |
| Seok, Yongho | MediaTek Inc. | FALSE | Voter |
| Serafimovski, Nikola | pureLiFi | FALSE | Voter |
| Sethi, Ankit | NXP Semiconductors | TRUE | Voter |
| Sevin, Julien | Canon Research Centre France | TRUE | Voter |
| Shafin, Rubayet | Samsung Research America | TRUE | Voter |
| Shalom, Hai | Google | FALSE | Non-Voter |
| Shaw, Amit | Infineon Technologies | TRUE | Aspirant |
| Shellhammer, Stephen | Qualcomm Incorporated | TRUE | ExOfficio |
| Sherlock, Ian | Texas Instruments Inc. | TRUE | Voter |
| Shilo, Shimi | Huawei Technologies Co., Ltd | TRUE | Voter |
| Shirakawa, Atsushi | SHARP CORPORATION | TRUE | Aspirant |
| Shprukhman, Ann | US Department of Defense | FALSE | Non-Voter |
| Sinn, Ulrich | Siemens AG | TRUE | Voter |
| Smith, Graham | SR Technologies | TRUE | Voter |
| Smith, Luther | Cable Television Laboratories Inc. (CableLabs) | TRUE | Aspirant |
| Solaija, Muhammad Sohaib | Istanbul Medipol University; Vestel | TRUE | Voter |
| Son, Ju-Hyung | WILUS Inc. | TRUE | Voter |
| Song, Hao | Intel Corporation | TRUE | Potential Voter |
| Sood, Ayush | Infineon Technologies | TRUE | Aspirant |
| Sosack, Robert | Molex Incorporated | TRUE | Voter |
| Srinivasa, Sudhir | NXP Semiconductors | TRUE | Voter |
| Srivatsa, Veena | Synaptics | TRUE | Aspirant |
| Stacey, Robert | Intel Corporation | FALSE | Voter |
| Stanley, Dorothy | Hewlett Packard Enterprise | TRUE | Voter |
| Stavridis, Athanasios | Ericsson AB | TRUE | Voter |
| Stepanov, Max | Intel | TRUE | Voter |
| Stott, Noel | Keysight Technologies | TRUE | Voter |
| Strauch, Paul | Qualcomm Incorporated | TRUE | Voter |
| Suh, JUNG HOON | Huawei Technologies Co., Ltd | TRUE | Voter |
| Sumi, Takenori | Mitsubishi Electric Corporation | TRUE | Voter |
| Sun, Bo | ZTE Corporation | TRUE | Voter |
| Sun, Li-Hsiang | Sony Corporation | TRUE | Voter |
| Sun, Yanjun | Qualcomm Incorporated | TRUE | Voter |
| Sundman, Dennis | Ericsson AB | TRUE | Voter |
| SURACI, FRANK | U.S. Department of Homeland Security | TRUE | Voter |
| Takai, Mineo | Space-Time Engineering | TRUE | Voter |
| Tan, Danny | Huawei Technologies Co., Ltd | TRUE | Voter |
| Tanaka, Yusuke | Sony Group Corporation | TRUE | Voter |
| Taori, Rakesh | Infineon Technologies | TRUE | Aspirant |
| Thakur, Sidharth | Apple, Inc. | TRUE | Aspirant |
| Thompson, Tom | IEEE Standards Association (IEEE-SA) | FALSE | Non-Voter |
| Thota, Sri Ramya | Infineon Technologies | TRUE | Aspirant |
| THOUMY, Francois | Canon Research Centre France | TRUE | Voter |
| Tian, Bin | Qualcomm Incorporated | TRUE | Voter |
| Tolpin, Alexander | Intel Corporation | TRUE | Voter |
| Tomeba, Hiromichi | SHARP CORPORATION | TRUE | Aspirant |
| Torab Jahromi, Payam | Facebook | TRUE | Voter |
| Torrijo, Alejandro | MaxLinear Corp | TRUE | Voter |
| Trainin, Solomon | Qualcomm Incorporated | TRUE | Voter |
| Tsai, Tsung-Han | MediaTek Inc. | TRUE | Voter |
| Tsodik, Genadiy | Huawei Technologies Co., Ltd | TRUE | Voter |
| Tsujimaru, Yuki | Canon Inc. | TRUE | Voter |
| Tugtekin, Omer | VESTEL Electronics Corp. | TRUE | Potential Voter |
| Turkmen, Halise | Vestel | TRUE | Voter |
| Turner, Michelle | IEEE STAFF | FALSE | Non-Voter |
| Uln, Kiran | Cypress Semiconductor Corporation | TRUE | Voter |
| Unterhuber, Paul | German Aerospace Center (DLR) | TRUE | Voter |
| Urabe, Yoshio | Panasonic Corporation | TRUE | Voter |
| Van Nee, Richard | Qualcomm Incorporated | TRUE | Voter |
| Van Zelst, Allert | Qualcomm Incorporated | TRUE | Voter |
| Varshney, Prabodh | Nokia | TRUE | Voter |
| Venkatesan, Ganesh | Intel Corporation | TRUE | Voter |
| Verenzuela, Daniel | Sony Corporation | TRUE | Voter |
| Verma, Lochan | Apple, Inc. | TRUE | Voter |
| Verma, Sindhu | Broadcom Corporation | TRUE | Voter |
| Vermani, Sameer | Qualcomm Incorporated | TRUE | Voter |
| Vicent Colonques, Santiago | Maxlinear Corp | TRUE | Voter |
| VIGER, Pascal | Canon Research Centre France | TRUE | Voter |
| Wang, Chao Chun | MediaTek Inc. | TRUE | Voter |
| Wang, Hao | Tencent | TRUE | Voter |
| Wang, Huizhao | Quantenna Communications, Inc. | TRUE | Voter |
| Wang, Lei | Futurewei Technologies | TRUE | Voter |
| Wang, Qi | Apple, Inc. | TRUE | Voter |
| Wang, Steven Qi | Huawei Technologies Co., Ltd | TRUE | Voter |
| Wang, Xiaofei | InterDigital, Inc. | TRUE | Voter |
| Wang, Yi-Hsiu | Zeku | TRUE | Voter |
| Wang, Zisheng | ZTE Corporation | TRUE | Aspirant |
| Want, Roy | Google | TRUE | Voter |
| Ward, Lisa | Rohde & Schwarz | TRUE | Voter |
| Wei, Dong | NXP Semiconductors | TRUE | Potential Voter |
| Wendt, Matthias | Signify | TRUE | Voter |
| Wentink, Menzo | Qualcomm Incorporated | TRUE | Voter |
| Wilhelmsson, Leif | Ericsson AB | TRUE | Voter |
| Wizenberg, Reut | Vayyar Imaging | FALSE | Aspirant |
| Wu, Hao | XGIMI Technology Co.Ltd | TRUE | Voter |
| Wu, Kanke | Qualcomm Incorporated | TRUE | Voter |
| Wu, Shengwei | Synaptics Inc. | TRUE | Aspirant |
| Wu, Tianyu | Apple, Inc. | TRUE | Voter |
| Wu, Wayne | MediaTek Inc. | TRUE | Potential Voter |
| Wullert, John | Perspecta Labs | TRUE | Voter |
| Xiao, Bo | ZTE Corporation | TRUE | Voter |
| Xin, Liangxiao | Sony Corporation | TRUE | Voter |
| Xin, Yan | Huawei Technologies Co., Ltd | TRUE | Voter |
| Xu, Yanchao | Zeku | FALSE | Aspirant |
| Xue, Qi | Qualcomm Incorporated | TRUE | Voter |
| YAGHOOBI, HASSAN | Intel Corporation | TRUE | Voter |
| Yamada, Ryota | SHARP | TRUE | Aspirant |
| Yan, Aiguo | Zeku | TRUE | Voter |
| Yan, Zhongjiang | Northwestern Polytechnical University | TRUE | Voter |
| Yang, Bo | Huawei Technologies Co., Ltd | TRUE | Voter |
| Yang, Jay | Nokia | TRUE | Voter |
| Yang, Lin | Qualcomm Incorporated | TRUE | Voter |
| Yang, Mao | Northwestern Polytechnical University | TRUE | Voter |
| YANG, RUI | InterDigital, Inc. | TRUE | Voter |
| Yang, Steve TS | MediaTek Inc. | TRUE | Voter |
| Yang, Xun | Huawei Technologies Co., Ltd | FALSE | Voter |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) | TRUE | Voter |
| Yee, James | MediaTek Inc. | TRUE | Voter |
| Yee, Peter | NSA-CSD | TRUE | Voter |
| Yi, Yongjiang | Spreadtrum Communication USA Inc. | TRUE | Voter |
| Yokoyama, Takahiro | Association of Radio Industries and Businesses (ARIB) | TRUE | Voter |
| Yong, Su Khiong | Apple, Inc. | TRUE | Aspirant |
| Yoo, Homin | LG ELECTRONICS | TRUE | Voter |
| Yoon, Jeonghwan | LG ELECTRONICS | TRUE | Voter |
| Yoon, Kangjin | Facebook | FALSE | Non-Voter |
| Yoshikawa, Yuki | Canon | TRUE | Voter |
| Young, Christopher | Broadcom Corporation | TRUE | Voter |
| Yu, Mao | Anyka | TRUE | Voter |
| Zaman, Malia | IEEE Standards Association (IEEE-SA) | FALSE | Non-Voter |
| ZEGRAR, Salah Eddine | Istanbul Medipol University; Vestel | TRUE | Voter |
| Zein, Nader | NEC Europe | TRUE | Voter |
| Zeng, Ruochen | Apple, Inc. | TRUE | Voter |
| Zhang, Hongyuan | NXP Semiconductors | TRUE | Voter |
| ZHANG, JIAYIN | Huawei Technologies Co., Ltd | TRUE | Voter |
| Zhang, Yan | NXP Semiconductors | TRUE | Voter |
| Zhou, Pei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd | TRUE | Voter |
| Zhu, Peiying | Huawei Technologies Co., Ltd | TRUE | Voter |
| Zia, Muhammad Furqan | Koc University; Vestel | TRUE | Aspirant |
| Zuniga, Juan Carlos | SIGFOX | FALSE | Non-Voter |

**Annex B : Working Group Officers**

**Working Group**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
| Dorothy Stanley (HP Enterprise) | IEEE 802.11 Working Group Chair | +1( 630) 363-1389  [dstanley@ieee.org](mailto:dstanley@ieee.org) |
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| Robert Stacey (Intel Corporation) | 2nd Vice Chair (Rules and reflectors) IEEE 802 (LMSC) EC delegate | +1 (503) 712 4447 [robert.stacey@intel.com](mailto:robert.stacey@intel.com) |
| Stephen McCann (Huawei Technologies Co., Ltd) | Secretary | [stephen.mccann@ieee.org](mailto:stephen.mccann@ieee.org) |
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| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
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| Mark Hamilton (Ruckus Wireless) | Architecture (ARC) Chair | +1 (303) 818-8472 [mark.hamilton2152@gmail.com](mailto:mark.hamilton2152@gmail.com) |
| Jon Rosdahl (Qualcomm) | Project Authorization Request (PAR) review Chair | +1 (801) 492-4023 [jrosdahl@ieee.org](mailto:jrosdahl@ieee.org) |
| Andrew Myles (Cisco) | Coexistence Standing Committee Chair | +61 418 656587 [amyles@cisco.com](mailto:amyles@cisco.com) |

**Task Groups**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
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| Marc Emmelmann (Koden-TI) | TGbc Chair  Broadcast Services (BCS) | [marc.emmelmann@me.com](mailto:marc.emmelmann@me.com) |
| Bo Sun (ZTE) | TGbd Chair  Next Generation V2X (NGV) | [sun.bo1@zte.com.cn](mailto:sun.bo1@zte.com.cn) |
| Alfred Asterjadhi  (Qualcomm) | TGbe Chair  Extremely High Throughput (EHT) | aasterja@qti.qualcomm.com |
| Tony Xiao Han  (Huawei Technologies Co., Ltd) | TGbf Chair  WLAN Sensing (SENS) | [tony.hanxiao@huawei.com](mailto:tony.hanxiao@huawei.com) |
| Mark Hamilton  (Ruckus/CommScope Wireless) | TGbh Chair  Random and Changing MAC address (RCM) | +1 (303) 818-8472 [mark.hamilton2152@gmail.com](mailto:mark.hamilton2152@gmail.com) |
| Carol Ansley  (Cox Communications) | TGbi Chair  Enhanced Data Privacy (EDP) | [carol@ansley.com](mailto:carol@ansley.com) |
| Michael Montemurro (Huawei Technologies Co., Ltd) | TGme Chair 802.11 revision project - P802.11REVme | [montemurro.michael@gmail.com](mailto:montemurro.michael@gmail.com) |

|  |
| --- |
|  |

**Study Groups (SG) & Topic Interest Groups (TIG)**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |

**Ad-Hoc Groups (AHG)**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
| Hassan YAGHOOBI  (Intel) | ITU Ad-Hoc | [hassan.yaghoobi@intel.com](mailto:hassan.yaghoobi@intel.com) |

**Liaison Officials to non-IEEE 802 organizations**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
| Peter Yee (Akayla) | Liaison to IETF (Internet Engineering Task Force) | [peter@akayla.com](mailto:peter@akayla.com) |
| Ian Sherlock (Texas Instruments Inc.) | Liaison to WFA (Wi-Fi Alliance) | +1-972-995-2011 [isherlock@ieee.org](mailto:isherlock@ieee.org) |

**Liaison Officials to IEEE 802 organizations**

|  |  |  |
| --- | --- | --- |
| Name (Affiliation) | Position | Contact Details |
| Jay Holcomb (Itron) | Liaison to IEEE 802.18 | +1 (509) 891-3281 [jay.holcomb@itron.com](mailto:jay.holcomb@itron.com) |
| Tuncer Baykas (Istanbul Medipol Universitesi) | Liaison to IEEE 802.19 | [tbaykas@ieee.org](mailto:tbaykas@ieee.org) |
| Tim Godfrey (Electric Power Research Institute) | Liaison to IEEE 802.24 | +1 (650) 855-8584 (office) [tim.godfrey@ieee.org](mailto:tim.godfrey@ieee.org) |
| John Kenney  (Toyota) | Liaison to IEEE 1609 | [jkenney@us.toyota-itc.com](mailto:jkenney@us.toyota-itc.com) |

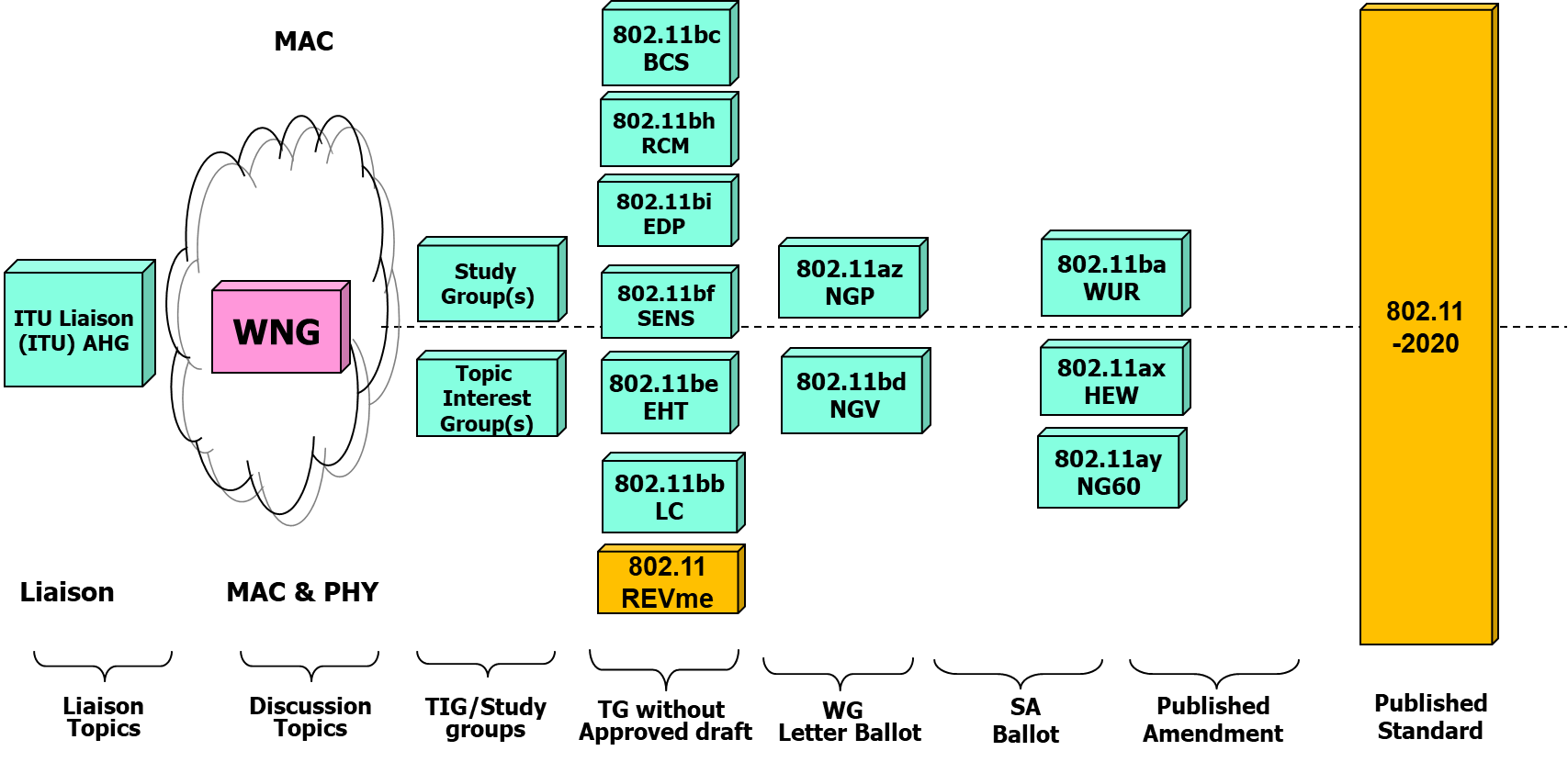
**Annex C : Minutes**

This Annex contains references to all IEEE 802.11 SC/TG/SG & Ad Hoc Committee (AHC) minutes from this meeting. Please note that they are NOT subject to the approval of these minutes, but are confirmed and approved by their individual group in the opening meeting at their next session.

|  |  |  |
| --- | --- | --- |
| WG | TE | 21-1764r0 |
| TGme | TG | 21-1838r4 |
| TGaz | TG | 21-1834r0 |
| TGbb | TG | 21-1872r0 |
| TGbc | TG | 21-1744r0 |
| TGbd | TG | 21-1863r0 |
| TGbe | TG | 21-1888r0 |
| TGbf | TG | 21-1889r0 |
| TGbh | TG | 21-1892r0 |
| TGbi | TG | 21-1915r0 |
| AANI | SC | 21-1926r0 |
| COEX | SC | 21-1891r0 |
| WNG | SC | 21-1823r0 |
| JTC 802 | SC | 21-1845r0 |
| ARC | SC | 21-1794r0 |
| ITU | AH | Did not meet |
| PAR | SC | 21-1779r0 |

**Annex D : Revisions and Standards Pipeline**

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**IEEE 802.11 Standards Pipeline**

End.