IEEE P802.11  
Wireless LANs

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| Minutes of the IEEE P802.11 Full Working Group | | | | |
| Date: 2017-05-08 | | | | |
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Abstract

This document constitutes the minutes of the IEEE 802.11 full working group for the May 2017, Daejeon, South Korea meeting.

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

**IEEE 802 Wireless Interim Meeting – #105 Joint Opening Plenary**

**Daejeon Convention Centre**

**Daejeon, South Korea**

**May 8 - 12, 2017**

**Monday, 8th May 2017**

**Call to Order**

The 802.11, 802.15, 802.18, 802.19, 802.21 and 802.24 Chairs called the joint meeting to order at 08:00 Korean Standard Time (KST)

**General announcements**

* No photography, no audio recording
* Social – Reception on Wednesday 18:30 – 21:00 in the Lotte Hotel
* Straw Poll of new attendees: 1 (correct value for this week)

**IEEE patent policy**

The 802.15 WG chair read the IEEE-SA instructions and displayed the four slides explaining patent policy and informed the attendees that additional information could be found on the PatCom web site: (<http://standards.ieee.org/board/pat/pat-slideset.ppt>).

The 802.15 WG chair read the IEEE anti-trust policy.

Nothing to note

**Financial report** [11-17-0565-00](https://mentor.ieee.org/802.11/dcn/17/11-17-0565-00-0000-treasurer-report-may-2017-daejeon.pptx)

Total liabilities and equity $ 548,283.28

**Network**

Provided by Linespeed this week. Very good performance this week. IEEE 802.11ac is available in each room and there is a help desk near the registration desk.

**Wireless Chairs Standing Committee (WCSC)**

The 802.15 WG Chair informed the group that the Wireless Chairs Standing Committee (WCSC) met yesterday, Sunday at 16:00 local time. Chair noted that this is an open meeting, all are encouraged to attend. Minutes are available at [ec-17-0080-00-WCSG](https://mentor.ieee.org/802-ec/dcn/17/ec-17-0080-00-WCSG-daejeon-may-2017-minutes.docx)

**Future Sessions (\* - interims)**

May 7-12, 2017, Daejeon Convention Center, Daejeon, Korea (TBC), 802 Wireless Interim Session.\*

July 9-14, 2017, Estrel Hotel and Convention Center, Berlin, Germany, 802 Plenary Session.

September 10-15, 2017, Hilton Waikoloa Village, Kona, HI, USA, 802 Wireless Interim Session.\*

November 5-10, 2017, Caribe Hotel and Convention Center, Orlando, FL, USA, 802 Plenary Session

January 14-19, 2018, Hotel Irvine, Irvine, California, 802 Wireless Interim Session.\*

March 4-9, 2018, Hyatt Regency O'Hare, Rosemont, IL, USA, 802 Plenary Session.

May 6-11, 2018, Warsaw Marriott (TBC), 802 Wireless Interim Session.\*

July 8-13, 2018, Manchester Grand Hyatt, San Diego, CA, USA, 802 Plenary Session.

September 9-14,  2018, Hilton Waikoloa Village, Kona, HI, USA, 802 Wireless Interim Session.\*

November 11-16, 2018, Suzhou, China (TBD), 802 Plenary Session.

**Working Group Updates**

802.11, [11-17-0537r0](https://mentor.ieee.org/802.11/dcn/17/11-17-0537-00-0000-may-2017-wg-opening-report.pptx)

802.15, [15-17-0247r1](https://mentor.ieee.org/802.15/dcn/17/15-17-0247-01-0000-802-15-icn-2017-graphic-agenda.xlsx)

802.18, [18-17-0072r1](https://mentor.ieee.org/802.18/dcn/17/18-17-0072-01-0000-daejeon-opening-report-may-2017.pptx)

802.19, [19-17-0043r1](https://mentor.ieee.org/802.19/dcn/17/19-17-0043-01-0000-may-2017-opening-report.pptx)

802.21, [21-17-0022r0](https://mentor.ieee.org/802.21/dcn/17/21-17-0022-00-0000-wireless-joint-opening-plenary-notes.pptx)

802.24, [24-17-0012r0](https://mentor.ieee.org/802.24/dcn/17/24-17-0012-00-0000-may-2017-meeting-presentation.pptx)

**AoB**

None

**Adjourn**

Meeting adjourned at 09:39 KST without objection.

**IEEE 802.11 Interim Meeting – Session #163**

**Daejeon Convention Center (DCC), Daejeon, South Korea**

**May 8th – 12th, 2017**

**IEEE 802.11 Opening Plenary, Monday 8th May 2017**

Presiding chair: Adrian Stephens (Intel) opened the meeting at 09:00 Korean Standard Time (KST) and declared Quorum for the Session.

2nd Vice-chair (VC2): Dorothy Stanley Hewlett Packard Enterprise

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

Secretary: Stephen McCann BlackBerry Ltd

There are 327 voting members and 12\*\* Ex Officio voters of IEEE 802.11

There were 105 people in the room

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

1. **Notices** (11-17-0563r1)
   1. No photographs at this meeting and please turn your mobiles to vibrate.
   2. Chair: Are there any members of the press present.
      1. None
2. **Approve/modify joint opening agenda** (11-17-0536r1)
   1. Chair: I would like to acknowledge that ETRI are sponsoring this meeting and I would like to thank them.
   2. VC1: This is a great example of how companies can sponsor the IEEE 802 interim meetings.
   3. This is a summary of all room allocations for the week.
   4. Chair: I suggest we approve this agenda.
   5. **Move to approve the agenda 11-17-0536r1 (“Agenda Graphic” tab and the “WG11” tab Monday agenda)**
      1. Moved: Al Petrick, 2nd: Lei Wang
      2. No objection to approving by unanimous consent
3. **March 2017 WG Minutes**
   1. **Move to approve the Vancouver March 2017 WG minutes document 11-17-0339r1**
   2. Moved: Stephen McCann, 2nd: Stuart Kerry
   3. Following neither discussion nor dissent the minutes were approved by unanimous consent.
4. **Attendance**
   1. Welcome to the 1 new participant in this meeting.
   2. Chair: Please note that Stephen McCann (Secretary) will be holding a newcomer’s session at 10:30 in room 107.
5. **Call for essential Patents** (11-17-0561r0)
   1. VC2: read out the current PatCom rules and then called for essential patents information, as shown by:
   2. <http://standards.ieee.org/board/pat/pat-slideset.ppt>
      1. There were no issues raised regarding the call for essential patents. There was no response to the call for essential patents.
   3. VC2: read out other policies and procedures for the meeting.
   4. VC2: There are also several current documents which describe the policies and procedures. The last updates were done in March 2017, although not all the revised documents have been posted yet. The IEEE 802.11 Operations Manual (OM) has also been updated.
   5. No questions
6. **Announcements**
   1. **Liaisons (11-17-0537r0 slide #5)**
      1. Chair: This is a summary of the single liaison from 3GPP RAN1. This work will be passed to the IEEE 802.11 PDED ad-hoc and IEEE 802.19.
      2. PDED Chair: These liaisons will be discussed in the PDED meetings this week.
      3. AANI Chair: There are also some liaisons to 3GPP that will discussed within the AANI meetings this week.
   2. **IEEE 1932.1 (slide #7)**
      1. Chair: I would like to bring this new project to your attention. I have invited the chair of this group to attend one of our meetings to share some information.
   3. **Other information and agendas for this meeting (slide #9)**
      1. Chair: This is information about the other IEEE 802.11 and IEEE 802 group meeting logistics for this week. Please note the joint meetings and reciprocal credit with some of the other IEEE 802 groups.
   4. **Meeting logistics (11-17-0566r1 slide #4)**
      1. VC1: this slide deck shows information about future meetings and logistics this week.
      2. Slide #5 shows a link to this week’s online room schedule.
      3. Slide #6 shows the meeting room layout within this convention center.
      4. There is an online google IEEE 802.11 calendar which is available for most hand held devices.
      5. Q: I believe that the IEEE 802.18 chair requested that their meetings be shown on this IEEE 802.11 calendar.
      6. The next meeting is in July 2017 in Berlin, Germany. The IEEE 802.11 will be in the Estrel hotel.
      7. There will be more information about the Hawaii, September 2017 meeting in a few weeks’ time.
   5. **Recording Attendance (slide #9)**
      1. VC1: Please remember to record your attendance for each 2 hour slot during the week.
   6. **WG Documents (slide #10)**
      1. VC1: If you want to synchronize all the documents on mentor, please use the local server and not the external link. The IT support company this week is Linespeed, so please note the new SSID, links and URLs. The IT support center is along the corridor from the IEEE 802 registration desk.
   7. **Social and Catering options (slide #11)**
      1. VC1: Please note that you obtain breakfast in your own hotel and lunch is available within this convention center.
      2. There is a social on Wednesday evening, in the Lotte hotel, which is across the road from the convention center (slide #13). This will be a sit-down dinner, with a cultural performance at 7.15pm.
7. **IEEE standards board decisions** (11-17-0537r0 slide #10)
   1. Chair: These are the decisions made by the IEEE standards board.
   2. Question (Q): What does the term interest group mean on slide #11.
   3. Answer (A): I thought that the IEEE-SA need to be clear on this term and this term should be interpreted as Special Interest Group.
   4. Q: Is the presentation to the IEEE-SA in the public domain?
   5. A: Yes.
   6. Chair: However, it is not an IEEE 802.11 document, so please can you ask for it by email.
8. **Status of all groups** (slide #13)
   1. **Sub-Group Status**
      1. Chair: Please note the new maintenance task group md, which is meeting for the first time this week.
      2. Chair: slide #16 summarizes all the IEEE 802.11 sub-groups including officers.
      3. Slide #17 shows the updated status of the IEEE 802.11 projects. At the moment, it looks as though 11ah will be published in April 2017.
   2. **Voting Status (slide #20)**
      1. No questions
9. **Group Summaries** (11-17-0560r1)
   1. Special notes were mentioned for the following groups:
   2. **Editor’s meeting**
      1. Tomorrow morning at 7.00am, including the ANA status, style guides and numbering situation. There will be a discussion about the 11ah publication date.
   3. **WNG**
      1. There are 2 presentations this week for this group, which meets on Tuesday at 8am.
   4. **TGmd**
      1. This group is meeting for the first time this week.
   5. **TGaj**
      1. The initial sponsor ballot has now finished and passed. This week will be spent analyzing the comments.
   6. **TGak**
      1. This group is currently in sponsor ballot which will finish on Wednesday this week.
   7. **TGax**
      1. There was an ad-hoc in Seoul last week and a lot of good work was done there.
   8. **LC TIG**
      1. Q: Which “draft” document is the LC TIG creating?
      2. A: It’s a draft report about the feasibility of light communication technologies.
      3. C: I think it needs to be made clear that this is not an IEEE 802.11 draft document, as the group usually understands.
10. **Recess**
    1. Meeting recessed at 10:00 KST.

**Wednesday, 9th May 2017**

**IEEE 802.11 Mid-Week Plenary**

Presiding chair: Adrian Stephens (Intel) opened the meeting at 10:30 KST.

140 people present.

1. **Approve/modify joint opening agenda** (11-17-0536r2)
   1. Chair: I would like to mention that there is a photographer present, who will take a picture of the room on behalf of the City of Daejeon.
   2. Chair: Following that, please remember that other photographs are not permitted.
   3. There are a couple of minor changes to the agenda
   4. **Move to approve the agenda 11-17-0536r3.**
      1. Moved: Rich Kennedy, 2nd: Donald Eastlake
      2. No objection to approving the agenda by unanimous consent.
2. **Call for Essential Patents**
   1. The chair read out the Potentially Essential Patents slide.
   2. No statements were made
   3. Please remember that everyone here is participating as individuals.
3. **CAC**
   1. Reminder about 19.30 KST meeting on Thursday. The purpose of this meeting is to prepare for the Friday closing plenary. This is an open meeting and everyone is welcome to attend.
4. **IETF Liaison** (11-17-0564r0)
   1. This is report about the current IEEE 802.11 related activities within the IETF.
   2. The next meeting is at the end of July 2017 in Prague, which is the week after the IEEE 802.11 meeting in Berlin.
   3. No questions
5. **Room assignment updates** (11-17-0536r3)
   1. JTC1: Please can PDED ad-hoc take the JTC1 slot on Thursday PM1.
   2. TGba: Please can we have two more slots: Wed PM2 and Thur PM1
   3. **Motion to approve the updated room graphic in the agenda 11-17-0536r4**
      1. Moved: Andrew Myles, 2nd: Nicola Serafimovski
      2. For: 100, Against: 1, Abstain: 1 (Motion passes)
6. **Working Group Motions** (11-17-0562r0)
   1. **TGmd Chair Confirmation (slide #4)**
      1. **Confirm Dorothy Stanley as TGmd chair.**
      2. Moved: Stuart Kerry, Seconded Lei Wang
      3. No objection to approving the agenda by unanimous consent
      4. From 11-14-629r19, section 4.2: "The TG Chair shall be appointed by the WG Chair and confirmed by a WG majority approval. The TG Chair is re-affirmed every 2 years: one session after the WG Chair is elected."
   2. **TGmd Vice-Chair Confirmation – 1 (slide #5)**
      1. **Confirm Mark Hamilton as TGmd vice-chair.**
      2. Moved: Dorothy Stanley on behalf of TGmd
      3. No objection to approving the agenda by unanimous consent
      4. [TGmd result: Unanimous]
      5. From 11-14-629r19, section 4.3: "TG Vice-Chair is elected by a TG majority approval and confirmed by a WG majority approval. The TG Vice-Chair is reaffirmed every 2 years; one session after the WG Chair is elected."
   3. **TGmd Vice-Chair Confirmation – 2 (slide #6)**
      1. **Confirm Michael Montemurro as TGmd vice-chair.**
      2. Moved: Dorothy Stanley on behalf of TGmd
      3. No objection to approving the agenda by unanimous consent
      4. [TGmd result: Unanimous]
      5. From 11-14-629r19, section 4.3: "TG Vice-Chair is elected by a TG majority approval and confirmed by a WG majority approval. The TG Vice-Chair is reaffirmed every 2 years; one session after the WG Chair is elected."
   4. **AANI Motion (slide #7)**
      1. **Approve the liaison statement in 11-17-378-01 from IEEE 802 to 3GPP RAN WG2 in response to the liaison received in 11-17-0315, granting the WG chair editorial license.**
      2. Moved: Joseph Levy, Seconded: Nicola Serafimovski
      3. For: 76, Against: 0, Abstain: 10 (Motion passes)
   5. **AANI Liaison to 3GPP SA**
      1. This is an information item about the liaison document 11-16-1574r1. Please come along to the next ANNI session during Thurs AM2 to find out more information and to help with this work.
   6. **PDED Liaison to 3GPP RAN4 (slide #8)**
      1. **Approve the liaison statement in 11-17-738-02 from IEEE 802 to 3GPP RAN4 in relation to SIR for below ED tests in Wi-Fi /LAA coexistence testing, granting the WG chair editorial license.**
      2. Moved: Andrew Myles, Seconded: Vinko Erceg
      3. For: 64, Against: 0, Abstain: 12 (Motion passes)
      4. [PDED result: 15-0-7 Passes]
   7. **Response to ISO/IEC/JTC1 Ballot comments: 802.11-2016 (slide #9)**
      1. **Approve the text in 11-17-0629-01 as the response to the comments on IEEE Std 802.11-2016 during the 60-day ballot in ISO/IEC JTC1 under the PSDO agreement**
      2. Moved: Andrew Myles, Seconded: Dan Harkins
      3. Q: Is this going out as an IEEE 802 liaison?
      4. A: IEEE 802.11 will approve this, and then it will go to the IEEE 802 teleconference on June 6th for their approval. Then it will be sent out.
      5. For: 41, Against: 0, Abstain: 1 (Motion passes)
      6. [JTC1/SC6 SC: Moved: Dan Harkins Seconded: Stuart Kerry Result: 5-0-0]
   8. **Response to ISO/IEC/JTC1 Ballot comments: 802.11ai-2016 (slide #10)**
      1. **Approve the text in 11-17-0612-01 as the response to the comments on IEEE Std 802.11ai-2016 during the 60-day ballot in ISO/IEC JTC1 under the PSDO agreement**
      2. Moved: Andrew Myles, Seconded: Dan Harkins
      3. Q: Did you also send the IEEE 802.11ai-2016 2nd print version to ISO.
      4. A: No, not as yet. We need to determine the exact process to do this.
      5. For: 56, Against: 0, Abstain: 3 (Motion passes)
      6. [JTC1/SC6 SC: Moved: Dan Harkins Seconded: Stuart Kerry Result: 5-0-0]
   9. **LC TIG ITU-R SG1 WP1A Liaison Statement (slide #11)**
      1. **Approve the liaison in https://mentor.ieee.org/802.11/dcn/17/11-17-0790-02-00lc-lc-liaison-statement-to-itu-r.docx, granting the WG chair editorial license, and send to 802.18 for consideration to forward to ITU-R SG1 WP1A.**
      2. Moved: Nikola Serafimovski, Seconded: John Notor
      3. C: The LC TIG had a teleconference on the 3rd May and was joined by some regulators regarding light communications. These regulators are chairing ITU ad-hocs on this topic and requested some input from IEEE 802.11. A summary of the ITU-R workshop held at the Dutch Radiocommunications Agency in Amersfoort on 8th March 2017 on Optical Wireless Communications is contained in document 11-17-0706r0. IEEE 802.15.7 and IEEE 802.18 have also been consulted about this liaison.
      4. Q: Why is 11-17-0790r3 shown the on screen?
      5. A: I have prepared 11-17-0790r3 in case there were any comments?
      6. Q: The motion appears to state that this liaison is to be sent to 802.18?
      7. Chair: Yes, this is correct.
      8. Q: The liaison header does not appear to say this.
      9. Chair: Perhaps we need to modify the motion text.
      10. C: The motion text is ok.
      11. Chair: ok.
      12. Q: I’m still not sure what is happening here?
      13. A: The ITU-R has a study group and has requested input from IEEE 802.11 about what regulators should be doing regarding spectrum allocations for light communications. The liaison attempts to answer this.
      14. C: Therefore, this document should be an output of IEEE 802.18
      15. Chair: The motion is still ok.
      16. C: I speak against the motion, as I don’t think this is good input. IEEE is a member of ITU-R and this type of liaison is not necessary.
      17. C: This response was started in IEEE 802.18. Since it involves the IEEE 802.11 and IEEE 802.15 projects, it has been brought to IEEE 802.11 for our consideration.
      18. For: 20, Against: 12, Abstain: 44 (Motion passes)
7. **Any Other Business**
   1. Please remember that there is a social event tonight in the Lotte City Hotel at 6.30pm. Please note that you should use the far door to enter the ballroom in hotel on the ground floor.
   2. Meeting recessed at 11:45 KST

**Friday, 12th May 2017**

**IEEE 802.11 Closing Plenary**

Call to order at 08:06 KST by Adrian Stephens (Intel).

45 people present in the room.

1. **Agenda** (11-17-0536r5)
   1. Chair: There have been some minor changes to the agenda from earlier this week.
   2. **Adopt the changes to the agenda as shown in 11-17-0536r5**
      1. Moved: Mark Hamilton, 2nd: Al Petrick
      2. No objection to approving by unanimous consent.
2. **Call for Essential Patents**
   1. Call for Essential Patents and Letters of Assurance (LoA)
   2. No statements
   3. No questions
3. **Announcements** (11-17-0538r1)
   1. **Participation**
      1. Please can you remember to read this slide and understand that everyone is here as an individual subject matter expert.
   2. **Chair’s minutes, reports and web pages**
      1. Please can you ensure that the sub-group minutes are on the server within 30 days after the close of this meeting. Please can you also send web-page and timeline updates to the secretary.
      2. Please be aware of the Chair’s schedule for the chair’s committee meetings (CAC), which are on 1st June and 28th June 2017 at noon ET.
   3. **Letters of Assurance (LoA)** (slide #11)
      1. Chair: please remember about the LoA requirements.
   4. **IEEE Store and ISO SCG** (slide #12)
      1. Chair: Please can everyone review the state of the store and drafts going to ISO SCG
      2. Please note that after 6 months, documents appear within the “Get 802” scheme.
      3. There are no drafts which have been liaised to ISO in the last 2 months, although there are some motions later in today’s meeting regarding some new drafts.
      4. Note that the recently published IEEE 802.11ah will be automatically liaised to ISO SCG
      5. No questions
4. **Current Venues** (11-17-0566r1 slide #17)
   1. **Straw Poll: How many people would like to come back to this venue?**
   2. Y: 9, N: 24
   3. **Straw Poll: How many people enjoyed the social?** 23, **Did not**: 1
   4. **Straw Poll: How many people did not attend the social?** 2
5. **Upcoming Venues** (11-17-0566r1 slide #18)
   1. VC1: This slide shows the future wireless interim locations.
   2. Slide #18 shows the confirmed upcoming wireless sessions.
   3. Slide #19 shows the confirmed upcoming plenary sessions. The venue for Nov 2018 may change.
6. **Treasury Report** (11-17-0565r1)
   1. VC1: This is the treasurer’s report from 30th April 2017. The final figures for this week will be available later in the year. The number of attendees are down a little (215), but it looks as though we’ll break event this week.
   2. Note that the early bird rate for the July 2017 interim meeting (Berlin) is next Friday (May 19th 2017)
   3. I would We are currently up to date with the Netsuite reporting.
7. **Timelines**
   1. There are timelines updates for TGaj, TGak and there will be a new row for TGmd. It will be updated over the weekend
8. **Documentation & Attendance** (11-17-0563r0 slide #4)
   1. These are the usual attendance statistics for this week and IEEE 802.11ax is by far the largest project this week, although IEEE 802.11ba is close behind.
   2. The number of document uploads per meeting is quite steady, although the current trend is a slow increase.
9. **WG Committee Reports** (11-17-0563r0)
   1. **Technical editor** (slide #8)
      1. No questions
   2. **AANI Standing Committee** (slide #13)
      1. No questions
   3. **ARC Standing Committee** (slide #18)
      1. No questions
   4. **WNG** (slide #25)
      1. There were 2 presentations this week.
      2. Chair: In July 2017, there will a presentation regarding some students’ activities.
      3. No questions
   5. **PDED ad-hoc** (slide #27)
      1. PDED Ad-Hoc Chair: There are several options regarding the future of the PDED Ad-Hoc which will be considered later in a motion.
      2. No questions
   6. **JTC1** (slide #34)
      1. VC1: will you have some items on the EC teleconference on June 6th.
      2. A: yes
      3. Chair: In March 2017, I met with the China representatives at the IEEE-SA. The issue about IEEE 802.11 security within SC6 was discussed and the response was that these comments will continue to be provided.
      4. Q: Regarding the IEEE 802.11ai 2nd printing document, can you clarify what is happening?
      5. A: We have been asked by ISO JTC1 to re-start the liaison process with the 2nd printing.
      6. Chair: Please note that we will not proceed with the ISO motion from the mid-week plenary. “Response to ISO/IEC/JTC1 Ballot comments: 802.11ai-2016” described above, as IEEE 802.11 has been asked to re-start the ISO liaising process with the IEEE 802.11ai-2016 2nd printing.
   7. **TGmd** (slide #38)
      1. This week was the first meeting of this group
      2. No questions
   8. **TGaj** (slide #43)
      1. No questions
   9. **TGak** (slide #50)
      1. No questions
   10. **TGaq** (slide #54)
       1. No questions
   11. **TGax** (slide #57)
       1. No questions
   12. **TGay** (slide #62)
       1. No questions
   13. **TGaz** (slide #68)
       1. Chair: please can you spell out all your acronyms (e.g. FRD) within your closing reports, as not everyone knows what they mean, especially when they are not attending that group.
   14. **TGba** (slide #74)
       1. No questions
   15. **LC TIG** (slide #78)
       1. There will be a tutorial on light communications to the wider IEEE 802 audience at the July plenary.
       2. No questions
10. **Liaison Reports** (11-17-0563r0)
    1. **IEEE 802.24** (slide #83)
       1. No questions
    2. **IEEE 802.18** (11-17-0563r1 - slide #82)
       1. Chair: IEEE 802.11 approved a liaison to IEEE 802.18 regarding light communications. What has happened to this?
       2. IEEE 802.18 chair: That document has been converted into a submission for the IEEE 802 EC. Nothing from IEEE 802.11 was technically changed.
11. **Working Group Motions (Old Business)** (11-17-0562r4)
    1. **Teleconferences** (slide #13)
       1. **Move to approve the following teleconferences**

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Date(s)** | **Start** | **Duration** |
| **CAC** | **Thurs June 1, Wed June 28** | **Noon ET** | **1 hr** |
| **TGaj** | **Thurs June 8, 15, 22, July 6**  **Thurs June 29** | **22:00 ET**  **23:00 ET** | **2 hrs** |
| **TGak** | **Mon May 22, June 12, 26** | **9:00 ET** | **1 hr** |
| **TGaq** | **Friday May 26, June 2, 16, 23, 30, July 7** | **Noon ET** | **2 hrs** |
| **TGax** | **Thurs June 1, 15, Mon June 26, Wed June 28**  **Thurs June 8, 22, Tues June 27, Thurs June 29**  **Thurs July 20** | **20:00 ET**  **10:00 ET**  **10:00 ET** | **2 hrs**  **2 hrs**  **2 hrs** |
| **TGay** | **Wed May 24, 31, June 7, 14, 21, 28** | **10:00 ET** | **1 hr** |
| **TGaz** | **Wed May 31** | **11:00 ET** | **1 hr** |
| **TGba** | **Mon June 5**  **Mon June 19**  **Mon June 26** | **10:00 ET**  **17:00 ET**  **23:00 ET** | **2 hrs** |
| **TGmd** | **Tue May 30**  **Friday June 23, June 30** | **11:00 ET**  **10:00 ET** | **1 hr** |
| **ARC** | **Tues May 30, June 27** | **09:00 ET** | **1 hr** |

* + 1. Moved: Jonathan Segev, 2nd: Al Petrick
    2. No objection to approving by unanimous consent.
  1. **AANI Liaison** (slide #14)
     1. **Moved, Approve the liaison statement in 11-16/1574r3 from IEEE 802.11 to 3GPP SA Requesting Status and Information on WLAN integration in 3GPP NextGen System, granting the WG chair editorial license.**
     2. Moved: Joseph Levy (on behalf of AANI SC), Seconded: Mike Montemurro
     3. [Result in SC, 9-0-1]
     4. For: 31, Against: 0, Abstain: 4 (Motion passes)
  2. **PDED Motion** (slide #15)
     1. **The IEEE 802.11 WG approves a LS using the text contained in 11-17-0634-04 be sent to ETSI BRAN after 6 June 2017 and before 17 June 2017**
     2. **Note: this LS needs to be approved by the 802 EC on 6 June, but needs to be submitted to ETSI BRAN by 19 June**
     3. Moved: Andrew Myles on behalf of the PDED ad-hoc, Seconded: Al Petrick
     4. [Result in ad hoc, 14-1-3]
     5. Chair: This will need to be approved by the IEEE 802 EC.
     6. For: 29, Against: 0, Abstain: 7 (Motion passes)
  3. **Liaise 11ak Draft 4.0 to ISO/IEC JTC1/SC6** (slide #16)
     1. **Moved, to liaise the following draft to ISO/IEC JTC1/SC6 for information under the PSDO agreement:**
     2. **P802.11ak D4.0**
     3. Moved: Donald Eastlake, Seconded: Jon Rosdahl
     4. [In TGak Moved: Mark Hamilton, 2nd: Jon Rosdahl, Yes: 3, No: 1, Abstain: 1]
     5. Chair: This will need to be approved by the IEEE 802 EC.
     6. For: 34, Against: 0, Abstain: 0 (Motion passes)

1. **Working Group Motions (New Business)** (11-17-0562r4)
   1. **PDED Continuation Motion** (slide #17)
      1. **The IEEE 802.11 WG approves transitioning the PDED ad hoc to the Coexistence Standing Committee with scope**
      2. **Discuss the use of PD, ED or other coexistence mechanisms with the goal of promoting "fair access" to unlicensed spectrum for all technologies including IEEE 802.11**
      3. **Promote an environment that enables IEEE 802.11ax to have "fair access" to global unlicensed spectrum in the 5GHz band**
      4. Moved: Andrew Myles, Seconded: Nikola Serafimovski
      5. For: 34, Against: 0, Abstain: 0 (Motion passes)
      6. Chair: Please note what a standing committee (SC) is from the IEEE 802.11 operations manual (OM) as shown on the screen (11-14-0629r16). Andrew Myles is willing to stand as chair of a SC if this motion is approved. I think that a group that lasts longer than about 6 months should be an SC, as opposed to an ad-hoc.
      7. PDED ad-hoc chair: There is work to be done, so this group should continue in one form or another.
      8. C: I would like to speak in favour of this motion, as I don’t feel that IEEE 802.19 is the correct place to do this work. In addition this topic deals with IEEE 802.11 co-existence with external (non IEEE 802) technologies, which is not within the scope of IEEE 802.19.
      9. C: I speak against this motion, as this topic belongs in IEEE 802.19. IEEE 802.19 has debated similar topics in the past and so is within the scope of IEEE 802.19. I don’t this separate group is necessary within IEEE 802.11.
      10. C: The IEEE-SA rules do advise that ad-hocs should only consider straw polls and not consider motions. As the PDED ad-hoc has been having motions, it should be changed to a standing committee.
      11. Q: Could this work be done within IEEE 802.18?
      12. IEEE 802.18 chair: For this ETSI BRAN liaison, it is not a regulatory issue as ETSI BRAN is another SDO. Therefore, a separate IEEE 802.11 group would be the best place.
      13. C: regarding the earlier points about IEEE 802.19, there does appear to an urgent issue to work on.
      14. Q: Is this motion fails, what will then happen to the PDED ad-hoc.
      15. Chair: If this motion fails, then we can have another motion to continue the ad-hoc for a limited time.
      16. C: I think this issue is artificial as there are no products in the market and therefore there is no urgency. Within Europe there is already an agreement on the way forward.
      17. PDED ad-hoc chair: I certainly welcome submissions in a future PDED ad-hoc group showing all positions in this debate.
      18. For: 23, Against: 5, Abstain: 7 (Motion passes)
   2. **Coexistence Standing Committee** (slide #18)
      1. **Move, to re-affirm Andrew Myles as Chair of the Coexistence Standing Committee**
      2. Mover: Mark Hamilton, Second: Dan Harkins
      3. No objection to approving the agenda by unanimous consent.
   3. **Liaise 11aj Draft 5.0** (slide #19)
      1. **to ISO/IEC JTC1/SC6**
      2. **Moved, to liaise the following draft to ISO/IEC JTC1/SC6 for information under the PSDO agreement:**
      3. **P802.11aj D5.0**
      4. **Moved: Jiamin Chen, Seconded: Jon Rosdahl**
      5. For: 31, Against: 0, Abstain: 0 (Motion passes)
2. **Next Meeting** (11-17-0538r1 slide #15)
   1. The next meeting is at the Estrel Hotel, Berlin, Germany 9-14th July 2017. Registration is now open for this meeting and please note the new type of web-page.
   2. There will be an IEEE 802 Wireless Chairs meeting as shown in Slide #14 at the July 2017 meeting. This is an open meeting and everyone is welcome.
   3. VC1: Please note that the early bird registration cut-off is May 19th 2017.
3. **AoB:**
   1. Q: Where is today’s “IEEE 802 Workshop” please?
   2. Chair: Room 105.
4. **Adjournment**
   1. Chair: Having completed the agenda, the chair announced that the meeting was adjourned at 09:42 KST.

**Annex A: Attendance & Affiliation**

| **Name** | **Affiliation** | **Attended >= 75%?** |
| --- | --- | --- |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd | Yes |
| Ahn, Jinsoo | Yonsei University | Yes |
| Ahn, Woojin | WILUS | Yes |
| Alpert, Yaron | Intel Corporation | Yes |
| Ansley, Carol | ARRIS Group | Yes |
| Asai, Yusuke | NTT | Yes |
| Asterjadhi, Alfred | Qualcomm Incorporated | No |
| Au, Kwok Shum | Huawei Technologies Co. Ltd | Yes |
| Azizi, Shahrnaz | Intel Corporation | Yes |
| Banerjea, Raja | Qualcomm Incorporated | No |
| bang, saehee | LG ELECTRONICS | No |
| baron, stephane | Canon Research Centre France | Yes |
| Batra, Anuj | Apple, Inc. | No |
| Bhandaru, Nehru | Broadcom Corporation | Yes |
| Calcev, George | Huawei R&D USA | Yes |
| Cariou, Laurent | Intel Corporation | Yes |
| Carney, William | Sony Corporation | Yes |
| Chen, Jiamin | HUAWEI | Yes |
| Chen, Xiaogang | Intel Corporation | No |
| Cheng, Yong | Huawei Device | Yes |
| CHERIAN, GEORGE | Qualcomm Incorporated | Yes |
| Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. | Yes |
| Cho, Hangyu | lg electronics | Yes |
| Choi, Jinsoo | LG ELECTRONICS | Yes |
| Chu, Liwen | Marvell Semiconductor, Inc. | Yes |
| Ciochina, Dana | Sony Corporation | Yes |
| Coffey, John | Realtek Semiconductor Corp. | Yes |
| Cordeiro, Carlos | Intel Corporation | Yes |
| da Silva, Claudio | Intel Corporation | Yes |
| Eastlake 3rd, Donald | Huawei Technologies Co. Ltd | Yes |
| Erceg, Vinko | Broadcom Corporation | No |
| Estrada, Andrew | Sony Corporation | Yes |
| Fan, Xiaojing | Fujitsu Research & Development Center | No |
| Fang, Yonggang | ZTE TX Inc | Yes |
| Fawcett, Darren | ARRIS Group | No |
| Fischer, Matthew | Broadcom Corporation | Yes |
| Fujio, Shunsuke | FUJITSU LABORATORIES LIMITED | Yes |
| Furuichi, Sho | Sony Corporation | No |
| Gan, Ming | Huawei Technologies Co. Ltd | Yes |
| Ghosh, Chittabrata | Intel Corporation | No |
| Guo, Qiang | Huawei R&D USA | No |
| Guo, Yuchen | Huawei Technologies Co., Ltd | Yes |
| Hamilton, Mark | Ruckus Wireless | Yes |
| Han, Yunbo | HUAWEI | Yes |
| Handte, Thomas | Sony Corporation | Yes |
| Hansen, Christopher | Covariant Corporation | Yes |
| HAO, CHEN | Huawei Technologies Co., Ltd | Yes |
| Harkins, Daniel | Aruba Networks, Inc. | Yes |
| Hartman, Chris | Apple, Inc. | Yes |
| he, shiwen | Southeast University, China | Yes |
| Heberling, Allen | Tensorcom, Inc. | Yes |
| Hiertz, Guido | Ericsson AB | Yes |
| Holcomb, Jay | Itron Inc. | No |
| Hong, Hanseul | Yonsei University | Yes |
| Hsu, Chien-Fang | MediaTek Inc. | Yes |
| Huang, Lei | Panasonic Asia Pacific Pte Ltd. | Yes |
| Huang, Po-Kai | Intel Corporation | Yes |
| Hwang, Sung Hyun | Electronics and Telecommunications Research Institute (ETRI) | Yes |
| Inoue, Yasuhiko | Nippon Telegraph and Telephone Corporation (NTT) | Yes |
| Ishizu, Kentaro | National Institute of Information and Communications Technology (NICT) | Yes |
| Jeffries, Timothy | Huawei R&D USA | Yes |
| Ji, Chenhe | Huawei Technologies Co., Ltd | Yes |
| Jiang, Jinjing | Marvell Semiconductor, Inc. | Yes |
| Jones, Vincent Knowles IV | Qualcomm Incorporated | Yes |
| Kang, Tae-Gyu | Electronics and Telecommunications Research Institute (ETRI) | No |
| Kapetanovic, Dzevdan | Ericsson AB | Yes |
| Kennedy, Richard | Hewlett Packard Enterprise | No |
| Kerry, Stuart | OK-Brit | Yes |
| Kim, Jeong Gon | Korea Polytechnic University | No |
| Kim, Jeongki | LG ELECTRONICS | No |
| Kim, Jin Min | LG ELECTRONICS | Yes |
| Kim, Sang Gook | LG ELECTRONICS | Yes |
| Kim, Suhwook | LG ELECTRONICS | Yes |
| Kim, Sungsoo | Samsung Electronics Co., Ltd. | No |
| Kim, Youhan | Qualcomm Incorporated | Yes |
| KNECKT, JARKKO | Apple, Inc. | Yes |
| Ko, Geonjung | WILUS Institute | Yes |
| Kumar, Manish | Marvell Semiconductor, Inc. | Yes |
| Kwak, Jin-Sam | WILUS Institute | Yes |
| Lan, Zhou | Huawei Technologies Co. Ltd | Yes |
| Lanante, Leonardo | Kyushu Institute of Technology | No |
| Lansford, James | Qualcomm Incorporated | Yes |
| Lee, Hyeong Ho | Electronics and Telecommunications Research Institute (ETRI) | No |
| Lee, Jae Seung | ETRI | Yes |
| LEE, JUNG WOON | Samsung Electronics Co., Ltd. | Yes |
| LEE, SUNGEUN | Cypress Semiconductor Corporation | Yes |
| Lepp, James | BlackBerry | Yes |
| Levy, Joseph | InterDigital, Inc. | Yes |
| Li, Dejian | Huawei Technologies; HiSilicon | Yes |
| Li, Guoqing | Apple, Inc. | Yes |
| Li, Qiang | HUAWEI | Yes |
| Li, Qinghua | Intel Corporation | Yes |
| Li, Yunbo | Huawei Technologies Co. Ltd | Yes |
| Lim, Dong Guk | LG ELECTRONICS | Yes |
| Lim, Sang-Kyu | Electronics and Telecommunications Research Institute (ETRI) | No |
| Lindskog, Erik | Qualcomm Incorporated | Yes |
| Liu, Jianhan | MediaTek Inc. | Yes |
| Loc, Peter | Huawei Technologies Co. Ltd | Yes |
| Lomayev, Artyom | Intel Corporation | No |
| Lv, Kaiying | ZTE Corporation | Yes |
| Lv, Lily | Huawei Technologies Co. Ltd | Yes |
| Lynch, Michael | MJ Lynch & Associates, LLC. | No |
| Ma, Jing | National Institute of Information and Communications Technology (NICT) | Yes |
| Maltsev, Alexander | Intel Corporation | Yes |
| Marks, Roger | EthAirNet Associates; Huawei | Yes |
| Matsuo, Ryoko | TOSHIBA Corporation | Yes |
| Mccann, Stephen | BlackBerry | Yes |
| Monajemi, Pooya | Cisco Systems, Inc. | Yes |
| Montemurro, Michael | BlackBerry | Yes |
| Morioka, Yuichi | Sony Corporation | Yes |
| Motozuka, Hiroyuki | Panasonic Corporation | Yes |
| Mueller, Robert | Ilmenau University of Technology - TU Ilmenau | Yes |
| Murakami, Yutaka | Panasonic Corporation | Yes |
| Myles, Andrew | Cisco Systems, Inc. | Yes |
| Nakanishi, Kensuke | Toshiba | Yes |
| Nejatian, Alireza | Ericsson AB | No |
| Nezou, Patrice | Canon Research Centre France | Yes |
| Noh, Yujin | Newracom Inc. | Yes |
| Notor, John | Notor Research; ARM, Inc. | Yes |
| Oh, Minseok | Kyonggi University | Yes |
| Oteri, Oghenekome | InterDigital, Inc. | Yes |
| Park, Eunsung | LG Electronics | Yes |
| Park, Minyoung | Intel Corporation | Yes |
| Park, Sung-jin | LG ELECTRONICS | No |
| Patil, Abhishek | Qualcomm Incorporated | Yes |
| petrick, Albert | Jones-Petrick and Associates, LLC. | Yes |
| porat, ron | Broadcom Corporation | Yes |
| Qi, Emily | Intel Corporation | Yes |
| Rakanovic, Demir | u-blox | Yes |
| Rantala, Enrico-Henrik | Nokia | Yes |
| Rong, Zhigang | Huawei Technologies Co. Ltd | Yes |
| Rosdahl, Jon | Qualcomm Technologies, Inc. | Yes |
| Ryu, Kiseon | LG ELECTRONICS | Yes |
| Sakamoto, Takenori | Panasonic Corporation | Yes |
| Sakoda, Kazuyuki | Sony Corporation | Yes |
| Sambasivan, Sam | AT&T | Yes |
| Sampath, Hemanth | Qualcomm Incorporated | Yes |
| Schelstraete, Sigurd | Quantenna Communications, Inc. | Yes |
| Segev, Jonathan | Intel Corporation | Yes |
| Serafimovski, Nikola | pureLiFi | Yes |
| Shellhammer, Stephen | Qualcomm Incorporated | No |
| Smith, Graham | SR Technologies | Yes |
| Sohn, IllSoo | Seoul National University of Science and Technology | No |
| Son, Ju-Hyung | WILUS Inc. | Yes |
| Stacey, Robert | Intel Corporation | Yes |
| Stanley, Dorothy | Hewlett Packard Enterprise | Yes |
| Stephens, Adrian | Intel Corporation | Yes |
| Suh, JUNG HOON | Huawei Technologies Co. Ltd | Yes |
| Sun, Bo | ZTE Corporation | Yes |
| Sun, Chen | Sony Corporation | No |
| Sun, Li-Hsiang | InterDigital, Inc. | Yes |
| sun, sheng | Huawei Technologies Co. Ltd | Yes |
| Tanaka, Yusuke | Sony Corporation | Yes |
| Taniguchi, Kentaro | TOSHIBA Corporation | Yes |
| Tian, Bin | Qualcomm Incorporated | Yes |
| Torkildson, Eric | Nokia | Yes |
| Trainin, Solomon | Qualcomm Incorporated | Yes |
| Urabe, Yoshio | Panasonic Corporation | No |
| Varshney, Prabodh | Nokia | Yes |
| Venkatesan, Ganesh | Intel Corporation | Yes |
| Verma, Lochan | Qualcomm Incorporated | Yes |
| Vermani, Sameer | Qualcomm Incorporated | Yes |
| Wang, Chao Chun | MediaTek Inc. | Yes |
| Wang, Haiming | Southeast University, China | Yes |
| Wang, Huizhao | Quantenna Communications, Inc. | Yes |
| Wang, Lei | Huawei R&D USA | Yes |
| Wang, Xiaofei | InterDigital, Inc. | Yes |
| Want, Roy | Google | Yes |
| Ward, Lisa | Rohde & Schwarz | Yes |
| Webber, Julian | Advanced Telecommunications Research Institute International (ATR) | Yes |
| Wentink, Menzo | Qualcomm Incorporated | No |
| Wilhelmsson, Leif | Ericsson AB | Yes |
| Wu, Tianyu | MediaTek Inc. | Yes |
| Xin, Yan | Huawei Technologies Co. Ltd | Yes |
| YAGHOOBI, HASSAN | Intel Corporation | No |
| YANG, RUI | InterDigital, Inc. | Yes |
| Yang, Xun | Huawei Technologies Co. Ltd | Yes |
| Yang, Yunsong | Huawei Technologies Co. Ltd | Yes |
| Yano, Kazuto | Advanced Telecommunications Research Institute International (ATR) | Yes |
| Yee, James | MediaTek Inc. | Yes |
| Yee, Peter | NSA/IAD | Yes |
| Yong, Su Khiong | Apple, Inc. | No |
| Yu, Jian | Huawei Technologies Co. Ltd | Yes |
| Yun, SunWoong | LG ELECTRONICS | Yes |
| Zhang, Hongyuan | Marvell Semiconductor, Inc. | Yes |
| Zhang, Xingxin | Huawei Technologies Co. Ltd | Yes |
| Zhu, Chunhui | Huawei Technologies Co., Ltd | Yes |

**Annex B : Working Group Officers**

Working group

|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
| Adrian Stephens  (Intel Corporation UK Ltd.) | IEEE 802.11 Working Group Chair | +44 1793 404825 (office)  [adrian.p.stephens@ieee.org](mailto:adrian.p.stephens@ieee.org) |
| Jon Rosdahl (Qualcomm) | 1st Vice Chair (Policies and Procedures) Treasurer | +1 (801) 492-4023 [jrosdahl@ieee.org](mailto:jrosdahl@ieee.org) |
| Dorothy V. Stanley  (HPE) | 2nd Vice Chair (Rules and reflectors)  IEEE 802 (LMSC) EC delegate | +1 (630) 363-1389  [dorothy.stanley@hpe.com](mailto:dorothy.stanley@hpe.com) |
| Stephen McCann (BlackBerry Ltd.) | Secretary Publicity ad-hoc Chair | +44 1753 667099 [stephen.mccann@ieee.org](mailto:stephen.mccann@ieee.org) |
| Peter Ecclesine (Self) | Co-Technical Editor | [petere@ieee.org](mailto:petere@ieee.org) |
| Robert Stacey  (Intel Corporation) | Co-Technical Editor  802.11 Assigned Numbers Authority | +1 (503) 712 4447  [robert.stacey@intel.com](mailto:robert.stacey@intel.com) |

Standing Committees

|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
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| Mark Hamilton (Ruckus Wireless) | Architecture (ARC) Chair | +1 (303) 441-7553  [mark.hamilton2152@gmail.com](mailto:mark.hamilton2152@gmail.com) |
| Andrew Myles (Cisco Systems, Inc.) | ISO/IEC/JTC1/SC6 shadow committee (JTC1) Chair | +61 2 84461010 [andrew.myles@cisco.com](mailto:andrew.myles@cisco.com) |
| Jon Rosdahl (Qualcomm ) | Project Authorization Request (PAR) review Chair | +1 (801) 492-4023 [jrosdahl@ieee.org](mailto:jrosdahl@ieee.org) |
| Joseph Levy  (InterDigital Communications Inc.) | Advanced Access Network Interface (AANI) Chair | +1.631.622.4139  [jslevy@ieee.org](mailto:jslevy@ieee.org) |
| Andrew Myles (Cisco Systems, Inc.) | Co-existence (Coex) Chair | +61 2 84461010 [andrew.myles@cisco.com](mailto:andrew.myles@cisco.com) |

Task Groups

|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
| Dorothy V. Stanley  (HPE) | TGmd Chair  (Revision md | +1( 630) 363-1389  [dorothy.stanley@hpe.com](mailto:dorothy.stanley@hpe.com) |
| Jiamin Chen  (HiSilicon/Huawei Technologies) | TGaj Chair  (China Millimeter Wave) | +86-10-8282-9532  [jiamin.chen@mail01.huawei.com](mailto:jiamin.chen@mail01.huawei.com) |
| Donald Eastlake, 3rd  (Huawei Technologies) | TGak Chair  (General Link) | +1 508-333-2270  [d3e3e3@gmail.com](mailto:d3e3e3@gmail.com) |
| Stephen McCann  (BlackBerry Ltd.) | TGaq Chair  (Pre-association Discovery) | +44 1753 667099  [stephen.mccann@ieee.org](mailto:stephen.mccann@ieee.org) |
| Osama Aboul-Magd  (Huawei) | TGax Chair  (High Efficiency WLAN) | +1 (613) 287-1405  [osama.aboulmagd@huawei.com](mailto:osama.aboulmagd@huawei.com) |
| Edward Au (Huawei) | TGay Chair (Next Generation 60 GHz) | +1 773 782 6875  [edward.ks.au@huawei.com](mailto:edward.ks.au@huawei.com) |
| Jonathan Segev (Intel Corporation) | TGaz Chair (Next Generation Positioning) | +972-54-2403587  [jonathan.segev@intel.com](mailto:jonathan.segev@intel.com) |
| Minyoung Park (Intel Corporation) | TGba Chair (Wake-up Radio) | +1 (503) 712-4705  [minyoung.park@intel.com](mailto:minyoung.park@intel.com) |

Study Groups

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

Topic Interest Groups

|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
| Nikola Serafimovski (pureLiFi) | Light Communication TIG | +44 131 516 1816 [nikola.serafimovski@purelifi.com](mailto:nikola.serafimovski@purelifi.com%3E) |

Liaison Officials to non IEEE 802 organizations

|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
| Dorothy V. Stanley (HPE) | Liaison to IETF (Internet Engineering Task Force) | +1 (630) 363-1389  [dorothy.stanley@hpe.com](mailto:dorothy.stanley@hpe.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

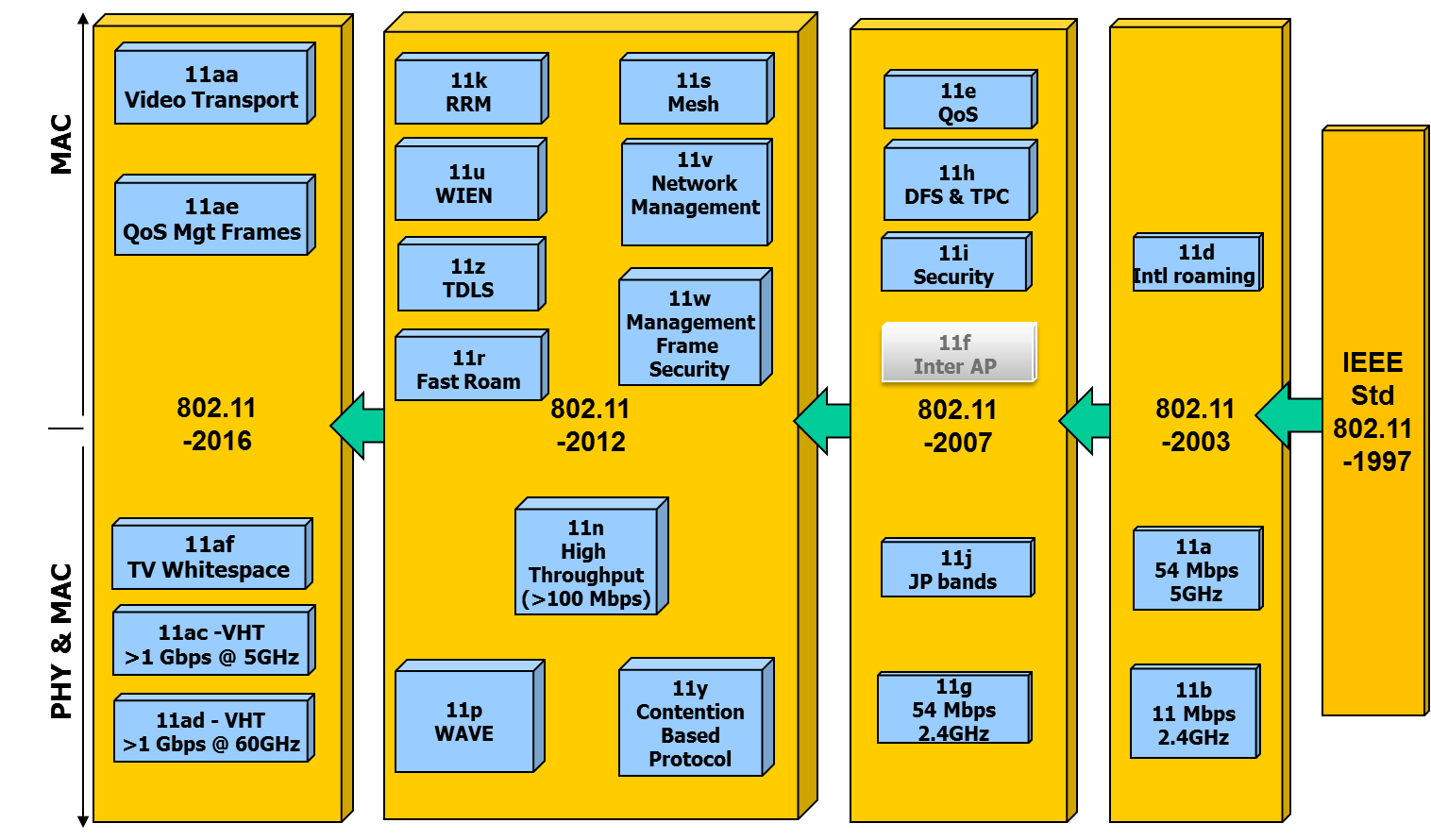
|  |  |  |
| --- | --- | --- |
| **Name (Affiliation)** | **Position** | **Contact Details** |
| Rich Kennedy  (HPE) | Liaison to IEEE 802.18 | +1 (832) 298-1114  [rkennedy1000@gmail.com](mailto:rkennedy1000@gmail.com) |
| Tim Godfrey (Electric Power Research Institute) | Liaison to IEEE 802.24 | +1 (650) 855-8584 (office) [tim.godfrey@ieee.org](mailto:tim.godfrey@ieee.org) |

**Annex C : Minutes**

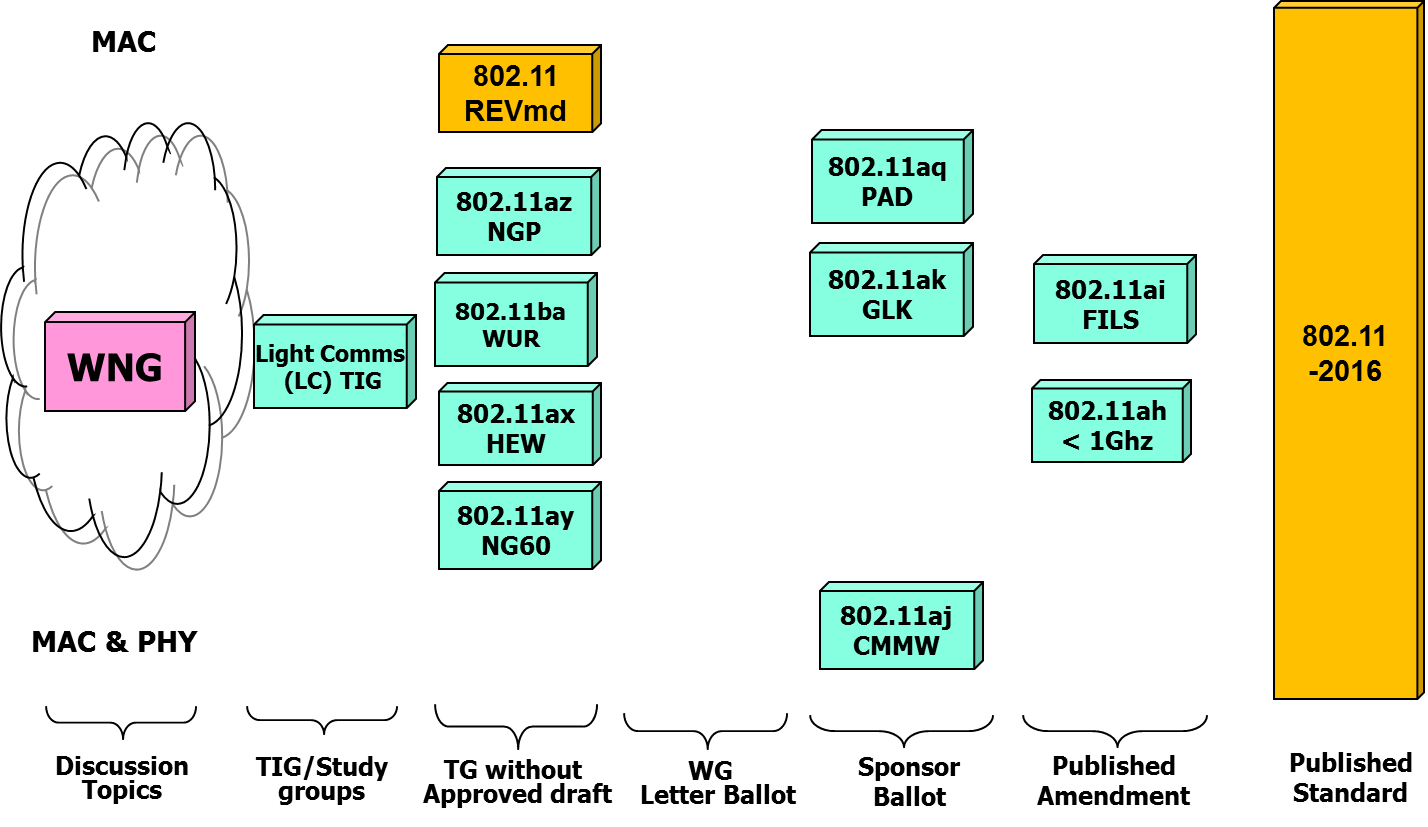
This Annex contains references to all IEEE 802.11 SC/TG/SG & Ad Hoc Committee (AHC) minutes from this meeting. Please note that they are NOT subject to the approval of these minutes, but are confirmed and approved by their individual group in the opening meeting at their next session.

|  |  |  |
| --- | --- | --- |
| WG | TE | 17-0739r1 |
| TGak | TG | 17-0810r0 |
| TGaj | TG | 17-0841r1 |
| TGaq | TG | 17-0785r0 |
| TGax | TG | 17-0749r0 |
| TGay | TG | 17-0794r0 |
| TGaz | TG | 17-0842r0 |
| TGba | TG | 17-0843r0 |
| LC | TIG | 17-0827r0 |
| WNG | SC | 17-0800r1 |
| ARC | SC | 17-0864r0 |
| JTC1 | SC | 17-0xxxr0 |
| AANI | SC | 17-0796r1 |
| PDED | Ad-Hoc | 17-0815r0, 17-0823r0 and 17-0834r0 |

**Annex D : Revisions and Standards Pipeline**

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**IEEE 802.11 Revisions**

**

**IEEE 802.11 Standards Pipeline**

End.