IEEE 802.18

Radio Regulatory-TAG

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| Radio Regulatory Technical Advisory Group Minutes | | | |
| Date: 03jun21 | | | |
| Name | Affiliation | Address | Email |
|  |  |  |  |
| Author and Officer presiding: | | | |
| Jay Holcomb,  Chair, RR-TAG | Itron | Liberty Lake, (Spokane) WA | jholcomb@ieee.org |

Co-Vice-chairs are [Stuart Kerry (OK-Brit/Self)](mailto:stuart@ok-brit.com) and [Al Petrick (Skyworks Solutions)](mailto:apetrick@ieee.org)

Abstract

Minutes of the IEEE 802 RR-TAG teleconference

These are the Minutes of the IEEE 802 RR-TAG teleconference Thursday, 03jun21

Chair calls the meeting to order at 15:03et

1. Chair presents slides 2 – 6 of 802.18-21/0065r01, the call to order and administrative items
   1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
2. Chair presents slides 7, the agenda:
   1. Call to Order.
      1. Attendance is not on IMAT
      2. Remember to mute when not speaking, thanks.
      3. Please request Q in the chat window.
   2. Administrative items
      1. Someone to take some notes, jay and Al.
      2. Attendance & monitor chat window, Stuart K
   3. Approve agenda, last minutes & announcements.
   4. Discussion items
      1. EU Items
      2. Other Regions Items
      3. ITU-R Items
      4. MSGs on 6 GHz
      5. IEEE 802 Stds Table of Frequency Bands
      6. General Discussion Items
   5. Actions required.

      2. All-ongoing-WRC-23 AIs viewpoints, & restructure ext. influence
      3. Anything new today
   6. AOB and Adjourn
3. Chair presents slides 8 - 9 Administrative – Motions and more
   1. **Motion: To approve the agenda as presented on previous slide**

Moved by: Stuart Kerry (OK-Brit, self)

Seconded by: Vijay Auluck (self)

Discussion? None

Vote: Approved by unanimous consent

* 1. **Motion:** To approve the minutes from the IEEE 802.18 teleconference in document <https://mentor.ieee.org/802.18/dcn/21/18-21-0063-00-0000-minutes-27may21-rrtag-teleconference.docx> 28-May-2021 10:12:23 ET with editorial privilege for the 802.18 chair.

Moved by: Mike Lynch (MJLynch and Assoc)

Seconded by: Al Petrick (Skyworks)

Discussion? None

Vote: Approved by unanimous consent

* 1. **Administrative moving forward** 
     1. For **July 2021** that was in Madrid, Spain, the LMSC(EC) on 05Mar21 **approved to cancel the in-person 802 Plenary.**
        1. At the EC teleconference Tuesday (06Apr), approved 09-23 July 21 dates.
        2. Also the registration fee was approved. The plan:
        3. $50 – till 30June $75 registration fee after 30june.
        4. registration is open: **REGISTRATION WEBSITE:**[**https://cvent.me/D5LYLq**](https://cvent.me/D5LYLq)
        5. reminder sent on 28june (2 days, before fee increases) and on 30june last day before fee increases.
        6. reminder sent on 05 july – notifying of $75 fee started 01july
        7. For .18 will plan on: 15 & 22Jul21 (normal Thursday’s 1500et, looking at 2 hour slot for one, possibly the 22nd. )
           1. Do not want to overlap with .19 with the 2 hr slot.
           2. The extra hour will focus on IEEE 802 WRC-23 AIs viewpoints
           3. Looking at other WGs/TAGs:

.11: 12-20 jul 21 time slot over .18: 13:30-15:30 (times from May interim)

.15: 13-21 jul 21 time slot over .18: 15:00-17:00 (times from May interim)

.19: tbc: 12th 4et mon & 15th 4et thurs is the normal times

.24: tbc wed 10:30et, normal time, though which wed?

* + 1. For **Sept 2021,** it will be an electronic Wireless Interim, with a ($50, $75, $125) registration fee.
       1. Dates are Friday 10sep to our .18 meeting on 23sep21. .18 will meet our normal Thursday’s, 16th and 23rd.
       2. Looking at a wireless opening meeting Friday 10sep21 at 0900et (similar to what was done at f2fs)

1. Chair presents slides 10 & 11, **EU items to share**
   1. **General EU info:** [**<ojeu>**](https://eur-lex.europa.eu/oj/direct-access.html)[**<HStds>**](https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/)[**https://www.etsi.org/deliver/etsi\_en/**](https://www.etsi.org/deliver/etsi_en/)
   2. **Remember – BRAN documents can be found in the 802.11 private area documents (daily refresh)**
   3. **ETSI –** [**<BRAN>**](https://portal.etsi.org/tb.aspx?tbid=287&SubTB=287) **next call #110 18-25jun21**
      1. Call today, worked on LS statement to send out, 1) Country Determination Capability, 2) changes to the text on Access methods in EN 301 893 (5 GHz).
      2. There is an EN 303 687 (6 GHz) call tomorrow (Friday 4th CEST)
         1. Note- 2016 was start of this and looking like 2023 to get approved, 7 years for EU process
      3. 20may: Expect in call #110, a modified proposal on Country Determination Requirements.
      4. 06May: 6 GHz draft std. is standing by, so no new draft from the #109e meeting, see BRAN(21)109e006r6. Watch for more on this one.
         1. • EN 301 893 (5 GHz), and • EN 303 687 (6 GHz), and User Access Restrictions (UAR).
   4. **ETSI** [**<ERM>**](https://portal.etsi.org/tb.aspx?tbid=286&SubTB=286) **next meeting #73b, 23Feb21-07Jun21, correspondence** 
      1. 20may: There is a liaison from WGSE (ERM(21)73b008) and encourage interested ETSI members to support SE21 in their work on draft ECC Recommendation on “Receiver resilience to transmission on adjacent frequency ranges”.
   5. **CEPT – ECC** [**<SE45>**](https://cept.org/ecc/groups/ecc/wg-se/se-45/client/introduction/) **call #13, 01-02Jun21; next call #14 28-29oct21**
      1. The group started its work to further study OOB emissions below 5935 MHz from Very Low Power (VLP) WAS/RLAN devices in the 6 GHz band, to protect CBTC systems that operate in the band 5915-5935 MHz.
   6. **CEPT – ECC** [**<WGFM>**](https://cept.org/ecc/groups/ecc/wg-fm/client/introduction/) **next call #100, 04-08Oct21**
      1. WGFM approved for public consultation, a new draft ECC Report on 5.8 GHz RLAN and a draft new ECC Report on digitising Maritime VHF communications. The meeting also agreed the public consultation of a new ECC Decision on HD GB-SAR and a new ECC Decision on FSS uplink in Q&V bands. Additionally, there were several amendments agreed for public consultation to Recommendations for SRD and FRMCS.
      2. Approved by WG FM for public consultation
         1. Draft new ECC Report on RLAN at 5.8 GHz
         2. Draft revision of ERC/REC 70-03 Annex – several
      3. To be approved by the ECC for publication
         1. Draft revision of ECC/DEC/(04)08 on RLAN at 5 GHz
         2. Draft CEPT Report 79 on RLAN at 5 GHz
   7. **CEPT – ECC** [**<FM57>**](https://cept.org/ecc/groups/ecc/wg-fm/fm-57/client/introduction/) **next call #16 12-13Jul21 (provisional)**
      1. nothing was shared.
      2. 13may: These are not public yet.
         1. TEMP005R1 Table of resolution of comments from public consultation on draft revision of ECC Decision (04)08
         2. TEMP004 draft ECC Report for National Measures WAS-RLAN 5725 - 5850 MHz [end Wednesday with track changes]
            1. This may require another meeting (#16) , could not get to a compromise, so will also move up to WGFM in a week.
            2. Phrases in public consultation, some wanted to change to these and others did not noy and let original stand.
            3. Remember FM groups do not do studies, that is for SE groups and to ETSI; this came up in the country determination discussion………..
2. Chair presents slides 12, **Other regions (outside EU-Stds and USA), items to share**

* 1. Mexico – IFT – preliminary draft on 5925-7125MHz for free spectrum.
     1. Comments are from 28May to 24June, replies to be in Spanish.
     2. Look to be following USA, including AFC. Initial look does not show for standard power as not in the proposal. Need to review further what is in proposal and what was in consultation replies.
     3. Rules for LPI over 1200MHz; VLP is also across the 1200 MHz, not like USA.
     4. Any further comments? none heard

1. Chair presents slide 13, **ITU-R items to share**
   1. nothing was shared
   2. IEEE 802 viewpoints on WRC-23 agenda items. **ad hoc: 5 folks stepped up. Are there any others to help?** 
      1. Doc for viewpoints: <https://mentor.ieee.org/802.18/dcn/21/18-21-0039-00-0000-ieee-802-viewpoints-on-wrc-23-agenda-items.pptx>
      2. Key item was to review what we can on responses to consultations many countries are doing on topics related to WRC-23 AIs, e.g. on 6 GHz that is included in AI 1.2
      3. Though this process could work for other Agenda Items that maybe of interest to us also.
         1. It does seem the Arab states are engaging quicker than other regions, e.g. on 6 GHz.
         2. Oman has a consultation out on Wi-Fi 6;
            1. <https://www.tra.gov.om/En/ViewPublicConsultations.jsp?code=33>
         3. FCC WAC has a *preliminary* view on AI 1.2, we should look at this.
            1. <https://www.fcc.gov/us-contributions-sent-citel-pccii-wrc-23>
         4. Don’t forget the actual ITU-R WPs will be working AIs they have.
         5. **Next discussions will be during July 2021 electronic plenary**.
      4. Reference:
         1. Updated WRC-23 Agenda Item list: [https://mentor.ieee.org/802.18/dcn/20/18-20-0107-01-0000-res-811-wrc-19-wrc-23-agenda-items.docx](https://mentor.ieee.org/802.18/dcn/20/18-20-0107-00-0000-res-811-wrc-19-wrc-23-agenda-items.docx)
         2. btw- the initial AIs to consider IEEE 802 viewpoints:
            1. 1.1 -800-4 990 MHz and Resolution 223. Connection w/ITS going there?
            2. 1.2 -300-3 400MHz, 3 600-3 800MHz, 6 425-7 025MHz, 7 025-7 125MHz and 10.0-10.5GHz for International Mobile Telecommunications (IMT) and resolution 245.
            3. 1.5 -470-960 MHz in Region 1-consider possible regulatory actions, Resolution **235.**
            4. 10 **-**recommend to the Council items for inclusion in the agenda for the next WRC
2. Chair presents slide 14, **MSG 6 GHz**
   1. **The WInnforum “6 GHz Committee”, all groups meet every 2 weeks except interference-weekly (168people)** 
      * 1. <https://www.wirelessinnovation.org/6ghz-multistakeholder-committee>
        2. For access to documents from the committee, can request to be an observer from the MSG below.
      1. New org: 2 (now) focus areas:
         1. 1) AFC Functional Specification -WG – includes: Interference-TG, Incumbent Info-TG, security (new) and 3GPP-TG
         2. 2) AFC Test and Certification-WG
      2. nothing new today
      3. 27may: WInnforum. There is a lot of work underway addressing standard power deployments.
         * 1. All WInnform dialogue is open to those that want to observe. This group is making significant process and good execution.
   2. **From the FCC R&O, an informal MSG (“Group”) has also been formed. (260+ people)** 
      1. <https://groups.wirelessinnovation.org/wg/6MSG/dashboard>.
         1. **Work stream 1 - interference protection and resolution (CableLabs, EPRI, Lake Cty, APCO) Meets biweekly, from 28Jan21-10:00 et,**
         2. Work stream 2 - correct incumbent data (ULS) (Comsearch, APCO)
         3. Work stream 3 - AFC and how it provides protection, etc. (Charter, Google, UTC)
         4. Overall Co-chairs: NPSTC, UTC, WFA, WISPA.
      2. nothing new today
      3. 27may: MSG has plenary meeting 5/28. It’s a briefing by all the workstreams on their activities. WS#1 is the most active which cover interference.
         1. That group is working towards a final report. They will seek contributions for the workMeets tomorrow, 28th, mostly briefing of the Work Streams.
         2. Q: Is the was goal target time to complete the final report?
            1. A: No but for now WS#1 tabled contributions and is now focused on the details of the report – no target date at this time.
            2. Report aside WS#1 is well worth the time to be involved with and participate.
            3. The FCC didn’t have a particular expected date for the report. The FCC believes in MSGs. The C-Band MSG concept did very well.
      4. Here are links to two good reports, you may need to request username/password which is open to anyone.
         1. Nokia <https://groups.wirelessinnovation.org/wg/6GHz-MSG-WS1/document/16057> (extended spectrum analyzer software network platform.)
         2. Aviat <https://groups.wirelessinnovation.org/wg/6GHz-MSG-WS1/document/16060> (dribbling 2nds, most 10dB off noise floor**)**
3. Chair presents slide 15, **Table of IEEE 802 Stds Frequency Bands**
   1. **Problem statement**
      1. It is difficult for 802 wireless standards developers to quickly and accurately identify all the frequency bands by the family of 802 wireless standards in a regularly maintained database.
      2. The primary application is to simplify identification of potential frequency bands for coexistence assessment.
   2. **Initial Audiences:** 
      1. 1) 802 wireless standards developers
      2. 2) 802.19 wireless coexistence working group
   3. **Ad hoc calls** 
      1. **The spreadsheet is going, always look for latest:**
      2. <https://mentor.ieee.org/802.18/dcn/21/18-21-0036-04-0000-frequency-table-template.xlsx>
   4. Some emails working on Status of the standard/amendment of: Published, Approved, Project, and other emails on 802.11 specifics.
   5. 27may: From last ad hoc, most all captured in rev05 if the spreadsheet. Some highlights:
      1. Some highlights:
         1. There will be multiple rows for a given frequency range, one for each standard/amendment.
         2. Adding the year to the standard and the amendment was worked through and is leading to the approved date, not the published date. (the date on the cover page.)
         3. Also, a discussion on the Standard or Project column, what about if approved but not published yet, that should be noted. Also, should pre-Par amendments be lists, or study groups. Maybe this is a status column? Will review this further.
      2. Also reviewed a 2nd spreadsheet with 802.11 clauses with frequencies for setting for the actual frequency ranges:
         1. <https://mentor.ieee.org/802.18/dcn/21/18-21-0064-00-0000-frequency-table-input-802-11-phys.xlsx>
   6. The next meeting will be 22jun21. (call-in in backup slides here)
4. Chair presents slide 16, **General Discussion.**
   1. Expanding Flexible Use of the 12.2-12.7 GHz Band
      1. FR Document: [2021-11066](https://urldefense.com/v3/__https:/www.federalregister.gov/documents/2021/05/27/2021-11066/expanding-flexible-use-of-the-122-127-ghz-band?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!lrof3l44OWHK_LlLrm4YVl-MnRYrqwBxxjSnu8AE-ZbaPo-SKg6HkedY2m6WbixXWA$); Citation: 86 FR 28520; [PDF](https://urldefense.com/v3/__https:/www.govinfo.gov/content/pkg/FR-2021-05-27/pdf/2021-11066.pdf?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!lrof3l44OWHK_LlLrm4YVl-MnRYrqwBxxjSnu8AE-ZbaPo-SKg6HkedY2m7MPsLLwA$) Pages 28520-28522 *(3 pages);* [Permalink](https://urldefense.com/v3/__https:/www.federalregister.gov/d/2021-11066?utm_source=federalregister.gov&utm_medium=email&utm_campaign=subscription*mailing*list__;Kys!!F7jv3iA!lrof3l44OWHK_LlLrm4YVl-MnRYrqwBxxjSnu8AE-ZbaPo-SKg6HkedY2m569N3yxQ$)
      2. Abstract: In this document, the Commission denies the request of WorldVu Satellites Limited (ONEWEB), Kepler Communications, SpaceX Holdings, LLC, Intelsat License LLC, and SES S.A., for a further extension of the comment and reply comment deadlines for the proposed rule published in the Federal Register.
   2. FCC ECFS: [https://www.fcc.gov/ecfs/search/............wtb 20-443](https://www.fcc.gov/ecfs/search/filings?proceedings_name=20-443&sort=date_disseminated,DESC)
   3. However, as of today (3rd) reply comments were extended to 07July. FCC 21-13
   4. The NPRM was put on mentor with the seek comments highlighted.
      1. <https://mentor.ieee.org/802.18/dcn/21/18-21-0056-00-0000-expanding-flexible-use-of-the-12-2-12-7-ghz-band-fcc-21-13a1-rcd.docx>
5. Chair presents slide 17, **Actions required.**
   * All – input for a table of countries implementing 6GHz and a brief summary of their rules, consultations, etc.
   * All – ongoing – bring to RR-TAG info they hear, e.g. different country consultations, on the WRC-23 AIs we are interested in.
6. Chair presents slide 18 Any Other Business
   1. A lawsuit has been filed in the D.C. Circuit Court, seeking to reverse the FCC's reallocation of 60% of the 5.9 GHz band (ITS/DSRC) to unlicensed, non-transportation uses. The request is to preserve the 55MHz and affects ITS, DSRC and WLAN extension.
   2. FCC released a budget recently it included:
      1. $s for upgrade of ULS to be complete in 2022 (critical for 6GHz AFC.)
      2. Continue with < 6 GHz work. e.g. an additional 50MHz < 6Ghz for auction
      3. IEEE 802 should look at other bands < 6GHz at the link below to see if any interest.
      4. <https://www.fcc.gov/document/fcc-fy-2022-budget-estimates-congress>
   3. Going to be looking at a table of countries bringing on 6 GHz license-exempt, with a brief summary of their rules, consultations. At this time to have on mentor for all info and input.
      1. One input was, would like to know more what companies are doing with the new rules of 6GHz and other bands.
7. Chair presents slide 19, Adjourn.
   1. Next “weekly” teleconference (sched’d to 02sep21): 10jun21–*15:00–<15:55* ET
      1. Call in info: <https://mentor.ieee.org/802.18/dcn/16/18-16-0038-17-0000-teleconference-call-in-info.pptx> (new call-in starting 14Jan21)
         1. Also, see back up slide in this agenda.
      2. All late changes/cancellations will be sent out to the 802.18 list server.
   2. Overall IEEE 802 schedule: <http://ieee802.org/802tele_calendar.html>
   3. Adjourn:
      1. Any objection to Adjourn.
      2. None heard, Adjourn at 15:38et

* **The next face to face meeting is tbd.**
* **The next IEEE 802 plenary will be electronic in July 2021**
* **The next IEEE 802.18 (wireless) interim will be electronic in Sept 2021**
* **Thank You**

1. Attendance

Voting members:

Auluck Vijay Self

Holcomb Jay Itron Inc.

Kain Carl Noblis, Inc.

Kenney John TOYOTA InfoTechnology Center U.S.A.

Kerry Stuart OK‐Brit, Self

Lynch Michael MJ Lynch & Associates, LLC.

Nikolich Paul Self, HPE, Huawei, Wyebot, UNH BCoE, YAS BBV, Origin Wireless

Petrick Al Skyworks Solutions Inc.

Rolfe Benjamin Blind Creek Associates

Stanley Dorothy Hewlett Packard Enterprise

Yaghoobi Hassan Intel Corporation

Yucek Tevfik Qualcomm

non-Voting members:

Kennedy Richard Self

Pirhonen Riku NXP Semiconductors