IEEE 802.18

Radio Regulatory-TAG

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| Radio Regulatory Technical Advisory Group Minutes | | | | |
| Date: 14-21Jan21 | | | | |
| Name | Affiliation | Address | Phone | Email |
|  |  |  |  |  |
| Author and Officer presiding: | | | | |
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Abstract

Minutes of the IEEE 802 RR-TAG electronic Interim

These are the Minutes of the IEEE 802 RR-TAG Interim, Thursday, 14-21Jan21

Chair calls the meeting to order at 15:03 et, Thursday 14Jan21.

1. Chair presents slides 2 – 6 of 802.18-21/0002r01, 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 like normal with Webex check
      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, Peter E.
      2. Attendance & monitor chat window, Stuart K
   3. Approve agenda, last minutes and announcements.
   4. Discussion items
      1. EU Items
      2. Other Regions Items
      3. ITU-R Items
      4. MSG 6 GHz & FCC
      5. Table of Frequency Bands
      6. General Discussion Items
   5. Actions required
      1. Table of Frequency Bands
      2. WRC-23 IEEE 802 viewpoints
      3. Anything new today
   6. AOB and Recess/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: Hassan Yaghoobi (Intel)

Discussion? None

Vote: Approved by unanimous consent

* 1. **Motion:** To approve the minutes from the IEEE 802.18 Plenary 05-12 Nov 2020 in document <https://mentor.ieee.org/802.18/dcn/20/18-20-0148-01-0000-minutes-electronic-plenary-05-12nov2020-rr-tag-bkk.docx> 04-Jan-2021 15:52:54 ET, with editorial privilege for the 802.18 chair.

Moved by: Steve Palm (Broadcom)

Seconded by: Edward Au (Huawei)

Discussion? None

Vote: Approved by unanimous consent

* 1. **Administrative moving forward** 
     1. For **January** **2021** Wireless Interim (Irvine) the Wireless Chairs met 30Sep20 and have cancelled the face-to-face meeting in Irvine, CA. This leaves open for the WGs to decide on their own if they do an electronic interim or not. The LMSC (EC) rules are being reviewed for possible participation credit. **With that, the chair has announced that .18 will have an interim session on the 14th and 21st of January 2021, each call, 1500-1555et.** (Call-in info is in the back up slides here and will be elsewhere.) Attendance will be like we do.
     2. Wireless interims:
        1. 802.11 - 11-15jan21 802.15 - 15-21jan21
        2. 802.18 - 14-21jan21 802.19 - not meeting 802.24 - 13jan21
        3. Note: updated rules to allow participation credit at a non-f2f interim did not make it.
     3. For **March 2021** the EC at their monthly telecon on 01Dec20 **approved to cancel the in-person part** of the March 2021 Plenary originally at Hyatt Denver and to hold an electronic session for the plenary. The EC is taking up the rule exceptions needed like in July and Nov.
        1. **EC just updated approval times to 05Mar21 (Friday) to 18Mar21 (Thursday) 19Mar21**
           1. Any input on preferred earlier times to meet on Thursday 18Mar21? 10:00et? 09:00et?

Or Wednesday 17Mar21, 1500et? 🡸 will start here and check with other WG/TAGss.

* + - * 1. The chair will check with .15/.19/.24 chairs and coordinate plenary meeting times. (.11 will be closed).
    1. For **May 2021** at the Hilton in Panama City, Panama, the WCSC straw poll earlier was to continue with the contract with clear cancellation policies. With that, the IEEE has new language on cancellation policies, considering the pandemic, so it is much clearer. On the WCSC 09Dec20 call the **plan is to review Panama on the 03Feb21 WCSC call**.

1. Chair presents slides 10 & 11, **EU items to share**
   1. **ETSI –** [**<BRAN>**](https://portal.etsi.org/tb.aspx?tbid=287&SubTB=287) **next call #109-05-12Mar21 (#108a-18,21,22,25Jan21(90min))**
      1. Calls coming up on different subjects.
      2. 11Jan – User Access Restrictions
      3. 14Jan/09Feb – EN 303 722, Wideband Data Transmission Systems (WDTS) for Fixed Network Radio Equipment operating in the 57 - 71 GHz band
      4. 18Jan – BRAN 108a and EN 303 753, WDTS for Mobile and Fixed Equipment in the 57 - 71 GHz band
      5. 29Jan – TS 103 754, BRAN MAP Performance testing
      6. Much focus on 5 and 6 GHz and user access restrictions
      7. A second ad hoc is being planned, stay tuned.
   2. **ETSI** [**<ERM>**](https://portal.etsi.org/tb.aspx?tbid=286&SubTB=286) **next meeting #72b, 03Nov20-22Feb20, correspondence**
   3. **ETSI - ERM -** [**<TG-11>**](https://portal.etsi.org/tb.aspx?tbid=442&SubTB=442) **no meetings on schedule**
      1. ERMTG11(20)000066ReportMeeting minutes of G2M#15 on the 2.4 GHz SRDoc TR 103 665
   4. **CEPT – ECC** [<WGSE>](https://cept.org/ecc/groups/ecc/wg-se/client/introduction/) **next call/meeting #87, 11-15 Jan 21 (#88-19-23Apr21)**
      1. Many Input documents, any of note for IEEE 802? Nothing brought up.
      2. Note: [<SE 19>](https://cept.org/ecc/groups/ecc/wg-se/se-19/client/introduction/)– working on fixed services, defining of short and long term interference, to update.
      3. Has been since ‘92/’93 for these, they will show up in many places for many reasons, including 6 GHz.
   5. **CEPT – ECC** [<FM57>](https://cept.org/ecc/groups/ecc/wg-fm/fm-57/client/introduction/) **next call #13, 18-21Jan21 (#14 now 19-22Apr21)**
      1. A draft CEPT Report is being done in response to the 5 GHz Mandate
      2. 2 Input documents:
      3. [FM57(21)002](https://cept.org/Documents/fm-57/62438/fm57-21-002_proposed-revisions-to-eccdec-04-08-wasrlan-usage-in-parts-of-5150-5725-mhz)Proposed revisions to ECC/DEC(04)08 'WASRLAN usage in parts of 5150 – 5725 MHz'UK...
      4. [FM57(21)001](https://cept.org/Documents/fm-57/62437/fm57-21-001_output-from-offline-discussions-on-the-draft-ecc-rpt-national-was-rlan-measures-in-58-ghz)Output from offline discussions on the draft ECC Rpt National WAS-RLAN Measures in 5.8 GHz
      5. Will have more next week (21Jan) on what had transpired on #13 at that time.
2. Chair presents slides 12, **Other regions (outside EU-Stds and USA), items to share**
   1. From list server email: India DOT has issued a consultation asking for public opinion on the spectrum allocations in the next 10 years.  However, it is a consultation with a very short duration - only 7 days and the deadline is January 13, 2021.
      1. For details, please refer to the following PDF in the DOT's website:  
         <https://dot.gov.in/sites/default/files/DoT%20Website%20notice%20for%20Comments%20on%20Spectrum%20Roadmap.pdf?download=1>
      2. This was covered in the APAC update below.
      3. Learned this consultation is a first call, and that it will continue and there will be more opportunity later for inputs to them.
   2. **APAC update**
      1. [**https://mentor.ieee.org/802.18/dcn/20/18-21-0001-00-0000-apac-update-january-2021.pptx**](https://mentor.ieee.org/802.18/dcn/20/18-21-0001-00-0000-apac-update-january-2021.pptx)
      2. See presentation for much good information, for example:
         1. Hong Kong Table of Freq allocation, update with many footnotes
         2. Japan UWB conditions in translation are presented in the update.
3. Chair presents slide 13 **ITU-R items to share (added a 2nd slide, #14, for input shared).**
   1. [ERM(21)DIS921](https://urldefense.com/v3/__http:/portal.etsi.org/ngppapp/RemoteConsensusReport.aspx?RCID=4529__;!!F7jv3iA!jKawprUhl-JOSKgQTdHucVlYzP16zUu4MKVsxTrLP07qBhzgO22qwMmx2Gaa8U9N3Q$) has just started, with 2 available contributions.  
      RAISING COMMENTS is ALLOWED until Sunday 2021-02-07 at midnight.
      1. LSin from ITU-R 5D on Development of a draft new report ITU-R M.[IMT.C-V2X] – Application of the Terrestrial Component of IMT for Cellular-V2X
   2. Next WP 5A meeting: [Wednesday 2021-04-28 - Tuesday 2021-05-11](https://www.itu.int/events/eventdetails.asp?eventid=18359)
      1. Place : **Switzerland [Geneva]** Status : **Planned**
   3. 802.11 ad hoc on ITU had a call this week discussing results of the IEEE 802 contributions to WP 5A last year. The contributions were not accepted as a base line.
      1. The ad hoc will work on new contributions from the inputs learned, for next WP 5A call.
      2. .11 ad hoc has a call on 27Jan21 (1300et) to work on this.
      3. The output from ad hoc will come to .11 and .18, then go for EC approval.
      4. Would be best to get to WP 5A early/soon, and not wait till a few weeks before their call.
   4. 802,15 THz SC has liaison from WP 5A on THz fixed links.
      1. Need to have reply by mid-April before next WP 5A call.
      2. 802.15 THz SC will be meeting to have a reply for March Plenary (via .18), for an EC approval for submission to WP-5A.
   5. WRC-23 agenda items
      1. Asked for someone to help get this going, quiet.
      2. Will try a small focused ad hoc, 3 folks stepped up (Hassan, Peter and Paul)
      3. Chair to call a focused ad hoc call on putting together IEEE 802 viewpoints on WRC-23 agenda items of interests to IEEE 802.
      4. **Before:**
      5. 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)
      6. Need to start up document with 4 + 3 WRC-23 agenda items IEEE 802 should consider viewpoints on.
      7. Btw- 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. 10recommend to the Council items for inclusion in the agenda for the next WRC,
      8. Then need to find more info on the following.
         1. 5 Report from the Radiocommunication Assembly, Nos. 135&136 of Convention.
         2. 6 items requiring urgent action by study groups in preparation for next WRC.
         3. 9 Report of Director of Radiocommunication Bureau, Article 7 of Convention.
   6. After IEEE 802 viewpoints in place then APT WRC-23 possible contribution on 6GHz and 7025-7125MHz, etc. by their next meeting in April ‘21
      1. Need to work with APT so IEEE 802 is a recognized SDO for comments.
      2. Could we attend virtually, may have a better impact on our comments?
4. Chair presents slide 15 ~~14~~, **MSG 6 GHz & FCC**
   * 1. **Any new news on 1st circuit court of appeals? Move to monitor? yes**
        1. As reported earlier, they denied motions to the stay and denied motions to expedite, so now there is basically no more clock to get to done.
        2. Latest: April 16, 2021 Final Briefs
        3. TBD Oral Argument (probably just FCC and Petitioners)
     2. **BTW – FCC KDB** [**987594**](https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=277034&switch=P)**for 6 GHz is out with a revision.**  (last time to share)
     3. **Multi-stake holder group (MSG) on 6 GHz and what happens in the band.** 
        + 1. The MSG site is not public but open to any interested party that wants to join in, *you do have to register and apply.* Was renamed to the “6GHz M.S. Committee”.
          2. [https://www.wirelessinnovation.org/6ghz-multistakeholder-committee](https://urldefense.com/v3/__https:/www.wirelessinnovation.org/6ghz-multistakeholder-committee__;!!F7jv3iA!miq8gKDh5u9EeBEqnJQ0xEKNYPoCPGlGj45FX_qjQNRwSaW1Br7N6myjjcdbTNciew$)
          3. From original organization meeting:
          4. Work stream 1 - interference protection and resolution (CableLabs, EPRI, Lake Cty, APCO)
          5. Work stream 2 - correct incumbent data (ULS) (Comsearch, APCO)
          6. Work stream 3 - AFC and how it provides protection, etc. (Charter, Google, UTC)
          7. Overall Co-chairs: NPSTC, UTC, WFA, WISPA
        1. **Next overall MSG meeting - 22Jan21**
           1. There are workstream meetings most every week.
           2. e.g. 14&28Jan21 – WS1;
           3. Firing on all WSs, at least every week for each one.
5. Chair presents slides 16-17 ~~15-16~~, **Table of Frequency Bands – IEEE 802 Stds**
   1. **Working on creating an ad hoc team, .18 chair to lead the .18/.19 joint effort with all the wireless groups participating.** 
      * 1. .11 tbd – though just point to Annex E in IEEE Std 802.11™-2020
        2. .15 Ben (Dorothy for now for .11)
        3. .16 Roger
        4. .22 reached out
        5. .18 Edward (w/jay)
        6. .19 Steve (co-lead)
        7. .24 Tim
        8. -EC Paul/Geoff
      1. .15 lead will provide what had been started on an 802.15 table before to review and see if that gets the overall table started. . Can be found at:
         1. <https://mentor.ieee.org/802.18/dcn/21/18-21-0005-00-0000-freq-table-802-15-work.xlsx>
   2. **The ad hoc team on the table of frequency bands will meet over the next few months, and work on a recommendation.** 
      * 1. Will status in the .18 weekly teleconferences as appropriate.
      1. **Co-leads for ad hoc on table of frequency bands setting up call for Tuesday 26 Jan 21, 15:00et.**
         1. Agenda points: problem statement, audience, how often to meet, etc.
   3. **Possible problem statement**
      1. It is difficult for 802 wireless standards developers to quickly and accurately identify all the bands by the family of 802 wireless standards in a regularly maintained database.
      2. The primary application is to simplify identification of potential bands for coexistence assessment.
      3. Discussion:
      4. Maintaining a database is different from a list of bands for coexistence assessment
         1. *It is a matter if interpretation/clarity of the first statement.*
         2. What is the actual task at hand?
      5. Maybe start with coexistence needs and drop down the possible audiences,
      6. Seems “coexistence” will be different in different regions, though where does this come in?
   4. **Possible Audiences:** 
      1. 1) 802 wireless standards developers
      2. 2) 802.19 wireless coexistence working group
      3. 07Jan: can we add 802.18 here? Possibly, though not to disturb coexistence as primary, more for a reference for comments.
      4. 17Dec20: Stop here for now, then below are secondary audiences for later.
      5. 3) non-802 wireless standards developers 4) Global regulators
      6. 5) ITU-R 6) 802.18 Radio Regulatory TAG.
      7. 7) Implementors of 802 wireless standards-based products and services
      8. 8) Wireless academic researchers
6. Chair presents slides 18 ~~17~~, **General discussion items - fyi**
   1. **FCC Public Notice: SEEKS ADDITIONAL INFORMATION REGARDING CLIENT-TO-CLIENT DEVICE COMMUNICATIONS IN THE 6 GHZ BAND**
      1. …unlicensed proponents requested that the Commission modify its low-power indoor device rules to permit client-to-client device communications.
      2. … if they can decode an enabling signal transmitted by a low-power indoor access point within the last four seconds.
      3. Lots of questions around this and has not been in published in the Federal Register, so comment date not set yet.
      4. <https://mentor.ieee.org/802.18/dcn/21/18-21-0004-00-0000-fcc-pn-client2client-in-6ghz-band-et-18-295.pdf>
   2. **FCC Rule: Unlicensed White Space Device Operations in the Television Bands**
      1. FR Document: [2020-26706](https://urldefense.com/v3/__https:/www.federalregister.gov/documents/2021/01/12/2020-26706/unlicensed-white-space-device-operations-in-the-television-bands?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!jcrVRm1q6PjGhm2J42byTiEs8nG9rxWZhOSuIqedyj6LrHahJx_GzyDbYsiehSg6Iw$) Citation: 86 FR 2278 [PDF](https://urldefense.com/v3/__https:/www.govinfo.gov/content/pkg/FR-2021-01-12/pdf/2020-26706.pdf?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!jcrVRm1q6PjGhm2J42byTiEs8nG9rxWZhOSuIqedyj6LrHahJx_GzyDbYsiwhBY2hA$) Pages 2278-2296 *(19 pages)* [Permalink](https://urldefense.com/v3/__https:/www.federalregister.gov/d/2020-26706?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!jcrVRm1q6PjGhm2J42byTiEs8nG9rxWZhOSuIqedyj6LrHahJx_GzyDbYsjSQe0bNQ$) Abstract: In this document, the Commission revises its rules to expand the ability of unlicensed white space devices to deliver wireless broadband services in rural areas and areas where fewer broadcast television stations are on the air. The Commission also modifies its rules to facilitate the development of new and innovative narrowband Internet of Things (IoT) devices in TV white spaces. Unlicensed white space devices operate in the VHF and UHF broadcast TV bands, a spectral region that has...
7. Chair presents slide 19 ~~18~~, **Actions / AOB / Recess**
   1. **Actions required:** 
      * **Chair to call a focused ad hoc call on putting together IEEE 802 viewpoints on WRC-23 agenda items of interests to IEEE 802.**
      * **Co-leads for ad hoc on table of frequency bands setting up call for Tuesday 26 Jan 21, 15:00et.**
      * The ch**air will check with .15/.19/.24 chairs and coordinate plenary meeting times. (.11 will be closed).**
   2. **AOB before recess to next Thursday, 12Nov20?**
      1. None heard
   3. Attendance on-line today: \_\_22\_\_\_\_ and voters on-line: \_\_6\_\_\_\_
   4. **Recessed at 15:56 until Thursday 21Jan21, 15:00et**
8. Chair presents 18-21/0002r03 slide 20, **2nd - Thursday (21Jan21) Agenda**
   1. Chair calls the meeting to order at 15:02 et, Thursday 21Jan21.
   2. **Reminder we are still under all IEEE policies as shown last Thursday (14Jan21)**
      1. **Attendance like normal with Webex check**
      2. Remember to state your name, affiliation, employer and/or clients first time you speak.
      3. Someone to take a few notes: Peter E.
      4. **Attendance and request queue in chat window, Stuart K**
   3. **Items routine or from last week or new**
      1. EU Items
      2. Other Regions Items
      3. ITU-R Items
      4. MSG 6 GHz & FCC
      5. Table of Frequency Bands
      6. General Discussion Items
   4. **Actions Required**
      1. ad hoc on wrc-23 agenda items
      2. March 21 plenary coordination on times
      3. Anything new today
   5. **AOB**
   6. **Adjourn**
   7. Any objections to accepting the agenda?
      1. None heard
      2. **Results:** Approved by unanimous consent
9. Chair presents slides 21 & 22, **EU items to share**
   1. **ETSI –** [**<BRAN>**](https://portal.etsi.org/tb.aspx?tbid=287&SubTB=287) **next call/meeting #108, 7-11Dec20**
      1. Met this week, talked 5 GHz earlier, today discussed 6 GHz, and tomorrow (22nd) the user access restriction. This had a lengthy discussion on if it can not be tested, can it be in a standard? BRAN has worked out a possible way test it so will propose to leave in the standard.
      2. Next Monday is the closing of meeting #108a ad hoc meeting. Will work on user access restriction and will respond back to ECC on 6 GHz studies being complete.

* + 1. Calls coming up on different subjects.
    2. 14Jan/09Feb – EN 303 722, Wideband Data Transmission Systems (WDTS) for Fixed Network Radio Equipment operating in the 57 - 71 GHz band
    3. 18-25Jan – BRAN 108a and EN 303 753, WDTS for Mobile and Fixed Equipment in the 57 - 71 GHz band
    4. 29Jan – TS 103 754, BRAN MAP Performance testing
    5. 05Feb – EN 303 687 6 GHz RLAN Harmonised Standard
    6. Much focus on 5 and 6 GHz and user access restrictions
  1. **CEPT – ECC** [**<WGSE>**](https://cept.org/ecc/groups/ecc/wg-se/client/introduction/) **last call/meeting #87, 11-15 Jan 21 (#88-19-23Apr21)**
     1. Note: [<SE 19>](https://cept.org/ecc/groups/ecc/wg-se/se-19/client/introduction/)– working on fixed services, defining of just short term (not anything on long term) interference, to update old definition. Communications has changed now with IP traffic having retries, unlike back years ago, no retries.
     2. Has been since ‘92/’93 for these, they will show up in many places for many reasons, including 6 GHz.
  2. **CEPT – ECC** [<FM57>](https://cept.org/ecc/groups/ecc/wg-fm/fm-57/client/introduction/) **next call #13, 18-21Jan21 (#14 now 19-22Apr21)**
     1. Have affirmed ECC Decision (04)08 decision on all 5 GHz RLAN usage. New meeting 11-13 May being setup to pick this up, as it will likely take till then to be ready. .
     2. Some disagreement on power out from Resolution 229 WRC-19, so being moved up to WGFM.
     3. New outdoor 5 GHz consultation came out yesterday from one country, on access and power out.
     4. Then a non-EC member state has agreed on a PSD limit at the border in 5725-5850 MHz. This is another approach instead of limits to radars and other devices.
     5. Input documents:
        1. [**FM57(21)004**](https://cept.org/Documents/fm-57/62571/fm57-21-004_proposal-for-draft-cept-report-in-response-to-the-mandate-on-wasrlan-in-5-ghz-bands)**Proposal for draft CEPT Report in response to the Mandate on WAS/RLAN in 5 GHz bands**
        2. [**FM57(21)003**](https://cept.org/Documents/fm-57/62554/fm57-21-003_ecc-options-for-assisting-in-the-reduction-of-impact-to-meteorological-radar-from-wasrlan-devices-in-56-565-ghz)**ECC Options for assisting in the reduction of impact to meteorological radar from WAS/RLAN devices in 5.6 – 5.65 GHz**
        3. [**FM57(21)002**](https://cept.org/Documents/fm-57/62438/fm57-21-002_proposed-revisions-to-eccdec-04-08-wasrlan-usage-in-parts-of-5150-5725-mhz)**Proposed revisions to ECC/DEC(04)08 'WASRLAN usage in parts of 5150 – 5725 MHz'UK...**
        4. [**FM57(21)001**](https://cept.org/Documents/fm-57/62437/fm57-21-001_output-from-offline-discussions-on-the-draft-ecc-rpt-national-was-rlan-measures-in-58-ghz)**Output from offline discussions on the draft ECC Rpt National WAS-RLAN Measures in 5.8 GHz**

1. Chair presents slides 23, **Other regions (outside EU-Stds and USA), items to share**
   1. nothing to share today
2. Chair presents slides 24 - 25, **ITU-R items to share**
   1. WRC-23 agenda items (pick this up before General Discussion items)
      1. Will try a small focused adhoc, 3 folks stepped up (Hassan, Peter and Paul) .
      2. Chair to call a focused ad hoc call on putting together IEEE 802 viewpoints on WRC-23 agenda items of interests to IEEE 802. (sent some options to the volunteers)
      3. Need to start up document with 4 + 3 WRC-23 agenda items IEEE 802 should consider viewpoints on.
         1. Do have a start on this power point.
      4. 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)
      5. Btw- 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. 10recommend to the Council items for inclusion in the agenda for the next WRC,
      6. Then need to find more info on the following.
         1. 5 Report from the Radiocommunication Assembly, Nos. 135&136 of Convention.
         2. 6 items requiring urgent action by study groups in preparation for next WRC.
         3. 9 Report of Director of Radiocommunication Bureau, Article 7 of Convention.
      7. After IEEE 802 viewpoints in place then APT WRC-23 possible contribution on 6GHz and 7025-7125MHz, etc. by their next meeting in April ‘21
         1. Need to work with APT so IEEE 802 is a recognized SDO for comments.
         2. Could we attend virtually, may have a better impact on our comments?
   2. **FCC Meetings: World Radiocommunication Conference Advisory Committee**
      1. FR Document: [2021-01087](https://urldefense.com/v3/__https:/www.federalregister.gov/documents/2021/01/19/2021-01087/world-radiocommunication-conference-advisory-committee-meetings-of-informal-working-groups-one-two?utm_source=federalregister.gov&utm_medium=email&utm_campaign=subscription*mailing*list__;Kys!!F7jv3iA!jir0zLn-xjYkPYYJChcG8CBGIPTp0UqJI-VY7GZsYt7V8TKqr6BH928drxzesDfWVg$), Citation: 86 FR 5195, [PDF](https://urldefense.com/v3/__https:/www.govinfo.gov/content/pkg/FR-2021-01-19/pdf/2021-01087.pdf?utm_campaign=subscription*mailing*list&utm_source=federalregister.gov&utm_medium=email__;Kys!!F7jv3iA!jir0zLn-xjYkPYYJChcG8CBGIPTp0UqJI-VY7GZsYt7V8TKqr6BH928drxyxyKzu6Q$) Pages 5195-5196 *(2 pages),* [Permalink](https://urldefense.com/v3/__https:/www.federalregister.gov/d/2021-01087?utm_medium=email&utm_campaign=subscription*mailing*list&utm_source=federalregister.gov__;Kys!!F7jv3iA!jir0zLn-xjYkPYYJChcG8CBGIPTp0UqJI-VY7GZsYt7V8TKqr6BH928drxz_-uxbHQ$)
      2. Abstract: This notice advises interested persons that Informal Working Group 1 (IWG-1), Informal Working Group 2 (IWG-2), Informal Working Group 3 (IWG-3) and Informal Working Group 4 (IWG-4) of the 2023 World Radiocommunication Conference Advisory Committee (WRC-23 Advisory Committee) have scheduled meetings as set forth below. The meetings are open to the public.
3. Chair presents slide 26, **MSG 6 GHz & FCC**
   * 1. **Multi-stake holder groups (MSG) on 6 GHz and what happens in the band.** 
        1. 1. The Winnforum site is not public (e.g. it has an IP policy and all) *you have to register being associated with a company that is a member of Winnforum and apply for memberhip.* Winnforum themselves do have a “6 GHz M.S. **Committee**” working the 6 GHz needs, with their own work streams and all. Their link is at:
        2. <https>[://www.wirelessinnovation.org/6ghz-multistakeholder-committee](https://urldefense.com/v3/__https:/www.wirelessinnovation.org/6ghz-multistakeholder-committee__;!!F7jv3iA!miq8gKDh5u9EeBEqnJQ0xEKNYPoCPGlGj45FX_qjQNRwSaW1Br7N6myjjcdbTNciew$)
        3. Members of the MSGroup below can attend calls of the Winnforum Committee above, just as observers.
     2. **2. From the FCC R&O, an informal MSG (“Group”) has also been formed, which is separate from Winnforum’s, but is being hosted on the Winnforum’s website also. There is no IP policy for this group. This is the MSG 802.18 will focus on to keep up with. The link for this informal group is at:** 
        1. <https>[://groups.wirelessinnovation.org/wg/6MSG/dashboard](https://groups.wirelessinnovation.org/wg/6MSG/dashboard).
        2. You still need to register for this informal group, and if not associated with a (Winnforum) company on the registration form, you can send an email to a person at Winnforum to get registered for this informal group. Several know who to contact.
        3. For the informal MS**Group**:
           1. Work stream 1 - interference protection and resolution (CableLabs, EPRI, Lake Cty, APCO)
           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
        5. There are workstream meetings most every week, where the work is getting done.
     3. **Next overall MSGroup meeting - 22Jan21**
        1. Agenda for tomorrow’s (22Jan21) for the overall group was just posted and is very full for the 2-hour call.
        2. One agenda item of note is request for discussion on development of the AFC System-Device Interface Specification. (to access points (masters))
4. Chair presents slides 27 - 28, **Table of Frequency Bands – IEEE 802 Stds** 
   1. Ad hoc team, .18 chair to lead the .18/.19 joint effort with all the wireless groups participating.
      * 1. .11 tbd – though just point to Annex E in IEEE Std 802.11™-2020
        2. .15 Ben (Dorothy for now for .11)
        3. .16 Roger
        4. .22 reached out
        5. .18 Edward (w/jay)
        6. .19 Steve (co-lead)
        7. .24 Tim
        8. -EC Paul/Geoff
      1. .15 lead will provide what had been started on an 802.15 table before to review and see if that gets the overall table started.
   2. The ad hoc team on the table of frequency bands will meet over the next few months, and work on a recommendation.
      1. Will status in the .18 weekly teleconferences as appropriate.
   3. Co-leads setting up Tuesday 26 Jan 21, 15:00et, for next ad hoc call.
      1. Agenda points: problem statement, audience, how often to meet, etc.
   4. **Possible problem statement**
      1. It is difficult for 802 wireless standards developers to quickly and accurately identify all the bands by the family of 802 wireless standards in a regularly maintained database.
      2. The primary application is to simplify identification of potential bands for coexistence assessment.
      3. **Some from before:** 
         1. Maintaining a database is different from a list of bands for coexistence assessment
            1. What is the actual task at hand?
      4. Keep in mind regulators – are updating often (USA every 3 yrs, FM57 revisiting some now)
         1. Others have tried and it was too big an effort for this layer.
      5. Remember just what is in the standards, is the first layer. This will limit the initial scope.
   5. **Possible Audiences:** 
      1. 1) 802 wireless standards developers
      2. 2) 802.19 wireless coexistence working group
      3. 07Jan: can we add 802.18 here? Possibly, though not to disturb coexistence is primary, more for a reference for comments.
5. Chair presents slides 29 - 30, **General discussion items – fyi**
   1. none today
   2. **802.18 activity since November Plenary – fyi only**
      1. Approvals: none
      2. Other discussions:
         1. FCC Rules digital divide for low-income consumers
         2. Canada ISED 6 GHz policy
         3. NSF Workshop Panel – economic considerations for rules
         4. Japan MIC Technical conditions for UWB
         5. Vietnam MIC national radio frequency spectrum
         6. FCC NPRM 5.9 GHz
         7. Japan MIC frequency reorganization plan

1. Chair presents slide 31, **Actions required**

* The ch**air will check with .15/.19/.24 chairs and coordinate plenary meeting times. (.11 will be closed), due to looking at Wednesday 17Mar31, 3pm et, for the .18 2nd meeting of the plenary.**
* **Chair to call a focused ad hoc call on putting together IEEE 802 viewpoints on WRC-23 agenda items of interests to IEEE 802.**

1. Chair presents slide 32 Any Other Business
   1. Is the call-in info for the Frequency table ad hoc (26jan21) in the back up slides here? Yes
2. Chair presents slide 33, Adjourn
   1. Next “weekly” teleconference (sched’d to 20may21): 28Jan21–*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**](http://ieee802.org/802tele_calendar.html)
      1. or only 802.18: [IEEE 802.18 TAG Calendar](https://calendar.google.com/calendar/embed?src=c2gedttabtbj4bps23j4847004%40group.calendar.google.com&ctz=America%2FNew_York)
   3. Adjourn:
      1. Any objection to Adjourn.
      2. None heard, Adjourn at 15:53et
   4. **The next face to face meeting is tbd.**
   5. **The next IEEE 802 plenary will be electronic in March 2021**
   6. **Thank You**
3. Attendance – 14th 21st

voting members

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Au** | Edward | Huawei Technologies Co., Ltd | **x** | **x** |
| **Auluck** | Vijay | Self | **x** | **x** |
| **Ecclesine** | Peter | Cisco Systems, Inc. | **x** | **x** |
| **Hiertz** | Guido | Ericsson AB |  | **x** |
| **Holcomb** | Jay | Itron Inc. | **x** | **x** |
| **Jeffries** | Timothy | FutureWei Technologies, Inc. | **x** | **x** |
| **Jones** | Vincent Knowles IV | Qualcomm Incorporated | **x** |  |
| **Kain** | Carl | USDoT | **x** | **x** |
| **Kenney** | John | TOYOTA InfoTechnology Center U.S.A. | **x** | **x** |
| **Kerry** | Stuart | OK‐Brit, Self | **x** | **x** |
| **Kuerner** | Thomas | TU Braunschweig | **x** |  |
| **Lansford** | James | Qualcomm | **x** | **x** |
| **Levy** | Joseph | InterDigital | **x** | **x** |
| **Lynch** | Michael | MJ Lynch & Associates, LLC. | **x** | **x** |
| **Nikolich** | Paul | Self, HPE, Huawei, Itron, octoScope, Wyebot, UNH BCoE, YAS BBV, Origin Wireless | **x** |  |
| **Palm** | Stephen | Broadcom Corporation | **x** | **x** |
| **Rolfe** | Benjamin | Blind Creek Associates | **x** | **x** |
| **Rosdahl** | Jonathan | Qualcomm | **x** |  |
| **Salazar Cardozo** | Ruben E | Landis Gyr Group Worldwide | **x** | **x** |
| **Schiessl** | Sebastian | u‐blox | **x** |  |
| **Verso** | Billy | Qorvo | **x** | **x** |
| **Wang** | Lei | Huawei R&D USA | **x** | **x** |
| **Yaghoobi** | Hassan | Intel Corporation | **x** | **x** |
| **Non Voting Attendees** | |  |  |  |
| **Fang** | Yonggang | Self | **x** |  |
| **Goldberg** | Jonathan | IEEE |  | **x** |
| **Hamilton** | Mark | Ruckus/CommScope |  | **x** |
| **Petrick** | Al | Skyworks (Jones-Petrick and Associates, LLC.) | **x** | **x** |
| **Pirhonen** | Riku | NXP Semicondustors | **x** |  |
| **Scott** | Andy | NCTA | **x** | **x** |
| **Ward** | Lisa | Rohde & Schwarz | **x** | **x** |
| **Yucek** | Tevfik | Qualcomm | **x** | **x** |