IEEE P802.18  
Radio Regulatory Technical Advisory Group (RR-TAG)

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| Radio Regulatory Technical Advisory Group Minutes  March 2024 Mixed-Mode IEEE 802 Plenary Session | | | | |
| Date: April 2, 2024 | | | | |
| Author: | | | | |
| Name | Company | Address | Phone | email |
| Al Petrick | Skyworks Solutions |  |  | Apetrick123@gmail.com |
| Stuart J Kerry | OK-Brit; Self |  |  | stuart@ok-brit.com |
|  |  |  |  |  |

Abstract

This document constitutes the minutes of the IEEE 802.18 Radio Regulatory Technical Advisory Group for the March 2024 Mixed Mode IEEE 802 Plenary Session, with on-site participants in Denver, CO, USA and remote participants through Webex. "Local time" in this document means local time “Mountain Daylight Time” (MDT) zone.

**C:** means question or comment from participant.

**Chair:** means statement by the chair as chair.  
Highlight means action point.

Chair: Edward Au (Huawei)

Co-Vice-chairs: Stuart Kerry (OK-Brit; Self) and Al Petrick (Skyworks Solutions)

Secretary: VACANT (Open position)

IEEE SA Program Manager: Jodi Hassz (IEEE SA)

IEEE 802.18, RR-TAG website: <https://www.ieee802.org/18/> .

Chair: Edward Au (Huawei)

Co-Vice-chairs: Stuart Kerry (OK-Brit/Self) and Al Petrick (Skyworks Solutions)

Secretary: Amelia Andersdotter (Comcast)

IEEE SA Program Manager: Jodi Hassz (IEEE SA)

* IEEE 802.18, RR-TAG website: <https://www.ieee802.org/18/>

**Opening meeting – March 12, 2024**

1. **Opening formalities**
2. Chair calls the meeting to order at 10:32AM MDT local time. Quorum is asserted.
3. Agenda spreadsheet document **18-24/0011r1** with supplementary materials in **18-24/0012r1.**
4. Group officers are present. Co-Vice Chair: Al Petrick volunteered as secretary for the March 2024 plenary session.
5. This meeting is part of the IEEE 802 wireless mixed mode plenary session located in Denver, CO, USA at the Hyatt Regency on March 10 – 15, 2024.

* You **must** pay the registration fee to attend.
* If you have not already done so, you can register w/Face to Face Events – Registration website at:
* [**Summary - March 2024 IEEE 802 Plenary Session (cvent.com)**](https://web.cvent.com/event/1fb7683a-77e3-48fe-a703-472af68d3ee5/summary)
* If you do not intend to register for this session you must leave this meeting and, if you have logged attendance on IMAT, please email the 802.18 chair or a vice chair to have your attendance canceled.
* At conclusion of each of the 802.18 calls, the Webex log and IMAT will be reviewed.
* No payment, become deadbeat and lose voting rights in all groups, after 60-day grace.
* Stuart Kerry Co-Vice Chair confirmed as of the March 2024 plenary, 802.18 has **zero deadbeats**.
* Chair presents and reviews Agenda (RR-TAG Opening tab). See discussion comment in motion #1 discussion below.
  + - * **Motion #1 (internal):** To approve the agenda as shown in the “RR-TAG Opening Agenda” tab of the document **18-24/0011r1**

Moved by: Paul Nikolich

Seconded by: Stuart Kerry

Discussion: Added a contribution to the General discussion item if time permits today. If no, consider it on Thursday AM or a future teleconference call.

Vote: Approved with unanimous consent.

1. **Voter list update**Group officers and voting membership (at the opening meeting on March 12, 2024)

Voters: 58 (8 on LMSC)

Nearly Voters: 6

Aspirant members: 14

1. **Policies and procedures**  
   1. RR-TAG Policies & Procedures [[802 LMSC WG P&P](https://mentor.ieee.org/802-ec/dcn/21/ec-21-0207-23-0PNP-ieee-802-lmsc-working-group-policies-and-procedures.pdf)]

IEEE 802 meeting and participant’s guidelines and requirements [[link](http://www.ieee802.org/devdocs.shtml)]

IEEE policies and procedures [[link](https://standards.ieee.org/about/policies/opman/)]

* 1. Reciprocal credit with IEEE 802.11 Working Group (WG) is granted for only the two meeting slots scheduled for IEEE 802.18 as per the agreement between the IEEE 802.11 and IEEE 802.18 chairs.   
       
     Chair asked for any press in the room to announce their presence.   
     No response, no comments from the group or WebEx.
  2. **Reminder that IMAT is being used for attendance.**

Online meeting procedures reminder.

Walk-through of session schedule.

Chair asks the group if there are any questions relating to the IEEE policies.

No response, no comments from the group or WebEx.

1. **General business**  
   * **Minutes**
   * Chair presents meeting minutes from RR-TAG 2024 January 2024 interim session.   
     No questions or comments from the group or WebEx.  
      **Motion #2 (internal):** To approve the meeting minutes of the RR-TAG 2024 January interim session as shown in the document **18-24/0014r0**, with editorial privilege for the IEEE 802.18 Chair.

Moved by: Al Petrick

Seconded by: Kiwin Palm

Discussion: None.

Vote: Approved with unanimous consent.

* + **Opening reports**
    - **Presentation of 802.18 opening report 18-24/0013r0,** Edward Au (Chair)  
      Chair presents progress on consultations since the interim meeting in January 2024 including US FCC 6 GHz Second Further Notice of Proposed Rulemaking and update from ETSI BRAN.
    - Chair reviewed objectives for the week.
    - Chair informs the group; officer elections will be conducted by using DirectVoteLive.
      * Tuesday (March 12, 2024) AM2: Candidate introduction and Q&A.
      * Thursday (March 14, 2024) AM1: Officer election.

1. **Old Business**
   * **Status of Ongoing Consultations**
     + **Review: US Federal Communications Commission (FCC) Consultation**
       - Hassan Yaghoobi (Intel) presents revision 3 of the proposed Response to the FCC Second Further Notice of Proposed Rulemaking for 6 GHz document **18-24/0007r3**.
       - Discussion takes place. Gaurav Patwardhan (Hewlett Packard Enterprise) and Ben Rolfe (Blind Creek Associates) plan to provide text updates to Hassan to include in final draft for motion on Thursday March 14, 2024.
   * **General discussion items**
     + **ETSI BRAN update**
       - Document **18-24/0023r0** ETSI TC BRAN, March 2024 Update was presented by Guido Hiertz (Ericsson GmbH). There was some discussion. The document provides updates and links on several harmonized standards.
     + **UWB Regulation in Europe**
       - Document **18-24/0022r1** March 2024 update UWB Regulation in Europe was presented by Friedbert Berens (FBConsulting Sarl). There was some discussion. Refer to document **18-24/0022r1** for details.
         * Discussion comments:
         * C: UWB regulation framework on slide 6 was presented to SE.
         * C: Slide 8 is the same as ETSI

* + - **CEPT ECC Report**
      * Document **18-24/0024r0** Public consultation of ECC Report 355 – OOB limits of 6 GHz VLP RLAN was presented by Friedbert Berns (FBConsulting Sarl). There was some discussion. Refer to document **18-24/0024r0** for details.
        + Discussion comments:
        + C: -45dBm is possible but controversial.

1. **New business**
   * **Announcements: Designation of individual experts**

* The Chair announced Dr. Aleksander Soltysik (Chair, Radio Spectrum Policy Group) was invited to give a presentation; Title: The RSPG Work Programme for 2024-2025. The presentation will be given on Thursday March 14, 2024, during the 802.18 closing plenary. Members are encouraged to attend. See document **18-24/0012r1** slide 31for details.

* + **Officer election**
    - Chair reviewed Chair and Vice Chair election process timeline for 802.18 officer candidates with the group. See document **18-24/0012r1** slide 33 for details.
    - **Candidate Introduction and Q&A**
      * Chair announces perspective candidates. See document **18-24/0012r1** slide 34 for details.
      * Chair candidate:
        + Edward Au (Huawei Technologies)
      * Vice Chair candidates (in alphabetical order of their family names)
        + Stuart Kerry (OK-Brit; Self)
        + Gaurav Patwardhan (Hewlett Packard Enterprise)
        + Al Petrick (Skyworks Solutions)
        + Ben Rolfe (Blind Creek Associates)
    - Chair - Edward Au presents introductory statement to the group. Refer to document **18-24/0026r0** (Chair’s candidate statement). No questions or comments from the group or WebEx.
    - Chair – Edward Au moderates each of the Vice Chair candidate’s introductory statement. No questions or comments from the group or WebEx. Note – The candidate introductory statement from Stuart Kerry was presented but was not uploaded as of the preparation of this meeting minutes.

1. **Recess at 12:30 PM MDT local time (until Thursday AM 1, March 14, 2024)**

**Closing meeting – March 14, 2024**

1. **Opening formalities**
   * Chair calls meeting to order at 08:00AM MDT local time. Quorum is declared.
     + Agenda spreadsheet document **18-24/0011r5** with supplementary materials in **18-24/0012r2**.
   * Officer introduction.
   * Reminder of registration fee was presented.
   * Chair presents and reviews Agenda (RR-TAG Closing tab). See comment in motion #3 Discussion below.

* **Motion #3 (internal):** To approve the agenda as shown in the “RR-TAG Closing Agenda” tab of the document **18-24/0011r5.**

Moved by: Hassan Yaghoobi

Seconded by: Rich Kennedy

Discussion: Removed the agenda item 4.1.2

Vote: Approved with unanimous consent

1. **Policies and procedures**
   * IEEE 802 required notices
     + Declaration of affiliation
     + Anti-trust notices
     + IEEE 802 WG policies and procedures
   * Guidelines for IEEE SA meetings were introduced.
     + Reminder to object when inappropriate topics are discussed.
     + IEEE 802 Code of Conduct and Code of Ethics were introduced.
     + Reminder of the IEEE SA individual process applied in IEEE 802 Committee.
     + Reminder of IEEE SA board bylaws specifying fair and equitable consideration of all viewpoints.
     + Chair asks for comments, questions, or concerns.

None reported from the group or WebEx

* + - Reminder of housekeeping and meeting decorum.

1. **New Business Part 1**
   * **Announcements – Designation of Individual Experts**
     + Dr. Aleksander Soltysik (Chair Radio Spectrum Policy Group) and Julia Inmaculada Criado Casado (Vice Chair, Radio Spectrum Policy Group) are designated as specific individual experts and invited as guest speakers during the March 2024 802.18 plenary on Spectrum Policies.
   * **Members enrichment activities**

Invited presentation:  
The RSPG Work Programme for 2024 - 2025 by Dr. Aleksander Soltysik (Chair, Radio Spectrum Policy Group) document: **18-24/0025r0.**

Chair opens discussion. The discussion Q&A was time limited due to Dr. Soltysik’s schedule.

1. **Old Business** 
   * **Status of Ongoing Consultations**
   * **Review: US Federal Communications Commission (FCC) Consultation**
     + Hassan Yaghoobi (Intel) presents revision 7 of the proposed Response to the FCC Second Further Notice of Proposed Rulemaking for 6 GHz document **18-24/0007r7**.
     + Discussion takes place. Revision 7 includes comments from Ben Rolfe (Blind Creek Associates), Gaurav Patwardhan (Hewlett Packard Enterprise) and others shared with Hassan Yaghoobi off-line. Hassan Yaghoobi creates revision 8 for motion.
     + **Motion #4 (External):** Move to approve document **18-24/0007r8** in response to the US Federal Communications Commission (FCC)’s consultation “6 GHz Second Further Notice of Proposed Rulemaking”, for review and approval by the IEEE 802 LMSC for submission to the FCC by the response deadline. The IEEE 802.18 Chair is authorized to make editorial changes as necessary.

Moved: Hassan Yaghoobi

Seconded: Lei Wang

Discussion: None

Result: Approved (22 Yes, 1 No, 5 Abstain)

NOTE: The Chair did not vote

* + **General discussion items**
    - **Emission limits for fixed-satellite services in the 19.7 GHz and 21.2 GHz bands**
      * Document **18-24/0027r0** Emission limits for fixed-satellite services in the 19.7 GHz and 21.2 GHz bands was presented by Nader Zein (NEC Europe – NEL). There was some discussion. Refer to document **18-24/0027r0** for details.
    - **Asia Pacific Update**
      * Chair gave and updated on Asia Pacific region. Refer to document **18-24/0012r2** slide 62 for details. No comments or questions from the group or WebEx.
    - **CEPT Public Consultation**
      * Document **18-24/0028r8** Proposed input to the CEPT public consultation of the draft ECC Report 355 on OOB limits for VLP devices in the 6 GHz band was presented by Friedbert Berens (FBConsulting Sarl). There was some discussion on VLP and relaxation of OOB emissions. Refer to document **18-24/0028r8** for details.

1. **New Business Part 2**
   * + **Officer election**
       - All IEEE 802.18 officer elections to be conducted by Jodi Haasz, IEEE SA program manager, and Paul Nikolich, IEEE 802 Chairman, using DirectVoteLive.
       - **Motion #5 (External)** Confirm Edward Au as the IEEE 802.18 Chair.
         * Moved: Guido Hiertz
         * Seconded: Tuncer Baykas
         * Result: Approved (32 Yes, 0 No, 1 Abstain)
       - **Election #1: 802.18 Vice Chair - Vote for up to 2 individuals**
     + Stuart Kerry: 14
     + Gaurav Patwardhan: 14
     + Al Petrick: 20
     + Ben Rolfe: 14
       - **Election #2: 802.18 Vice Chair - Vote for up to 1 individual**
   * Stuart Kerry: 10
   * Gaurav Patwardhan: 13
   * Ben Rolfe: 11
     + - **Motion #6** **(External):** Confirm Al Petrick as IEEE 802.18 co-Vice Chair.
         * Moved: Dorothy Stanley
         * Seconded: Kiwin Palm
         * Result: Approved (27 Yes, 1 No, 2 Abstain)
       - **Motion #7 (External):** Confirm Gaurav Patwardhan as an IEEE 802.18 co-Vice Chair.
         * Moved: Hassan Yaghoobi
         * Seconded: Marc Emmelmann
         * Result: Approved (28 Yes, 2 No, 3 Abstain)
2. **Closing formalities**
   * **Future meetings.**Chair refers to document **18-24-0012r2** slides 71 and 72 for details on weekly conference calls and May 2024 interim dates and registration.

* **Motion #8 (internal):** The 802.18 Chair or Chair designee is directed to conduct, as necessary, the following weekly teleconference calls through 25 July 2024.
  + RR-TAG calls on Thursdays at 15:00 ET for 55 mins.

Moved by: Hassan Yaghoobi

Seconded by: John Kenney

Discussion: None

Vote: Approved with unanimous consent

1. **Any other business**
   * None

Chair: A reminder to register and log in to IMAT.

Chair: Any objection to Adjourn? None heard.

**Adjourn at 10:01 AM MDT local time.**

1. **Final administrative items**

**ATTENDANCE (Plenary Attendance Names and Affiliations):**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Attendees** | **Voters** | **Non-Voters** |  | **Audited & Reported By** |
| **12-Mar** | 51 | 39 | 12 |  | Stuart Kerry |
| **14-Mar** | 58 | 43 | 15 |  | Stuart Kerry |

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| **Voting Attendees:** | | | | **12-Mar** | **14-Mar** | **Credit >75%** |
| 1 | **Asai** | Yusuke | NTT ASLabs |  | **x** | **FALSE** |
| 2 | **Au** | Edward (Kwok Shum) | Huawei Technologies Co., Ltd | **x** | **x** | **TRUE** |
| 3 | **Baykas** | Tuncer | Ofinno | **x** | **x** | **TRUE** |
| 4 | **Berens** | Friedbert | FBConsulting Sarl | **x** | **x** | **TRUE** |
| 5 | **da Silva** | Claudio | Meta Platforms, Inc. | **x** | **x** | **TRUE** |
| 6 | **de Vegt** | Rolf | Qualcomm Incorporated | **x** | **x** | **TRUE** |
| 7 | **Emmelmann** | Marc | Self | **x** | **x** | **TRUE** |
| 8 | **Fang** | Yonggang | MediaTek Inc. | **x** | **x** | **TRUE** |
| 9 | **Gilb** | James P.K. | General Atomics Aeronautical Systems and Gilb Consulting, UoSD, GenXCom | **x** | **x** | **TRUE** |
| 10 | **Godfrey** | Tim | Electric Power Research Institute, Inc. (EPRI) | **x** | **x** | **TRUE** |
| 11 | **Halasz** | Dave | Morse Micro | **x** | **x** | **TRUE** |
| 12 | **Hiertz** | Guido | Ericsson GmbH | **x** | **x** | **TRUE** |
| 13 | **Jeffries** | Timothy | FutureWei Technologies, Inc. | **x** | **x** | **TRUE** |
| 14 | **Jones** | Vincent Knowles IV | Qualcomm Incorporated | **x** | **x** | **TRUE** |
| 15 | **Kain** | Carl | USDOT, Noblis, Inc. | **x** | **x** | **TRUE** |
| 16 | **Kennedy** | Richard | Bluetooth SIG; Self | **x** | **x** | **TRUE** |
| 17 | **Kenney** | John | TOYOTA InfoTechnology Center U.S.A. | **x** | **x** | **TRUE** |
| 18 | **Kerry** | Stuart | OK‐Brit, Self | **x** | **x** | **TRUE** |
| 19 | **Kitazawa** | Shoichi | Muroran Institute of Technology | **x** | **x** | **TRUE** |
| 20 | **Lalam** | Massinissa | Sagemcom Broadband SAS | **x** | **x** | **TRUE** |
| 21 | **Levy** | Joseph | InterDigital, Inc. | **x** | **x** | **TRUE** |
| 22 | **Li** | Huan‐Bang | National Institute of Information and Communications Technology (NICT) | **x** | **x** | **TRUE** |
| 23 | **Max** | Sebastian | Ericsson AB | **x** | **x** | **TRUE** |
| 24 | **Neirynck** | Dries | Ultra Radio Ltd | **x** | **x** | **TRUE** |
| 25 | **Nikolich** | Paul | Self | **x** | **x** | **TRUE** |
| 26 | **Palm** | kiwin (Stephen) | Broadcom Corporation | **x** | **x** | **TRUE** |
| 27 | **Petrick** | Al | Skyworks Solutions Inc. | **x** | **x** | **TRUE** |
| 28 | **Pettersson** | Charlie | Ericsson AB | **x** | **x** | **TRUE** |
| 29 | **Pirhonen** | Riku | NXP Semiconductors | **x** | **x** | **TRUE** |
| 30 | **Porat** | Ron | Broadcom Corporation |  | **x** | **FALSE** |
| 31 | **Robert** | Joerg | TU-Ilmenau/Fraunhofer IIS |  | **x** | **FALSE** |
| 32 | **Rosdahl** | Jonathan | Qualcomm Technologies, Inc. |  | **x** | **FALSE** |
| 33 | **Sand** | Stephan | German Aerospace Center (DLR) | **x** | **x** | **TRUE** |
| 34 | **Sasaki** | Shigenobu | Niigata University, Japan | **x** | **x** | **TRUE** |
| 35 | **Sato** | Naotaka | Sony Group Corporation | **x** | **x** | **TRUE** |
| 36 | **Sherlock** | Ian | Texas Instruments | **x** | **x** | **TRUE** |
| 37 | **Stanley** | Dorothy | Hewlett Packard Enterprise | **x** | **x** | **TRUE** |
| 38 | **Verso** | Billy | Qorvo | **x** | **x** | **TRUE** |
| 39 | **Wang** | Lei | FutureWei Technologies, Inc. | **x** | **x** | **TRUE** |
| 40 | **Ward** | Lisa | Rohde & Schwarz | **x** | **x** | **TRUE** |
| 41 | **Wilhelmsson** | Leif | Ericsson AB | **x** | **x** | **TRUE** |
| 42 | **Yaghoobi** | Hassan | Intel Corporation | **x** | **x** | **TRUE** |
| 43 | **Yu** | Ross (Jian) | Huawei Technologies Co., Ltd | **x** | **x** | **TRUE** |
|  |  |  |  |  |  |  |
| **Non-Voting Attendees:** | | | | **12-Mar** | **14-Mar** | **Credit >75%** |
| 1 | **Aldana** | Carlos | Facebook | **x** |  | **FALSE** |
| 2 | **Berens** | Robin | Self; Gymnasium Konz | **x** |  | **FALSE** |
| 3 | **Criado** | Julia Immaculada | Radio Spectrum Policy Group (RSPG) |  | **x** | **FALSE** |
| 4 | **Derham** | Thomas | Broadcom Corporation |  | **x** | **FALSE** |
| 5 | **Haasz** | Jodi | IEEE SA |  | **x** | **FALSE** |
| 6 | **Kohno** | Ryuji | YNU/YRP-IAI | **x** |  | **FALSE** |
| 7 | **Krebs** | Alex | Apple Inc. | **x** |  | **FALSE** |
| 8 | **Leong** | Frank | NXP Semiconductors | **x** | **x** | **TRUE** |
| 9 | **Mano** | Hiroshi | Koden Techno Info K.K. |  | **x** | **FALSE** |
| 10 | **Nagai** | Yukimasa | Mitsubishi Electric Corporation |  | **x** | **FALSE** |
| 11 | **Patwardhan** | Gaurav | Hewlett Packard Enterprise | **x** | **x** | **TRUE** |
| 12 | **Rolfe** | Benjamin | Blind Creek Associates | **x** | **x** | **TRUE** |
| 13 | **Salem** | Pelin | Cisco Systems, Inc. | **x** | **x** | **TRUE** |
| 14 | **Soltysik** | Aleksander | Radio Spectrum Policy Group (RSPG) |  | **x** | **FALSE** |
| 15 | **Sumi** | Takenori | Mitsubishi Electric Corporation | **x** | **x** | **TRUE** |
| 16 | **Wendt** | Matthias | Signify | **x** | **x** | **TRUE** |
| 17 | **Yang** | David (Xun) | Huawei |  | **x** | **FALSE** |
| 18 | **Yang** | Shang-Te | Apple Inc. | **x** |  | **FALSE** |
| 19 | **Yang** | Steve TS | MediaTek |  | **x** | **FALSE** |
| 20 | **Zein** | Nadar | NEC Europe - NLE | **x** | **x** | **TRUE** |
|  |  |  |  |  |  |  |

**End.**