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

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| Radio Regulatory Technical Advisory Group Minutes  May 2024 Mixed-Mode IEEE 802 Wireless Interim Session 14, May 2024 | | | | |
| Date: June 17, 2024 | | | | |
| Author: | | | | |
| Name | Company | Address | Phone | email |
| Al Petrick | Skyworks Solutions |  |  | Apetrick123@gmail.com |
| Gaurav Patwardhan | Hewlett Packard Enterprise |  |  | gauravpatwardhan1@gmail.com |
| Edward Au | Huawei |  |  | Edward.ks.au@gmail.com |

Abstract

This document constitutes the minutes of the IEEE 802.18 Radio Regulatory Technical Advisory Group for the May 2024 Mixed Mode IEEE 802 Wireless Interim Session, with on-site participants in Warsaw, Poland and remote participants through Webex. "Local time" in this document means local time “Central Europe Time” (CET) 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: Gaurav Patwardhan (Hewlett Packard Enterprise) 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 – May 14, 2024**

1. **Opening formalities**
2. Chair calls the meeting to order at 10:30AM CET local time. Quorum is asserted.
3. Agenda spreadsheet document [**18-24/0042r1**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024) with supplementary materials in [**18-24/0043r0**](https://mentor.ieee.org/802.18/documents?is_dcn=43&is_group=0000&is_year=2024) **.**
4. Group officers are present. Co-Vice Chair: Al Petrick volunteered as secretary for the   
   May 2024 IEEE 802.18 wireless interim session.
5. This meeting is part of the mixed mode IEEE 802 wireless interim session located in Warsaw, Poland, ED, held at the Warsaw Marriott on May 12-17, 2024.

* You **must** pay the registration fee to attend.
* If you have not already done so, you can register w/MTG Events Pty Ltd – Registration website at:
* [**IEEE 802 Wireless Interim Session | IEEE 802 Wireless Interim Session, May 12-17, 2024, Warsaw, Poland (mtgevents.com.au)**](https://mtgevents.com.au/ieee2024/)
* 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. <https://imat.ieee.org/my-site/home>
* 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.
* Chair presents and reviews Agenda (RR-TAG Opening tab) in document [**18-24/0042r1**](https://mentor.ieee.org/802.18/documents?is_dcn=42&is_group=0000&is_year=2024).
  + - * **Motion #1 (internal):** To approve the agenda as shown in the “RR-TAG Opening Agenda” tab of the document[**18-24/0042r1**](https://mentor.ieee.org/802.18/documents?is_dcn=42&is_group=0000&is_year=2024)**.**

Moved by: Dorothy Stanley

Seconded by: Kwin Palm

Discussion: None

Vote: Approved with unanimous consent.

1. **Voter list update**Group officers and voting membership (at the opening meeting on March 19, 2024).   
   Voters: 57 (8 on LMSC)

Nearly Voters: 4

Aspirant members: 17

1. **Administrative items** 
   * + **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 document [**18-24/0015r0**](https://mentor.ieee.org/802.18/documents?is_dcn=15&is_group=0000&is_year=2024) from RR-TAG 2024 March session.
     + Chair asks the group if there are any questions. No response, no comments from the group or WebEx.

**Motion #2 (internal):** To approve the meeting minutes of the RR-TAG 2024 March Plenary session as shown in the document [**18-24/0015r0**](https://mentor.ieee.org/802.18/documents?is_dcn=15&is_group=0000&is_year=2024) ,with editorial privilege for the IEEE 802.18 Chair.

Moved by: Al Petrick

Seconded by: Jim Lansford

Discussion: None.

Vote: Approved with unanimous consent.

* + **Opening reports**
    - **Presentation of 802.18 opening report** [**18-24/0044r1**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024) **,** Edward Au (Chair)  
      Chair presents progress on consultations since the Plenary meeting in March 2024.
      * The IEEE 802 LMSC approved 6 submissions. For details see document [**18-24/0044r1**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024) slide 3.
      * Discussed latest topics related to spectrum and regulation in Europe, North America, and Asia Pacific.
    - Chair reviewed **objectives for the week**: See document[**18-24/0044r1**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024) slides 4 and 5.
      * Invited presentation (remote): Title: Selected aspects of radio spectrum management and regulation in the Republic of Poland by: Mr. Mariusz Gruszczyński.   
        See document: [**18-24/0053r0**](https://mentor.ieee.org/802.18/documents?is_dcn=53&is_group=0000&is_year=2024)
      * Review consultations, petitions for rulemaking and liaison statement: South Africa ICASA, US FCC and ETSI ISG THZ liaison. See document[**18-24/0044r1**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024)side 5.
    - Chair asks the group if there are any questions relating to the objectives for the week.   
      No questions or comments from the group or WebEx.

1. **New business**
   * **Announcements: Designation of individual experts.** See document [**18-24/0043r0**](https://mentor.ieee.org/802.18/documents?is_dcn=44&is_group=0000&is_year=2024) slide22.
     + Chair reviews the list of 6 individual experts from the Office of Electronic Communications (UKE), Poland.

* Chair introduces invited guest speaker (remote) Mr. Mariusz Gruszczyński, Head of Radiocommunication Networks Unit in the Department of Radio Spectrum of the Office of Electronic Communications (UKE), Poland. Title: Selected aspects of radio spectrum management and regulation in the Republic of Poland presented by: Mr. Mariusz Gruszczyński. See document: [**18-24/0053r0**](https://mentor.ieee.org/802.18/documents?is_dcn=53&is_group=0000&is_year=2024)
* The content of the presentation included an overview of the following topics: introduction about UKE, nationwide broadband mobile networks, local/private broadband mobile networks, current and planned frequency resources for 5G networks, and wideband data transmission devices.
* Chair asks the group if there are any questions for Mr. Gruszczyński.   
  Discussion
* C: Slide 10: N38 has only one operator. Are they using this band?
* A: The operator is using this band for only 30 MHz.
* C: Slide 8: 5G private networks in 3800-4200 MHz band (n77): Are they focused on 3GPP or IMT?
* A: The plan is only for 5G / IMT.
  + - Chair asks the group if there are any further questions? No questions or comments from the group or WebEx.

1. **Old Business**
   * **Status of Ongoing Consultations**
     + **US FCC’s petition of for rulemaking:** 
       - Phil Beecher reviews document [**802.15-24-0280-00-0mag**](https://mentor.ieee.org/802.15/documents?is_dcn=280)with the group. NextNav filed rulemaking petition asking FCC for use of the lower 900 MHz band (902 MHz to 928 MHz band)**.**
       - Chair asks the group if there are any questions?
       - Discussion:
       - C: 802.15.4 devices on slide 4 would like to have 802.11 submit a response to the FCC.
       - C: For the petition for rulemaking in the 900 MHz, the TX power level is higher than the current FCC rules for 900 MHz.
       - C: Meets standard UWB and others which is easily discredited.
       - C: They are trying to use licensed, not unlicensed in the 900 MHz band.
       - Chair asks the group for volunteers to draft a response.
       - C: At this time, there is no timeline from the FCC chair. There are 2 options: Opt1, file an Exparte. Opt2, file a response when the FCC opens a comment period.
       - Phil Beecher and Dave Halasz agreed to work off-line with Chair and draft a response for the FCC open comment period.
     + **Liaison from ETSI ISG THZ:** 
       - Thomas Kurner reviews document [**802.15-24-0232-00-0mag**](https://mentor.ieee.org/802.15/documents?is_dcn=232) with the group.
       - Chair asks the group if there are any questions. No questions or comments from the group or WebEx.

* + - * Thomas Kurner reviews document **ETSI GR THz 002 V1.1.1 (2024-03)**.This document covers a frequency range from 100 GHz up to several THz.

* + - * Chair asks group if there are any questions. No questions or comments from the group or WebEx.
    - **South Africa ICASA’s Consultation:**
      * Chair reviews South Africa ICASA consultation draft response. See document  
         [**18-24/0054r1**](https://mentor.ieee.org/802.18/documents?is_dcn=54&is_group=0000&is_year=2024)**.**
      * Chair asks the group if there are any questions. No questions or comments from the group or WebEx.
    - Chair asks the group for AOB. No response from the group or WebEx.

1. **Recess at 12:08 PM CET local time (until Thursday AM 1, May 16, 2024)**

**Closing meeting – May 16, 2024**

1. **Opening formalities**
   * Chair calls meeting to order at 08:00AM CET local time. Quorum is declared.
     + Agenda spreadsheet document [**18-24/0042r2**](https://mentor.ieee.org/802.18/documents?is_dcn=42&is_group=0000&is_year=2024)with supplementary materials in [**18-24/0043r1**](https://mentor.ieee.org/802.18/documents?is_dcn=43&is_group=0000&is_year=2024).
   * Officer introduction.
   * Reminder of registration fee was presented.
   * Reminder of recording attendance. IMAT is used for this session.
   * Chair presents and reviews Agenda (RR-TAG Closing tab).

* **Motion #3 (internal):** To approve the agenda as shown in the “RR-TAG Closing Agenda” tab of the document [**18-24/0042r3**](https://mentor.ieee.org/802.18/documents?is_dcn=42&is_group=0000&is_year=2024)**.**

Moved by: Al Petrick

Seconded by: Lei Wang

Discussion: None

Vote: Approved with unanimous consent

1. **Administrative Items**
   * + **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. No response from the group or WebEx.
       - Reminder of housekeeping and meeting decorum.
       - IMAT is used for this session. <https://imat.ieee.org/my-site/home>
       - Reminder of Reciprocal credit.
     + Chair asks the group if there are any questions or comments.
     + C: Member would like to see reciprocal credit posted on 802.18 website. See slide 45 document [**18-24/0043r1**](https://mentor.ieee.org/802.18/documents?is_dcn=43&is_group=0000&is_year=2024)**.**
     + AI: Chair will review and make updates for reciprocal credit to the 802.18 website.
2. **Old Business** 
   * **Status of Ongoing Consultations**
     + **South Africa ICASA’s consultation**
       - Edward Au Chair is author of document [**18-24/0054r1**](https://mentor.ieee.org/802.18/documents?is_dcn=54&is_group=0000&is_year=2024)proposed response to South Africa ICASA consultation on draft radio frequency mitigation plan.
       - Edward Au hands over Chair to Al Petrick during the presentation of document   
         **18-24/0054r1**
       - Document includes editorials changes from the group and is ready for motion.
       - Chair (Al Petrick) asks the group if there are any questions. No questions or comments from the group or WebEx.
       - Al Petrick hands over Chair to Edward Au.
       - **Motion #4 (external):** Move to approve document[**18-24/0054r1**](https://mentor.ieee.org/802.18/documents?is_dcn=54&is_group=0000&is_year=2024)in response to the South Africa Independent Communications Authority of South Africa (ICASA)’s consultation “Draft Radio Frequency Migration Plan”, for review and approval by the IEEE 802 LMSC for submission to the ICASA before the contribution deadline. The IEEE 802.18 Chair is authorized to make editorial changes as necessary.

Moved by: Al Petrick

Seconded by: Kiwin Palm

Discussion: None

Vote: Approved (10 Yes, 0 No, 1 Abstain)

Note: Chair did not vote.

* + **General Discussion Items**
    - **ETSI update** 
      * Guido Hiertz presents document [**11-24-0910r0**](https://mentor.ieee.org/802.11/documents?is_dcn=910) Coex ETSI BRAN update.
      * Discussion:
      * C: Some of the slides include updates for May 2024.
      * Q: Are there any questions prepared for the up-coming ETSI meeting.
      * A: Not at this time.
    - Chair asks the group if there are any further questions? No questions or comments from the group or WebEx.
    - **ECC update**
      * Friedbert Berens gave an update on ECC report for UWB.
      * **Document temp03\_draft-edc-report-band-extension.doc** is the latest draft ECC Report for UWB regulation in Europe. This document includes UWB use cases of interest.
      * New Work Item (WI); WI 81 is now active in SE24; Indoor UWB in 4.2 GHz to 4.8 GHz with up to -31dBm/MHz for UWB operation of fixed infrastructure based indoor localization systems. Sharing and compatibility studies for the UWB operation are described in ETSI SRd.
      * There were some questions on how ETSI relies on their coexistence group.

1. **Closing formalities**
   * **Future RR-TAG meeting**Chair refers to document [**18-24/0043r1**](https://mentor.ieee.org/802.18/documents?is_dcn=43&is_group=0000&is_year=2024)slides 53 for details on weekly conference calls and July 2024 plenary dates and registration.
2. **Any other business**
   * None
   * The Chair reminds the group about the registration and accommodation deadline of the July 2024 plenary and the September 2024 wireless interim.

Chair: A reminder to register and log into IMAT.

Chair: Any objection to Adjourn? None heard.

**Adjourn at 9:44 AM CET local time.**

1. **Final administrative items**

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

|  |  |  |
| --- | --- | --- |
| **Asai** | Yusuke | NTT ASLabs |
| **Au** | Edward | Huawei Technologies Co., Ltd |
| **Baykas** | Tuncer | Ofinno |
| **Beecher** | Phil | Wi-SUN Alliance |
| **Berens** | Friedbert | FBConsulting Sarl |
| **Boldy** | David | Broadcom Corporation |
| **da Silva** | Claudio | Meta Platforms, Inc. |
| **de Vegt** | Rolf | Qualcomm Incorporated |
| **Emmelmann** | Marc | Self |
| **Fang** | Yonggang | MediaTek Inc. |
| **Gilb** | James P.K. | General Atomics Aeronautical Systems and Gilb Consulting, UoSD, GenXCom |
| **Godfrey** | Tim | Electric Power Research Institute, Inc. (EPRI) |
| **Gruber** | Josef | Infineon Technologies |
| **Gruszczyński** | Mariusz | Office of Electronic Communications |
| **Halajko** | Jacek | Office of Electronic Communications |
| **Halasz** | Dave | Morse Micro |
| **Hiertz** | Guido | Ericsson GmbH |
| **Jaworski** | Boguslaw | Office of Electronic Communications |
| **Jeffries** | Timothy | FutureWei Technologies, Inc. |
| **Jones** | Vincent Knowles IV | Qualcomm Incorporated |
| **Kennedy** | Richard | Bluetooth SIG; Self |
| **Kitazawa** | Shoichi | Muroran Institute of Technology |
| **Kürner** | Thomas | TU Braunschweig |
| **Lalam** | Massinissa | Sagemcom Broadband SAS |
| **Lansford** | James | FaraFir Consulting |
| **Leong** | Frank | NXP Semiconductors |
| **Levy** | Joseph | InterDigital, Inc. |
| **Li** | Huan‐Bang | National Institute of Information and Communications Technology (NICT) |
| **Mamam** | Mickael | ST |
| **Max** | Sebastian | Ericsson AB |
| **Morioka** | Hitoshi | SRC Soft |
| **Nagai** | Yukimasa | Mitsubishi Electric Corporation |
| **Neirynck** | Dries | Ultra Radio Ltd |
| **Palm** | kiwin (Stephen) | Broadcom Corporation |
| **Patel** | Tushar | Litepoint |
| **Patwardhan** | Gaurav | Hewlett Packard Enterprise |
| **Petranovich** | James | ViaSat, Inc. |
| **Petrick** | Al | Skyworks Solutions Inc. |
| **Pettersson** | Charlie | Ericsson AB |
| **Pirhonen** | Riku | NXP Semiconductors |
| **Porat** | Ron | Broadcom Corporation |
| **Riegel** | Maximilian (Max) | Nokia |
| **Robert** | Joerg | TU-Ilmenau/Fraunhofer IIS |
| **Rolfe** | Benjamin | Blind Creek Associates |
| **Salem** | Pein | Cisco |
| **Sand** | Stephan | German Aerospace Center (DLR) |
| **Sasaki** | Shigenobu | Niigata University, Japan |
| **Schmidt** | Reinhold | Infineon |
| **Serafimovski** | Nikola | pureLiFi |
| **Sherlock** | Ian | Texas Instruments |
| **Stacey** | Robert | Intel Corporation |
| **Stanley** | Dorothy | Hewlett Packard Enterprise |
| **Sumi** | Takenori | Mitsubishi Electric Research Laboratories (MERL) |
| **Takai** | Mineo | Space-Time Engineering |
| **Verso** | Billy | Qorvo |
| **Wang** | Lei | FutureWei Technologies, Inc. |
| **Wendt** | Matthias | Signify |
| **Wilhelmsson** | Leif | Ericsson AB |
| **Yu** | Ross (Jian) | Huawei Technologies Co., Ltd |
| **Zarkowska** | Karolina | Office of Electronic Communications |

**End.**