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| **Radiocommunication Study Groups** |  |
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|  | **Document 5A/1065-E** |
| **24 May 2019** |
| **English only** |
| Chairman, Working Party 5A | |
| report on the TWENTY-SECOND meeting of working party 5a | |
| (Geneva, 29 April – 9 May 2019) | |

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Annexes

[1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) Working Party 5A Management

[2](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N02!MSW-E) Consolidation of texts approved by Working Party 5A

[3](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N03!MSW-E) Consolidation of reports from the Working Groups of Working Party 5A  
(Source: Docs. 5A/TEMP/416, 420, 421, 422, 425)

[4](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N04!MSW-E) Working document towards a preliminary draft new Recommendation ITU-R M.[RSTT\_FRQ] – *Spectrum harmonization for railway radiocommunication systems between train and trackside (RSTT)* (Source: Doc. 5A/TEMP/418)

[5](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N05!MSW-E) Working document towards preliminary draft new Report on utility communication systems (Source: Doc. 5A/TEMP/408)

[6](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N06!MSW-E) Working document towards a preliminary draft revision of Report ITU-R M.2282-0 – *Systems for public mobile communications with aircraft*   
(Source: Doc. 5A/TEMP/407)

[7](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N07!MSW-E) Working document towards a preliminary draft new Report on Broadband Air To Ground Systems – *Frequency usage in the land mobile service for broadband direct air-to-ground (A2G) communications links with passenger aircraft*   
(Source: Doc. 5A/TEMP/406)

[8](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N08!MSW-E) Working document towards a preliminary draft new Report ITU-R M.[100-GHz.RSTT.COEXIST] – *Coexistence between high-speed railway radiocommunication system between train and trackside operating in the frequency bands 92-94 GHz, 94.1-100 GHz and 102-109.5 GHz, and active and passive services* (Source: Doc. 5A/TEMP/403)

[9](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N09!MSW-E) Preliminary draft new Report ITU-R M.[RLAN REQ-PAR] – *Technical characteristics and operational requirements of WAS/RLAN in the 5 GHz frequency range* (Source: Doc. 5A/TEMP/412(Rev.1))

[10](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N10!MSW-E) Preliminary draft new Report ITU-R M.[RLAN SHARING 5 350-5 470 MHZ] – *Sharing and compatibility studies of WAS/RLAN in the 5 350-5 470 MHz frequency range* (Source: Doc. 5A/TEMP/413(Rev.1))

[11](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N11!MSW-E) Preliminary draft new Report ITU-R M.[RLAN SHARING 5 150-5 250 MHz] – *Sharing and compatibility studies of WAS/RLAN in the 5 150-5 250 MHz frequency range* (Source: Doc. 5A/TEMP/414(Rev.1))

[12](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N12!MSW-E) Preliminary draft new Report ITU-R M.[RLAN SHARING 5 725-5 850 MHz] – *Sharing and compatibility studies of WAS/RLAN in the 5 725-5 850 MHz frequency range* (Source: Doc. 5A/TEMP/415(Rev.1))

[13](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N13!MSW-E) Working document towards a preliminary draft revision of Report ITU-R M.2417-0 – *Technical and operational characteristics of land-mobile service applications in the frequency range 275-450 GHz* (Source: Doc. 5A/TEMP/395(Rev.1))

[14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N14!MSW-E) List of output documents

Annexes from previous WP 5A Chairman’s Reports that are being carried forward:

[Annex 17](https://www.itu.int/dms_pub/itu-r/md/15/wp5a/c/R15-WP5A-C-0844!N17!MSW-E.docx) to [Doc. 5A/844](https://www.itu.int/md/R15-WP5A-C-0844/en): Vocabulary for RLANs: DFS and TCP (elements for a future update of Rec. ITU-R M.1450).

[Annex 12](https://www.itu.int/dms_pub/itu-r/md/15/wp5a/c/R15-WP5A-C-1065!N12!MSW-E.docx) to [Doc. 5A/976](https://www.itu.int/md/R15-WP5A-C-0976/en): Carry forward elements with respect to RSTT.

[Annex 14](https://www.itu.int/dms_pub/itu-r/md/15/wp5a/c/R15-WP5A-C-0976!N14!MSW-E.docx) to [Doc. 5A/976](https://www.itu.int/md/R15-WP5A-C-0976/en): Preliminary draft new Report ITU-R M.[GEO.SHARE] – *Sharing schemes in the land mobile service on the basis of geographical use*.

[Annex 17](https://www.itu.int/dms_pub/itu-r/md/15/wp5a/c/R15-WP5A-C-0976!N17!MSW-E.docx) to [Doc. 5A/976](https://www.itu.int/md/R15-WP5A-C-0976/en): Preliminary draft new Report ITU-R M.[AGGREGATE RLAN MEASUREMENTS] – *Use of aggregate RLAN measurements from airborne and terrestrial platforms to support studies under WRC-19 agenda item 1.16*.

Management documents referred to in the Report:

List of input documents: [Doc. 5A/1057](https://www.itu.int/md/R15-WP5A-C-1057/en)

Final list of participants: [Doc. 5A/1064](http://www.itu.int/md/R15-WP5A-C-1064)

# 1 Introduction

WP 5A held its twenty-second (22nd) meeting from 29 April to 9 May 2019 in Geneva. The meeting participants (see list in [Doc. 5A/1064](http://www.itu.int/md/R15-WP5A-C-1064)) included 245 participants from 43 countries representing 40 administrations, 6 recognized operating agencies, 13 scientific or industrial organizations, 1 United Nations, its specialized agencies and the International Atomic Energy Agency, 2 regional and other international organizations, 1 regional telecommunication organization, 1 other entity dealing with telecommunication matters, 2 associates, 1 academia, universities and research establishments, and the BR. WP 5A held three plenary sessions during the meeting period (on 29 April, 3 May and 9 May).

The meeting dealt with 88 input documents (82 listed in [Doc. 5A/1057](https://www.itu.int/md/R15-WP5A-C-1057/en) and 6 liaison documents that arrived during the meeting as listed in the table below) and upon their consideration the meeting prepared 41 output temporary documents (see list in [Annex 14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N14!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)).

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| Number | Title | Source |
| [**[ 1063 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1063) | Reply liaison statement to Working Party 7B (copy to Working Parties 4C, 5A, 5C and 6A for information) – *Consideration of non-GSO short duration satellite systems in 137-138 MHz operating under the space operation service* | [WP 5B](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=WP%205B) |
| [**[ 1062 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1062) | Report on the relevant activities in certain countries in Region 3 | [Liaison R3 Rapporteur](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=Liaison%20R3%20Rapporteur) |
| [**[ 1061 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1061) | Report on relevant activities in certain countries in Region 2 | [Liaison Rapporteur](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=Liaison%20Rapporteur) |
| [**[ 1060 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1060) | Reply liaison statement to Working Party 1A (copy for information to Working Parties 4A, 4C, 5A, 5B, 5D, 7B and 7C) – *System parameter tables in Recommendation ITU-R SM.1448 and Appendix* ***7*** *(Rev.WRC-15) of the Radio Regulations* | [WP 5C](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=WP%205C) |
| [**[ 1059 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1059) | Report on relevant activities in certain countries in Region 1 | [Liaison Rapporteur](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=Liaison%20Rapporteur) |
| [**[ 1058 ]**](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C-1058) | Report on the recent activities of The Wireless World Research Forum (WWRF) | [WWRF Liaison Rapporteur](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP5A-C&source=WWRF%20Liaison%20Rapporteur) |

Document [5A/1060](https://www.itu.int/md/R15-WP5A-C-1060/en) (WP 5C) was noted for information at the closing plenary of WP 5A. Document [5A/1063](https://www.itu.int/md/R15-WP5A-C-1063/en) (WP 5B) arrived on the last day of the meeting and was not considered; it will be considered at the 23rd meeting of WP 5A.

[Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) contains the management aspects of WP 5A, including a summary of the status of the texts that are the responsibility of WP 5A and the use of electronic facilities.

The Chairman’s Report of the twenty-first meeting of WP 5A ([Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en)) was adopted, including the objectives for the 22nd meeting as presented in Section 4 of [Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en).

The structure of WP 5A for this meeting was also adopted as presented in Section 2.2 of Annex 1 in [Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en), which is reproduced in [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en).

At the opening plenary the chairman informed the meeting that Mr. Sergio Buonomo had been promoted to chief of the BR Study Group Department and the meeting reacted with an applause to congratulate him for such well-deserved promotion.

The chairman also informed the meeting on related ITU and external activities of interest:

– Results from the fourteenth meeting of Study Group 5 (19 November 2018) ([Doc. 5A/984](http://www.itu.int/md/R15-WP5A-C-0984)).

– Results of CPM19-2 ([CPM Report](https://www.itu.int/md/R15-CPM19.02-R-0001/en)).

– Results of the 26th meeting of the RAG (Circular [CA/246](https://www.itu.int/md/R00-CA-CIR-0246/en)).

– [22nd meeting of Global Standards Collaboration](https://www.itu.int/en/ITU-T/gsc/22/) ([GSC](https://www.itu.int/en/ITU-T/gsc/)), 26‐27 March 2019, Montreux.

The Chairman asked the meeting participants to review the list of contacts that appears in section 4 of [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N01!MSW-E) to [Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en) and inform him of any necessary changes (the final list appears in section 4 of the updated [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en) and updates between meetings are maintained by the BR and the Chairman of WP 5A). The Chairman indicated this list showing the contacts by topics is used for all liaison statements to external organizations on those topics and the e-mail distribution lists are generated automatically from it.

The work program for the WP 5A meeting was adopted as presented in [Doc. 5A/ADM/30](http://www.itu.int/md/R15-WP5A-ADM-0030/en), and updates were made during the meeting as shown in [Table 1](#t1) below. The initial schedule was adopted as per [Doc. 5A/ADM/31](http://www.itu.int/md/R15-WP5A-ADM-0031/en) and it was updated daily in the WP 5A share folder during the meeting, with the final version included in [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E).

At the opening Plenary three liaison statements were considered (Documents [5A/979](http://www.itu.int/md/R15-WP5A-C-0979/en) (TSAG), [5A/980](http://www.itu.int/md/R15-WP5A-C-0980/en) (JCA-IoT and SC&C), and [5A/989](http://www.itu.int/md/R15-WP5A-C-0989/en) (ITU-T SG 11)). Document [5A/979](http://www.itu.int/md/R15-WP5A-C-0979/en) (TSAG) was assigned to WG 5A-3, which prepared Doc. 5A/TEMP/391R2 and was agreed by WP 5A for action by the BR. Document [5A/980](http://www.itu.int/md/R15-WP5A-C-0980/en) (JCA-IoT and SC&C) was assigned to WG 5A-5 to prepare a liaison response. Document [5A/989](http://www.itu.int/md/R15-WP5A-C-0989/en) (ITU-T SG 11) was noted for information.

The Chairman also drew the attention of the meeting to the WP 5A texts that are listed in section 1 of Annex 1 to [Doc. [5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en)](http://www.itu.int/md/R15-WP5A-C-0844/en), the [Guide to the use of ITU-R texts related to the land mobile service](http://www.itu.int/oth/R0A06000001/en), and the [Guide to the use of ITU-R texts relating to the amateur and amateur-satellite services](http://www.itu.int/oth/R0A06000067) asking each Working Group to review the texts assigned to them, in particular to review the Questions under their responsibility ([Annex 4](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N04!MSW-E) to [Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en)) to prepare draft revisions for submission to Study Group 5.

The Chairman also pointed out the guidelines for the preparation of WP 5A texts in section 2.3 of Annex 1 to [Doc. [5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en)](http://www.itu.int/md/R15-WP5A-C-0844/en) (reproduced in [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)).

The Liaison Rapporteurs presented their reports at the opening and closing Plenary sessions of WP 5A, including on [Disaster Relief](http://www.itu.int/ITU-R/index.asp?category=information&link=emergency&lang=en) by Amy Sanders ([Doc. 5A/1055](https://www.itu.int/md/R15-WP5A-C-1055/en)), on WWRF by Hitoshi Yoshino ([Doc. 5A/1058](https://www.itu.int/md/R15-WP5A-C-1058/en)), on certain countries in Region 1 by Gabrielle Owen ([Doc. 5A/1059](https://www.itu.int/md/R15-WP5A-C-1059/en)), on certain countries in Region 2 by Jonathan Siverling ([Doc. 5A/1061](http://www.itu.int/md/R15-WP5A-C-1061/en)), and on certain countries in Region 3 by Hitoshi Yoshino ([Doc. 5A/1062](http://www.itu.int/md/R15-WP5A-C-1062/en)).

# 2 Objectives and work programme for the meeting

The objectives for the meeting were adopted as set forth in the Chairman’s Report of the twenty-first meeting of WP 5A (section 4 of [Doc. 5A/976](http://www.itu.int/md/R15-WP5A-C-0976/en)) noting that need to consider also the proposals in the input contributions for the twenty second meeting, in particular those related to the WRC-19 agenda items under the responsibility of WP 5A. With regards to the update of documents that are the joint responsibility of WPs 5A and 5C, the Chairmen of WP 5A and WP 5C decided not to hold a joint session as there were no new issues to consider; future actions regarding future updates of documents that have a joint responsibility will be considered on a case-by-case basis depending on the input contributions and the nature of the proposed update (cf. [section 3.10](#s310)).

The work was carried out within five Working Groups. The responsibilities for input contributions were assigned as per [Table 1](#t1), showing also the organization of the work for the meeting (the documents in the rows “Reports” and “General” were assigned to all the Working Groups).

TABLE 1

Assignment of input contributions and organization of the work for the meeting

The carried forward documents from previous meetings are highlighted in green (10 contributions).  
New documents: 976 to 1062 (88 contributions).

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| **Working Party 5A (Chairman:** [**José Costa**](mailto:jose.costa@ericsson.com?subject=WP5A-meeting)**, Canada)** | |
| **Reports** | [976](http://www.itu.int/md/R15-WP5A-C-0976/en) (Chairman, WP 5A); [984](http://www.itu.int/md/R15-WP5A-C-0984/en) (Chairman, WP 5A); [1055](http://www.itu.int/md/R15-WP5A-C-1055/en) (Disaster Relief L.R.);  [1058](http://www.itu.int/md/R15-WP5A-C-1058/en) (WWRF L.R.); [1059](http://www.itu.int/md/R15-WP5A-C-1059/en) (L.R. #1); [1061](http://www.itu.int/md/R15-WP5A-C-1061/en) (L.R. #2); [1062](http://www.itu.int/md/R15-WP5A-C-1062/en) (L.R. #3); |
| **General** | [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 4](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N04!MSW-E) (Questions); [979](http://www.itu.int/md/R15-WP5A-C-0979/en) (TSAG); [980](http://www.itu.int/md/R15-WP5A-C-0980/en) (JCA-IoT and SC&C); [989](http://www.itu.int/md/R15-WP5A-C-0989/en) (ITU-T SG 11); [1057](http://www.itu.int/md/R15-WP5A-C-1057/en) (List of documents); [1060](http://www.itu.int/md/R15-WP5A-C-1060/en) (WP 5C) |

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| **Working Group 1: Amateur Services (Chairman:** [**Dale Hughes**](mailto:dalevk1dsh@gmail.com?subject=WP5A-meeting)**, Australia)** | |
| **AI 1.1 (**[**Res. 658**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0001PDFE.pdf)**)** | *M.[AMATEUR\_50\_MHZ]:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 5](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N05!MSW-E) (WP 5A); [987](http://www.itu.int/md/R15-WP5A-C-0987/en) (Ukraine); [994](http://www.itu.int/md/R15-WP5A-C-0994/en) (WP 6A);  [1002](http://www.itu.int/md/R15-WP5A-C-1002/en) (Switzerland); [1013](http://www.itu.int/md/R15-WP5A-C-1013/en) (Russian F.); [1032](http://www.itu.int/md/R15-WP5A-C-1032/en) (France); [1052](http://www.itu.int/md/R15-WP5A-C-1052/en) (IARU) |
| **Amateur satellite** |  |
| **Amateur services protection** | *Wireless power transmission:* [991](http://www.itu.int/md/R15-WP5A-C-0991/en) (WP 6A); [993](http://www.itu.int/md/R15-WP5A-C-0993/en) (WP 6A) |
| **Protection of other services** |  |

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| **Working Group 2: Systems and standards (Chairman:** [**Lang Baozhen**](mailto:bzlang@ties.itu.int?subject=WP5A-meeting)**, China)** | |
| **AI 1.11 (Railways** [**Res. 236**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0012PDFE.pdf)**)** | *RSTT:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 12](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N12!MSW-E) (WP 5A); [1056](http://www.itu.int/md/R15-WP5A-C-1056/en) (WP 6A)  *M.2442:* [1000](http://www.itu.int/md/R15-WP5A-C-1000/en) (Ukraine)  *RSTT Frequencies:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 8](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N08!MSW-E) (WP 5A); [981](http://www.itu.int/md/R15-WP5A-C-0981/en) (APT); [982](http://www.itu.int/md/R15-WP5A-C-0982/en) (CITEL); [988](http://www.itu.int/md/R15-WP5A-C-0988/en) (ECC/CEPT); [990](http://www.itu.int/md/R15-WP5A-C-0990/en) (RCC); [992](http://www.itu.int/md/R15-WP5A-C-0992/en) (Germany); [999](http://www.itu.int/md/R15-WP5A-C-0999/en) (ATU); [1011](http://www.itu.int/md/R15-WP5A-C-1011/en) (Russian F.); [1039](http://www.itu.int/md/R15-WP5A-C-1039/en) (Japan); [1041](http://www.itu.int/md/R15-WP5A-C-1041/en) (China)  *Information:* [1015](http://www.itu.int/md/R15-WP5A-C-1015/en) (Canada) |
| **Broadband Wireless Access** | *M.[MS-RXCHAR-28]:* [733](http://www.itu.int/md/R15-WP5A-C-0733) (USA); [934](http://www.itu.int/md/R15-WP5A-C-0934) (Korea); [963](http://www.itu.int/md/R15-WP5A-C-0963) (UK); [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 6](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N06!MSW-E) (WP 5A);  [1010](http://www.itu.int/md/R15-WP5A-C-1010/en) (USA); [1025](http://www.itu.int/md/R15-WP5A-C-1025/en) (Korea); [1046](http://www.itu.int/md/R15-WP5A-C-1046/en) (China); [1054](http://www.itu.int/md/R15-WP5A-C-1054/en) (India)  *Satellite in NGAT:* [871](http://www.itu.int/md/R15-WP5A-C-0871/en) (WP 4B); [986](http://www.itu.int/md/R15-WP5A-C-0986/en) (WP 5D) |
| **Land mobile systems** | *M.[CDLMR]:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 7](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N07!MSW-E) (WP 5A); [1017](http://www.itu.int/md/R15-WP5A-C-1017/en) (Motorola Solutions)  *Utilities:* [861](http://www.itu.int/md/R15-WP5A-C-0861/en) (WP 1A); [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 9](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N09!MSW-E) (WP 5A); [985](http://www.itu.int/md/R15-WP5A-C-0985/en) (WP 5D); [1014](http://www.itu.int/md/R15-WP5A-C-1014/en) (UTC América Latina)  *Hearing aids:*  *M.478:*  *M.1746:* [844](http://www.itu.int/md/R15-WP5A-C-0844/en) [Annex 20](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0844!N20!MSW-E) (WP 5A) |
| **Air to Ground** | *Update of Rep. ITU-R M.2282:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 10](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N10!MSW-E) (WP 5A)  *New Report:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 11](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N11!MSW-E) (WP 5A); [1048](http://www.itu.int/md/R15-WP5A-C-1048/en) (China) |
| **RLAN characteristics** | *Vocabulary:* [844](http://www.itu.int/md/R15-WP5A-C-0844/en) [Annex 17](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0844!N17!MSW-E) (WP 5A)  *Support WG 4 on RLANs* |
| **ANT, HNT** | [978](http://www.itu.int/md/R15-WP5A-C-0978/en) (ITU-T SG 9) |

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| **Working Group 3: PPDR (Chairman:** [**Amy Sanders**](mailto:asanders@ntia.doc.gov?subject=WP5A-meeting)**, USA)** | |
| **Updates of ITU-R Recs.** | *M.1826:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 13](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N13!MSW-E) (WP 5A); [1003](http://www.itu.int/md/R15-WP5A-C-1003/en) (Australia) |
| **Updates of ITU-R Reports** | *M.2377:* [891](http://www.itu.int/md/R15-WP5A-C-0891/en) (WP 5D) |

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| **Working Group 4: Interference and sharing (Chairman:** [**Michael Kraemer**](mailto:michael.kraemer@intel.com?subject=WP5A-meeting)**, Germany)** | |
| **Sharing studies (general)** | *M.1808:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 15](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N15!MSW-E) (WP 5A)  *UTC (Res. 655):*  *RR Appendix 7 and Rec. ITU-R SM.1448-0:*  *Range 40-50 MHz:*  *Range 20-22 GHz:*  *Range 92-109.5 GHz:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 21](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N21!MSW-E) (WP 5A); [1040](http://www.itu.int/md/R15-WP5A-C-1040/en) (Japan)  [*Resolution 155*](https://www.itu.int/en/ITU-R/space/snl/Documents/RES-155.pdf)*:* |
| **Dynamic Access – sharing** | *support WG 5 on sharing & coexistence studies* |
| **Sharing by zones** | [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N14!MSW-E) (WP 5A) |
| **Non-ionizing radiation** | [996](http://www.itu.int/md/R15-WP5A-C-0996/en) (ITU-D SG 2) |
| **AI 1.16 (**[**Res. 239**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0017PDFE.pdf)**)** | *REQ-PAR:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 16](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N16!MSW-E) (WP 5A); [1019](http://www.itu.int/md/R15-WP5A-C-1019/en) (Globalstar); [1030](http://www.itu.int/md/R15-WP5A-C-1030/en) (France); [1036](http://www.itu.int/md/R15-WP5A-C-1036/en) (Japan); [1044](http://www.itu.int/md/R15-WP5A-C-1044/en) (China)  *Aggregate Measurements:* [923](http://www.itu.int/md/R15-WP5A-C-0923) (Globalstar); [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 17](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N17!MSW-E) (WP 5A); [1018](http://www.itu.int/md/R15-WP5A-C-1018/en) (Globalstar)  *Technical regulation:* [933](http://www.itu.int/md/R15-WP5A-C-0933) (Korea)  *Sharing:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 18](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N18!MSW-E), [Annex 19](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N19!MSW-E), [Annex 20](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N20!MSW-E) (WP 5A); [1004](http://www.itu.int/md/R15-WP5A-C-1004/en) (Australia); [1007](http://www.itu.int/md/R15-WP5A-C-1007/en) (USA); [1012](http://www.itu.int/md/R15-WP5A-C-1012/en) (Russian F.); [1016](http://www.itu.int/md/R15-WP5A-C-1016/en) (Canada); [1020](http://www.itu.int/md/R15-WP5A-C-1020/en) (Globalstar); [1026](http://www.itu.int/md/R15-WP5A-C-1026/en) (France); [1027](http://www.itu.int/md/R15-WP5A-C-1027/en) (France); [1028](http://www.itu.int/md/R15-WP5A-C-1028/en) (France); [1029](http://www.itu.int/md/R15-WP5A-C-1029/en) (France); [1031](http://www.itu.int/md/R15-WP5A-C-1031/en) (France); [1035](http://www.itu.int/md/R15-WP5A-C-1035/en) (Japan); [1042](http://www.itu.int/md/R15-WP5A-C-1042/en) (China);  [1043](http://www.itu.int/md/R15-WP5A-C-1043/en) (China) |
| **AI 9.1/Issue 9.1.5 (**[**Res. 764**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0023PDFE.pdf)**)** |  |
| **AI 1.2 (400 MHz** [**Res. 765**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0002PDFE.pdf)**)** |  |
| **AI 1.3 (460 MHz** [**Res. 766**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0003PDFE.pdf)**)** | [1053](http://www.itu.int/md/R15-WP5A-C-1053/en) (India) |
| **AI 1.5 (FSS** [**Res. 158**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0005PDFE.pdf)**)** | [1047](http://www.itu.int/md/R15-WP5A-C-1047/en) (China); [1010](http://www.itu.int/md/R15-WP5A-C-1010/en) Attachment 2 (USA) |
| **AI 1.6 (nonGSO FSS** [**Res.159**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0006PDFE.pdf)**)** |  |
| **AI 1.7 (nonGSO FSS** [**Res.659**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0007PDFE.pdf)**)** | [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 3](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N03!MSW-E) [Attachment 6](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N03!MSW-E#Att6) |
| **(AI 1.8) (GMDSS** [**Res. 359**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0008PDFE.pdf)**)** |  |
| **/1.9.1 (160 MHz** [**Res. 362**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0009PDFE.pdf)**)** |  |
| **/1.9.2 (VDES/MMSS** [**Res. 360**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0010PDFE.pdf)**)** |  |
| **AI 1.10 (GADSS** [**Res. 426**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0011PDFE.pdf)**)** |  |
| **AI 1.13 (IMT** [**Res. 238**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0014PDFE.pdf)**)** |  |
| **AI 1.14 (HAPS** [**Res. 160**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0015PDFE.pdf)**)** |  |
| **EESS 45 MHz (Res. 656)** |  |
| **> 275 GHz** | *support WG 5 on sharing & coexistence studies* |
| **/9.1.3 (nonGSO** [**Res. 157**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0021PDFE.pdf)**)** |  |
| **/9.1.6 (WPT-EV** [**Res. 958**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0024PDFE.pdf)**)** | [977](http://www.itu.int/md/R15-WP5A-C-0977/en) (WP 1B) |
| **/9.1.9 (50 GHz FSS** [**Res. 162**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0025PDFE.pdf)**)** | [875](http://www.itu.int/md/R15-WP5A-C-0875/en) (WP 4A) |
| **ITU-T interference** |  |

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| **Working Group 5: New technologies (Chairman:** [**Hitoshi Yoshino**](mailto:hitoshi.yoshino@g.softbank.co.jp?subject=WP5A-meeting)**, Japan)** | |
| **AI 1.12 (ITS** [**Res. 237**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0013PDFE.pdf)**)** | *Rec. ITU-R M.[ITS\_FRQ]:* |
| **ITS** | *General:* [983](http://www.itu.int/md/R15-WP5A-C-0983/en) (ITU-T SG 17); [995](http://www.itu.int/md/R15-WP5A-C-0995/en) (CITS); [997](http://www.itu.int/md/R15-WP5A-C-0997/en) (ITU-T SG 16); [998](http://www.itu.int/md/R15-WP5A-C-0998/en) (ITU-T FG-VM)  *Study Questions:* [1023](http://www.itu.int/md/R15-WP5A-C-1023/en) (Korea); [1037](http://www.itu.int/md/R15-WP5A-C-1037/en) (Japan); [1051](http://www.itu.int/md/R15-WP5A-C-1051/en) (China)  *M.2084:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 22](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N22!MSW-E) (WP 5A); [1005](http://www.itu.int/md/R15-WP5A-C-1005/en) (3GPP TSG RAN); [1009](http://www.itu.int/md/R15-WP5A-C-1009/en) (USA);  [1021](http://www.itu.int/md/R15-WP5A-C-1021/en) (China, Korea); [1022](http://www.itu.int/md/R15-WP5A-C-1022/en) (Korea); [1034](http://www.itu.int/md/R15-WP5A-C-1034/en) (Huawei, Intel, Nokia, Ericsson);  [1050](http://www.itu.int/md/R15-WP5A-C-1050/en) (China)  *Sharing:* [1001](http://www.itu.int/md/R15-WP5A-C-1001/en) (Telstra)  *Handbook:* [1008](http://www.itu.int/md/R15-WP5A-C-1008/en) (USA); [1024](http://www.itu.int/md/R15-WP5A-C-1024/en) (Korea); [1038](http://www.itu.int/md/R15-WP5A-C-1038/en) (Japan); [1049](http://www.itu.int/md/R15-WP5A-C-1049/en) (China) |
| **AI 1.15 (> 275 GHz** [**Res. 767**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0016PDFE.pdf)**)** | *M.2417:* [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 24](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N24!MSW-E) (WP 5A); [1006](http://www.itu.int/md/R15-WP5A-C-1006/en) (USA) |
| **/9.1.8 (MTC** [**Res. 958**](http://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A00000C0024PDFE.pdf)**)** | [976](http://www.itu.int/md/R15-WP5A-C-0976/en) [Annex 23](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-0976!N23!MSW-E) (WP 5A); [1033](http://www.itu.int/md/R15-WP5A-C-1033/en) (Huawei, Intel, Nokia, Qualcomm, Sony, Ericsson);  [1045](http://www.itu.int/md/R15-WP5A-C-1045/en) (China) |

The Working Groups developed preliminary draft revised/new Recommendations, Reports, Questions, and liaison statements, and progress reports on the work. The detailed reports from the Working Groups are contained in [Annex 3](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N03!MSW-E). The texts proposed by these Working Groups in TEMP documents ([Annex 14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N14!MSW-E)) were considered by WP 5A and are either annexed to this Report for further work to be considered at future meetings of WP 5A or were approved by WP 5A as liaison statements to other groups or for submission to Study Group 5 ([Annex 2](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N02!MSW-E)).

# 3 Executive summary of the results of the meeting

## 3.1 Summary of documents approved by WP 5A

The list of texts that are the responsibility of WP 5A has been updated in line with [Doc. 5/1(Rev.2)](http://www.itu.int/md/R15-SG05-C-0001), including the assignment of responsibilities to the Working Groups of WP 5A and identification of topics for the Recommendations and Reports ([Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E)).

At a previous meeting, WP 5A already decided to implement factual editorial updates of the guides to the use of ITU-R texts related to the radiocommunication services under the responsibility of WP 5A between the meetings of WP 5A (i.e., updates of references to Recommendations, Reports and Handbooks as they are approved), while amendments of substance will be considered for approval at the WP 5A meetings. At this meeting the [Guide to the use of ITU-R texts relating to the amateur and amateur-satellite services](http://www.itu.int/oth/R0A06000067) was updated.

The consolidation of all the texts approved by WP 5A, including the liaison statements, appears in [Annex 2](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N02!MSW-E) of [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en).

## 3.2 Summary of proposals and documents submitted by Working Party 5A to Study Group 5

### 3.2.1 Draft revised and new Recommendations proposed for Adoption

WP 5A submitted four draft revised and one draft new Recommendations for adoption by Study Group 5:

– Draft revision of Recommendation ITU-R M.1746-0 – *Harmonized frequency channel plans for the protection of property using data communication* – Doc. [5/139](http://www.itu.int/md/R15-SG05-C-0139)

– Draft revision of Recommendation ITU-R M.1826 – *Harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3* – Doc. [5/140](http://www.itu.int/md/R15-SG05-C-0140)

– Draft revision of Recommendation ITU-R M.1808 – *Technical and operational characteristics of conventional and trunked land mobile systems operating in the mobile service allocations below 869 MHz to be used in sharing studies in bands below 960 MHz - (Questions ITU-R 1-3/8 and ITU-R 7-5/8)* – Doc. [5/142](http://www.itu.int/md/R15-SG05-C-0142)

– Draft revision of Recommendation ITU-R M.2084-0 – *Radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure two-way communications for Intelligent Transport System applications (Question ITU-R 205-5/5)* – Doc. [5/149](http://www.itu.int/md/R15-SG05-C-0149)

– Draft new Recommendation ITU-R M.[MS.RXCHAR-28] – *Receiver characteristics and protection criteria for systems (excluding IMT) in the mobile service in the frequency range 27.5-29.5 GHz for use in sharing and compatibility studies* – Doc. [5/147](http://www.itu.int/md/R15-SG05-C-0147)

### 3.2.2 Draft new Reports

WP 5A proposed the following three draft new Reports for consideration for approval by Study Group 5:

– Draft new Report ITU-R M.[CDLMR] – *Conventional digital land mobile radio systems* – Doc. [5/141](http://www.itu.int/md/R15-SG05-C-0141)

– Draft new Report ITU-R M.[NON\_IMT.MTC\_USAGE] – *The use of land mobile systems, excluding IMT, for machine-type communications* – Doc. [5/148](http://www.itu.int/md/R15-SG05-C-0148)

– Draft new Report ITU-R M.[AMATEUR\_50\_MHz] – *Spectrum needs for the amateur service in the frequency band 50-54 MHz in Region 1 and sharing with mobile, fixed, radiolocation and broadcasting services* – Doc. [5/152](http://www.itu.int/md/R15-SG05-C-0152)

## 3.2.3 Proposed editorial updates of Questions

WP 5A proposed editorial updates of the following 9 Questions for consideration by Study Group 5:

– Questions ITU-R 1-6/5, 7-7/5, 37-6/5, 48-7/5, 212-4/5, 215-4/5, 242-2/5, 250-1/5, and 254/5 – Doc. [5/158](http://www.itu.int/md/R15-SG05-C-0158)

## 3.2.4 Draft revised and new Questions proposed for Adoption

WP 5A proposed the following 6 draft revised and one new Questions for consideration for adoption by Study Group 5:

– Draft revision of Question ITU-R 101-4/5 - *Quality of service requirements in the land mobile service* – Doc. [5/153](http://www.itu.int/md/R15-SG05-C-0153)

– Draft revision of Question ITU-R 205-5/5 – *Intelligent Transport Systems* – Doc. [5/151](http://www.itu.int/md/R15-SG05-C-0151)

– Draft revision of Question ITU-R 209-5/5 – *Use of the mobile, amateur and amateur satellite services in support of disaster radiocommunications* – Doc. [5/154](http://www.itu.int/md/R15-SG05-C-0154)

– Draft revision of Question ITU-R 238-2/5 – *Mobile broadband wireless access systems* – Doc. [5/155](http://www.itu.int/md/R15-SG05-C-0155)

– Draft revision of Question ITU-R 241-3/5 – *Cognitive radio systems in the mobile service* – Doc. [5/157](http://www.itu.int/md/R15-SG05-C-0157)

– Draft revision of Question ITU-R 256/5 – *Technical and operational characteristics of the land mobile service in the frequency range 275-1 000 GHz* – Doc. [5/156](http://www.itu.int/md/R15-SG05-C-0156)

– Draft new Question ITU-R M.[CAV]/5 – *Radiocommunication requirements for connected automated vehicles (CAV)* – Doc. [5/150](http://www.itu.int/md/R15-SG05-C-0150)

## 3.3 Amateur and amateur-satellite services

The work on the sharing and compatibility studies required for WRC-19 agenda item 1.1 (preliminary draft new Report ITU-R M.[AMATEUR\_50\_MHz]) was completed and was submitted to WP 5A. Generated one liaison statement to another group. Reviewed and revised the ‘[*Guide to the use of ITU-R texts relating to the amateur and amateur-satellite services*](https://www.itu.int/oth/R0A06000067)’.

## 3.4 Systems and standards

Work was continued on WRC-19 agenda item (AI) 1.11, further developed the working document towards a PDN Recommendation ITU-R M.[RSTT.FRQ] on harmonization of frequencies and related frequency arrangements for railway radiocommunication systems between train and trackside ([Annex 4](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N04!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)).

Work was completed on the development of preliminary draft new Report ITU-R M.[CDLMR] on conventional digital land mobile radios.

Work was completed on the development of preliminary draft new Recommendation ITU-R M.[MS‑RXCHAR-28] on receiver characteristics and protection criteria for systems (excluding IMT) in the mobile service in the frequency range 27.5-29.5 GHz for use in sharing and compatibility studies.

Work was completed on the development of preliminary draft revision Recommendation ITU-R M.1746 on Harmonized frequency channel plans for the protection of property using data communication.

Work was initiated on the development of working document towards a preliminary draft new Report on utility communication systems ([Annex 5](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N05!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)).

Work was initiated on the development of a working document towards a preliminary draft new Report on Broadband Air to Ground Systems – “Frequency usage in the land mobile service for broadband direct air-to-ground (A2G) communications links with passenger aircraft” ([Annex 6](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N06!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)) and a working document towards a preliminary draft revision of Report ITU-R M.2282-0 – *Systems for public mobile communications with aircraft* ([Annex 7](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N07!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)).

Two liaison statements were drafted to other groups.

## 3.5 Public protection and disaster relief

Completed the preliminary draft revision of Recommendation ITU-R M.1826. Developed a response to the liaison statement from ITU-T TSAG, for action by the BR (Doc. 5A/TEMP/391(Rev.2). Considered the need to update the information contained in the ITU-R portion of the [Compendium of ITU’s Work on Emergency Telecommunications](https://www.itu-ilibrary.org/science-and-technology/compendium-of-itu-s-work-on-emergency-telecommunications_pub/800c8178-en).

## 3.6 Interference and sharing

Further progressed the working documents related to RLAN sharing, parameters and measurements resulting from the work on WRC-19 agenda item 1.16 (Annexes 9 to 12 to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)). Also continued work on the development of a PDN Report ITU-R M.[100GHz.RSTT.COEXIST] ([Annex 8](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N08!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)), completed the revision of Recommendation ITU-R M.1808 and developed reply liaison statements to Working Parties 4A and 7B related to their work in response to WRC-19 agenda items 1.5 and 1.3, respectively.

## 3.7 New technologies

Completed the development of a preliminary draft revision of Recommendation ITU-R M.2084-0 on radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure communications for Intelligent Transport System applications and a preliminary draft new Report ITU-R M.[NON\_IMT.MTC\_USAGE] on the use of land mobile systems for machine-type communications.

Continued the development of a working document towards a preliminary draft revision of Report ITU-R M.2417-0 on technical and operational characteristics of land-mobile service applications in the frequency range 275-450 GHz ([Annex 13](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N13!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en)) and continued to develop a working document towards a draft revision of Land Mobile Handbook, Vol. 4 – Intelligent Transport Systems.

## 3.8 Land Mobile Handbook

Continued to develop a draft new edition of the Land Mobile Handbook, [Volume 4](http://www.itu.int/pub/R-HDB-49/en) – Intelligent Transport Systems, which will continue to be developed by correspondence through the Share [LMH Review folder](https://extranet.itu.int/rsg-meetings/sg5/wp5a/Share/Forms/Column%20view.aspx?RootFolder=%2frsg-meetings%2fsg5%2fwp5a%2fShare%2fLMH%20review&FolderCTID=0x012000FB880722B4622243913B1114C70648D5) by the LMH Rapporteur.

## 3.9 Vocabulary

WP 5A carried forward vocabulary for RLANs on DFS and TCP (elements for a future update of Rec. ITU-R M.1450), in [Annex 17](https://www.itu.int/dms_pub/itu-r/md/15/wp5a/c/R15-WP5A-C-0844!N17!MSW-E.docx) to [Doc. 5A/844](https://www.itu.int/md/R15-WP5A-C-0844/en).

**3.10 Joint responsibilities of WP 5A with other working parties**

WP 5A shares responsibilities with other working parties for the maintenance of certain Recommendations and Reports, see [Doc. 5/1(Rev.2)](http://www.itu.int/md/R15-SG05-C-0001) and [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en). The Chairmen of WP 5A and WP 5C decided not to hold a joint session as there were no new issues to consider.

During this meeting, the Chairman of WP 5C informed the Chairman of WP 5A that WP 5C was submitting to Study Group 5 a draft revision of Recommendation ITU-R F.758-6 – *System parameters and considerations in the development of criteria for sharing or compatibility between digital fixed wireless systems in the fixed service and systems in other services and other sources of interference* to update aspects pertaining to WP 5C only ([Doc. 5/145](http://www.itu.int/md/R15-SG05-C-0145)).

# 4 Objectives for the twenty-third meeting of WP 5A

The principal objective for the 23rd meeting of Working Party 5A is to assess the work that may need to be conducted by WP 5A in support of the preparations for WRC-23, as per the results of CPM23-1, and to continue the work on the study questions assigned to WP 5A.

Based on the reports from the Working Groups of WP 5A, the following overall objectives are tentatively set for the 23rd meeting of WP 5A:

**1) Amateur and amateur-satellite**

– Continue the work on Questions 48/5 and 209/5.

**2) Systems and standards**

– Studies related to RSTT.

– Development of the working document towards a preliminary draft new Report on Broadband Air To Ground Systems - Frequency usage in the land mobile service for broadband direct air-to-ground (A2G) communications links with passenger aircraft.

– Development of the working document towards a preliminary draft revision of Report ITU-R M.2282-0 - Systems for public mobile communications with aircraft.

– Development of the working document towards a preliminary draft new Report on utility communication systems.

– Development of a preliminary draft revision of Recommendation ITU-R M.478.

– Continue the work on the WAS Study Questions on the basis of input contributions.

**3) Public protection and disaster relief**

– Consider the possible revision of Report ITU-R M.2377, based on input contributions.

– Consider the possible revision of the ITU-R portion of the Compendium of ITU’s Work on Emergency Telecommunications, based on input contributions.

**4) Interference and sharing**

– Continue work on the PDN Report on sharing schemes in the land mobile service.

– Continue work on the working document on 100 GHz.RSTT.COEXISTENCE.

– Continue discussion on the issue of time percentages associated with propagation models and protection criteria for sharing and compatibility studies.

**5) New technologies**

– Continue the development of a preliminary draft revision of Report ITU-R M.2417 on Technical and operational characteristics of land-mobile service applications in the frequency range 275-450 GHz.

– Continue the development of a working document towards a draft revision of Land Mobile Handbook, Vol. 4 – *Intelligent Transport Systems*.

**6) Land Mobile Handbook**

– Continue to develop the new edition of Volume 4 on "Intelligent Transport Systems".

– Consider the need to update the handbooks that are the responsibility of WP 5A. The development of future volumes will be contribution driven.

**7) Vocabulary**

– Continue the development of the land mobile vocabulary and liaise with the CCV.

# 5 Future meetings

The next meeting of WP 5A (#23) is tentatively scheduled to be held in the period from 27 April to 8 May 2020 in Geneva. The deadline for contributions **is 16:00 hours UTC, Monday, 20 April 2020[[1]](#footnote-1)[1]**.

The next meeting of Study Group 5 is scheduled from 2-3 September 2019.

# 6 Progression of the work and concluding remarks

The work may continue by correspondence. The correspondence groups will conduct their work using the Share Point facilities as described in section 6.5 of [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) to [Doc. 5A/1065](http://www.itu.int/md/R15-WP5A-C-1065/en).

[Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP5A-C-1065!N01!MSW-E) also summarizes the status of the texts that are the responsibility of WP 5A (section 1), the structure of WP 5A (section 2), and the list of contacts for liaison and collaboration with other organizations under Resolution ITU-R 9-5 (section 4).

The WP 5A and wireless access systems (WAS) home pages can be found, respectively, at:

<http://www.itu.int/ITU-R/go/rwp5a/en>

<http://www.itu.int/ITU-R/go/rwp8a-was>.

In closing, the Chairman thanked all the WP 5A participants for their hard work, and in particular the Chairmen of the Working Groups, Ms. Amy Sanders and Messrs. Dale Hughes, Lang Baozhen, Michael Kraemer, and Hitoshi Yoshino; the LMH Rapporteur, Mr. Takahiko Yamazaki; the Vocabulary Rapporteur, Mr. Brian Patten; the Liaison Rapporteurs, Mses. Gabrielle Owen and Amy Sanders and Messrs. Jonathan Siverling, Paul Najarian, Hitoshi Yoshino, Brian Copsey and Haim Mazar; and the BR, in particular the WP 5A Counsellor, Mr. Sergio Buonomo, who has been promoted to chief of the BR Study Group Department, and his team for the excellent support provided at the meetings.

1. [1] Members are strongly advised to pay attention to the strict time deadline for contributions; refer to the forthcoming [5/LCCE Circular Letter](https://www.itu.int/md/R00-SG05-CIR/e) announcing the meeting. [↑](#footnote-ref-1)