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| **Radiocommunication Study Groups** |  |
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| Source: Documents 5A/TEMP/273R1, 280, 281, 284,285, 286 and 287 | **Annex 3 toDocument 5A/636-E** |
| **13 November 2014** |
| **English only** |
| Annex 3 to Working Party 5A Chairman’s Report |
| consolidation of reports from the working groupsof working party 5a |
|  |

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NOTE – Throughout this Annex reference is made to the temporary documents (5A/TEMP/…) produced by the Working Groups. Since these documents are not kept, please refer to [Annex 14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0636!N14!MSW-E) of [Doc. 5A/636](http://www.itu.int/md/R12-WP5A-C-0636/en) to find the final disposition of these documents by Working Party 5A.

# 1 Working Group 5A-1 – Amateur and amateur-satellite services (Chairman: Mr Dale Hughes, Australia)

**Executive Summary**

Working Group 5A-1 met eight times, completed the WRC-15 agenda item 1.4 sharing and compatibility study, noted one liaison statement, created one liaison statement, created a ‘Guide to Text’ document and updated our work plan. Future work for WG 5A-1 is to review existing
ITU-R Recommendations relevant to the amateur and amateur satellite service.

**Detailed Report**

WG 5A-1 was assigned the following documents:

|  |
| --- |
| **Working Group 1: Amateur Services** |
| **COMPAT Report** | [543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 10](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N10!MSW-E) (WP 5A)[579](http://www.itu.int/md/R12-WP5A-C-0579/en) (Russian Federation)[592](http://www.itu.int/md/R12-WP5A-C-0592/en) (Canada)[599](http://www.itu.int/md/R12-WP5A-C-0599/en) (China); [611](http://www.itu.int/md/R12-WP5A-C-0611/en) (USA)[622](http://www.itu.int/md/R12-WP5A-C-0622/en) (IARU) |
| **Amateur texts Guide** | [623](http://www.itu.int/md/R12-WP5A-C-0623/en) (IARU) |
| **Morse code** | [551](http://www.itu.int/md/R12-WP5A-C-0551/en) (WP 1C) |

The preliminary draft new Report on compatibility and sharing issues for WRC-15 agenda item 1.4 ([Annex 10](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N10!MSW-E) to Doc. 5A/543) was the basis of the final report. Contributions [5A/572](http://www.itu.int/md/R12-WP5A-C-0592/en) (Canada), [5A/599](http://www.itu.int/md/R12-WP5A-C-0599/en) (China), [5A/622](http://www.itu.int/md/R12-WP5A-C-0622/en) (IARU), [5A/579](http://www.itu.int/md/R12-WP5A-C-0579/en) (Russian Federation) and [5A/611](http://www.itu.int/md/R12-WP5A-C-0611/en) (USA) were considered and were incorporated into final sharing and compatibility report. Following approval at the second WP 5A Plenary meeting the report was sent to SG 5 as Document [5/146](http://www.itu.int/md/R12-SG05-C-0146/en) (ITU-R M.[5 MHz COMPAT]).

WG 5A-1 produced a liaison statement to keep other Working Parties informed of our work and progress on WRC15 agenda item 1.4. This statement is found in Documents [5B/759](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R12-WP5B-C-0759) and [5C/356](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R12-WP5C-C-0356).

Document [5A/623](http://www.itu.int/md/R12-WP5A-C-0623/en) was the basis of a new ‘Guide to Texts’ which will become part of the WP 5A webpage. This document provides a brief summary of resolutions, recommendations and reports that are relevant to the Amateur and Amateur Satellite Service and it is modelled on a similar document describing the [Land Mobile Service](http://www.itu.int/oth/R0A06000001/en).

Document [5A/551](http://www.itu.int/md/R12-WP5A-C-0551/en) (Working Party 1C), regarding Morse telegraphy identification methods for oceanographic radars in the 3-50 MHz frequency range was noted with no further action being required as work in other working groups has superseded the questions raised in the liaison statement.

WG 5A-1 has reviewed and revised our work plan for agenda item 1.4 (Document 5A/421
[Annex 5](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0421!N05!MSW-E)) to take account of progress to date. The updated work plan for WG 5A-1 is in [Attachment 1](#att1) and the focus of the ongoing work for WG 5A-1 will be to review and update (as necessary) ITU-R Recommendations and Reports related to the amateur and amateur satellite service.

The chair enjoyed working with all of the delegates and is grateful for their thoughtful and high quality contributions, determination to complete our work and general goodwill. Mr. Brennan Price (USA) is especially thanked for his editorial assistance and work in drafting and editing various working documents.

**Attachment:**

[Attachment 1](#att1): Work plan for WG 5A-1.

# **2** **Working Group 5A-2 – Systems and standards (Chairman: Mr Lang Baozhen, China)**

# 2.1 Executive summary

The development of preliminary draft revision of Recommendation ITU-R M.1076 was completed and will be submitted to SG5. Work continued on the development of draft new Report
ITU-R M.[LOCAL\_COVERAGE].

# 2.2 Systems and standards

Working Group 5A-2 met three times at the fourteenth meeting of WP 5A in Geneva with approximately 30 delegates in attendance. Working Group 5A-2 received the 18 documents remanded by the WP 5A plenary as follows:

|  |  |
| --- | --- |
|  | Documents |
| 2.1 Broadband Wireless Access | [538](http://www.itu.int/md/R12-WP5A-C-0538/en),[539](http://www.itu.int/md/R12-WP5A-C-0539/en) (WP 5C); [568](http://www.itu.int/md/R12-WP5A-C-0568/en) (MEF); [626](http://www.itu.int/md/R12-WP5A-C-0626/en), [629](http://www.itu.int/md/R12-WP5A-C-0629/en) (WP 5D); |
| 2.2 Local coverage aspects | [543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 12](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N12!MSW-E) (WP 5A); [570](http://www.itu.int/md/R12-WP5A-C-0570/en) (CG on Rep. Local Coverage); [588](http://www.itu.int/md/R12-WP5A-C-0588/en) (USA); [613](http://www.itu.int/md/R12-WP5A-C-0613/en), [614](http://www.itu.int/md/R12-WP5A-C-0614/en) (Japan) |
| 2.3 Hearing aids and related | [532](http://www.itu.int/md/R12-WP5A-C-0532/en) (Rev.1) (JCA-ACH);[543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 11](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N11!MSW-E) (WP 5A); [561](http://www.itu.int/md/R12-WP5A-C-0561/en) (Rev.1) (WP 5D); [565](http://www.itu.int/md/R12-WP5A-C-0565/en) (ITU-T SG 16); [578](http://www.itu.int/md/R12-WP5A-C-0578/en) (EHIMA); [598](http://www.itu.int/md/R12-WP5A-C-0598/en) (China) |
| 2.4 Rec. M.1450 | [586](http://www.itu.int/md/R12-WP5A-C-0586/en) (Ukraine) |
| 2.5 Out-of-band emissions | [552](http://www.itu.int/md/R12-WP5A-C-0552/en) (WP 1A) |

Working Group 5A-2 set up two drafting groups to deal with Hearing aids and Local coverage issues respectively.

– DG5A2-1 Hearing Aids Mr. Brian Copsey

– DG5A2-2 Local Coverage Mr. Hitoshi Yoshino

## 2.2.1 Broadband Wireless Access

The meeting considered 5 documents: [538](http://www.itu.int/md/R12-WP5A-C-0538/en), [539](http://www.itu.int/md/R12-WP5A-C-0539/en) (WP5C);[568](http://www.itu.int/md/R12-WP5A-C-0568/en) (MEF); [626](http://www.itu.int/md/R12-WP5A-C-0626/en), [629](http://www.itu.int/md/R12-WP5A-C-0629/en) (WP 5D).

A Liaison statement ([5A/538](http://www.itu.int/md/R12-WP5A-C-0538/en)) of 5C informs 5A that 5C has developed a preliminary draft New Report ITU-R F.[FS USE-Trends] “Fixed service use and future trends” which provides guidance on the future development of and future requirements for fixed wireless systems. Working Group 5A-2 reviewed the liaison and developed a reply liaison based on Doc. 5A/TEMP/230 from the previous meeting of WP 5A, which is Doc. 5A/TEMP/258.

A liaison statement ([5A/539](http://www.itu.int/md/R12-WP5A-C-0539/en)) of 5C thanks 5A and 5D for their liaisons on the subject of the working document on backhaul for IMT and other terrestrial mobile broadband systems. WP 5C has updated the working document based on the inputs to its May 2014 meeting (see Annex 7 to Document [5C/298](http://web.itu.int/md/R12-WP5C-C-0298/en): Working document towards a preliminary draft new Report ITU-R F.[FS.IMT/BB] “Use of fixed service for backhaul for IMT and other terrestrial mobile broadband systems”). Working Group 5A-2 reviewed the document and no further comments on the updated document.

A liaison ([5A/568](http://www.itu.int/md/R12-WP5A-C-0568/en)) from Metro Ethernet Forum thanks ITU-R WP 5C for its liaison statement on microwave backhaul and provides some materials for 5C. Because the liaison is just information for WP 5A, the meeting did not consider any need for a reply.

A liaison ([5A/626](http://www.itu.int/md/R12-WP5A-C-0626/en)) from WP 5D informs WP 5A that Working Party 5D (WP 5D) has initiated the development of a working document towards a preliminary draft new Report ITU-R M.[IMT.AV] “Interactive unicast and multicast audio-visual capabilities and applications provided over terrestrial International Mobile Telecommunication (IMT) systems” (AV over IMT).

A liaison ([5A/629](http://www.itu.int/md/R12-WP5A-C-0629/en)) is a reply liaison from WP 5D to WP 5C on PDNR ITU-R F.[FS USE-TRENDS] .WP 5D copied the liaison to WP 5A for information. The meeting did not consider any need for a reply.

## 2.2.2 Local coverage aspects

Working Group 5A-2 received four contributions [570](http://www.itu.int/md/R12-WP5A-C-0570/en) (CG on Rep. Local Coverage),[588](http://www.itu.int/md/R12-WP5A-C-0588/en) (USA), [613](http://www.itu.int/md/R12-WP5A-C-0613/en) and [614](http://www.itu.int/md/R12-WP5A-C-0614/en) (Japan).

Document [614](http://www.itu.int/md/R12-WP5A-C-0614/en) from Japan proposed to develop a new recommendation on Local Coverage.
The agreement was reached after discussion. The new recommendation proposal will be reconsidered after completion of the Report. Document [614](http://www.itu.int/md/R12-WP5A-C-0614/en) was carried forward to the next WP 5A meeting.

DG5A2-2 Local coverage further developed the working document towards a preliminary draft new Report ITU-R M.[LOCAL\_CoVERAGE] based on the input contributions(5A/TEMP/274). DG5A2-2 Local coverage also updated the time plan document (5A/TEMP/273) for Report ITU-R M.[LOCAL\_CoVERAGE] contained in [Attachment 2](#att2) to this Annex. To facilitate the work on the report, the continuation of the existing correspondence group was established. The revised ToR of the CG (Doc. 5A/TEMP/273R1) are in [Attachment 3](#att3) to this Annex .

## 2.2.3 Hearing aids

The meeting considered 6 documents: [532](http://www.itu.int/md/R12-WP5A-C-0532/en) (Rev.1) (JCA-ACH) ;[543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 11](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N11!MSW-E) (WP 5A); [561(Rev.1](http://www.itu.int/md/R12-WP5A-C-0561/en)) (WP 5D); [565](http://www.itu.int/md/R12-WP5A-C-0565/en) (ITU-T SG 16); [578](http://www.itu.int/md/R12-WP5A-C-0578/en) (EHIMA); [598](http://www.itu.int/md/R12-WP5A-C-0598/en) (China).

Working Group 5A-2 accomplished the work on the Preliminary draft Revision of Recommendation ITU-R M.1076 on Wireless communication systems for persons with impaired hearing based on input contribution. The output document is 5A/TEMP/259R1.

A joint liaison statement (5A/TEMP/[257](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R12-WP5A-141027-TD-0257)) to JCA-AHF on 2.3-2.4 GHz issued was developed based on the 5A/[532R1](http://www.itu.int/md/R12-WP5A-C-0532/en) (JCA-AHF), 5A/[561R1](http://www.itu.int/md/R12-WP5A-C-0561/en) (WP 5D) and 5A/[578](http://www.itu.int/md/R12-WP5A-C-0578/en) (EHIMA).

Working Group 5A-2 took note of the information provided by ITU-T SG 16 on draft new Recommendation F.ACC-TERM “Accessibility Terms and Definitions” in Document 5A/[565](http://www.itu.int/md/R12-WP5A-C-0565/en).

## 2.2.4 Rec. M.1450

Ukraine presented contribution 5A/586, which proposed a draft new Annex «Testing WLAN (RLAN) equipment in accordance with the technical requirements of ITU-R Recommendation M.1450 for conformity assessment» to Recommendation ITU-R М.1450-5. Multiple Administrations objected to the proposal. For example, several Administrations noted that testing for conformance assessment of radio equipment is already done very well at the national and regional levels. Several other Administrations opposed the proposal as developing an ITU conformance testing regime would be in conflict with the existing legally binding conformance assessment regimes (e.g. EU framework based on the R&TTE Directive), as well as the mutual recognition agreements of other countries.
As a result of the discussion, the Administration of Ukraine was encouraged to work with other Administrations on the matter of conformance assessment of radio equipment, rather than within the ITU. This was agreed and the matter was closed.

## 2.2.5 Out-of-band emissions

A liaison (5A/[552](http://www.itu.int/md/R12-WP5A-C-0552/en)) from WP 1A was received on Characteristics of the unwanted emissions in the out-of-band and spurious domains for digital modulation technology used in broadband communication systems. WP 1A initiated a working document towards a preliminary draft new Report ITU-R SM.[CHAR-UNWANTED]. The report includes the study of the boundary between the OoB and spurious domains and limits of the unwanted emissions. Working Group 5A-2 developed a reply liaison which provides the information extracted from M.1450, M.1801 and M.2116 (Doc. 5A/TEMP/272).

## 2.2.6 Review of ITU-R texts

Working Group 5A-2 reviewed the WP 5A texts (Section 1 of [Annex 1](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N01!MSW-E) to [Doc. 5A/543](http://www.itu.int/md/R12-WP5A-C-0543/en), and [Doc. 2/5(Rev.2)](http://www.itu.int/md/R12-SG05-C-0002/en), including the [Guide to the use of ITU-R texts related to the land mobile service](http://www.itu.int/oth/R0A06000001/en)) , Vocabulary ([Annex 25](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0079!N25!MSW-E) to [Doc. 5A/79](http://www.itu.int/md/R12-WP5A-C-0079), [Doc. 5A/566](http://www.itu.int/md/R12-WP5A-C-0566/en), Res. [33-3](http://www.itu.int/pub/R-RES-R.33/en), [34-3](http://www.itu.int/pub/R-RES-R.34/en), [35-3](http://www.itu.int/pub/R-RES-R.35/en), [36-3](http://www.itu.int/pub/R-RES-R.36/en)) and Questions assigned to WP 5A (Doc. 5A/[594](http://www.itu.int/md/R12-WP5A-C-0594/en)).

Working Group 5A-2 identified one editorial comment to update the status to the revision of Recommendation ITU-R M.1076. Working Group 5A-2 accomplished the revision work on Recommendation ITU-R M.1076 at this meeting. Working Group 5A-2 agreed the modification proposal of Doc. 5A/[594](http://www.itu.int/md/R12-WP5A-C-0594/en) related to WG2.

## 2.2.7 Objectives for the next meeting

The objectives for the next meeting are to continue the work on WAS Study Questions on the basis of input contributions and, in particular, to continue the work on:

- Development of a working document on Operational guidelines for the deployment of broadband mobile systems for local coverage in the frequency bands below 6 GHz.

## 2.2.8 Chairman’s closing remarks

Finally, Chairman of Working Group 5A-2 wishes to thank all participants of WG 2 for their contributions and cooperation and particularly thank DG Chairs Mr. Brian Copsey and Dr. Hitoshi Yoshino for their good and efficient work.

**Attachments:**

[Attachment 2](#att2): Work plan for further studies on local coverage issues.

[Attachment 3](#att3): Terms of reference for the Correspondence Group on local coverage issues.

# 3 Working Group 5A-3 – Public protection and disaster relief (Chairman: Ms Amy Sanders, USA)

**3.1 Executive summary**

Working Group 3 met on three occasions and considered 20 contributions to this meeting and three Annexes to the previous Working Party 5A Chairman’s Report. The input documents were related to revisions of documents under the purview of WG 3. Two sub-working groups conducted the majority of the work. The work of the group produced two documents for consideration for transmission to Study Group 5, two documents to be carried forward in the Chairman’s Report, and one liaison statement.

**3.2 Organization of the work**

As outlined in Section 3 of [Annex 3 of 5A/543](http://www.itu.int/md/R12-WP5A-C-0543%21N03%21MSW-E) the Objectives for this meeting were to:

– continue development of the working document toward a preliminary draft new Report ITU-R M.[PPDR] based input contributions;

– continue development of the preliminary draft revision of Recommendation ITU-R M.2009 based on input contributions; and

– continue development of the working document toward a preliminary draft revision of Recommendation ITU-R M.2015 based on input contributions.

All input contributions were introduced at the Working Group level. The Disaster Relief Rapporteur’s Report (Doc. [5A/630](http://www.itu.int/md/R12-WP5A-C-0630)) was presented at the WP 5A Plenary. The Chairman tasked all WGs to conduct a review of the relevant portions of the “Guide to the use of ITU-R texts related to the land mobile service” and the texts attributed to the group, and to identify any relevant vocabulary to share with the CCV.

Two Sub-Working Group were established to address the work of the WG 3, as follows:

a) SWG 5A3-1 PPDR Reports under the leadership of Mr. Andy Gowans, UK.

b) SWG 5A3-2 PPDR Recommendations ITU-R M.2009 and M.2015 under the leadership of Mr. Stuart Shepard (Australia)

**3.3 Sub-Working Group activities**

**3.3.1 SWG 5A3-1 PPDR Reports**

Sub-Working Group 5A-3 PPDR Reports met on ten occasions. The SWG was assigned seven input contributions and Annex 15 of the Chairman’s Report, as shown in the table below:

|  |  |
| --- | --- |
| **Draft new Rep. ITU-R M.[PPDR] & Supp. of M.2033**  | [543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 15](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N15!MSW-E) (WP 5A); [572](http://www.itu.int/md/R12-WP5A-C-0572/en) (CG on Rep. M.[PPDR]); [581](http://www.itu.int/md/R12-WP5A-C-0581/en) (Australia); [585](http://www.itu.int/md/R12-WP5A-C-0585/en) (Motorola Solutions); [589](http://www.itu.int/md/R12-WP5A-C-0589/en) (Canada); [597](http://www.itu.int/md/R12-WP5A-C-0597/en), [600](http://www.itu.int/md/R12-WP5A-C-0600/en) (China); [604](http://www.itu.int/md/R12-WP5A-C-0604/en) (Korea) |

The group worked on updating the draft working document toward a PDNR ITU-R M.[PPDR] in line with the inputs, using the output of the Correspondence Group as the baseline document.

The group then carried out a full review of the inputs and discussed the proposals contained in all of the input contributions. As a result of these discussions, the SWG was able to produce a clean version of the working document to be carried forward in the WP 5A Chairman’s report. The SWG proposed that WP 5A consider elevating the document to a preliminary draft new Report with a view to finalize it at the July 2015 meeting.

The results of the SWG’s work are two documents:

1. Annex 6 of 5A/636 – Preliminary draft new Report ITU-R M.[PPDR] to be carried in the WP 5A Chairman's Report

2. 5A/TEMP/276Rev.1 – [Draft] Liaison Statement to Working Party 5D

**3.3.2 SWG 5A3-2 PPDR Recommendations M.2009 and M.2015**

The Sub-Working Group on PPDR Recommendations continued work on the update to Recommendation ITU-R M.2009, **“**Radio interface standards for use by public protection and disaster relief operations in some parts of the UHF band in accordance with Resolution **646**
**(WRC-03)”,** and Recommendation ITU-R M.2015, “Frequency arrangements for public protection and disaster relief radiocommunication systems in UHF bands in accordance with Resolution **646 (Rev.WRC‑12)**”. and considered the input contributions below:

|  |  |
| --- | --- |
| **Update of Rec. ITU-R M.2009** | [543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 13](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N13!MSW-E) (WP 5A); [590](http://www.itu.int/md/R12-WP5A-C-0590/en) (Canada); [596](http://www.itu.int/md/R12-WP5A-C-0596/en) (China); [627](http://www.itu.int/md/R12-WP5A-C-0627/en) (WP 5D) |
| **Update of Rec. ITU-R M.2015** | [543](http://www.itu.int/md/R12-WP5A-C-0543/en) [Annex 14](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N14!MSW-E) (WP 5A); [574](http://www.itu.int/md/R12-WP5A-C-0574/en) (Israel); [591](http://www.itu.int/md/R12-WP5A-C-0591/en) (Canada); [601](http://www.itu.int/md/R12-WP5A-C-0601/en) (China); [605](http://www.itu.int/md/R12-WP5A-C-0605/en) (Motorola Solutions); [606](http://www.itu.int/md/R12-WP5A-C-0606/en) (UAE), [610](http://www.itu.int/md/R12-WP5A-C-0610/en) (Vietnam) |

SWG 5A3-2 met three times to continue the development of these two Recommendations.

On Recommendation ITU-R M.2009, the SWG considered the three input contributions above, which included a proposal to finalise the document at this meeting. A new technology “BTrunC” from China and revised text for LTE-Advanced were considered and incorporated by the meeting.
The SWG and WG proposed that WP 5A consider submitting the document, as contained in 5A/TEMP/268Rev.1, to Study Group 5.

Work also continued on the update to Recommendation ITU-R M.2015; and the SWG considered the six input contributions above, which included a proposal to finalise the document at this meeting. Updated frequency arrangements were incorporated in Annex 4 for the frequency range
406.1-430 MHz in Region 3, and additional arrangements were included in Annex 5 for
806-824/851-869 MHz in Region 3. The meeting agreed to the inclusion of a new footnote 4 to take into account some frequency ranges/bands not within Resolution **646 (Rev. WRC-12)** that are used or considered for use by some Administrations. The SWG and WG proposed that WP 5A consider submitting the document, as contained in 5A/TEMP/271Rev.1, to Study Group 5.

The SWG chairman would like to thank delegates for their hard work and ability to compromise to finalise the work on these Recommendations at this meeting. The chairman would also like to thank the working group chairman, Ms Amy Sanders, for her guidance and encouragement.

**3.4 Other matters**

**3.4.1 Future discussions on Recommendation ITU-R M.2015**

At the Working Group, it was agreed to create an Annex on “Elements for consideration in future discussions on Recommendation ITU-R M.2015” incorporating text from 5A/606 and 5A/610, which is reflected in Annex 7 of the Chairman’s Report.

**3.4.2 Relevant Recommendations and Reports**

WG 3 reviewed [Attachment 1 of Annex 3 of Document 5A/543](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N03!MSW-E), “Proposed course of action toward the review of Recommendations and Reports associated with work on WRC-15 Agenda item 1.3” and made no changes at this time; although revisions may be required at the next meeting, based on the actions of Study Group 5. The unchanged document is contained in [Attachment 4](#att4) to this Annex.

**3.4.3 Administrative Issues**

WG 3 followed the WP 5A Chairman’s instructions to consider the Texts, the Guide, the structure of the work in WP 5A, and [Vocabulary](http://www.itu.int/md/R12-WP5A-C-0079/en). Minor revisions to Section 1 of Annex 1of 5A/543 were recommended.

With regard to work at the fifteenth meeting of Working Party 5A, the objectives for Working Group 3 will be to:

– continue development of the preliminary draft new Report ITU-R M.[PPDR] based input contributions;

– consider the further development of Annex 7 of the Chairman’s Report, “Elements for a future revision of Recommendation ITU-R M.2015”.

The WG Chairman would like to thank Mr. Gowans and Mr. Shepard for their leadership of the subworking groups and all the participants of Working Group 3 for their contributions and cooperative approach to the discussions.

**Attachment:**

[Attachment 4](#att4): Proposed course of action toward the review of Recommendations and
Reports associated with work on WRC-15 agenda item 1.3 and status of work.

# 4 Working Group 5A-4 – Interference and sharing (Chairman: Mr Michael Kraemer, Germany)

**Executive Summary**

Working Group 5A-4 completed work on the revision of Recommendation ITU-R M.1824, as well as the development of a PDNR ITU-R M.[MS 14.5-15.35 CHAR]. WG 5A-4 also started work on a working document towards a PDN Report ITU-R M.[RLAN MITIGATION] describing possible additional mitigation techniques to facilitate sharing between RLAN systems and incumbent services, and updated the compilation of technical information on techniques that could be used in RLAN deployments to facilitate sharing. WG 5A-4 furthermore developed comments from a “sharing/compatibility” perspective for the reply liaison statement to Working Party 1B regarding their work on PDN Report ITU-R SM.[DYNAMIC ACCESS].

**4.1 Introduction**

Working Group 5A-4 met four times during the November 2014 meeting of Working Party 5A and considered 35 input contributions and developed 5 output documents.

**4.2 Consideration of input documents**

The following issues were considered based on input contributions as assigned to WG 5A-4 by the WP 5A opening plenary based on Document 5A/ADM/25(Rev.1).

**4.2.1 Out-of-band emissions in the 2 700-2 900 MHz frequency band from services operating below 2 690 MHz**

Input document: 5A/547 (WP 5B)

WG 5A-4 took note of the ongoing work in WP 5B on this issue and did not see the need for futher action at this point in time.

**4.2.2 Handbook ITU-R F.[CROSS-BORDER]**

Input document: 5A/577 (Chairman, Joint Correspondence Group 5A/5C)

WG 5A-4 took note of the ongoing work in WP 5C on this issue and did not see the need for futher action at this point in time.

**4.2.3 Revisions to Recommendation ITU-R P.2001**

Input document: 5A/582 (WP 7B)

WG 5A-4 took note of the comments provided by WP 7B to WP 3M on this issue and did not see the need for futher action at this point in time.

**4.2.4 PDN Report ITU-R SM.[DYNAMIC ACCESS]**

Input documents: 5A/534 (WP 5C); 5A/544 (WP 5B); 5A/553 (WP 1B); 5A/587 (USA)

Output document: 5A/TEMP/263(Rev.1) (Elements for the reply LS to WP1B)

WG 5A-4 took note of the comments from WP 5C and WP 5B as contained in Documents 5A/534 and 5A/544 respectively.

Based on the relevant parts of Document 5A/587, elements for a reply liaison statement to WP 1B were developed to address the sharing, compatibility and regulatory issues regarding the working document towards a PDN Report ITU-R SM.[DYNAMIC ACCESS]. These elements were included into the overall reply liaison statement as developed by WP5A-5 which is Document 5A/TEMP/269(Rev.1).

**4.2.5 Revision of Recommendation ITU-R M.1824**

Input documents: 5A/593 (Canada); 5A/617 (Japan)

Output document: 5A/TEMP/255(Rev.1) (PDNR ITU-R M.1824)

WG 5A-4 updated the PDNR based on Document 5A/617 and agreed, as proposed in Document 5A/593, to suggest to the WP 5A Plenary to submit the PDNR to Study Group 5 for adoption.

**4.2.6 RLAN mitigation techniques**

Input documents: 5A/546 (WP 5B); 5A/595 (Canada); 5A/609 (France); 5A/612 (USA); 5A/621 (ESA).

Output documents: 5A/TEMP/261 (Working document towards a PDN Report ITU-R M.[RLAN MITIGATION]); 5A/TEMP/262 (RLAN compilation document)

WG 5A-4 took note of the comments from WP 5B as contained in Document 5A/546.

Based on the proposal in Document 5A/612, WG 5A-4 agreed to initiate the development of a working document towards a PDN Report ITU-R M.[RLAN MITIGATION]. Furthermore, the RLAN compilation document was updated based on material from Documents 5A/595,
609 and 621.

**4.2.7 Interference from wired telecommunications systems and liaison with ITU-T**

Input documents: 5A/545 (WP 5B); 5A/548 and 549 (ITU-T SG 9); 5A/554, 555, 556, 557, 558 and 559 (WP 1A); 5A/567 (ITU-T WP 2/5); 5A/573 and 576 (ITU-T SG 9); 5A/584 (WP 7D)

WG 5A-4 took note of the comments provided in the various liaison statements and did not see the need for further action at this point in time.

**4.2.8 WRC-15 agenda item 1.6**

Input documents: 5A/571 (WP 4A); 5A/624 (USA).

Output document: 5A/TEMP/254(Rev.1) (PDNR ITU-R M.[MS 14.5-15.35 CHAR]).

WG 5A-4 took note of the clarifications provided by WP 4A as contained in document 5A/571 and did not see the need for further action at this point in time.

The preliminary draft new Recommendation ITU-R M.[MS 14.5-15.35 CHAR] as contained in Annex 16 of the Chairman’s Report of the previous WP 5A meeting was slightly updated based on Document 5A/624 and it was agreed to suggest to the WP 5A Plenary to submit the PDNR to Study Group 5 for adoption.

**4.2.9 WRC-15 agenda Items 1.9.1 and 1.9.2**

Input documents: 5A/535 and 536 (WP 5C); 5A/563 (WP 4C)

WG 5A-4 took note of the comments provided by WP 5C and WP 4C on this issue and did not see a need for further action at this point in time.

**4.2.10 WRC-15 agenda Item 1.10**

Input documents: 5A/537 (WP 5C); 5A/564 (WP 4C)

WG 5A-4 took note of the comments provided by WP 5C and WP 4C on this issue and did not see a need for further action at this point in time.

**4.2.11 WRC-15 agenda Item 9.1.x**

Input document: 5A/583 (WP 7B)

WG 5A-4 took note of the comments provided by WP 7B on this issue and did not see a need for further action at this point in time.

**4.3 Revision of WP 5A texts**

WG 5A-4 reviewed the WP 5A texts and only identified one editorial comment to update the reference to the now completed revision of Recommendation ITU-R M.1824 in Section 1 of Annex 1 to Document 5A/543.

**4.4 Objectives for the next WP 5A meeting**

The objectives for the 15th WP 5A meeting related to the WG 5A-4 activities are:

* continue to develop the working document towards a PDN Report ITU-R M.[RLAN MITIGATION] on possible additional mitigation techniques to facilitate sharing between RLAN systems and incumbent services;
* further work on the compilation of technical information on techniques that could be used in RLAN deployments to facilitate sharing;
* consider the proposal to revise Recommendation ITU-R M.1652 or to develop a new Recommendation in this regard.
* review the ongoing work on the PDN Report ITU-R SM.[DYNAMIC ACCESS] depending on feedback from WP 1B.

**4.5 Conclusion**

The Chairman of WG 5A-4 would like to thank all the WG 5A-4 participants for their active contributions to the work of WG 5A-4.

# 5 Working Group 5A-5 – New technologies (Chairman: Mr Hitoshi Yoshino, Japan)

Working Group 5A-5 (WG 5A-5) met two times during the 14th meeting of ITU-R WP 5A from October 27th to November 6th, 2014. Around 50 delegates from Algeria, Australia, Germany, Canada, Cameroon, China, Finland, France, Italy, India, Japan, Kenya, Korea, The Netherlands, Norway, Russia, Saudi Arabia, Sweden, Switzerland, Thailand, Togo, United Kingdom, USA, Vietnam, Alcatel-Lucent, Cisco, EADS, Ericsson, Intel, IUCAF, Microsoft, Motorola, Orange, Robert Bosch and Telecom Italia participated in the meetings. The tasks assigned to WG 5A-5 address new technologies.

Sixteen input contributions were attributed to WG 5A-5, which were:

|  |  |
| --- | --- |
| Cognitive radio systems (CRS)(Q.241-2/5) | Documents 5A/[543](http://www.itu.int/md/R12-WP5A-C-0543/en) ([Annex 21](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N21!MSW-E)) (WP 5A); [607](http://www.itu.int/md/R12-WP5A-C-0607/en) (Nokia Solutions and Networks Oy); [618](http://www.itu.int/md/R12-WP5A-C-0618/en) (Japan); [625](http://www.itu.int/md/R12-WP5A-C-0625/en) (Orange, Telecom Italia) |
| Intelligent transport system (ITS)(Q. 205-5/5) | Documents 5A/[198](http://www.itu.int/md/R12-WP5A-C-0198/en) ([Annex 20](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0198!N20!MSW-E)), [543](http://www.itu.int/md/R12-WP5A-C-0543/en) ([Annex 19](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N19)), [543](http://www.itu.int/md/R12-WP5A-C-0543/en) ([Annex 20](http://www.itu.int/md/dologin_md.asp?lang=en&id=R12-WP5A-C-0543!N20!MSW-E)) (WP 5A); [562](http://www.itu.int/md/R12-WP5A-C-0562/en) (ETSI); [602](http://www.itu.int/md/R12-WP5A-C-0602/en), [603](http://www.itu.int/md/R12-WP5A-C-0603/en) (Korea); [615](http://www.itu.int/md/R12-WP5A-C-0615/en), [619](http://www.itu.int/md/R12-WP5A-C-0619/en), [620](http://www.itu.int/md/R12-WP5A-C-0620/en) (Japan) |
| Dynamic Access -Technology | Documents 5A/[[544](http://www.itu.int/md/R12-WP5A-C-0544/en)](http://www.itu.int/md/R12-WP5A-C-0421/en) (WP 5B); [553](http://www.itu.int/md/R12-WP5A-C-0553/en) (WP 1B); [587](http://www.itu.int/md/R12-WP5A-C-0587/en) (USA) |

WG 5A-5 established two Sub-working Groups (SWGs) and a Drafting Group (DG) to facilitate its work:

|  |  |
| --- | --- |
| **SWG/DG** (**Chairman**) | **Terms of Reference** |
| SWG 5A-5-1 –CRS: Cognitive Radio System(Ms. Marja Matinmmikko, Finland) | Update and finalize a preliminary draft new Report ITU-R [LMS.CRS2], |
| SWG 5A-5-2 – ITS: Intelligent Transport System(Mr. Satoshi Oyama, Japan) | – Develop working document towards a preliminary draft new Recommendation ITU-R M.[V2X] on radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure communication for intelligent transport systems (ITS) applications– Develop working document towards a preliminary draft revision of Report ITU-R M.2228 on advanced ITS radiocommunications– Develop a working document toward a draft new Report ITU-R M.[ITS USAGE] on Intelligent transport systems usage report in ITU-R member states.– Develop working document towards a preliminary draft new Report ITU-R M.[RAIL.LINK] |
| DG 5A-5-3 – Dynamic Access(Ms. Christine Di Lapi, USA) | Develop a draft liaison statement to WP 1B on the development of a draft new Report ITU-R SM[DYNAMIC ACCESS] |

SWG 5A-5-1 on CRS, SWG 5A-5-2 on ITS and DG on Dynamic Access met six, twice and four times, respectively, during the 14th meeting of WP 5A.

**5.1 Executive summary**

WG 5A-5 completed its work on the development of a preliminary draft new Report M.[LMS.CRS2] on cognitive radio systems. WG 5A-5 developed a liaison statement to ITU-R WP 1B on the development of a draft new Report ITU-R SM.[DYNAMIC ACCESS]. WG 5A-5 continued to develop three documents on ITS; (1) a working document towards a preliminary draft new Recommendation ITU-R M.[V2X], (2) a working document towards a preliminary draft revision of Report ITU-R M.2228 on advanced ITS radiocommunications and (3) a working document toward a draft new Report ITU-R M.[ITS USAGE] on Intelligent transport systems usage Report in
ITU-R member ststes. WG 5A-5 agreed to elevate the working document towards a preliminary draft revision of Report ITU-R M.2228 to a preliminary draft revision. WG 5A-5 initiated tis work of the development of a new working document towards a preliminary draft new Report ITU-R M.[RAIL.LINK] on Systems for public mobile communications with train.

**5.2 Cognitive radio systems (CRS) in the land mobile service**

WG 5A-5 considered three input contributions in the scope of CRS. WG 5A-5 continued the development of a preliminary draft new Report (PDNR) M.[LMS.CRS2] based on the input contributions. The PDNR M.[LMS.CRS2] was finalized to be submitted to WP 5A plenary for consideration for approval for SG5 (Document 5A/TEMP/270R1) .

WG 5A-5 considered the terminology used in its CRS work to help the development of vocabulary of ITU-R terms and definitions and concluded that there were no specific terms to be submitted to further consideration for the vocabulary work regarding the CRS work.

**5.3 Intelligent transport system (ITS)**

WG 5A-5 considered nine input contributions and continued to develop three output documents:

1) a working document towards a preliminary draft new Recommendation ITU-R M.[V2X] on radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure communication for ITS applications (Document 5A/TEMP/265), in which the technical characteristics of IEEE standard in Table 6 are invited to the 15th WP 5A meeting and USA will provide them at the 15th WP 5A meeting;

2) a working document towards a preliminary draft revision of Report ITU-R M.2228 on advanced ITS radiocommunications, which was finally elevated to be a preliminary draft revision (Document 5A/TEMP/266R1), and

3) a working document toward a preliminary draft new Report M.[ITS USAGE] of intelligent transport systems usage Report in ITU Member States (Document 5A/TEMP/267R1).

WG 5A-5 initiated tis work of the development of a new working document towards a preliminary draft new Report ITU-R M.[RAIL.LINK] on Systems for public mobile communications with train (Document 5A/TEMP/264).

WG 5A-5 also reviewed and decided to retain the schedules in its workplans on a working document towards a preliminary draft new Recommendation ITU-R M.[V2X] and a working document toward a preliminary draft new report M.[ITS USAGE] (Attachments [5](#att5) and [6](#att6) to this Annex 3).

Regarding WRC-15 agenda item 1.18, WG 5A-5 reviewed the work plan. It was agreed that WG 5A-5 will not take any actions on WRC-15 agenda item 1.18 in this meeting.

**5.4 Liaison Statement to WP 1B on Dynamic Spectrum Access**

WG 5A-5 developed a liaison statement to WP 1B on the development of a draft new Report
ITU-R SM.[DYNAMIC ACCESS] by incorporating text elements provided by WG 5A-4 (Document 5A/TEMP/263R1). This liaison statements includes WP 5A’s views and comments on the WP 1B’s working document towards a preliminary draft new Report SM.[DYNAMIC ACCESS] (Document 5A/TEMP/269R1).

**5.5 Review of ITU-R texts**

WG 5A-5 reviewed ITU-R texts pertinent to WG 5A-5 in Annex 1 to Document 5A/543 (WP 5A). WG 5A-5 proposed a suppression of Question ITU-R 230-3/5 on Software Defined Radio to WP 5A. At the occasion of the completion of WG 5A-5’s work on PDNR M.[LMS.CRS2], WG 5A-5 reviewed Question ITU-R 241-2/5 on CRS and concluded that Report ITU-R 2225 and the newly developed PDNR M.[LMS.CRS2] have addressed all the questions. WG 5A-5 proposed WP 5A to consider whether the Question ITU-R 241-2/5 should be supressed or revised at its 15th meeting in July 2015, taking into account that the Question is also assigned to WP 5D.

There were no views on suppression or revision with regard to the existing ITU-R Recommendations, Reports and Handbooks relating to WG5A-5. The meeting agreed to retain all the ITU-R Recommendations, Reports and handbook relating to WG5A-5. WG 5A-5 also reviewed the Guide to the use of ITU-R texts related to the land mobile service. WG 5A-5 also reviewed the working document towards a preliminary draft revision of Recommendation ITU-R M.1797/ New Recommendation ITU-R M.[5A/VOC] on Vocabulary of terms for the land mobile service (Annex 25 to Document [5A/79](http://www.itu.int/md/R12-WP5A-C-0079/en)) and Document 5A/566 on updating the integrated database of ITU terms and definitions. WG 5A-5 sees that there is no further terms to be included in the ITU-R vocabulary document, since some key terms with regard to CRS have already been included in the document.

**5.6 Future work**

Working Group 5A-5 continues the development of 1) working document towards a preliminary draft new Recommendation ITU-R M.[V2X], 2) a preliminary draft revision of Report ITU-R M.2228 on advanced ITS radiocommunications, 3) working document towards a preliminary draft new Report ITU-R M.[ITS USAGE], and 4) a working document toward a preliminary draft new Report M.[RAIL.LINK].

WG 5A-5 will discuss a possible update of the handbook volume 4 "Intelligent Transport Systems" of the Land Mobile Handbook (LMH).

Finally the WG 5A-5 Chairman would like to thank Sub-Working Group Chairmen Ms. Marja Matinmikko and Mr. Satoshi Oyama, and Drafting Group Chairman Ms. Christine Di Lapi for their excellent chairmanship and all participants for their contribution to work of the group.

**Attachments:**

[Attachment 5](#att5): Work plan for the development of a new Recommendation ITU-R M.[V2X] on vehicle to vehicle and vehicle to infrastructure communication.

[Attachment 6](#att6): Work plan for the development of a new Report ITU-R M.[ITS USAGE] on the usage of intelligent transport systems in ITU-R member states.

Attachment 1 to Annex 3

**Work plan for WG 5A-1**

(Source: Document 5A/TEMP/281)

| Working Party 5A meetings | Work plan |
| --- | --- |
| 1st meeting22-31 May 2012 | – Begin work on identifying amateur service technical and operational characteristics for systems to be operated in the range 5 250-5 450 kHz.– Develop a work plan for conducting studies and producing outputs relating to WRC-15 agenda item 1.4.– Transmit draft of characteristics and work plan to contributing groups.– Request any needed technical and operational characteristics from contributing groups.– Request CPM text input for sections 1, 2, and 3 from contributing groups. |
| 2nd meetingNovember 2012 | – Complete review of amateur service technical and operational characteristics and develop preliminary draft new Report.– Finalize work plan.– Begin sharing studies between proposed amateur service stations and existing service stations.– Provide any feedback on modelling and characteristics from other groups.– Develop preliminary draft new Report(s) for sharing studies.– Transmit preliminary draft new Report on amateur characteristics to contributing groups for final review.– Transmit preliminary draft new Report(s) on sharing studies to contributing groups as appropriate for review.– Develop draft CPM text for sections 1, 2, and 3, considering and incorporating from contributing groups.– Transmit draft CPM text to contributing groups for review. |
| 3rd meetingSecond Quarter 2013 | – Complete amateur service technical and operational characteristics draft new Report and send to Study Group 5.– Continue sharing studies, taking into account feedback from contributing groups.– Update preliminary draft new eport(s) for sharing studies as appropriate.– Develop CPM text for section 4, considering and incorporating from contributing groups.– Transmit updated preliminary draft new Report(s) on sharing studies to contributing groups as appropriate for review.– Transmit draft CPM text to contributing groups for review. |
| 4th meetingFourth Quarter 2013 | – Continue sharing studies taking into account feedback from contributing groups.– Prepare draft new Report(s) on sharing studies as appropriate.– Develop CPM text for sections 5 and 6, considering and incorporating from contributing groups.– Transmit draft new Report(s) on sharing studies to contributing groups as appropriate for final review.– Transmit draft CPM text to contributing groups for review |
| 5th meetingSecond Quarter 2014 | – Continue sharing studies taking into account feedback from contributing groups.– Finalize CPM text, considering and incorporating from contributing groups.– Transmit draft CPM text to Chapter Rapporteur. |
| 6th meetingFourth Quarter 2014 | * Continue sharing studies taking into account feedback from contributing groups.

– Complete draft new Report on sharing studies and send to Study Group 5.* Commence review of texts relevant to the Amateur and Amateur Satellite service
 |
| 7th meetingThird Quarter 2015 | * Review and update texts relevant to the Amateur and Amateur Satellite service and consider any new contributions on theses texts
* (Pending results of SG 5, review AI 1.4 compatibility report)
 |

|  |  |  |
| --- | --- | --- |
| **Contact:** | Dale Hughes | **E-mail:** [daleVK1DSH@gmail.com](file:///C%3A%5CUsers%5Cjbhifi%5CDownloads%5CdaleVK1DSH%40gmail.com) |

Attachment 2 to Annex 3

**Work plan for further studies on local coverage issues**

(Source: Document 5A/TEMP/273R1)

|  |  |  |
| --- | --- | --- |
| Date | Meeting | Activity |
| May 2014 | 13th WP 5A | * Study to develop a working document towards a draft new Report
 |
| 30th May to 8th September 2014 |  | * Correspondence Group activity on the development of the working document towards a draft new Report
 |
| 27th October to 6th November 2014 | 14th WP 5A | * Continue to develop the working document towards a draft new Report
* Review the progress and revise the work plan appropriately
 |
| 7th November 2014 to 4th May 2015 |  | * Correspondence Group activity on the development of the working document towards a draft new Report
 |
| 6th to 16th July 2015 | 15th WP 5A | * Continue to develop the working document towards a draft new Report
* Consider the finalization of the Report and submission to SG 5
* Consider whether the development of a draft new Recommendation is required
* Review the progress and revise the work plan appropriately
 |

Attachment 3 to Annex 3

**Terms of Reference**

**Correspondence Group on Local Coverage Issues**

 (Source: 5A/TEMP/273R1)

The Correspondence Group (CG) will work in accordance with § 2.16 and § 2.17 of Resolution ITU‑R 1-6[[1]](#footnote-1), and perform the following items:

- to develop the working document towards a preliminary draft new Report ITU-R M.[LOCAL\_COVERAGE] on operational guidelines for the deployment of broadband wireless access systems for local coverage operating below 6 GHz; and

- that the report of the result of the CG activity is submitted through the convenor of the CG to ITU-R BR as a contribution to the 15th Working Party 5A meeting eight weeks in advance of the deadline of the contribution to the 15th Working Party 5A meeting in July 2015;

- that the status of the CG will be reviewed at the 15th meeting of WP 5A.

**Correspondence Group Dates:** 7th November 2014 (end of 14th meeting of WP 5A) – 4th May 2015 (8 weeks prior to the deadline of contribution for the 15th meeting of WP 5A).

**Correspondence Group Convenor:** Mr. Satoshi Imata (e-mail: sa-imata@kddi.com).

**Correspondence Group Sharepoint site:** <https://extranet.itu.int/rsg-meetings/sg5/wp5a/default.aspx>.

**Participants:** Interested parties are encouraged to join Correspondence Group activity on the [Working Party 5A Sharepoint site](https://extranet.itu.int/rsg-meetings/sg5/wp5a/default.aspx) using their TIES account.

Attachment 4 to Annex 3

**Proposed course of action toward the review of Recommendations and Reports associated with work on WRC-15 agenda item 1.3 and status of work**

(Source: Document 5A/TEMP/286)

reviEW of recommendations and reports associated
with work on wrc-15 agenda item 1.3

As part of the work under WRC-15 agenda item 1.3, Working Group 3 has examined the Recommendations and Reports under its purview and identified the following courses of action. It was noted that the preparatory work for WRC-15 agenda item 1.3 may include the development of new Recommendations and/or Reports.

**Priority 1: Recommendations and Reports relevant to WRC-15 agenda item 1.3**

**Report ITU-R** [**M.2033**](http://www.itu.int/pub/R-REP-M.2033): “Radiocommunication objectives and requirements for public protection and disaster relief” (2003)

This document “identifies objectives, applications, requirements, a methodology for spectrum calculations, spectrum requirements and solutions for interoperability”

1) Relevant to WRC-15 agenda item 1.3.

2) Propose review and revision to further address broadband requirements.

3) Decision taken to develop a new Report on narrowband, wideband, and broadband PPDR with a view to suppress Report ITU-R M.2033 upon completion of the new Report.

**Priority 1bis: Recommendations and Reports already under revision**

**Recommendation** [**ITU-R M.2009**](http://www.itu.int/rec/R-REC-M.2009/en): “Radio interface standards for use by public protection and disaster relief operations in some parts of the UHF band in accordance with Resolution **646 (WRC‑03)**” (2012)

1) Relevant to WRC-15 agenda item 1.3.

2) Already under revision.

**Recommendation** [**ITU-R M.2015**](http://www.itu.int/rec/R-REC-M.2015/en): “Frequency arrangements for public protection and disaster relief radiocommunication systems in UHF bands in accordance with Resolution **646 (Rev.WRC‑12)**” (2012)

1) Relevant to WRC-15 agenda item 1.3.

2) Already under revision.

**Report ITU-R** [**M.2014**](http://www.itu.int/pub/R-REP-M.2014): “Digital land mobile systems for dispatch traffic” (2006)

1) Not relevant to WRC-15 agenda item 1.3.

2) Revision complete and submitted to SG 5for consideration.

3) Completed (2012).

**Priority 2: Recommendations and Reports for which consequential changes may be required based on results of technical studies**

**Recommendation** [**ITU-R M.1637**](http://www.itu.int/rec/R-REC-M.1637/en): “Global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations” (2006)

The document is designed “to facilitate the global circulation of radiocommunications equipment to be used in emergency and disaster relief situations”.

1) References Resolution **646 (Rev.WRC-12)**; therefore relevant to WRC-15 agenda item 1.3.

2) Consequential changes based on WRC-15 action to be considered in next study cycle.

**Recommendation** [**ITU-R M.1826**:](http://www.itu.int/rec/R-REC-M.1826/en) “Harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3” (2007)

The document “addresses harmonized frequency channel plans in the band 4 940‑4 990 MHz for broadband public protection and disaster relief radiocommunications in Regions 2 and 3”

1) Relevant to WRC-15 agenda item 1.3, appears to address broadband already.

2) Suggest no further revision needed under WRC-15 agenda item 1.3; possible further review based on technical studies developed to support CPM text.

3) No requirement for revision identified at this point in time.

**Recommendation** [**ITU-R F.1105**](http://www.itu.int/rec/R-REC-F.1105/en): “Fixed wireless systems for disaster mitigation and relief operations” (2006)

This document “provides characteristics of fixed wireless systems used for disaster mitigation and relief operations”

1) Not relevant to WRC-15 agenda item 1.3.

2) Revision to address broadband characteristics based on technical studies developed to support CPM text.

3) Completed (2014).

**Priority 3: Recommendations and Reports proposed for suppression**

**Recommendation** [**ITU-R M.1222**](http://www.itu.int/rec/R-REC-M.1222/en): “Transmission of data messages on shared private land mobile radio channels” (1997)

The document standardizes “the data transmission procedures for users who share an analogue radio channel in order to minimize interference to other users who also operate on the channel”.

1) Not relevant to WRC-15 agenda item 1.3 work.

2) Proposed for suppression.

3) Suppressed by Study Group 5 (2013)

**Report ITU-R** [**M.741**](http://www.itu.int/pub/R-REP-M.741): “Multi-channel land mobile systems for dispatch traffic (with or without PSTN interconnection)” (1990)



1) Not relevant to WRC-15 agenda item 1.3.

2) Proposed for suppression.

3) Suppressed by Study Group 5 (2013)

**Handbooks**

**Volume 3 of the Land Mobile Handbook** (2005)

TBD – Chairman of WP 5A to request a copy be placed on the Sharepoint to allow participants to review between meetings.

Attachment 5 TO ANnEX 3

**Work plan for the development of a new Recommendation ITU-R M.[V2X] on vehicle to vehicle and vehicle to infrastructure communication**

(Source: Document 5A/TEMP/285)

|  |  |
| --- | --- |
| **Title** | Work plan for the development of a new Recommendation on V2X communication |
| **Document type** | Recommendation |
| **WP 5A Lead Group** | WG New Technologies  |
| **SWG Chairman** | Satoshi (Sam) Oyama |
| **Editor** | Takeshi Yamamoto |
| **Focus for scope and work** | Intelligent transport systems (ITS) are applied to services such as electric toll collection by using dedicated short-range communications (DSRC) and deployed in many countries. Regarding DSRC, Recommendation ITU-R M.1453 “DSRC at 5.8 GHz”.To extend the existing ITS applications and to achieve traffic safety and reduction of environmental burden in transportation sector, R&D and standardization works on advanced ITS radiocommunications have been conducted. Such works include not only vehicle to infrastructure but also vehicle to vehicle (V2X) communications.The scope of this work is to identify specific radio interface standards of V2X communication for ITS applications. |
| **Related Documents** | Recommendations ITU-R [M.1453](http://www.itu.int/rec/R-REC-M.1453/en), ITU-R [M.1890](http://www.itu.int/rec/R-REC-F.1890/en) |
| **Milestones** | **11th meeting (May 2013)**– Develop and adopt work plan– Carry forward the working document toward a PDN Recommendation– Liaise as needed with concerned and interested groups on development of the PDN Recommendation.**12th meeting (November 2013)**– Continue developing the PDN Recommendation– Liaise as needed with concerned and interested groups on development of the PDN Recommendation– Update work plan as needed.**13th meeting (May 2014)**– Continue developing the PDN Recommendation– Liaise as needed with concerned and interested groups on development of the PDN Recommendation– Update work plan as needed.**14th meeting (November 2014)**– Complete draft Recommendation to be finally considered at the 15th meeting in May 2015.**15th meeting (May 2015)**– Finalize Recommendation and submit to SG 5 meeting for approval. |

Attachment 6 TO ANnEX 3

**Work plan for the development of a new Report ITU-R M.[ITS USAGE] on the usage of intelligent transport systems in ITU-R member states**

(Source: Document 5A/TEMP/285)

|  |  |
| --- | --- |
| **Title** | Workplan for the development of a new Report ITU-R M.[ITS USAGE] on the usage of intelligent transport systems in ITU-R member states |
| **Document type** | Report |
| **WP 5A Lead Group** | WG5 New Technologies  |
| **SWG Chairman** | Satoshi (Sam) Oyama |
| **Editor** | Satoshi (Sam) Oyama |
| **Focus for scope and work** |  |
| **Related Documents** |  |
| **Milestones** | **13th meeting (May 2014)**– Develop and adopt work plan– Carry forward the framework of working document toward a PDN Report**14th meeting (November 2014)**– Develop working document toward a PDN Report– Liaise as needed with concerned and interested organizations on development of the PDN Report– Update work plan as needed.**15th meeting (July 2015)**– Continue developing working document toward a PDN Report– Liaise as needed with concerned and interested organizations on development of the PDN Report– Update work plan as needed**16th meeting (May 2016)**– Developing a PDN Report– Liaise as needed with concerned and interested organizations on development of the PDN Report– Update work plan as needed **17th meeting (November 2016)**– Finalize Report and submit to SG 5 meeting for approval |

1. 2.16 Correspondence Groups may also be established under the leadership of an appointed Correspondence Group Chairman. The Correspondence Group differs from the Rapporteur Group in that the Correspondence Group performs its work only via electronic correspondence and no meetings are required. A Correspondence Group must have clearly defined Terms of Reference and may be established and its Chairman appointed by a Working Party, a Task Group, a Study Group, CCV, or RAG.

 2.17 Participation in the work of the Rapporteur and Correspondence Groups of the Study Groups is open to representatives of Member States, Sector Members, Associates and Academia. Any views expressed and documentation submitted to these groups should indicate the Member State, Sector Member, Associate or Academia, as appropriate, making the submission. [↑](#footnote-ref-1)