

Radiocommunication Bureau (BR)

Administrative Circular CACE/797

12 January 2017

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of Radiocommunication Study Group 7 and ITU Academia

Subject: Meetings of Radiocommunication Study Group 7 (Science services),

Geneva, 4 and 12 April 2017

1 Introduction

By means of this Administrative Circular, I wish to announce that meetings of ITU-R Study Group 7 will take place in Geneva on 4 and 12 April 2017, immediately preceding and immediately following the meetings of Working Parties 7B, 7C and 7D (see Circular Letter 7/LCCE/71).

The Study Group meetings will be held in the ITU Headquarters, Geneva. The opening session will take place at 0930 hours.

Group	Meeting dates	Deadline for contributions	Opening session
Study Group 7	4 and 12 April 2017	Tuesday, 28 March 2017 at 1600 hours UTC	Tuesday, 4 April 2017 at 0930 hours

2 Programme of the meetings

The draft agenda for the meetings of Study Group 7 is contained in Annex 1. The Questions assigned to Study Group 7 can be found on:

http://www.itu.int/ITU-R/go/que-rsg7/en

2.1 Adoption of draft Recommendations at the Study Group meeting (§ A2.6.2.2.2 of Resolution ITU-R 1-7)

12 draft revisions of Recommendations are proposed for adoption by the Study Group at its meeting in accordance with § A2.6.2.2.2 of Resolution ITU-R 1-7.

In accordance with § A2.6.2.2.1 of Resolution ITU-R 1-7, the titles and summaries of the draft revisions of Recommendations are given in Annex 2.

2.2 Adoption of draft Recommendations by a Study Group by correspondence (§ A2.6.2.2.3 of Resolution ITU-R 1-7)

The procedure described in § A2.6.2.2.3 of Resolution ITU-R 1-7 concerns draft new or revised Recommendations that are not specifically included in the agenda of a Study Group meeting.

In accordance with this procedure, draft new and revised Recommendations prepared during the meetings of Working Parties 7B, 7C and 7D held prior to the Study Group meeting will be submitted to the Study Group. After due consideration, the Study Group may decide to seek adoption of these draft Recommendations by correspondence. In such cases, the Study Group shall use the procedure for simultaneous adoption and approval (PSAA) by correspondence of the draft Recommendations as described in § A2.6.2.4 of Resolution ITU-R 1-7 (see also § 2.3 below), if there is no objection to this approach by any Member State attending the meeting and if the Recommendation is not incorporated by reference in the Radio Regulations.

In accordance with § A1.3.1.13 of Resolution ITU-R 1-7, Annex 3 to this Circular contains a list of topics to be addressed at the meetings of the Working Parties held just prior to the Study Group meeting, and for which draft Recommendations may be developed.

2.3 Decision on approval procedure

At the meeting, the Study Group shall decide on the eventual procedure to be followed for seeking approval for each draft Recommendation in accordance with § A2.6.2.3 of Resolution ITU-R 1-7 accordingly, unless the Study Group has decided to use the PSAA procedure as described in § A2.6.2.4 of Resolution ITU-R 1-7 (see § 2.2 above).

3 Contributions

Contributions in response to the work of Study Group 7 are processed according to the provisions laid down in Resolution ITU-R 1-7.

The deadline for reception of contributions not requiring translation* (including Revisions, Addenda and Corrigenda to contributions) is 7 calendar days (1600 hours UTC) prior to the start of the meeting. The deadline for reception of contributions for this meeting is specified in the table above. Contributions received later than this deadline cannot be accepted. Resolution ITU-R 1-7 provides that contributions which are not available to participants at the opening of the meeting cannot be considered.

Participants are requested to submit contributions by electronic mail to:

rsg7@itu.int

A copy should also be sent to the Chairman and Vice-Chairmen of Study Group 7. The pertinent addresses can be found on:

http://www.itu.int/go/rsg7/ch

^{*} Where translation is required, contributions should be received at least three months prior to the meeting.

4 Documents

Contributions will be posted "as received" within one working day on the webpage established for this purpose:

http://www.itu.int/md/R15-SG07.AR-C/en

The official versions will be posted on http://www.itu.int/md/R15-SG07-C/en within 3 working days.

In accordance with Resolution 167 (Rev. Busan, 2014), the Study Group meeting will be completely paperless. Wireless LAN facilities will be available for use by delegates in the meeting rooms. Printers are available in the cyber café of the 2nd basement of the Tower building and on the ground and first floors of the Montbrillant building for delegates who wish to print documents. In addition, the Service Desk (servicedesk@itu.int) has prepared a limited number of laptops for those who do not have one.

5 Remote participation

In order to follow the proceedings of ITU-R meetings remotely an audio webcast of the Study Group Plenary meetings in all languages will be provided through the ITU Internet Broadcasting Service (IBS). Participants do not need to register for the meeting to use the webcast facility, however, an ITU <u>TIES account</u> is required to access the webcast.

6 Participation/Visa requirements/Accommodation

Advance registration for ITU-R events is mandatory and carried out exclusively online through Designated Focal Points (DFPs). Each ITU-R Member has been requested to designate a DFP responsible for the handling of all registration formalities, including visa support requests that should also be submitted by the DFP during the on-line registration process. Individuals wishing to be registered for an ITU-R event should contact directly the DFP for their entity. The list of ITU-R DFPs (TIES protected) as well as detailed information on event registration, visa support requirements, hotel accommodation, etc., can be found at:

www.itu.int/en/ITU-R/information/events

François Rancy Director

Annexes: 3

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 7
- ITU-R Associates participating in the work of Radiocommunication Study Group 7
- ITU Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

Annex 1

Draft agenda for the meetings of Radiocommunication Study Group 7

(Geneva, 4 and 12 April 2017)

1	Opening remarks		
	1.1 Director, BR		
	1.2 Chairman		
2	Approval of the agenda		
3	Appointment of Rapporteur		
4	Summary Report of actions taken during the meeting of Study Group 7 on 4 April 2016 (Document $\frac{7/9}{9}$)		
5	Results 23rd meeting of the RAG (10-13 May 2016)		
6	Preparation for RA-19, CPM 19-2 and WRC-19		
7	Executive Reports from Working Parties		
	7.1 Working Party 7B		
	7.2 Working Party 7C		
	7.3 Working Party 7D		
8	Status of Questions, Recommendations, Reports and Handbooks		
9	Adoption of draft new and revised Recommendations and Questions and decision o approval procedure		
10	Suppression of Questions		
11	Consideration and adoption of new and revised Reports		
12	Suppression and modification of Opinions		
13	Progress in the development of Handbooks		
14	WMO/ITU Seminar, 22-23 October 2017		
15	Liaisons with other ITU Sectors, Study Groups and international organizations		
16	Note to BR Director		

Consideration of future work programme and discussion on a tentative meeting schedule

17

18

Any other business

J. ZUZEK Chairman, Study Group 7

Annex 2

Titles and summaries of the draft revisions of Recommendations proposed for adoption at the Study Group 7 meeting

Draft revision of Recommendation ITU-R SA.364-5

Doc. 7/10

Preferred frequencies and bandwidths for manned and unmanned near-Earth research satellites

The list of frequency bands given in Table 1 has been revised to identify those frequency ranges which are preferred from a technical standpoint.

Draft revision of Recommendation ITU-R SA.510-2

Doc. <u>7/11</u>

Feasibility of frequency sharing between the space research service and other services in bands near 14 and 15 GHz Potential interference from data relay satellite systems

Deleted reference to the power flux-density limits given in Recommendation ITU-R SF.358 which has been suppressed and also updated the footnote which states that the Recommendations to be brought to the attention of SGs 8 and 9, which no longer exist, so that it will now be brought to the attention of SG 5.

Draft revision of Recommendation ITU-R SA.1414-1

Doc. <u>7/15</u>

Characteristics of data relay satellite systems

Recommendation ITU-R SA.1414-1 has been revised to update the characteristics of the European data relay satellite system.

Draft revision of Recommendation ITU-R SA.1155-1

Doc. 7/16

Protection criteria related to the operation of data relay satellite systems

This revision amended *considering h*) by adding the inter-satellite service in the list of services used by data relay satellite systems. The band 25.5-27 GHz has also been added in the list of bands for data relay satellite return feeder link.

Draft revision of Recommendation ITU-R SA.1276-4

Doc. <u>7/1</u>7

Orbital locations of data relay satellites to be protected from the emissions of fixed services systems operating in the band 25.25-27.5 GHz

Recommendation ITU-R SA.1276 has been revised in order to include the geostationary orbital positions 9°E and 20.4°E in *recommends* 1.

Aggregate interference criteria for space-to-Earth data transmission systems operating in the Earth exploration-satellite and meteorological-satellite services using satellites in low-Earth orbit

The present revision of Recommendation ITU-R SA.1026 incorporates new reference systems in the bands 7 750-7 900 MHz, 8 025-8 400 MHz and 25.5-27 GHz and simplifies the current provisions by proposing a single aggregate interference criteria per frequency band.

Draft revision of Recommendation ITU-R SA.1027-4

Sharing criteria for space-to-Earth data transmission systems in the Earth exploration-satellite and meteorological-satellite services using satellites in low-Earth orbit

The present revision of Recommendation ITU-R SA.1027 simplifies the current provisions by proposing a single sharing criteria per frequency band, consistently with associated revision of Recommendation ITU-R SA.1026.

Draft revision of Recommendation ITU-R TF.538-4

Measures for random instabilities in frequency and time (phase)

This revised version of the Recommendation has been updated to reflect changes in timing metrology and analysis since the current version was adopted. It introduces additional methods and definitions to deal with time varying instabilities in the time domain, and extends the computation of time domain instability to a larger fraction of the data length.

<u>Draft new Recommendation ITU-R RS.[RFI-SENSOR_REPORTING]</u>

Detection and resolution of radio frequency interference to Earth exploration-satellite service (passive) sensors

Article **15** of the Radio Regulations (RR) describes the procedure for the resolution of cases of harmful interference. For the cases of radio frequency interference (RFI) to EESS (passive) sensors, the administration with jurisdiction over the sensor (or its operating agencies) shall provide to the administration having jurisdiction over the transmitting stations full particulars relating to the harmful interference. The data fields to be provided shall, whenever possible, be given in the form indicated in RR Appendix **10**. As RR Appendix **10** was designed with terrestrial services in mind, its applicability related to RFIs detected by EESS(passive) sensors is very limited. To be noted that passive remote sensors are detecting an increasing number of interference instances, in the order of several hundreds of RFI sources and that the interference which are distributed worldwide. This ITU-R Recommendation provides the information specific for reporting of harmful interference to passive sensors, and its Annex 1 contains a template which should be used, whenever possible, with the list of data fields and supporting information.

Doc. <u>7/18</u>

Doc. 7/23

Doc. 7/19

Doc. <u>7/24</u>

Doc. 7/25

Doc. 7/27

Doc. 7/28

Telecommunication requirements for manned and unmanned deep-space research

The required bit rates for deep-space research are aligned with Rec. ITU-R SA.1015. Uchinoura and Byalalu sites are added to the list of current SRS earth stations. Ranging parameters are deleted from the bit-rate requirements table (Table 1), and they are moved to the navigation and tracking requirements table (Table 2). Description of ranging systems in section 4.5 is revised. Specification of antenna gains in Table 6 is revised for 34 GHz, instead of 100 GHz and 37 GHz.

Draft revision of Recommendation ITU-R SA.1018-0

Hypothetical reference system for systems comprising data relay satellites in the geostationary orbit and their user spacecraft in low-Earth orbits

This Recommendation was last approved in 1994 and so was due for a revision. A revision to the Recommendation taking into account the latest developments is presented.

Draft revision of Recommendation ITU-R SA.1019-0

Frequency bands and transmission directions for data relay satellite systems

The table on data relay satellite frequency bands and directions of transmission is revised to include additional frequency bands. Additionally some clarification in some texts are included.

Annex 3

Topics to be addressed at meetings of Working Parties 7B, 7C and 7D held prior to the meeting of Study Group 7 and for which draft Recommendations may be developed

Working Party 7B

Maximum allowable degradation to radiocommunication links of the space research and space operation services arising from interference from emissions and radiations from other radio sources (PDRR ITU-R SA.1743) - See Annex 7 to Document $\frac{7B}{112}$

System design guidelines for Earth exploration-satellites operating in the band 8 025-8 400 MHz (PDRR ITU-R SA.1810-0) - See Annex 8 to Document 7B/112

Interference criteria for service links in data collection systems in the Earth exploration-satellite and meteorological-satellite services (PDRR ITU-R SA.1163-2) - See Annex 9 to Document $\frac{7B}{112}$

Sharing and coordination criteria for service links in data collection systems in the Earth exploration-satellite and meteorological-satellite services (PDRR ITU-R SA.1164-2) - See Annex 10 to Document $\frac{7B}{112}$

Performance criteria for data dissemination, data collection and direct data transmission readout systems in the Earth exploration-satellite service and meteorological-satellite service (PDRR ITU-R SA.1159-3) - See Annex 11 to Document 7B/112

Aggregate interference criteria for data dissemination and direct data transmission readout systems in the Earth exploration-satellite and meteorological-satellite services using satellites in the geostationary orbit (PDRR ITU-R SA.1160-2) - See Annex 12 to Document 7B/112

Sharing and coordination criteria for data transmission systems in the Earth exploration-satellite and meteorological-satellite services using satellites in geostationary orbit (PDRR ITU-R SA.1161-1) - See Annex 13 to Document $\frac{7B}{112}$

Working Party 7C

Typical technical and operational characteristics of Earth exploration-satellite service (active) systems using allocations between 432 MHz and 238 GHz (PDNR ITU-R RS.[ACTIVE_CHAR]) - See Annex 3 to Document 7C/91

Performance and interference criteria for active spaceborne sensors (PDRR ITU-R RS.1166-4) - See Annex 4 to Document 7C/91

Feasibility of sharing between active spaceborne sensors and other services in the range 420-470 MHz (PDRR ITU-R RS.1260) - See Annex 6 to Document $\frac{7C}{91}$

Evaluation method to determine compatibility between receiving earth stations in the radionavigation-satellite service (space-to-Earth) and spaceborne sensors in the Earth exploration-satellite (active) service in the 1 215-1 300 MHz band (PDNR ITU-R RS.[EESS_RNSS_METH]) - See Annex 10 to Document 7C/91

Use of remote sensing systems in the study of climate change and the effects thereof (PDRR ITU-R RS.1883) - see Annex 11 to Document 7C/91

Use of remote sensing systems for data collections to be used in the event of natural disasters and similar emergencies (PDRR ITU-R RS.1859) - See Annex 12 to Document 7C/91
