



Radiocommunication Bureau (BR)

Circular Letter CR/406

4 July 2016

To Administrations of Member States of the ITU

Subject: Implementation of decisions of the World Radiocommunication Conference, Geneva, 2015 (WRC-15) and associated transitional arrangements related to terrestrial services

1 The World Radiocommunication Conference, Geneva, 2015 (WRC-15), adopted a partial revision of the Radio Regulations and decided that the revised provisions shall enter into force on 1 January 2017, with the exception of those provisions for which another date was specifically indicated. The purpose of this Circular Letter is to highlight the most relevant decisions of the Conference related to terrestrial services with a view to facilitating their implementation. For the complete list of decisions, please refer to the Final Acts of the Conference and to Circular Letter CR/389 of 29 January 2016 relating to the WRC-15 decisions included in the Minutes of Plenary meetings.

2 Decisions that entered into force on 28 November 2015

2.1 WRC-15 revised several Resolutions and Recommendations from previous conferences and adopted several new Resolutions. Among those, the following Resolutions, which relate to terrestrial services and are in force as of 28 November 2015, need to be taken into account by administrations in the relevant activities:

- Resolution 647 (Rev. WRC-15) dealing with spectrum management guidelines for emergency and disaster relief radiocommunications. WRC-15 encouraged administrations to communicate to the Bureau the up-to-date administration contact information and, where available, the frequencies or frequency bands for use in emergency and disaster relief operations. The Bureau will continue maintaining its database containing information from administrations for use in emergency situations.
- Resolution 760 (WRC-15) dealing with the use of the band 694-790 MHz in Region 1 by the mobile, except aeronautical mobile, service and by other services. Through this Resolution WRC-15 introduced new criteria to identify administrations potentially affected by the mobile service under No. 9.21 with respect to the aeronautical radionavigation service operating in countries mentioned in No. 5.312. Administrations may use these criteria for establishment of coordination requirements for their mobile service stations. The Bureau

will apply them when processing the relevant No. **9.21** submissions for the identification of affected administrations.

- WRC-15 also modified Resolutions **207**, **417**, **418**, **517**, **535**, **705**, **748**, **749** and **906** that are related to terrestrial services. However, these modifications have an editorial nature and therefore do not have impact on the activities of administrations and the Bureau.
- WRC-15 abrogated the following resolutions dealing with terrestrial services as of 28 November 2015: **67, 153, 232, 233, 358, 423, 644, 648, 649, 653, 654, 755, 806, 807, 808** and **957** due to the fact that the concerned activities have been completed or the objectives are no longer relevant.

2.2 WRC-15 introduced the allocation to the mobile, except aeronautical mobile, service in the band 694–790 MHz in Region 1 into the Table of Frequency Allocations and established the conditions for the use of this service. This allocation entered into force on 28 November 2015 as decided by WRC-12 in *resolves 2* of Resolution **232 (WRC-12)**. The attention of administrations is drawn to the fact that implementation of stations in the mobile service in this band shall be subject to the applications of procedures contained in the GE06 Agreement with respect to the broadcasting service and the No. **9.21** procedure with respect to the aeronautical radionavigation service in countries listed in No. **5.312** according to Resolutions **224 (Rev.WRC-15)** and **760 (WRC-15)**.

3 Decisions that enter into force on 1 January 2017

3.1 WRC-15 introduced new definitions of meteorological aids land station and meteorological aids mobile station in Nos. **1.108A** and **1.108B**.

3.2 WRC-15 adopted provision No. **5.265** that makes mandatory the application of Resolution **205 (Rev.WRC-15)** in the band 403–410 MHz. The Resolution deals with protection of the systems operating in the mobile-satellite service in the frequency band 406-406.1 MHz. WRC-15 added two new substantive elements to this Resolution:

- in *resolves 1* administrations are requested not to make new assignments within the frequency bands 405.9-406 MHz and 406.1-406.2 MHz under the mobile and fixed services; and

- by *instructs 1 the Director of the BR*, the BR is instructed to organize monitoring programmes on impact of unwanted emissions from systems operating in the frequency bands 405.9-406 MHz and 406.1-406.2 MHz on MSS reception in the band 406-406.1 MHz.

Consequently, as from 1 January 2017 the Bureau will be requesting the administrations, in case they submit assignments to fixed and mobile service stations in the bands 405.9-406 MHz and 406.1-406.2 MHz, to refrain from assigning these frequencies. The Bureau will also organize the above-mentioned monitoring programmes and inform administrations accordingly.

3.3 WRC-15 made the following changes in allocations related to terrestrial services and identifications for specific applications, together with the associated conditions for operation of the concerned services in the respective frequency bands:

- Allocation to the mobile service and identification for IMT of different parts of the band 470-698 MHz in some Region 2 countries and identification for IMT in several region 3 countries, subject to the application of No. **9.21** and, in some cases, the condition of operation on noninterference basis, as stipulated in Nos. **5.295**, **5.296A**, **5.308** and **5.308A**.
- Identification of the band 1 427-1 518 MHz for IMT in all three Regions, with exception of the band 1 452–1 492 MHz where the identification in Region 1 is limited to 54 countries.

The identification is subject to the application of No. **9.21** in Regions 1 and 3, as stipulated in Nos. **5.341A**, **5.341B**, **5.341C**, **5.346** and **5.346A**.

- Allocation of the band 3 300–3 400 MHz to the mobile, except aeronautical mobile, service on a primary basis and identification for IMT in a number of countries of all three Regions, on a non-interference basis with respect to the radiolocation service and/or subject to the application of No. 9.21 procedure, as stipulated in Nos. 5.429A, 5.429B, 5.429C, 5.429D, 5.429E and 5.429F. No. 5.429C also allocates this band to the fixed service in some Region 2 countries on a primary basis subject to specific conditions.
- Geographical extension of the primary allocation to the mobile, except aeronautical mobile, service in 3 400-3 600 MHz to entire Region 1 and in some Region 3 countries. Geographical extension of the primary allocation to the mobile, except aeronautical mobile, service in the band 3 400-3 500 MHz to entire Region 2. Abrogation of the secondary allocation to the aeronautical mobile service in the band 3 400 3 600 MHz in Region 1 and in the band 3 400-3 500 MHz to entire Regions 2 and 3. Extension of the identification for IMT of the band 3 400 3 600 MHz to entire Regions 1 and 2 as well as in a number of Region 3 countries, as stipulated in Nos. 5.430A, 5.431B, 5.432B and 5.433A. These allocations/identifications are subject to the applications of Nos. 9.17, 9.18 and/or No. 9.21 and a pfd limit.
- Identification of the band 3 600-3 700 MHz for IMT in some Region 2 countries subject to Nos. 9.17, 9.18 and 9.21 as well as a pfd limit, as stipulated in No. 5.434.
- Allocation of the band 4 200-4 400 MHz to the aeronautical mobile (R) service reserved exclusively for wireless avionics intra-communication systems (WAIC), as stipulated in No. **5.436**. Such use shall be in accordance with Resolution **424 (WRC-15)**.
- Identification of the band 4 800 4 900 MHz for IMT in one Region 2 country and the band 4 800 4 990 MHz in some Region 3 countries, under the condition that IMT stations shall not claim protection from other applications of the mobile service, as stipulated in Nos. 5.441A and 5.441B. In Region 3 this identification is also subject to No. 9.21 and a pfd limit.
- Allocation of the band 77.5-78 GHz to the radiolocation service on a primary basis in all three Regions limited to short-range radars for ground-based applications, including automotive radars, pursuant to No. **5.559B.**
- For the application of the regulatory provisions decided by WRC-15 that specifically apply to IMT, please refer to Circular Letter CR/391 of 29 February 2016 covering the identification of IMT stations in the mobile service.

3.4 WRC-15 also made several changes in allocations related to space services, which modified the conditions of operation of the terrestrial services in the respective frequency bands, as follows:

- Allocation of the band 13.4 13.65 GHz to the fixed-satellite service (space-to-Earth) on a primary basis in Region 1, limited to GSO systems. As a result, the band in question became a band shared between space and terrestrial services with equal rights. Consequently, transmitting stations of the fixed, mobile, radiolocation and radionavigation services may be involved in coordination with receiving earth stations of FSS under Nos. 9.17 and 9.18.
- Extension of applicability of the FSS (Earth-to space) allocation in the band 14.5 14.8 GHz to the applications other than feeder links for BSS, limited to geostationary satellite systems. However, due to the specific limitations imposed by Nos. 5.509D and 5.509F on such non-feeder links, Nos.9.17 and 9.18 do not apply with respect to these FSS applications.

- Abrogation of the allocation to the fixed satellite service (space-to-Earth) in the band 15.43

 15.63 GHz following the modification of No. 5.511A. As a result, the band ceases to be shared between space and terrestrial services with consequential implications for coordination of terrestrial services.
- Abrogation of the allocation to the fixed satellite service in the bands 15.4–15.43 GHz and 15.63–15.7 GHz following the suppression of No. **5.511D**. As a result, the bands ceases to be shared between space and terrestrial services with consequential implications for coordination of terrestrial services.

3.5 WRC-15 modified provisions Nos. **9.47** and **9.62** related to coordination procedures of Article **9** by introduction of an additional reminder in case of no reply. Administrations are invited to take these changes into account in their relevant coordination activities.

3.6 WRC-15 reviewed the description of data items **1EO** (1.5.10.1 – the frequency offset), **7A** (7.1 – the class of emission) and **7AB** (7.2- the necessary bandwidth) contained in Table 1 (Characteristics for terrestrial services) of Appendix **4**. These data items, which were previously required for notification only in the GE06 planning area and bands, become mandatory for notifications under provisions Nos. **11.2** and **9.21** also in the countries and bands outside the GE06 Agreement.

4 With respect to Resolution **809 (WRC-15)**, dealing with the agenda for the 2019 World Radiocommunication Conference and Resolution **810 (WRC-15)**, dealing with the preliminary agenda for the 2023 World Radiocommunication Conference, in accordance with standard practices, the necessary preparatory actions have been initiated and the results of the first session of the 2019 Conference Preparatory Meeting (CPM19-1) have been dispatched to the membership (see Administrative Circular CA/226 of 23 December 2015).

5 Finally, I wish to draw your attention to the provisions of Article **54** of the Constitution, which invites the Member States to notify the Secretary-General of their consent to be bound by the revisions of the Radio Regulations.

6 The Bureau remains at the disposal of your Administration for any clarification you may require with respect to the subjects covered in this Circular Letter.

François Rancy Director

Annexes: 2

Distribution:

- Administrations of Member States of ITU
- Members of the Radio Regulations Board

ANNEX 1

Table of correspondence between provisional and final numbers for new WRC-15 Resolutions and Recommendations

Provisional No.	Final No.	Provisional No.	Final No.	Provisional No.	Final No.
COM4/1	424	COM5/8	556	COM6/14	767
COM4/2	425			COM6/15	958
COM4/3	759	COM6/1	764	COM6/16	809
COM4/4	760	COM6/2	810	COM6/17	158
COM4/5	155	COM6/3	361	COM6/18	159
COM4/6	235	COM6/4	656	COM6/19	659
COM4/7	761	COM6/5	657	COM6/20	238
		COM6/6	658	COM6/21	160
COM5/1	655	COM6/7	765	COM6/22	239
COM5/2	156	COM6/8	766	COM6/23	161
COM5/3	31	COM6/9	557	COM6/24	162
COM5/4	40	COM6/10	362	COM6/25	99
COM5/5	762	COM6/11	426		
COM5/6	157	COM6/12	236	PLEN/1	163
COM5/7	763	COM6/13	237	PLEN/2	164

ANNEX 2

Table of correspondence between provisional and final numbers for new Article 5 footnotes approved by WRC-15

Provisional number	Final number
5.A14	5.133B
5.A116	5.228AA
5.A911	5.265
5.idR2a	5.295
5.idR3	5.296A
5.allocateR2	5.308
5.idR2b	5.308A
5.A25	5.328AA
5.R1a	5.341A
5.R2a	5.341B
5.R3g	5.341C
5.R1b	5.346
5.R3h	5.346A
5.R1a	5.429A
5.R1b	5.429B
5.B11	5.429C
5.C11	5.429D
5.R3d	5.429E
5.R3e	5.429F
5.IMT	5.431B
5.IMT2	5.434
5.A117	5.436
5.B117	5.437
5.A11	5.441A
5.R3f	5.441B
5.A111	5.460A
5.B111	5.460B
5.A192	5.461AA
5.B192	5.461AB
5.A112	5.474A
5.C112	5.474B
5.D112	5.474C
5.B112	5.474D
5.A15	5.484B

Provisional number	Final number
5.A161	5.499A
5.X161	5.499B
5.B161	5.499C
5.B161A	5.499D
5.C161	5.499E
5.A16	5.509B
5.B16	5.509C
5.D16	5.509D
5.E16	5.509E
5.F16	5.509F
5.C16	5.509G
5.5X	5.527A
5.A118	5.559B
