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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| PLENARY MEETING | **Addendum 24 to Document 12-E** |
|  | **3 October 2019** |
|  | **Original: Russian** |
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| Regional Commonwealth in the field of Communications Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 10 | |

10 to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention.

Introduction

As regards the principles for establishing the agenda of world radiocommunication conferences, the RCC Administrations consider that questions concerning changes to the Radio Regulations should not be included under agenda item 9.1 concerning the Report of the Director of the Radiocommunication Bureau (BR), but should instead be considered as stand-alone agenda items for the next WRC. The RCC Administrations propose to modify Resolution **804 (Rev. WRC-12)** accordingly.

The RCC Administrations propose the addition in the WRC-23 agenda of the following items:

• an upgrade of the status of the allocation to the Space Research Service in the frequency band 14.8-15.35 GHz;

• identification of the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz for IMT systems;

The RCC Administrations do not object to the inclusion in the WRC-23 agenda of *resolves* 2.2 and 2.3 of Resolution **810 (WRC-15)**, but object to the inclusion in the WRC-23 agenda of *resolves* 2.5 of Resolution **810 (WRC-15)**.

The RCC Administrations propose the examination of the proposed agenda items in line with the general principles that enable sharing between existing and future services in the frequency bands under consideration.

The RCC Administrations invite WRC‑19 to examine draft new Resolution **[RCC/WRC-23-AGENDA] (WRC-19)** as a basis for the agenda of WRC‑23, while suppressing existing Resolution 810 (WRC‑15).

The RCC Administrations propose the establishment of time-frames for the publication of the Report by the Director of BR to WRC on difficulties or inconsistencies encountered in the implementation of the Radio Regulations requiring examination by WRC, and the inclusion of appropriate provisions in Resolution **804 (Rev. WRC-12)** and in the draft new Resolution **[RCC/WRC-23-AGENDA] (WRC-19)**.

MOD RCC/12A24/1

RESOLUTION 804 (Rev.WRC‑19)

Principles for establishing agendas for world radiocommunication conferences

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

*a)* that, in accordance with No. 118 of the ITU Convention, the general scope of the agendas for world radiocommunication conferences (WRCs) should be established four to six years in advance;

*b)* Article 13 of the ITU Constitution relating to the competence and scheduling of WRCs and Article 7 of the Convention relating to their agendas;

*c)* that No. 92 of the Constitution and Nos. 488 and 489 of the Convention require conferences to be fiscally responsible;

*d)* that in Resolution 71 (Rev. Marrakesh, 2002), concerning the strategic plan of the Union, the Plenipotentiary Conference noted the increasingly complex and lengthy agendas for world radiocommunication conferences;

*e)* that Resolution 80 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference and Resolution **72 (Rev.WRC‑07)** recognize the positive contribution of regional and informal groups and the need for improved efficiency and fiscal prudence;

*f)* the relevant Resolutions of previous WRCs,

noting

*a)* that the number of issues addressed in agendas for WRCs has been growing, and that some issues could not be resolved adequately in the time allotted to the Conference, including conference preparations;

*b)* that some agenda items may have a greater impact on the future of radiocommunications than others;

*c)* that the human and financial resources of ITU are limited;

*d)* that there is a need to limit the agenda of conferences, taking account of the needs of developing countries, in a manner that allows the major issues to be dealt with equitably and efficiently;

*e)* that, in accordance with No. 90 of the Constitution, the interval between WRCs should normally be three to four years, to ensure that changes in technology and requirements of Member States are adequately reflected in conference agendas,

resolves

that the principles in Annex 1 should be used when developing future WRC agendas,

resolves to invite administrations

1 to use the template in Annex 2 in proposing agenda items for WRCs;

2 to participate in regional activities for the preparation of future WRC agendas,

instructs the Director of the Radiocommunication Bureau

to publish in the six official languages of the Union, at least [five\*] months before the next WRC, the Report of the Director of the Radiocommunication Bureau for the next WRC on difficulties and inconsistencies encountered in the implementation of the Radio Regulations requiring examination by WRC.

*[\* Editorial note: The time-frame for the publication of the Report must be linked to the time-frame for the publication of the CPM Report in accordance with Resolution ITU-R 2*]

MOD RCC/12A24/2

ANNEX 1 TO RESOLUTION 804 (Rev.WRC‑19)

Principles for establishing agendas for WRCs

1 A conference agenda shall include:

1.1) items assigned to it by the ITU Plenipotentiary Conference;

1.2) items on which the Director of the Radiocommunication Bureau has been requested to report;

1.3) items concerning instructions to the Radio Regulations Board and the Radiocommunication Bureau regarding their activities and concerning the review of those activities.

2 In general, a conference may include on a future conference agenda an item proposed by a group of administrations or an administration, if all the following conditions are met:

2.1) it addresses issues of a worldwide or regional character;

2.2) it is expected that changes in the Radio Regulations, including WRC Resolutions and Recommendations, may be necessary;

2.3) it is expected that required studies can be completed (e.g. that appropriate ITU‑R Recommendations will be approved) prior to that conference;

2.4) resources associated with the subject are kept within a range which is manageable for Member States and Sector Members, the Radiocommunication Bureau and ITU‑R Study Groups, Conference Preparatory Meeting (CPM).

3 Items meeting the requirements indicated in section 2 of this Addendum shall be included in the agenda of a future conference in the form of stand-alone items, not in the form of separate issues within the WRC agenda item under which the Director of the Radiocommunication Bureau submits a Report on the activities of the Radiocommunication Sector since the last WRC.

4 To the extent possible, agenda items arising from previous conferences, normally reflected in Resolutions, and which have been considered by two successive conferences, should not be considered, unless justified.

5 In addition, where possible, issues that could be addressed through actions undertaken by a Radiocommunication Assembly, particularly those not involving amendments to the Radio Regulations, shall not be included in the WRC agenda.

6 In developing the conference agenda, efforts should be made to:

*a)* encourage regional and interregional coordination on the subjects to be considered in the preparatory process for the WRC, in accordance with Resolution **72 (Rev.WRC‑07)** and Resolution 80 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, with a view to addressing potentially difficult issues well before a WRC;

*b)* include, to the extent possible, agenda items that are prepared within regional groups, taking into account the equal right of individual administrations to submit proposals for agenda items;

*c)* ensure that proposals are submitted with an indication of priority;

*d)* include in proposals an assessment of their financial and other resource implications (with the assistance of the Radiocommunication Bureau) to ensure that they are within the agreed budgetary limits for ITU‑R;

*e)* ensure that the objectives and scope of proposed agenda items are complete and unambiguous;

*f)* take into account the status of the ITU‑R studies related to the potential agenda items before considering them as possible candidates for future agendas;

*g)* distinguish between items intended to result in changes to the Radio Regulations and those dealing solely with the progress of studies;

*h)* arrange items on the agenda by subject to the extent possible.

**Reasons:** Questions concerning changes to the Radio Regulations, including questions concerning the allocation of new frequency bands to radio services or changes to the conditions of use thereof, must be examined as stand-alone WRC agenda items, not under item 9.1 regarding the Report of the Director of BR. In addition, publication deadlines should be established for the Report of the BR Director for the next WRC regarding difficulties or inconsistencies encountered in the implementation of the Radio Regulations requiring examination by the WRC.

NOC RCC/12A24/3

ANNEX 2 TO RESOLUTION 804 (Rev.WRC‑12)

Template for the submission of proposals for agenda items

ADD RCC/12A24/4

Draft New Resolution [RCC/WRC-23-AGENDA] (WRC-19)

Agenda of the 2023 World Radiocommunication Conference

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

...

resolves

to recommend to the Council that a world radiocommunication conference be held in 2019 for a maximum period of four weeks, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC‑19 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the frequency bands under consideration, to consider and take appropriate action in respect of the following items:

1.1 to consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the Space Research Service in accordance with Resolution **[RCC/SRS-15GHZ UPGRADE] (WRC-19)**;

1.2 to examine the question of the identification of the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz for IMT in accordance with Resolution **[RCC/IMT-4/7GHZ} (WRC-19)**;

...

instructs the Director of the Radiocommunication Bureau

1 to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC‑23;

2 to publish in the Union’s six official languages at least [five\*] months before the next WRC a report by the Director of the Radiocommunication Bureau for the next WRC on difficulties or discrepancies encountered in the application of the Radio Regulations requiring examination by the WRC;

*[\* Editorial note: The time-frame for the publication of the Report must be linked to the time-frame for the publication of the CPM Report in accordance with Resolution ITU-R 2*]].

...

**Reasons:** The RCC Administrations propose the inclusion in the agenda of WRC-23 of two new items 1.1 and 1.2, and to establish a time-frame for publication of the report by the Director of BR to the next WRC on difficulties or inconsistencies encountered in the implementation of the Radio Regulations requiring examination by WRC.

ADD RCC/12A24/5

Draft New Resolution [RCC/SRS-15GHz UPGRADE]

Examination of the question of a possible upgrade to primary status of the secondary allocation to the Space Research Service in the frequency band 14.8‑15.35 GHz

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

*a)* that the frequency band 14.8-15.35 GHz is currently used by data relay satellites in inter-satellite links, which permits the establishment of communications with satellites in non-geostationary orbits (non-GSO), including manned flights in the Space Research Service (SRS);

*b)* that the frequency band 14.8-15.35 GHz is also used by existing high-speed data links from non-GSO satellites within the SRS and is planned for use in future systems;

*c)* that these satellites are needed for the operation of telescopes and/or other passive instruments used for measuring such phenomena as the Earth’s magnetosphere and solar flares;

*d)* that there is a need for broadband communication downlinks in the SRS for the purpose of transmitting future scientific data at high data transmission speeds;

*e)* that a number of space agencies are already considering the possibility of using this band for next-generation SRS satellites;

*f)* that the frequency band 14.8-15.35 GHz is currently allocated to the SRS on a secondary basis;

*g)* that the frequency band 14.8-15.35 GHz is currently allocated to the fixed and mobile services on a primary basis;

*h)* that the frequency band 15.2-15.35 GHz is currently allocated to the Earth exploration-satellite service (EESS) (passive) and SRS (passive) on a secondary basis;

*i)* that the frequency band 15.35-15.4 GHz is currently allocated to the EESS (passive), the radio astronomy service and the SRS (passive) on a primary basis;

*j)* that Recommendation ITU-R SA.1626 sets out the conditions for frequency sharing between the SRS (space-to-Earth) and the fixed and mobile services in the band 14.8-15.35 GHz, including pfd limits for the SRS;

*k)* that Recommendation ITU-R SA.510 sets out the conditions for frequency sharing between data relay systems operating in the SRS (space-to-space) and the fixed and mobile services in the frequency band 14.8-15.35 GHz, including pfd limits for the SRS;

*l)* that, owing to the small number of expected SRS earth stations that will be deployed worldwide (10-40 stations), coordination between systems in the fixed and land mobile communication systems and SRS stations will not impose excessive restrictions on any of the services;

*m)* that modern modulation methods together with the use of filters in high-speed data transmission links allow a significant reduction in out-of-band emissions, thereby minimizing possible interference for passive services in adjacent bands,

recognizing

*a)* that SRS operators must have stable regulatory certainty in order to be able to ensure long-term operation of systems in this service of public interest, and that operating on the basis of a secondary allocation conflicts with this objective;

*b)* that these space programmes represent long-term effort and investment that span across decades, from the time when the programme is officially decided, through the development period and the launch phase to the time when the corresponding satellites are in operation;

*c)* that space agencies are investing resources in the continuation of these programmes, providing subsequent satellites and payloads;

*d)* that upgrading to primary status the allocation of the frequency band 14.8-15.35 GHz for the SRS, together with appropriate measures to ensure adequate protection of existing primary allocations in that frequency band, will provide certainty for administrations and space agencies participating in satellite space programmes,

resolves to invite the World Radiocommunication Conference 2023

to examine, on the basis of the results of studies by the ITU Radiocommunication Sector, the possibility of upgrading the secondary status of the allocation to the Space Research Service to primary status in the frequency band 14.8-15.35 GHz while protecting existing primary services to which the frequency band is already allocated, as well as the primary allocations to passive services in the frequency band 14.8-15.35 GHz,

invites ITU-R

1 to investigate and identify all relevant scenarios that need to be considered in compatibility and sharing studies, taking into account the results of previous studies submitted in Recommendations ITU-R SA.510 and SA.1626;

2 to conduct and complete in time for WRC‑23 sharing and compatibility studies in order to determine the feasibility of upgrading the SRS allocation to primary status in the frequency band 14.8-15.35 GHz while protecting the primary fixed and mobile services to which that frequency band is allocated;

3 to determine the technical and regulatory conditions for stations in the Space Research Service operating in the frequency band 14.8-15.35 GHz, for the protection of existing primary services to which the frequency band is already allocated and of the primary allocations to passive services in the frequency band 15.35-15.4 GHz, if necessary,

invites administrations

to participate actively in the studies and provide the technical and operational characteristics of the systems involved by submitting contributions to ITU‑R.

**Reasons:** The frequency band 14.8-15.35 GHz currently allocated on a secondary basis is used intensively by data relay satellites in inter-satellite links, which allows the establishment of communications with non-GSO satellites including manned flights in the Space Research Service. This frequency band is also being considered for use in lunar and deep space missions. As a result of this, in the interests of long-term development of the SRS, there is a need for a primary allocation in the frequency band 14.8-15.35 GHz.

ATTACHMENT

Proposal concerning an additional agenda item on a possible upgrade to primary status of the secondary allocation to the Space Research Service in the frequency band 14.8-15.35 GHz

**Subject:** Proposal of a new WRC-23 agenda item

**Origin:** RCC

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| **Proposal:**  *To consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the Space Research Service.* | |
| ***Background/reason*:**  *In order to ensure the long-term possibility of development and guaranteed access to spectrum when developing new space systems and upgrading existing space systems, there is a need for frequency bands allocated to the Space Research Service on a primary basis.* | |
| ***Radiocommunication services concerned*:**  *Fixed, mobile.* | |
| ***Indication of possible difficulties*:**  *There is need to review compatibility studies carried out earlier.* | |
| ***Previous/ongoing studies on the issue*:**  *Rec. ITU-R SA.1626-1, which is devoted to this possible agenda item, was adopted.* | |
| ***Studies to be carried out by*:**  *Study Group 7* | ***with the participation of*:**  *Study Group 5* |
| ***ITU‑R Study Groups concerned*:**  ***[…]*** | |
| ***ITU resource implications, including financial implications (refer to CV126)*:**  *None, everything will be carried out within the framework of existing study groups and their working parties.* | |
| ***Common regional proposal*:** Yes | ***Multicountry proposal*:** No  ***Number of countries*:** |
| ***Remarks*** | |

ADD RCC/12A24/6

Draft New Resolution [RCC/IMT-4/7GHz]

Studies of technical and operational issues and regulatory provisions with a view to allowing the use of IMT systems in the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

*a)* that International Mobile Telecommunications (IMT) is intended to provide telecommunication services on a worldwide scale, regardless of location and type of network or terminal;

*b)* that IMT systems have contributed to global economic and social development;

*c)* that IMT systems are now being evolved to provide diverse usage scenarios and applications such as enhanced mobile broadband, massive machine-type communications and ultra-reliable and low-latency communications;

*d)* that there is a need to continually take advantage of technological developments in order to increase the efficient use of spectrum and facilitate spectrum access;

*e)* that adequate and timely availability of spectrum and supporting regulatory provisions is essential to realize the objectives in Recommendation ITU‑R M.2083;

*f)* that harmonized worldwide bands and harmonized frequency arrangements for IMT are highly desirable in order to achieve global roaming and the benefits of economies of scale;

*g)* that radiocommunication conditions in the band 4-7 GHz allow the creation of a high-capacity IMT network with a large coverage area;

*h)* that the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz contain a large amount of contiguous spectrum allocated in all three Regions for the mobile service on a primary basis;

*i)* that identification of frequency bands for IMT must protect existing services and ensure the possibility of their future development;

noting

*a)* that as a rule there is a lead time between the allocation of frequency bands by world radiocommunication conferences and the deployment of systems in those bands;

*b)* that it is important to support harmonized use of spectrum for IMT in order to provide accessible and high-quality mobile broadband services;

*c)* that IMT encompasses both IMT-2000, IMT-Advanced, and IMT-2020 collectively, as described in Resolution ITU‑R 56‑2;

*d)* that Question ITU‑R 229/5 seeks to address the further development of IMT;

*e)* Recommendation ITU‑R M.2083, on the framework and objectives of the future development of IMT for 2020 and beyond;

*f)* that Report ITU‑R M.2320 addresses future technology trends of terrestrial IMT systems;

*g)* that Report ITU‑R M.2370 analyses trends impacting future IMT traffic growth beyond the year 2020 and estimates global traffic demands for the period 2020 to 2030;

*h)* Recommendation ITU-R M.2101 Modelling and simulation of IMT networks and systems for use in sharing and compatibility studies;

*i)* Report ITU‑R M.2376, on technical feasibility of IMT in the frequency bands above 6 GHz,

recognizing

*a)* that in order to ensure the future development of IMT it is important to ensure the timely identification of additional spectrum;

*b)* that in identifying frequency bands for IMT, the use of the bands by other services and the evolving needs of those services should be taken into account;

*c)* that no additional regulatory or technical constraints should be imposed on services to which the band is currently allocated on a primary basis,

invites ITU-R

1 to conduct and complete in good time studies of the technical, operational and regulatory issues pertaining to the possible use of IMT systems in the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz, taking into account:

– the technical and operational characteristics of terrestrial IMT systems that would operate in this frequency range, including the evolution of IMT through advances in technology and spectrally efficient techniques;

– the deployment scenarios envisaged for IMT‑2020 systems and the related requirements of high data traffic such as in dense urban areas and/or in peak times;

2 to conduct and complete in good time for WRC-23 the appropriate sharing and compatibility studies for IMT systems, taking account of the protection of services to which the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz are allocated on a primary basis, and also taking account of the need to protect passive services in the light of No. **5.458**,

resolves to invite the World Radiocommunication Conference 2023

to examine, on the basis of the results of the above studies, the feasibility of identifying the bands 4 400-4 990 MHz and 6 525-7 100 MHz for IMT;

invites administrations

to participate actively in these studies by submitting contributions to ITU-R.

**Reasons:** IMT needs additional frequency bands below 24 GHz. In most RCC countries, cellular mobile networks are being developed in bands below 2.6 GHz. Radiofrequency bands allocated for the mobile service and identified for IMT in bands below 2.6 GHz have a small amount of contiguous spectrum for any one operator and do not allow full advantage to be taken of the benefits of modern IMT systems. In order to ensure effective use of modern IMT systems, it is essential for a broad band of contiguous radio frequencies to be available for each operator. These criteria are met by the frequency band 3.4-3.6 GHz, within which it is possible to use 200 MHz of contiguous spectrum, although the presence in that band of operational satellite communication systems precludes its use for IMT in a number of countries. IMT networks in the 4-7 GHz band will have a high capability in terms of both capacity and coverage area.

ATTACHMENT

Proposal concerning an additional agenda item on the identification of the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz for IMT

**Subject:** Proposal of a new WRC-23 agenda item

**Origin:** RCC

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| **Proposal:**  *To examine the question of identification of the frequency bands 4 400-4 990 MHz and 6 525-7 100 MHz for IMT in accordance with Resolution* ***[RCC/IMT-4/7GHz] (WRC-19)*** | |
| ***Background/reason*:**  *To ensure worldwide/regional development of IMT systems with high capacity and large coverage area.* | |
| ***Radiocommunication services concerned*:**  *Fixed, fixed-satellite service, radio astronomy service, EESS (passive)* | |
| ***Indication of possible difficulties*:**  *Compatibility studies are needed.* | |
| ***Previous/ongoing studies on the issue*:**  *In the frequency band 4400-4990 MHz, the CPM Report to WRC-15 (item 1.1)* | |
| ***Studies to be carried out by*:**  *Study Group 5* | ***with the participation of*:**  *Study Group 4* |
| ***ITU‑R Study Groups concerned*:**  *Study Group 7* | |
| ***ITU resource implications, including financial implications (refer to CV126)*:**  *None, everything will be carried out within the framework of existing study groups and their working parties.* | |
| ***Common regional proposal*:** Yes | ***Multicountry proposal*:** No  ***Number of countries*:** |
| ***Remarks*** | |

RCC/12A24/7

The RCC Administrations do not object to the inclusion in the WRC-23 agenda of *resolves* 2.2 and 2.3 of Resolution **810 (WRC-15)**:

– “to conduct, and complete in time for WRC‑23, studies for a possible new allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, in accordance with Resolution **656 (WRC‑15)**”;

– “in accordance with Resolution **657 (WRC‑15)**, to review the results of studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations for space weather sensors, with a view to providing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services”.

The RCC Administrations object to the inclusion in the WRC-23 agenda of *resolves* 2.5 of Resolution **810 (WRC-15)**:

– “to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470‑694 MHz in Region 1 on the basis of the review in accordance with Resolution **235** **(WRC‑15)**”.

**Reasons:** In Region 1 the frequency band 470-694 MHz is used intensively by existing services including the broadcasting service, and it is therefore too soon to consider the question of introducing IMT systems in this frequency band.

SUP RCC/12A24/8

RESOLUTION 810 (WRC‑15)

Preliminary agenda for the 2023 World Radiocommunication Conference

**Reasons:** Given the proposed new Resolution with the WRC-23 agenda, Resolution **810 (WRC‑15)** is no longer required.

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