

**1st ITU INTER-REGIONAL WORKSHOP
ON WRC-15 PREPARATION
(Geneva, 4 – 5 December 2013)**

**RCC Preparation for
the World
Radiocommunication
Conference 2015**

**1ST ITU INTER-REGIONAL
WORKSHOP ON WRC-15
PREPARATION**

**GENEVA, SWITZERLAND
4-5 DECEMBER 2013**

www.itu.int/go/ITU-R/WRC-15-irwsp-13/



**Regional Commonwealth in
the field of Communications**





Regional Commonwealth in
the field of Communications

RCC Preparation for the World Radiocommunication Conference 2015

Main Tasks of the WRC: Review of the Radio Regulations

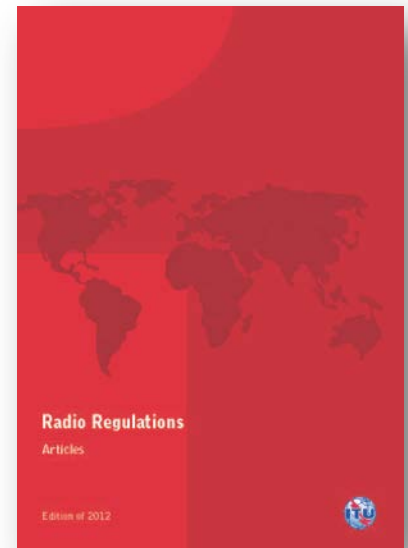
**Contributions from
Member States**

**Contributions from Group
of Member States**

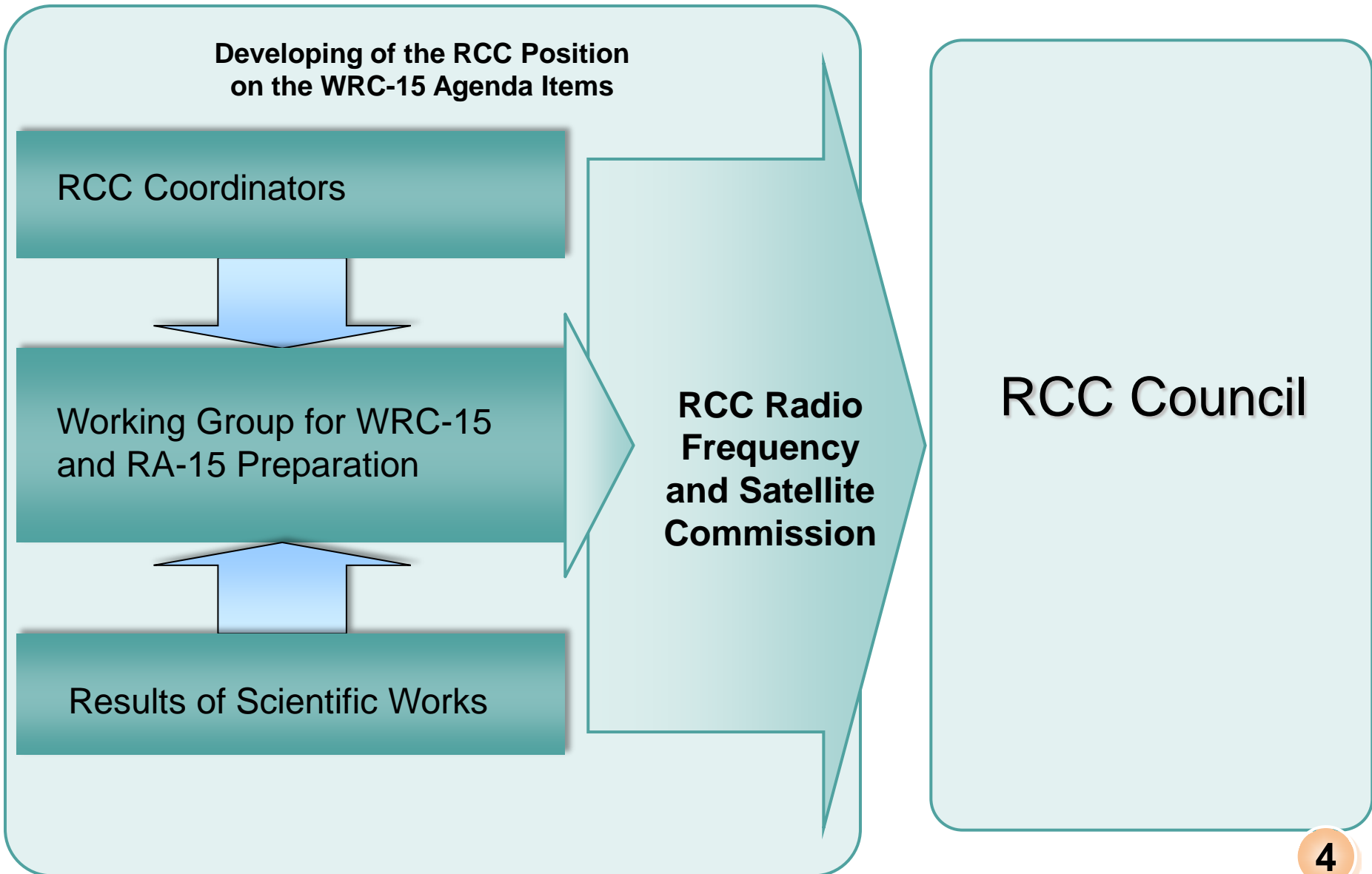
**Contributions from
Regional Organisations**

**World Radio-
communication
Conference**

**New Edition of
Radio Regulations**



Preparation of the RCC Administrations for the WRC-15



Working Group for WRC and RA preparation

WG WRC/RA was established by RCC Radio Frequency and Satellite Commission and responsible for WRC-15 and RA-15 preparation

Chairman : Albert Nalbandian, Armenia (albert.nalbandian@ties.itu.int)

WG WRC/RA develops draft Position and draft RCC Common Proposals for the work of the Conference (for actual WG WRC/RA documents see <http://www.en.rcc.org.ru>).

Since 2012 WG WRC/RA had 3 meetings.

1st meeting: May 2012

2nd meeting: December 2012

3^d meeting: November 2013

Next meeting: April 2014

Basic principles of the Developing of the RCC Position on the WRC-15 Agenda Items

RCC Position

1

**Equitable Access to Radio
Frequencies and
any Associated Orbits**

2

**Compatibility Between
Radioservices**

3

**Providing Regulatory and Technical
Provisions for Development of New
Technologies**



**PRELIMINARY POSITION OF THE RCC
ADMINISTRATIONS ON AGENDA ITEMS OF THE
WORLD RADIOCOMMUNICATION CONFERENCE 2015**

(1st November, 2013 version)

Available on the RCC Web site:

<http://www.en.rcc.org.ru>



Agenda Item 1.1

1.1 To consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12)

Agenda Item 1.1 (1/3) Spectrum allocations to the MS and identification of frequency bands for IMT

The RCC Administrations support allocation of additional frequency bands on a primary basis to the mobile service and identification for International Mobile Telecommunications (IMT) on the condition of optimizing the use of already identified frequency bands.

The RCC Administrations consider that by 2020 the overall spectrum requirements for IMT systems could be fulfilled for the RCC countries by using 1065 MHz of spectrum including the bands already identified for the IMT. However the spectrum requirements for IMT systems for provision of coverage don't exceed 220-260 MHz in the bands below 1.5 GHz including the bands already identified for the IMT.

The RCC Administrations consider that the assessment of possibilities and conditions for frequency allocation to the MS and identification of bands for IMT should take into account the protection and development of other services that have allocations within the subject bands and adjacent bands. The RCC Administrations consider that allocation to the MS on a primary basis and identification for IMT as well as identification for IMT of the bands which were already allocated to the MS on a primary basis should not pose any additional constraints for the use of the bands by incumbent services.

Agenda Item 1.1 (2/3) Spectrum allocations to the MS and identification of frequency bands for IMT

The RCC Administrations object to the primary allocation to the MS and identification for IMT systems, as well as identification for IMT in the following bands already allocated to the MS on a primary basis due to their intense use by the incumbent services and possible unacceptable interference to the stations of these services:

- ✓ 470-694 MHz used by BS;
- ✓ 1300-1350 MHz and 1350-1375 MHz used by ARNS under RR No. 5.337, RLS and RNSS under RR No 5.337A;
- ✓ 1375-1400 MHz used by RNS under RR No 5.338;
- ✓ 1427-1525 MHz used by aeronautical telemetry operating under RR Nos. 5.342 and 4.10;
- ✓ 1525-1559 MHz and 1626.5-1660.5 MHz used by MSS;
- ✓ 1695-1710 MHz used by meteorological-satellite service (downlink);
- ✓ 2025-2110 MHz and 2200-2290 MHz used by EESS, SRS and SOS;
- ✓ 2700-2900 MHz, 2900-3100 MHz and 3300-3400 MHz used by RLS;
- ✓ 3600-3800 MHz, 3800-4200 MHz and 4500-4800 MHz used by FSS (downlink).

Agenda Item 1.1 (3/3) Spectrum allocations to the MS and identification of frequency bands for IMT

The RCC Administrations consider that the possible identification of the band 410-430 MHz for IMT should be determined by the results of sharing studies between IMT systems and stations of other services.

The RCC Administrations object to global allocation of the band 3400-3600 MHz to the MS on a primary basis and its identification for IMT.

The RCC Administrations consider that the possible identification of the bands 4400-4500 MHz and 4800-5000 MHz for IMT should be determined by the results of compatibility studies between IMT systems and stations of other services.

The RCC Administrations consider that the possible primary allocation to the MS in the band 5725-5850 MHz to implement RLAN should be determined by the results of compatibility studies between the MS stations and stations of other services.

The RCC Administrations support compatibility studies between IMT systems and stations of other services to determine the possibility and conditions of identification for IMT in the band 5925-6425 MHz



Agenda Item 1.2

1.2 To examine the results of ITU R studies, in accordance with Resolution 232 (WRC-12), on the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and take the appropriate measures

Agenda Item 1.2 (1/5) The use of the frequency band 694-790 MHz by the mobile service in Region 1

BS and MS spectrum requirements in the band 694-790 MHz

The RCC Administrations are of the view that the BS requirements (taking into account the development of new technologies in broadcasting including HDTV) are 8 multiplexes for digital broadcasting in the band 470-790 MHz. These requirements can be met in case the frequency band 694-790 MHz is further used for broadcasting.

The MS spectrum requirements for IMT implementation are determined in the position the RCC administrations towards WRC-15 Agenda item 1.1.

The RCC Administrations consider that the use of the MS shall be determined by the administrations depending on their spectrum requirements for the BS.

Agenda Item 1.2 (2/5) The use of the frequency band 694-790 MHz by the mobile service in Region 1

Compatibility studies

The RCC Administrations support the requirement to define the technical and regulatory conditions for the mobile service in the considered frequency band for the protection of other services based on the characteristics and protection criteria of these services developed by the responsible ITU-R Working Parties.

The RCC Administrations are of the opinion that the MS operating conditions in the considered frequency band shall be based on the technically justified criteria and compatibility estimation methods.

In the compatibility studies between the MS and broadcasting service the minimum cumulative losses (MCL) method and Monte-Carlo method are supported to be used in the frequency band 694-790 MHz and in the adjacent frequency bands.

Agenda Item 1.2 (3/5) The use of the frequency band 694-790 MHz by the mobile service in Region 1

Refinement of lower edge of allocation to the mobile service (Issue A)

The RCC Administrations consider that the lower edge of allocation to the mobile service (including guard band) shall not be lower than 694 MHz

The IMT frequency arrangement shall be chosen taking into account the compatibility with the ARNS and with the terrestrial TV broadcasting systems.

The RCC Administrations consider the frequency arrangement based on the existing A5 arrangement in accordance with Recommendation ITU-R M.1036-4 as a preferable one.

The potential frequency arrangements for IMT systems shall be taken into account while defining the protection conditions of the terrestrial TV broadcasting and ARNS systems.

While choosing the frequency arrangement the usage of the frequency band 694-790 MHz by the ancillary broadcasting applications shall also be taken into account.

Agenda Item 1.2 (4/5) The use of the frequency band 694-790 MHz by the mobile service in Region 1

Protection of the broadcasting service (Issue B)

The RCC Administrations consider that the allocation conditions to the MS in the frequency band 694-790 MHz shall include the required technical and regulatory limitations of MS for providing protection for the BS. Imposing restrictions or application of additional requirements for the BS shall not be allowed.

The RCC Administrations support the method under which the regulatory and technical conditions for the MS are defined directly in the Radio Regulations or in WRC Resolution to provide protection of the BS.

To protect the BS from the MS interference the provisions of GE-06 Agreement shall be applied as well as additional regulatory and technical conditions taking into account the aggregate interference effect from the MS stations in the main and adjacent frequency bands.

Agenda Item 1.2 (5/5) The use of the frequency band 694-790 MHz by the mobile service in Region 1

Protection of ARNS (Issue C)

The RCC Administrations consider that the allocation conditions for the MS in the frequency band 694-790 MHz shall include the required technical and regulatory limitations of the MS to provide protection for the ARNS. Imposing restrictions or application of additional requirements to the ARNS shall not be allowed.

The protection of the ARNS applied in RCC countries under RR No.5.312 shall be ensured by application of coordination procedures under RR No.9.21 for the MS in relation to the ARNS using the coordination thresholds based on the ITU-R study results taking into account the aggregate interference.

Agenda Item 1.3



1.3 To review and revise Resolution 646 (Rev.WRC-12) Broadband public protection and disaster relief (PPDR), in accordance with Resolution 648 (WRC-12)

Agenda Item 1.3 (1/1)

Broadband public protection and disaster relief (PPDR)

The RCC Administrations support the use of IMT family standards for the purpose of building public protection and disaster relief networks in the frequency bands earlier identified for PPDR, but allocation of certain new frequency bands to MS to provide operation of these systems is not supported.

The RCC Administrations consider that spectrum requirements for broadband PPDR applications should be identified taking into account the intended use of the IMT standard family.

The RCC Administrations recognize that requirements for PPDR systems such as the volume of available and used spectrum, applicable scenarios of PPDR use, could substantially vary depending on the country's national interests.



Agenda Item 1.4

1.4 To consider possible new allocation to the amateur service on a secondary basis within the band 5 250-5 450 kHz in accordance with Resolution 649 (WRC-12)

Agenda Item 1.4 (1/1) New allocation to the amateur service within the band 5 250-5 450 kHz

The RCC Administrations do not support the allocation of the frequency band 5250 – 5450 kHz or part of this band to the amateur service on the secondary basis, due to its intense use by fixed / land mobile services and oceanographic radars, as well as unacceptable interference from amateur stations to the existing systems that is confirmed by the studies.

The RCC Administrations consider that during studies of possible additional allocations to the amateur service in the frequency band 5250 - 5450 kHz it is necessary to take into account the need for protection of the FS and MS systems in the frequency band 5250 – 5450 kHz, oceanographic radars in the frequency band 5250-5275 kHz and for protection of systems, which operate in adjacent frequency bands.



Agenda Item 1.5

1.5 To consider the use of frequency bands allocated to the fixed-satellite service not subject to Appendices 30, 30A and 30B for the control and non-payload communications of unmanned aircraft systems (UAS) in non-segregated airspaces, in accordance with Resolution 153 (WRC-12)

Agenda Item 1.5 (1/1)

Unmanned aircraft systems (UAS)

The RCC Administrations consider that the use of unplanned FSS allocations by satellite component of UAS CNPC links shall not impose additional constraints on the use of these bands by existing and future FSS and other primary service systems and shall provide the existing level of protection for these systems.

The RCC Administrations consider that the use of unplanned FSS allocations for operation of satellite component of UAS CNPC links shall be harmonized in all three Regions.



Agenda Item 1.6

1.6 To consider possible additional primary allocations:

1.6.1 To the FSS (Earth-to-space and space-to-Earth) of 250 MHz in the range between 10 - 17 GHz in Region 1;

1.6.2 To the FSS (Earth-to-space) of 250 MHz in Region 2 and 300 MHz in Region 3 within the range 13-17 GHz;

and review the regulatory provisions on the current allocations to the FSS within each range, taking into account the results of ITU-R studies, in accordance with Resolutions 151 (WRC-12) and 152 (WRC-12), respectively

Agenda Item 1.6 (1/2)

Additional primary allocations to the FSS

Agenda item 1.6.1 - FSS in Region 1

The RCC Administrations support the additional primary allocation of 250 MHz to the FSS (Earth-to-space and space-to-Earth) in the range between 10 and 17 GHz in Region 1 subject to protection of existing primary services in these and the adjacent frequency bands.

Agenda item 1.6.2 - FSS in Region 2 and 3

The RCC Administrations consider that with the additional allocation of 250 MHz to the FSS (Earth-to-space) in Region 2 and 300 MHz in Region 3 in frequency bands between 13 and 17 GHz, protection of the existing primary services in these frequency bands, including those allocated in Region 1, shall be provided.

Agenda Item 1.6 (2/2)

Additional primary allocations to the FSS

Agenda item 1.6.1 and agenda item 1.6.1

The new FSS allocations are preferable in frequency bands which are contiguous to the existing FSS allocations and also in bands, where the allocation is possible on the worldwide basis.

The RCC administrations consider that allocation of additional spectrum for the FSS on the worldwide basis (in the three Regions) has advantage over regional allocation (in one Region) for planning satellite communication networks and for providing efficient territory coverage.

The RCC Administrations consider it necessary to study the methods of protection for SRS and RAS systems having allocations on a secondary basis, in the frequency bands of interest and in the adjacent frequency bands, ensuring the observance of the existing protection criteria for SRS and RAS from the impacts of the FSS systems.

The RCC Administrations do not support the allocation of frequency bands 10.6-10.68 GHz and 15.35-15.4 GHz to the FSS due to the complicated sharing with the passive services allocated to these frequency bands.



Agenda Item 1.7

1.7 To review the use of the band 5 091-5 150 MHz by the fixed-satellite service (Earth-to-space) (limited to feeder links of the non-geostationary mobile-satellite systems in the mobile-satellite service) in accordance with Resolution 114 (Rev.WRC-12)

Agenda Item 1.7 (1/1)

The use of the band 5 091-5 150 MHz by the FSS

The RCC Administrations support the requirements for defining/updating conditions of operating feeder links of NGSO FSS systems and aeronautical radionavigation service (ARNS) stations in the frequency band 5091-5150 MHz.

The conditions should be taken into consideration when developing the proposals for future usage of the mentioned frequency band by new systems in FSS supporting feeder links (Earth-to-space) of NGSO MSS systems.



Agenda Item 1.8

1.8 To review the provisions relating to earth stations located on board vessels (ESVs), based on studies conducted in accordance with Resolution 909 (WRC-12)

Agenda Item 1.8 (1/1)

Earth stations located on board vessels (ESVs)

The RCC Administrations consider that possible modifications to Resolution **902 (WRC-03)** with the purpose to reflect the current ESV technologies and technical characteristics, should be made only ensuring protection to the existing radio services and not limiting their further development.

The RCC Administrations consider it reasonable to keep using the protective distance criterion in order to regulate sharing between ESV and stations of other services in the frequency bands specified in Resolution **902 (WRC-03)**, and do not object to possible decrease in protective distances in view of the modern level of ESV development, while protecting other services having allocations in the frequency bands 5925-6425 MHz and 14-14.5 GHz. The completed studies shall determine exact values of protective distances from a vessel to a coast line in the frequency bands under consideration.



Agenda Item 1.9

1.9 To consider, in accordance with Resolution 758 (WRC-12):

1.9.1 possible new allocations to the fixed-satellite service in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space), subject to appropriate sharing conditions;

1.9.2 the possibility of allocating the bands 7 375-7 750 MHz and 8 025-8 400 MHz to the maritime mobile-satellite service and additional regulatory measures, depending on the results of appropriate studies.

Agenda Item 1.9 (1/1)

Allocation to FSS and MSS in the 7/8 GHz range

1.9.1 Allocation to FSS in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space)

The RCC Administrations don't object to new allocations to the FSS in the bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space) subject to compatibility with existing terrestrial and satellite services without imposing additional constraints on these services.

1.9.2 Allocation to MMSS in the bands 7 375-7 750 MHz and 8 025-8 400 MHz

The RCC Administrations don't object to the allocations of the frequency bands 7375-7750 MHz and 8025-8400 MHz to the MMSS subject to compatibility with existing terrestrial and space services without imposing additional constraints on these services.

The RCC Administrations consider that additional regulatory provisions for MMSS should be developed ensuring protection for the existing services in the above frequency bands.



Agenda Item 1.10

1.10 To consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution 234 (WRC-12)

Agenda Item 1.10 (1/1)

Allocation to MSS in the frequency range 22 -26 GHz

The RCC Administrations consider that an additional spectrum allocation to the MSS in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including IMT, within the frequency range from 22 GHz to 26 GHz is possible only if the compatibility with existing terrestrial and space services is ensured in the same and adjacent frequency bands (taking into account RR Nos. 5.149 and 5.340 RR), and if such allocations to MSS do not impose additional constraints on the existing services. However, the level of unwanted emissions from earth and space stations in the MSS in the frequency bands 22.01-22.21 GHz; 22.21-22.5 GHz; 22.81-22.86 GHz and 23.07-23.12 GHz shall be limited to ensure the protection of the EESS (passive), SRS (passive) and radio astronomy service.

The RCC Administrations consider that when determining additional spectrum requirements for the MSS, it is necessary to take into account already existing allocations to the MSS in the Ka-band.



Agenda Item 1.11

1.11 To consider a primary allocation for the Earth exploration-satellite service (Earth-to-space) in the 7-8 GHz range, in accordance with Resolution 650 (WRC-12)

Agenda Item 1.11 (1/1)

Primary allocation for the EESS (Earth-to-space) in the 7-8 GHz range

The RCC administrations do not object to allocation of frequency band 7190-7250 MHz on a primary basis to the Earth exploration-satellite service (Earth-to-space) provided the compatibility with systems of SOS, SRS, FS and MS is ensured.

Compatibility conditions between EESS (Earth-to-space) and other existing services in the range of 7-8 GHz shall be incorporated in the RR.



Agenda Item 1.12

1.12 To consider an extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz, in accordance with Resolution 651 (WRC-12)

Agenda Item 1.12 (1/1)

Extension of the allocation to the EESS (active)

The RCC Administrations consider that worldwide extension of the available allocation to the EESS (active) in the frequency band 9300-9900 MHz by up to 600 MHz would be more preferable within the frequency band 9900-10500 MHz, and the extension would be possible only subject to defining the conditions of providing protection for systems in other services operating in the mentioned and adjacent frequency bands.

The RCC Administrations consider that in case of additional allocation of up to 600 MHz to the EESS (active) this frequency band shall be used only by the EESS systems with the pfd limits obtained through the ITU-R studies and also subject to not claiming protection from the systems in the services having allocations in this frequency band.

The RCC Administrations consider that protection shall be ensured for systems in other services, specifically RLS in the frequency band 9900-10500 MHz as well as for radiolocation stations operating in the frequency band 9200-9300 MHz deployed on river boats and sea ships.



Agenda Item 1.13

1.13 To review No. 5.268 with a view to examining the possibility for increasing the 5 km distance limitation and allowing space research service (space-to-space) use for proximity operations by space vehicles communicating with an orbiting manned space vehicle, in accordance with Resolution 652 (WRC-12)

Agenda Item 1.13 (1/1) The extension of use for the SRS (space-to-space) for proximity operations by space vehicles

The RCC Administrations support the removal of 5 km distance limitation in RR No. **5.268** and the extension of use for the SRS (space-to-space) for proximity operations by space vehicles while maintaining the power flux density limit at the Earth's surface in the frequency band 410-420 MHz in RR No. **5.268**.



Agenda Item 1.14

1.14 To consider the feasibility of achieving a continuous reference time-scale, whether by the modification of coordinated universal time (UTC) or some other method, and take appropriate action, in accordance with Resolution 653 (WRC-12)

Agenda Item 1.14 (1/1)

Future of the Coordinated Universal Time time-scale

The RCC Administrations are in the opinion that in case of transition to a continuous reference time-scale there should be no negative consequences in respect of existing telecommunication services.

The RCC Administrations are in the opinion that a transition period would be required for implementing a new scale in case of favorable finding on feasibility of using such time-scale.



Agenda Item 1.15

1.15 To consider spectrum demands for on-board communication stations in the maritime mobile service in accordance with Resolution 358 (WRC-12)

Agenda Item 1.15 (1/1) *On-board communication stations in MMS in the UHF bands*

The RCC Administrations recognize the importance of on-board communications to the safe ship operations (alarm and fire warnings, mooring operations and passenger traffic control) and suppose the possible congestion of frequencies for on-board communications in some geographic areas of the world.

The RCC Administrations do not support the additional frequency allocation to meet on-board communications due to intensive usage of VHF band by the other services and applications and also since the demand in additional frequencies for on-board communication has not been proved by the study results.

The RCC Administrations suppose that the more effective usage of the existing frequencies (12.5 kHz channel spacing, modern equipment usage) is sufficient to avoid possible congestion in the large ports.

The RCC Administrations support the incorporation of the provisions to the RR which allow more effective usage of the existing allocation for on-board communications stations in the MMS without allocation of new frequency bands.



Agenda Item 1.16

1.16 To consider regulatory provisions and spectrum allocations to enable possible new Automatic Identification System (AIS) technology applications and possible new applications to improve maritime radiocommunication in accordance with Resolution 360 (WRC-12)

Agenda Item 1.16 (1/1) *Automatic Identification System (AIS) and maritime Radiocommunication*

The RCC administration consider that:

✓ it is possible to identify frequency bands (channels) for implementation of enhanced AIS technology applications and new applications for enhanced maritime radiocommunication in accordance with Resolution **360 (WRC-12)**. However such identification should be conducted within the existing allocations to MMS and MSS taking into account EMC with existing services.

✓ for VDE terrestrial component it is feasible to use combination of VHF channels 24, 25, 26, 84, 85, 86 identified by WRC-12 for digital technologies in MMS.

✓ for AIS-ASM (AIS disaster-nonrelated) the identification of new channels is feasible (within MMS). However two options are available for consideration: channels 87 (157.375 MHz) and 88 (157.425 MHz) (option 1); channels 2027 (161.950 MHz) and 2028 (162.000 MHz) (option 2).

✓ allocation of new frequency bands to the MSS to be used by VDES satellite component is possible upon completion of compatibility studies between existing radio services.



Agenda Item 1.17

1.17 To consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support Wireless Avionics Intra-Communications (WAIC), in accordance with Resolution 423 (WRC-12)

Agenda Item 1.17 (1/1)

Wireless Avionics Intra-Communications (WAIC)

The RCC administrations consider that:

- ✓ WAIC systems shall operate in the frequency bands allocated to aeronautical services;
- ✓ frequency bands used by WAIC shall be harmonized in all three Regions;
- ✓ implementation of WAIC shall not impose constraints on other systems operating in common frequency bands.



Agenda Item 1.18

1.18 To consider a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band in accordance with Resolution 654 (WRC-12)

Agenda Item 1.18 (1/1)

Automotive short-range high-resolution radar

The RCC administrations have no objection to primary allocation to the radiolocation service of the 77.5-78.0 GHz frequency band under conditions, defined as a result of compatibility studies and providing the protection of existing services in the band 77.5-78.0 GHz and in the adjacent bands 76-77.5 GHz and 78-81 GHz.



Agenda Item 7

7 To consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit

Agenda Item 7 (1/1)

Regulatory provisions for Satellite Networks

The RCC Administrations consider as necessary further improvements in the notification, coordination and recording procedures for space services.

In particular, the RCC administrations find it necessary to amend RR Article 11 in order to bring full clarity to the Bureau's publication procedure for information related to bringing into use and suspending of frequency assignments (RR Nos 11.44B, 11.49).

The RCC Administrations do not support substantial modification of the Resolution **49 (Rev. WRC-12)** and extending of the provisions in the Resolution **552 (WRC-12)** to apply to other frequency bands pending the outcome of their practical applications by administrations and the Radiocommunication Bureau.

The RCC Administrations do not support the creation of group of experts for total revision of RR Articles 9 and 11; the consideration of proposals from administrations, aimed at modification of the individual provisions of the Radio Regulations related to notification procedures of satellite networks should be carried out in the established order during preparations to another WRC.



Agenda Item 8

8.2 To consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution 26 (Rev.WRC-07)

Agenda Item 8 (1/1) Footnotes to the Table of Frequency Allocations in RR Article 5

RCC Administrations support the ITU-R activity towards global harmonization of radio spectrum use through reasonable reduction of country footnotes to Article 5 of the Radio Regulations.

RCC Administrations consider that the given agenda item is not intended for addition of country names into the footnotes to Article 5 of the Radio Regulations.



Agenda Item 9

9 To consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.1 On the activities of the Radiocommunication Sector since WRC-12;

9.2 On any difficulties or inconsistencies encountered in the application of the Radio Regulations

Agenda Item 9.1 (1/8)

Activities of the ITU-R since WRC-12

Issue 9.1.1 Resolution **205 (Rev.WRC-12)** Protection of the systems operating in the mobile-satellite service in the band 406-406.1 MHz

Issue 9.1.2 Resolution **756 (WRC-12)** Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7.

Issue 9.1.3 Resolution **11 (WRC-12)** Use of satellite orbital positions and associated frequency spectrum to deliver international public telecommunication services in developing countries.

Issue 9.1.4 Resolution **67 (WRC-12)** Updating and rearrangement of the RR.

Issue 9.1.5 Resolution **154 (WRC-12)** Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1.

Issue 9.1.6 Resolution **957 (WRC-12)** Studies towards review of the definitions of fixed service, fixed station and mobile station.

Issue 9.1.7 Resolution **647 (Rev. WRC-12)** Spectrum management guidelines for emergency and disaster relief radiocommunication.

Issue 9.1.8 Resolution **757 (WRC-12)** Regulatory aspects for nano- and picosatellites.

Agenda Item 9.1 (2/8)

Activities of the ITU-R since WRC-12

Issue 9.1.1 Resolution 205 (Rev.WRC-12) Protection of the systems operating in the mobile-satellite service in the band 406-406.1 MHz

The RCC Administrations recognize the importance of Cospas-Sarsat system used for search and rescue operations

The RCC Administrations support activities aimed at ensuring the adequate protection of the Cospas-Sarsat system in the frequency band 406-406.1 MHz from emissions, which could cause harmful interference to the authorized uses in that frequency band (RR Nos. 5.267, 5.266), taking into account existing and future deployment of services in adjacent (390-406 MHz and 406.1-420 MHz) frequency bands.

Aggregate effect of emissions from stations operating in the adjacent frequency bands should be taken into consideration when conducting the relevant studies.

Agenda Item 9.1 (3/8)

Activities of the ITU-R since WRC-12

Issue 9.1.2 Resolution 756 (WRC-12) Studies on possible reduction of the coordination arc and technical criteria used in application of **No. 9.41** in respect of coordination under **No. 9.7**.

C/I criterion application:

The RCC Administrations support the use of C/I criterion instead of the $\Delta T/T$ criterion when justifying the inclusion of networks outside the coordination arc in the list of affected administrations when applying RR **No.9.41** and in application of RR **No 9.7** in cases when the criterion of coordination arc is not used.

Change of the $\Delta T/T$ criterion value and corresponding change of the C/I criterion:

The RCC Administrations propose to determine the value of C/I single entry interference criterion taking into account the value of $\Delta T/T$ increased up to 12-20%. New values of the C/I criterion is proposed to be applied in relation to new networks notified after the end of WRC-15:

- when applying RR **No 9.41**;
- when BR identifies affected administrations according to **RR No 9.7** and in cases when the coordination arc criterion is not used
- when applying RR No. **11.32A**;
- during coordination by administrations.

Agenda Item 9.1 (4/8)

Activities of the ITU-R since WRC-12

Issue 9.1.2 (Cont.) Resolution 756 (WRC-12) Studies on possible reduction of the coordination arc and technical criteria used in application of **No. 9.41** in respect of coordination under **No. 9.7**.

Application of permissible pfd mask

The RCC Administrations object to application of the pfd mask-based method since the proposed pfd mask does not protect networks that are more sensitive to interference, than typical ones, and does not exclude specific calculations in respect to the affected networks.

Reduction of the coordination arc size

The RCC Administrations consider it necessary to continue to study a reasonability of the further reduction of the coordination arc (for frequency bands 4/6 GHz from ± 8 to ± 6 degrees, 11/12/13/14 GHz from ± 7 to ± 5 degrees and 20/30/40 GHz from ± 8 to ± 7 degrees) and proposals from other countries concerning the reduction of the coordination arc. Any way the position is in favour of retaining RR **No 9.41** as it is.

Agenda Item 9.1 (5/8)

Activities of the ITU-R since WRC-12

Issue 9.1.3 Resolution 11 (WRC-12) Use of satellite orbital positions and associated frequency spectrum to deliver international public telecommunication services in developing countries.

Draft position is being developed.

Issue 9.1.4 Resolution 67 (WRC-12) Updating and rearrangement of the RR.

The RCC Administrations recognize the need to examine the Radio Regulations in order to remove redundant information, outdated and other provisions which are not used.

The RCC Administrations consider that the update, review and rearrangement of the Radio Regulations should not lead to the complication of the text or change in the content of the reviewed provisions of the Radio Regulations.

Agenda Item 9.1 (6/8)

Activities of the ITU-R since WRC-12

Issue 9.1.5 Resolution 154 (WRC-12) Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1.

The RCC Administrations support the development of possible technical and regulatory measures in some countries in Region 1 in order to support existing and future FSS earth stations within the band 3400-4200 MHz used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information.

In order to protect the FSS earth stations from IMT networks in the band 3400-3600 MHz in some countries in Region 1 it is possible to use technical conditions of **RR No.5.340A**.

The RCC Administrations consider that technical and regulatory measures under Resolution **154 (WRC-12)** should not limit the use of the band 3400-4200 MHz by other existing and planned systems and services in other countries, including SOS for the purpose of spacecraft control.

Agenda Item 9.1 (7/8)

Activities of the ITU-R since WRC-12

Issue 9.1.6 Resolution **957 (WRC-12)** Studies towards review of the definitions of fixed service, fixed station and mobile station.

The RCC Administrations consider that current definitions in the Radio Regulations do not prevent from using the existing applications in the fixed and mobile services

The RCC Administrations consider that any revision of definitions (fixed service, fixed station, mobile station) should not degrade existing conditions for sharing between radio services.

Issue 9.1.7 Resolution **647 (Rev. WRC-12)** Spectrum management guidelines for emergency and disaster relief radiocommunication.

The RCC Administrations support the establishment of spectrum management guidelines applicable in emergency and disaster relief operations.

Agenda Item 9.1 (8/8)

Activities of the ITU-R since WRC-12

Issue 9.1.8 Resolution 757 (WRC-12) Regulatory aspects for nano- and picosatellites.

The RCC Administrations consider that necessity to develop special regulatory aspects for coordination and notification of nano- and picosatellites can be defined after gathering and summarizing of technical and operational parameters of nano- and picosatellites, including information on possibility of their usage in the interest of particular radiocommunication services, and also based on analysis of current practical notification of nano- and picosatellites and also considering that any changes to the notification procedures of satellite networks operating nano-and picosatellites should not lead to complications in the use of other satellite networks.

Agenda Item 9.2 (1/1)

Difficulties or inconsistencies encountered in the application of the Radio Regulations

The RCC administrations support measures to eliminate any difficulties or inconsistencies encountered in the application of the Radio Regulations.



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

Draft position is being developed.



Regional Commonwealth in the field of Communications

Thank you for your attention!