
PLEANARY MEETING

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Note by the Secretary-General
NABA INFORMATION PAPER

I have the honour to bring to the attention of the Conference, at the request of the North American Broadcasters Association (NABA) the annexed information paper.

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Secretary-General

Annex: 1 (English only)

ANNEX

Introduction

The World Radiocommunication Conference (WRC-12) which will be held in Geneva, Switzerland from January 23-February 17, 2012 will make decisions on new frequency allocations to Radiocommunication Services, amendments to the international Radio Regulation procedures and technical regulations and adopt a draft agenda for the next conference to be held in 2015/2016 (WRC-16).

A number of the WRC-12 Agenda Items are concerned with changes to the International Regulations which will affect broadcasting and the ability of broadcasters to deliver and distribute content in an efficient and cost effective manner.

This paper outlines NABA's positions on WRC-12 Agenda Items which may affect NABA member operations.

In order to respond to the challenge, this paper documents NABA's positions for each conference Agenda Item of interest to the North American broadcast community.

AGENDA ITEM 1.4

1.4 to consider, based on the results of ITU-R studies, any further regulatory measures to facilitate introduction of new aeronautical mobile (R) service (AM(R)S) systems in the bands 112-117.975 MHz, 960-1 164 MHz and 5 000-5 030 MHz in accordance with Resolutions 413 (Rev.WRC-07), 417 (WRC-07) and 420 (WRC-07);

Resolution 413 (Rev.WRC-07)

Use of the band 108-117.975 MHz by the aeronautical mobile (R) service

Background

At WRC-07 the allocation to the AM(R)S in the band 108-112 MHz was further limited only to ground based systems that transmit navigational information in support of air navigation functions, while the band 112-117.975 MHz was opened to all AM(R)S systems subject to Resolution 413 (Rev.WRC-07). Studies have been completed on the investigation of any compatibility issues between the analogue broadcasting and AM(R) services that may arise from the introduction of AM(R) S systems in the band 112-117.975 MHz. These studies indicate that no harmful interference will arise from the introduction of AM(R) S systems in the band 112-117.975 MHz into analogue FM broadcasting receivers below 108 MHz and that the both services can operate on a compatible basis. Hence no further ITU-R studies are needed towards the development of technical criteria for the protection of analogue FM broadcasting receivers below 108 MHz from AM(R) S emissions in the band 112-117.975 MHz.

Regarding the compatibility with digital broadcasting service below 108 MHz, the matter will be pursued under traditional ITU-R activities and outside the WRC process.

To enable the performance of the studies, the final CPM report includes an example modification of Resolution 413 (Revision WRC-07) to invite the ITU-R to study the compatibility between AM(R) S service and digital audio broadcasting systems and develop new or revised Recommendations on the AM(R)S/Digital Sound Broadcasting compatibility. The example modified Resolution in the final CPM report fully reflects WBU-TC's views and, if adopted by WRC-12, will ensure the performance of future ITU-R studies on the compatibility between Digital Sound Broadcasting systems and AM(R)S would not impose additional constraints to Digital Sound Broadcasting systems.

NABA POSITION

NABA fully supports the findings of the CPM report on the use of the band 108-117.975 MHz by the aeronautical mobile (R) service and Resolution 413 (Rev.WRC-07)

AGENDA ITEM 1.22

1.22 to examine the effect of emissions from short-range devices on Radiocommunication services, in accordance with Resolution 953 (WRC-07);

Resolution 953 (WRC-07): *Protection of Radiocommunication services from emissions by short-range radio devices*

Background

Resolution **953 (WRC-07)** and WRC-12 Agenda item 1.22 invite the ITU-R to study emissions from short-range devices (SRDs), in particular radio frequency identification devices (RFIDs), operating inside and outside the frequency bands designated for ISM applications (RR No. **5.138** and No. **5.150**) to ensure adequate protection of radiocommunication services. This Resolution considers the deployment of SRDs, which can typically cross borders, such as RFIDs and ultra-wideband (UWB) devices, across various frequency bands and recognizes the work already carried out on UWB by ITU-R.

Four methods have been identified to satisfy this Agenda item:

- **Method A** proposes to keep the current practice with solutions from national or regional regulations and from relevant ITU-R Recommendations and Reports, as appropriate;
- **Method B** proposes to develop a general WRC Resolution inviting the ITU-R to study the regional and global harmonization of SRDs;
- **Method C** proposes to recognize a limited number of harmonized frequency bands, emission levels and other relevant technical characteristics for SRD applications, either by a WRC Resolution or regulatory changes in RR Article **5** for SRDs, similar to those in specific bands for ISM applications, including limits on the aggregated use of SRDs or total radiation of SRDs;

- **Method D** proposes to add RR provisions to define SRD applications and their conditions of operation.

NABA POSITION

NABA believes that the current practice with technical assistance from relevant ITU-R Recommendations and Reports can be maintained in the future and therefore supports methods-to-satisfy this Agenda item that do not require changes to the Radio Regulations (Method A of the CPM Report).

AGENDA ITEM 1.19

1.19 to consider regulatory measures and their relevance, in order to enable the introduction of software-defined radio and cognitive radio systems, based on the results of ITU-R studies, in accordance with Resolution 956 (WRC-07);

Resolution 956 (WRC-07): Regulatory measures and their relevance to enable the introduction of software-defined radio and cognitive radio systems

Summary

After the review and analysis of the agenda item, it was concluded that there is no need to modify the Radio Regulations for the implementation of software-defined radios.

NABA POSITION

For software defined and cognitive radio systems NABA supports “no changes” to the Radio Regulations and suppression of Resolution 956. (METHOD B1 of the CPM Report).

AGENDA ITEM 1.5

1.5 to consider worldwide/regional harmonization of spectrum for electronic news gathering (ENG), taking into account the results of ITU-R studies, in accordance with Resolution 954 (WRC-07);

Resolution 954 (WRC-07): Harmonization of spectrum for use by terrestrial electronic news gathering systems

Background

This agenda item is to consider worldwide/regional harmonization of spectrum for electronic news gathering (ENG), taking into account the results of ITU-R studies, in accordance with Resolution 954 (WRC-07).

Three methods have been identified to satisfy the agenda item

Method A is approval of a WRC Resolution encouraging the development of a database of frequencies used in each country for ENG; and, no change to the ITU Radio Regulations (RR)

This method provides a mechanism to rationalize ENG spectrum usage by maintaining a database of country-specific ENG bands with required technical and operational requirements for deployment. This database can be used to conduct an analysis of frequencies used to provide administrations with information on tuning ranges in use regionally and worldwide. It will also provide foreign broadcasters with the needed information to ensure that they deploy with

equipment that will operate within a given country and allow broadcasters to seek approval for spectrum use.

Method B proposes to include in a WRC Recommendation/Resolution a list of frequency bands for harmonization of tuning ranges for ENG use to the extent achievable on a regional/worldwide basis. The tuning ranges/frequency bands considered under this method would take into account those currently allocated to broadcasting, FS and MS in the Radio Regulations, as they are already used by ENG systems. Thus, there is no need to change the Table of Frequency Allocations in RR Article 5. Worldwide/regional harmonization of ENG spectrum should be made in compliance with RR provisions relevant to the relevant frequency bands and should not constrain usage of existing services allocated in these bands. Regional groups are encouraged to submit contributions at WRC-12 for tuning ranges to the extent achievable. The ITU-R Recommendations and Reports referenced in the CPM text could be used for guidance by administrations in developing specific tuning ranges for consideration under this method.

Method C comprises the development and approval of ITU-R Recommendations/Reports within the regular activities of the ITU-R Study Groups, addressing measures that would provide some level of harmonization for the use of ENG applications.

This can be achieved through the development and approval of ITU-R Recommendation(s)/Reports listing the preferred tuning ranges/frequency bands on a country, regional or worldwide basis for ENG applications.

This method could also be complemented by guidance (for example a universal access procedure) on the operators of ENG from country to country in order to coordinate frequency access.

These preferred tuning ranges for ENG do not preclude the use of these bands by any application of the services to which they are allocated, and do not establish any priority in the RR.

This method would not require any action at WRC-12 and would not modify the RR.

Method D proposes a WRC Recommendation with a list of frequency bands/tuning ranges for ENG use intended for harmonization to the extent achievable on a regional/worldwide basis. In addition, the method proposes a WRC Resolution intended to encourage the development of a database of frequency bands which may be available for cross-border deployment in each country for ENG and other relevant information. The Resolution and the Recommendation encourage further study on ENG in the ITU-R to maintain and update these documents.

NABA POSITION

NABA supports methods to satisfy this agenda which do not require regulatory action by the WRC or the development of ENG databases. (Method C of the CPM Report).

AGENDA ITEM 1.2

1.2 *taking into account the ITU-R studies carried out in accordance with Resolution 951 (Rev.WRC-07), to take appropriate action with a view to enhancing the international regulatory framework;*

Resolution 951 (Rev.WRC-07): *Enhancing the international spectrum regulatory framework*

Background

ITU-R carried out studies in accordance with Resolution 951 (Rev.WRC-07). General allocation or procedural issues relating to general spectrum management solutions for enhancing the Radio Regulations (RR) have been examined to meet the demands of current, emerging and future radio applications, while taking into account existing services and usage. Extensive ITU-R studies were undertaken and various solutions have been developed which reflect the differing views. Beyond the general analysis of the four options in Resolution 951 (Rev.WRC-07), different studies related to the issue(s) of convergence and how to reflect current and future technologies in the international spectrum regulatory framework have been addressed. These studies reviewed the current regulatory framework with the view to address the objectives in specific (Issue A) or generic (Issue B) manner. The attempt to develop broad regulatory changes that would apply across a significant portion of the Radio Regulations has been challenging.

Two categories of approaches were developed, one dealing with specific Radiocommunication Services and the other dealing with general principles. Under the specific service approach, four methods are proposed to accommodate convergence between applications of the FS and MS. **Method A1** proposes to keep the current practice and introduces no change to the RR. **Method A2** proposes changes to the definitions to the FS, fixed station, mobile station, and land station. **Method A3** proposes changes to the definition of the FS and other related provisions in the RR (Article 11 and Appendix 4). **Method A4** proposes modifications of Appendix 4 of the RR related to the FS without proposing any changes to the definitions. Under the general principles approach, the agenda item is addressed in terms of spectrum allocation principles. Two methods are proposed: **Method B1** proposes to keep the current practice and introduces no change to the RR, and **Method B2** proposes a WRC Resolution on additional principles of allocating spectrum complementing the existing provisions in the RR. Under **Method B2** several diverse options are provided addressing issues in addition to the basic principles outlined above.

NABA POSITION

NABA supports maintaining the existing Broadcasting Service definition in the Radio Regulations. Regarding possible changes by WRC-12 to the definitions of the Terrestrial Fixed or Mobile Services, NABA is of the view that such changes may not be enacted without the benefit of a thorough technical, operational and regulatory review of their impact on the BS, BSS and FSS (CPM method A1).

AGENDA ITEM 8.2 (Broadband)

Agenda Item 8.2: *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, taking into account Resolution 806 (WRC-07)*

Issue

Agenda Item 8.2 is a standing agenda item for the World Radiocommunication Conferences. Its purpose is to recommend to the ITU 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.

The principles for the development of the agenda for future World Radiocommunication Conferences are contained in Resolution **804 (WRC-07)**.

A number of Administrations are proposing the adoption of WRC-16 Agenda Item for the allocation of 500 MHz of spectrum for wireless broadband applications in the 400MHz-6GHz range. The target frequency segment is heavily used by broadcasting for over-the-air content delivery (Terrestrial and Satellite), electronic news gathering and distribution of program material. In the event parts of the broadcasting spectrum is reallocated or repurposed for other uses, broadcasters will be forced to make substantial new capital investment in new distribution and ENG facilities and equipment. Over-the-Air broadcasting and satellite delivery of content will become problematic, at best, and future opportunities for the delivery of new services such as mobile TV and 3D TV will be severely diminished.

NABA Position

NABA believes that any consideration of extension of mobile services into the broadcasting bands below 790 MHz would substantially hinder the future development of digital over-the air terrestrial television platform.

- The current linear terrestrial delivery of broadcasting is a very spectrum efficient method to reach large number of viewers and therefore it should be preserved.
- Consideration should be given to the spectrum needs of future forms of content delivery and distribution such as 3DTV, Mobile TV, Hybrid Broadcasting etc .

The use of the current FSS and BSS frequency allocations by satellite systems for broadcasting applications, as well as the ability of these systems to deliver and distribute broadcast services, should also be preserved.

The use of the existing mobile and fixed allocations should be studied and solutions should be found to improve their spectrum efficiency.

Technical sharing studies by the ITU-R should demonstrate compatibility between broadcasting and wireless broadband in a conclusive and unbiased manner before any reallocations are considered.

Compatibility studies between MS and other services as well as studies on spectrum demand should be performed in a Joint Task Group comprising all concerned ITU-R Study Groups.

Frequency reallocations should only be made with prior favourable results on service sharing studies while taking account of the spectrum requirements of the currently allocated services.