

Mr. John Giusti
Acting Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Mr. Giusti:

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch Agencies, approves the release of three draft Executive Branch proposals for WRC-11 agenda items 1.5, 1.19 and 1.22.

NTIA developed a new resolution to support agenda item 1.5. This resolution provides a mechanism to rationalize electronic news gathering (ENG) spectrum usage by maintaining a database of country specific ENG bands with required technical and operational requirements for deployment. NTIA proposes no change (NOC) for agenda item 1.19. Software defined radio and cognitive radio system technologies can be introduced without changes to the International Telecommunication Union (ITU) Radio Regulations. NTIA also proposes no change (NOC) for agenda item 1.22. Short-range device usage does not require changes to the ITU Radio Regulations.

These draft proposals consider the Federal agencies' input toward the development of U.S. Proposals for WRC-11. This package is forwarded for your consideration and review by your WRC-11 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,

(Original Signed July 22, 2009)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

Enclosures

UNITED STATES OF AMERICA
DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 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)*

Background Information: WRC-07 established Resolution 954 (WRC-07), which “invites ITU-R to carry out studies of ENG regarding possible solutions for global/regional harmonization in frequency bands and tuning ranges, taking into account: available technologies to maximize efficient and flexible use of frequency; system characteristics and operational practices which facilitate the implementation of these solutions.” Resolution 954 (WRC-07) calls for studies to determine to what extent harmonization of spectrum can be achieved for ENG services.

The contents of Report ITU-R BT.2069 make it clear that four distinct categories of ENG applications exist in support of the broadcasting service.¹ The harmonization and rationalization of spectrum for each of these applications should be considered separately, as their spectrum requirements are distinctly different, and the potential for spectrum re-use is also distinctly unique.

Spectrum harmonization provides many benefits but may not be feasible given the disparate use of spectrum by the many countries and the differing broadcasting standards in use in the three ITU Regions. Instead, a mechanism for spectrum rationalization may be more productive in allowing foreign broadcaster’s knowledge of and access to, the needed spectrum in a given country/region to ensure that international news-worthy events can be covered.

Proposal:

ADD USA/AI 1.5/1

DRAFT RESOLUTION [USA-1.5-ENG] (WRC-11)

Spectrum Management Guidelines for Electronic News Gathering (ENG)²

The World Radiocommunication Conference (Geneva, 2011),

considering

that some administrations may have different operational needs and spectrum requirements for electronic news gathering, depending on the circumstances;

recognizing

¹ The four categories of applications (Field Use, Field Transmission, Fleet Transmission, and Mobile Repeaters) are a generalization of the specific applications found in Section 3.1 on page 5 of Report ITU-R BT.2069-1.

² For the purpose of this Resolution, ENG represents all applications ancillary to broadcasting, such as terrestrial electronic news gathering, electronic field production, TV outside broadcasting, wireless radio microphones, and radio outside production and broadcast.

- a) that broadcasting ancillary services can be utilized as part of an administration's telecommunications/information and communication technologies (ICTs) systems in service of management in emergency and disaster situations for early warning, prevention, mitigation, and relief;
- b) that Recommendation ITU-R M.1824 provides system characteristics of television outside broadcast, electronic news gathering (ENG) and electronic field production (EFP) in the mobile service for use in sharing studies;
- c) that Recommendation ITU-R F.1777 provides system characteristics of television outside broadcast, electronic news gathering and electronic field production in the fixed service for use in sharing studies;
- d) that Report ITU-R BT.2069 provides spectrum usage and operational characteristics of terrestrial ENG, television outside broadcast (TVOB) and EFP systems,

noting

- a) that when an international news-worthy event happens, broadcasters often have little to no lead time in which to prepare for deployment;
- b) that there is a critical requirement to perform immediate spectrum management actions, including frequency coordination, sharing and spectrum reuse, within an administration where an international news-worthy event takes place;
- c) that the identification of frequency availability within individual administrations within which equipment could operate, or the use of spectrum-flexible equipment that allows for operation in various spectrum access scenarios, may ease the interoperability and/or networking, with mutual cooperation and consultation, especially in international news-worthy events that draw broadcasters regionally or globally,

noting further

that it is in the interest of administrations and their broadcasters to have access to updated information on national spectrum planning for ENG use,

resolves

- 1 to encourage administrations to consider global and/or regional frequency bands/ranges for ENG when undertaking their national planning and to communicate this information to the broadcasting community;
- 2 to encourage and assist the broadcasting community in developing a database of available frequencies, technical and operational requirements, and spectrum authorization points of contact as appropriate for global usage of ENG systems,

instructs the Director of the Radiocommunication Bureau

1 to assist the broadcasting community in coordinating their ENG usage for regional/global international news-worthy events by maintaining a link on the ITU-R website to a community database of currently available ENG frequencies, ENG technical and operational requirements, and spectrum authorization points of contact as appropriate;

2 to report on the progress on this Resolution to subsequent World Radiocommunication Conferences,

urges administrations

1 to provide the broadcasting community with the relevant information concerning their national ENG frequency allocations, ENG spectrum management practices, and appropriate governmental points-of-contact for ENG usage within their administration;

2 to assist the broadcasting community in keeping the database up to date on an ongoing basis by notifying the broadcasting community of any modifications to the information requested above.

Reasons: Information on ENG usage around the world, which the broadcasters can maintain in a database, would enable broadcasters to obtain access as necessary. Resolution [USA-1.5-ENG] 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 will provide foreign newscasters 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. It will also provide manufacturers with a knowledge base of required spectrum parameters that will enable them to build common-use equipment that will leverage economies-of-scale for the worldwide ENG market.

UNITED STATES OF AMERICA
DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 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)*

Background Information: Resolution 956 (WRC-07), complementary to WRC agenda item 1.19, considers a number of means for implementing software-defined radio and cognitive radio system technologies. These include the possible use of a worldwide harmonized cognitive supporting pilot channel and the usefulness of having means to assist in the determination of local spectrum usage, such as wireless or wired access to a database or to other networks to support access and connectivity, and therefore support the use of these systems. Resolution 956 (WRC-07) also notes that without additional means, it may not be possible for a radio system to discover receive-only usage. Receive-only systems would include those operating in Earth exploration-satellite (passive) and radio astronomy allocations.

Various ITU-R groups have generally agreed that the SDR/CRS technologies could potentially be implemented in stations as part of any radiocommunication service, except perhaps in some passive remote sensing services. This finding points to the lack of practicality in adding generic provisions for SDR and CRS technologies in the Radio Regulations.

The Constitution (CS) of the ITU, No. 197, stipulates that “all stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations.” No need for any additional provisions in the Radio Regulations to enable the introduction of CRS and SDR technologies in stations of any radiocommunication service has been identified. Furthermore, there is no need for similar or redundant provisions in the Radio Regulations to guarantee that these technologies will not deprive stations in any radiocommunication service, using any other technology, from operating in their allocated and assigned bands in accordance with the existing Radio Regulations.

Proposal:

ARTICLE 1

Terms and definitions

NOC USA/AI 1.19/1

Reasons: No changes to Article 1 (Terms and definitions) of the Radio Regulations are necessary to enable the introduction of SDR and CRS technologies. This is consistent with CPM Method A (no regulatory changes required for SDR).

ARTICLE 5

Frequency allocations

NOC USA/AI 1.19/2

Reasons: No changes to Article 5 (Frequency allocations) of the Radio Regulations are necessary to enable the introduction of SDR and CRS technologies. This is consistent with CPM Method A (no regulatory changes required for SDR).

UNITED STATES OF AMERICA
DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.22: *Examine the effect of emissions from short-range devices on radiocommunication services, in accordance with Resolution 953 (WRC-07)*

Background Information: The United States implements a flexible regulatory regime in the ISM and certain other bands, setting basic technical requirements that facilitate spectrum sharing among license-exempt and short-range devices while minimizing constraints on product designs. This regime has led to the implementation of a variety of license-exempt and short-range devices.

The United States believes that the regulation of short-range devices is primarily a national matter. Based on experience with implementation of short-range devices, there is no need for any modification to the international Radio Regulations to accommodate them.

Proposal:

ARTICLE 1

Terms and definitions

NOC USA/AI 1.22/1

Reasons: The regulation of short-range devices is primarily a national matter and does not require any modifications to the Radio Regulations. There is no need for international regulation of such devices.

ARTICLE 5

Frequency allocations

NOC USA/AI 1.22/2

Reasons: The regulation of short-range devices is primarily a national matter and does not require any modifications to the Radio Regulations. There is no need for international regulation of such devices.