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Information Society and Media Directorate-General

Electronic Communications Policy
Radio Spectrum Policy Group
RSPG Secretariat

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RSPG OPINION ON THE

MAIN THEMES OF WRC-12 OF INTEREST FOR EU-WIDE SUPPORT

1. Introduction

The RSPG confirms, as recently stated in the RSPG Work programme for 2009, the necessity to identify as early as possible the main themes of the WRC-12 which are of particular interest for the EU policies and which require an EU-wide support. This RSPG opinion should ensure that overall policy goals could be supported during the development of technical positions (European Common Proposals).

This opinion echoes the two opinions adopted by the RSPG on WRC-07 which were adopted in 2005 and 2007 and which were addressed to the European Commission. Following these RSPG Opinions on WRC-07, the European Commission provided political guidance for the negotiation process of the WRC-07 inter alia via Communications to the European Parliament and Council.

Today, CEPT has started the preparation of the next WRC to be held in 2012 and reviewed all agenda items for WRC-12. CEPT produced an explanatory document on each of them, the so-called "CEPT brief". The initial discussions which have taken place during 2008 within CEPT and in ITU-R meetings, together with the initial intention of Europe when the WRC-12 agenda has been adopted during WRC-07, are the main drivers for determining the main themes for WRC-12 which are of EU-interest.

The agenda for WRC-12 was agreed at the previous WRC (WRC-07 Resolution 805) and was formally established by the ITU council with the concurrence of a majority of the Member States. This agenda is given in Annex 1.

In this opinion on the main themes of WRC-12 relevant for EU interest, the reference to each relevant Community policies is made under each theme.

2. Relevant Community Policies for WRC-12

There are several Community policies which are relevant for WRC-12: e.g. information society, environment, transport, space policy, audiovisual policy, research and development. The importance of right international spectrum regulations in support of these Community policies has to be underlined as lastly demonstrated in the RSPG opinion on WRC-07 adopted in February 2007.

The task of identifying WRC-12 agenda items which are of EU interest is complex since there are some agenda items for which there were already some related discussions at the EU level (i.e. agenda items 1.2 or 1.17) and some for which there are clearly interests at the EU level but which are very specific or technical. For the latter, only a general support for successful solutions at WRC-12 can be recommended.

It would be an advantage during this preliminary phase of the preparation of the WRC-12 to identify preliminary European positions and priorities, even though all agenda items are still subject to technical and regulatory studies at ITU and CEPT level. These European preliminary positions should then guide the positions taken by Member States within CEPT. Therefore this RSPG opinion can suggest the direction that the European Commission and EU Member States should promote within CEPT on several agenda items.

3. Main items in regard to Community policies

The RSPG is of the opinion that the following WRC-12 issues are of most relevance to the Community. It should be noted however, that given the rapid pace of technological progress and commercial deployment of new wireless systems, additional issues may also emerge as being important during the process of preparation of the conference. The position of issues in the following text should not be taken as implying any relative priority. (The “A.I.” references are to agenda items in the formal agenda for WRC-12 – see Annex.)

3.1 Information society – Electronic Communications

A large part of RSPG activity is dedicated to electronic communication services (ECS), even if the scope of RSPG is broader, encompassing all spectrum issues. In 2009, the review of the EU regulatory framework for electronic communications networks and services is expected to be completed and, in particular, the revision of the Framework Directive and of the Authorisation Directive should be adopted.

The Digital Dividend¹ issue is of particular importance for the European economy and information society and has been discussed therefore in the Council and in the European Parliament as well. It may have a considerable impact on the EU economy by driving innovation, productivity and competitiveness. RSPG has already adopted an Opinion on this subject in 2007 and has included a new activity on this matter in its work programme for 2009, which underlines the importance of this

¹ See the [draft] RSPG opinion on Digital Dividend [adopted in XX]

issue. The new opinion will be the basis for a Communication of the Commission to be delivered to the Council and the EP at the end of 2009. Already, it is considered by the RSPG that the digital dividend will offer a crucial opportunity for promoting innovation. Therefore, WRC-12 agenda item 1.17, which addresses specific regulatory and technical studies within the frequency band 790-862 MHz is particularly relevant for the EU. In consequence EU interests in this agenda item have to be safeguarded by ensuring that no decision at WRC-12 would impede the possibility to deploy mobile and fixed networks in this frequency band, taking into account the regulatory provisions ensuring the protection of other co-primary services (e.g. GE-06 agreement).

Agenda item 1.5 of WRC-12 offers the opportunity to harmonize tuning ranges for frequencies for electronic news gathering (ENG), noting the majority of these bands are used or will be used on shared basis with other services and applications. It offers the opportunity to reinforce the attractiveness of some bands and therefore to increase the economies of scale for ENG equipment and to facilitate global circulation.

Several agenda items are addressing space policy which represents an important strategic resource for the European Union to implement some of its broader goals in areas such as broadcasting, communications, sustainable transport and mobility, weather forecasting, monitoring of environmental changes, and responses to emergencies. Ensuring an adequate international regulatory environment for satellite radiocommunication is important since all ITU procedures applying to the coordination and notification of space networks and systems are those giving to administrations and operators the rights to operate in an interference-controlled environment. There are a number of items which aim to improve the regulatory provisions applying to space services and to preserve spectrum access. Successful outcome on Agenda item 1.25 which looks for new allocations to the mobile satellite service may be key in facilitating the development of new space services and in providing new access platform for the delivery of electronic communication services.

3.2 Transport policy

EU Transport policy covers the full range of transportation and travelling within the EU, which includes the use of various radiocommunication systems for aeronautical and maritime communication as well as the European satellite navigation system, Galileo, to foster clean, safe and efficient travel throughout Europe.

Agenda item (1.3), deals with spectrum for Unmanned Aircraft Systems (UAS). Today, there are significant civil development programmes for these UAS with the intention of developing systems that operate seamlessly with existing piloted aircraft in non-segregated airspace. Operations of civil or defence UAS in non-segregated airspace require regulatory actions to ensure the safe operation of UAS including access to spectrum for terrestrial and satellite communications enabling Air Traffic Control Relay, Command & Control and Sense and Avoid.

Agenda item 1.4 is a follow-up of decisions which were taken by WRC-07 in conformity with the European Common Proposals for new allocations in several bands to aeronautical mobile service in order to provide the sector with sufficient spectrum to plan the required capacity growth to overcome congestion, while increasing safety, and at the same time promoting the timely introduction of more spectrum-efficient technologies in this sector. European positions for WRC-12 should preserve the decisions of WRC-07 in particular by not introducing technical measures which would unduly constrain the WRC-07 allocations. Another part of the agenda item is WRC-Resolution 420, which looks for a new allocation for terrestrial aeronautical services in the band 5000 – 5030 MHz. This frequency band is also used by the European Radionavigation Satellite

System Galileo, hence the European position should ensure the protection of the implemented and planned components of the Galileo system.

Besides this agenda item 1.18 is intended to provide an extension band for a new generation of Galileo and/or to ease the coordination process with systems other than Galileo in existing bands. Due to efficient backing by EU and CEPT during the negotiation process at WRC-07, a specific point on the radionavigation-satellite service in the frequency band 2483.5-2500 MHz could be put on the agenda of WRC-12, even if the proposal came at a very late stage. Galileo is a major project for Europe which has implications on many EU policies such as transport, satellite, communication, research or environment. The outcome of the studies should enable to achieve a new primary worldwide allocation subject to relevant technical and regulatory conditions in response to Galileo interest.

One of the EU interest in aeronautical services is based on the EU Single Sky policy. The European Aviation Safety Agency is the centrepiece of a new regulatory system which provides for a single European market in the aviation industry and the European Commission has established in 2002 a formal relationship to Eurocontrol. The European project SESAR (Single European Sky ATM Research) is the European air traffic control infrastructure modernisation programme. SESAR aims to develop the next generation air traffic management system which will be capable of ensuring the safety and fluidity of air transport over the next 30 years. The availability of spectrum required for the satellite component of SESAR should also be ensured by a successful outcome on agenda item 1.7 which aims to ensure long-term spectrum availability and access to spectrum for aeronautical mobile satellite (R) service. Europe is studying the future spectrum requirement of this service to ensure the availability of an appropriate amount of spectrum in the required timeframe. Also, in relation with maritime policy, two agenda items for WRC-12, 1.9 and 1.10, are aiming to facilitate maritime communications and operation of safety systems for ships and ports.

3.3 Scientific use of spectrum

Scientific uses of the spectrum are relevant to EU policies in the areas of environment, space, and European Research and Technological Development (RTD). The economic and societal importance of the scientific use of spectrum was emphasized in the RSPG Report and Opinion on “coordinated EU spectrum approach for scientific use of the radio spectrum” adopted in 2006. This noted the expected increase in pressure to find sharing opportunities between scientific users and other services.

WRC-12 agenda items consider new spectrum allocations for meteorological-satellite service in the 7 GHz range (1.24), for Space Research service in the 23 GHz range (1.11), new spectrum allocation for meteorological aids for lightning detection (1.16), prospective identification of the spectrum use by passive service above 275 GHz (1.6), and the protection of Space Research service in the 37 GHz band (1.12). A successful outcome at WRC-12 on these agenda items would benefit EU interests in the field of scientific use.

WRC-12 will also consider the revision of Resolution 673 under Agenda Item 8.1.1 to underline the essential role and global importance of Earth Observation with the objective to improve its recognition. The relevant sections of the RSPG opinion: “coordinated EU spectrum approach for scientific use of the radio spectrum” is one of the main sources used by European delegates in the WRC-12 preparatory activities relating to this Resolution.

3.4 Introduction of more flexibility in the international regulatory framework

In the ITU, there is a strong willingness to ensure the maximum possible flexibility in allocating frequency bands to services in the Radio Regulations while ensuring the protection of services operated in other countries. Under agenda item 1.2, pursuant to WRC-Resolution 951, there is currently a review, within CEPT and ITU-R groups, of the definition and procedures of the Radio Regulations to study if the current framework has the right level of flexibility. There is an EU interest in this matter to facilitate technical evolution, to ensure future access to spectrum in a timely and responsive manner and to ensure that flexibility at European level in the use of allocations should not be unduly constrained by provisions in the ITU Radio Regulations. Such flexibility should take into account the outcome of any required compatibility studies to ensure the possible use of different services/applications in the same band without harmful interference to services used in other countries.

An agenda item on software defined radio and cognitive radio was proposed by Europe in response to a request from the FP6 European Union's research project E2R (End-to-End Reconfigurability), now turned into E3 (End-to-End Efficiency). The objective of the research project was to consider a global harmonisation for a cognitive supporting Common Pilot Channel. The discussion on the feasibility of such technical concept is still under investigation considering the operational and regulatory difficulties. Finally, the scope of agenda item 1.19 was widened to cover more generally cognitive radio and, here again, particular attention needs to be paid in ensuring that flexibility at European level to implement such new and innovative technologies will not be unduly constrained by Radio Regulations.

Another Agenda item (1.22) relates to the effect of emissions from short-range devices on radiocommunication services. Within the EU, there exists a harmonised regulatory environment on Short Range Devices (SRD). As this agenda item was neither proposed nor supported by Europe at WRC-07, it is an example where the EU interest would consist in ensuring that no undue constraints will be placed in the Radio Regulations on these short range devices taking into account the possibility to harmonise SRD use through the development of ITU-R recommendations.

4. Responses to public consultation

The RSPG undertook a public consultation to seek the views from all interested parties on the RSPG Opinion on the main themes of WRC-12 of interest for EU-Wide support. The consultation was conducted in accordance with Article 5 of the EC Decision establishing the Radio Spectrum Policy Group, on 15 May 2009, via the RSPG website, with a closing date of the 15 July 2009.

There were 8 responses to the consultation, 2 from operator organizations (GSMA, ETNO), 3 from operators (Orange, Telecom Italia, Telefonica), 1 from a broadcaster (Mediaset), 1 from a coalition of companies, organizations and individuals (Open Spectrum Alliance), 1 from an administration (Luxembourg). The full text of the responses is available on the public RSPG website.

All responses were generally supportive of the opinion with different emphasis on the importance of each agenda item. Most responses were commenting and stressing the importance of agenda item 1.2 and agenda item 1.17.

ANNEX 1

RESOLUTION 805 (WRC-07)

Agenda for the 2011 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 2007),

considering

- a) that, in accordance with No. 118 of the ITU Convention, the general scope of the agenda for a world radiocommunication conference should be established four to six years in advance and a final agenda shall be established by the Council two years before the conference;
- b) Article 13 of the ITU Constitution relating to the competence and scheduling of world radiocommunication conferences and Article 7 of the Convention relating to their agendas;
- c) the relevant resolutions and recommendations of previous world administrative radio conferences (WARCs) and world radiocommunication conferences (WRCs),

recognizing

- a) that this Conference has identified a number of urgent issues requiring further examination by WRC-11;
- b) that, in preparing this agenda, many items proposed by administrations could not be included and have had to be deferred to future conference agendas,

resolves

to recommend to the Council that a world radiocommunication conference be held in 2011 for a period of four weeks, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC-07 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the bands under consideration, to consider and take appropriate action with respect to the following items:

1.1 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)**;

- 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;
- 1.3 to consider spectrum requirements and possible regulatory actions, including allocations, in order to support the safe operation of unmanned aircraft systems (UAS), based on the results of ITU-R studies, in accordance with Resolution **421 (WRC-07)**;
- 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, 960-1164 MHz and 5000-5030 MHz in accordance with Resolutions **413 (Rev.WRC-07)**, **417 (WRC-07)** and **420 (WRC-07)**;
- 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)**;
- 1.6 to review No. **5.565** of the Radio Regulations in order to update the spectrum use by the passive services between 275 GHz and 3000 GHz, in accordance with Resolution **950 (Rev.WRC-07)**, and to consider possible procedures for free-space optical-links, taking into account the results of ITU-R studies, in accordance with Resolution **955 (WRC-07)**;
- 1.7 to consider the results of ITU-R studies in accordance with Resolution **222 (Rev.WRC-07)** in order to ensure long-term spectrum availability and access to spectrum necessary to meet requirements for the aeronautical mobile-satellite (R) service, and to take appropriate action on this subject, while retaining unchanged the generic allocation to the mobile-satellite service in the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz;
- 1.8 to consider the progress of ITU-R studies concerning the technical and regulatory issues relative to the fixed service in the bands between 71 GHz and 238 GHz, taking into account Resolutions **731 (WRC-2000)** and **732 (WRC-2000)**;
- 1.9 to revise frequencies and channelling arrangements of Appendix **17** to the Radio Regulations, in accordance with Resolution **351 (Rev.WRC-07)**, in order to implement new digital technologies for the maritime mobile service;
- 1.10 to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution **357 (WRC-07)**;
- 1.11 to consider a primary allocation to the space research service (Earth-to-space) within the band 22.55-23.15 GHz, taking into account the results of ITU-R studies, in accordance with Resolution **753 (WRC-07)**;

- 1.12 to protect the primary services in the band 37-38 GHz from interference resulting from aeronautical mobile service operations, taking into account the results of ITU-R studies, in accordance with Resolution **754 (WRC-07)**;
- 1.13 to consider the results of ITU-R studies in accordance with Resolution **551 (WRC-07)** and decide on the spectrum usage of the 21.4-22 GHz band for the broadcasting-satellite service and the associated feeder-link bands in Regions 1 and 3;
- 1.14 to consider requirements for new applications in the radiolocation service and review allocations or regulatory provisions for implementation of the radiolocation service in the range 30-300 MHz, in accordance with Resolution **611 (WRC-07)**;
- 1.15 to consider possible allocations in the range 3-50 MHz to the radiolocation service for oceanographic radar applications, taking into account the results of ITU-R studies, in accordance with Resolution **612 (WRC-07)**;
- 1.16 to consider the needs of passive systems for lightning detection in the meteorological aids service, including the possibility of an allocation in the frequency range below 20 kHz, and to take appropriate action, in accordance with Resolution **671 (WRC-07)**;
- 1.17 to consider results of sharing studies between the mobile service and other services in the band 790-862 MHz in Regions 1 and 3, in accordance with Resolution **749 (WRC-07)**, to ensure the adequate protection of services to which this frequency band is allocated, and take appropriate action;
- 1.18 to consider extending the existing primary and secondary radiodetermination-satellite service (space-to-Earth) allocations in the band 2483.5-2500 MHz in order to make a global primary allocation, and to determine the necessary regulatory provisions based upon the results of ITU-R studies, in accordance with Resolution **613 (WRC-07)**;
- 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)**;
- 1.20 to consider the results of ITU-R studies and spectrum identification for gateway links for high altitude platform stations (HAPS) in the range 5850-7075 MHz in order to support operations in the fixed and mobile services, in accordance with Resolution **734 (Rev.WRC-07)**;
- 1.21 to consider a primary allocation to the radiolocation service in the band 15.4-15.7 GHz, taking into account the results of ITU-R studies, in accordance with Resolution **614 (WRC-07)**;
- 1.22 to examine the effect of emissions from short-range devices on radiocommunication services, in accordance with Resolution **953 (WRC-07)**;
- 1.23 to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the amateur service on a secondary basis, taking into account the need to protect existing services;

1.24 to consider the existing allocation to the meteorological-satellite service in the band 7750-7850 MHz with a view to extending this allocation to the band 7850-7900 MHz, limited to non-geostationary meteorological satellites in the space-to-Earth direction, in accordance with Resolution **672 (WRC-07)**;

1.25 to consider possible additional allocations to the mobile-satellite service, in accordance with Resolution **231 (WRC-07)**;

2 to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution **28 (Rev.WRC-03)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with principles contained in the Annex 1 to Resolution **27 (Rev.WRC-07)**;

3 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the Conference;

4 in accordance with Resolution **95 (Rev.WRC-07)**, to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

5 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

6 to identify those items requiring urgent action by the Radiocommunication Study Groups in preparation for the next world radiocommunication conference;

7 to consider possible changes in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference: “Advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks”, in accordance with Resolution **86 (Rev.WRC-07)**;

8 in accordance with Article 7 of the Convention:

8.1 to consider and approve the Report of the Director of the Radiocommunication Bureau:

8.1.1 on the activities of the Radiocommunication Sector since WRC-07;

8.1.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations; and

8.1.3 on action in response to Resolution **80 (Rev.WRC-07)**;

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)**,

resolves further

to activate the Conference Preparatory Meeting and the Special Committee on Regulatory/Procedural Matters,

invites the Council

to finalize the agenda and arrange for the convening of WRC-11, and to initiate as soon as possible the necessary consultations with Member States,

instructs the Director of the Radiocommunication Bureau

to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC-11,

instructs the Secretary-General

to communicate this Resolution to international and regional organizations concerned.