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RSPG INTERIM OPINION ON
COMMON POLICY OBJECTIVES FOR WRC-15

1.   INTRODUCTION

The next World Radiocommunication Conference (WRC) is planned to be held from 2 to 27 November 2015, which will be the culmination of several years of preparatory work within the International Telecommunication Union (ITU). The Conference in 2015 (WRC-15) will address the revision of the Radio Regulations, an international treaty on the use of the radio spectrum and coordination rules between the 193 Member states of the ITU, in accordance with an agenda proposed by the preceding WRC held in 2012 (WRC-12) and finally adopted as ITU Council Resolution 1343 (C12).

The Radio Regulations applies to the relationship between ITU Member states. It allows assignment to a station of any frequency providing that such a station does not cause harmful interference to, and does not claim protection from harmful interference caused by, a station operating in accordance with these regulations. As such, no provision of the Radio Regulations can affect the rights of the European Union to implement the desired harmonised technical conditions and to make available the spectrum for stations of any type, except for cases where there is a potential for interference with a country outside the EU (e.g. cross-border rights).

On the other hand, the Radio Regulations are key for services of international nature, such as; aeronautical, maritime or space services, as well as for worldwide harmonisation of spectrum

use, including for the mobile service, which potentially translates into economies of scale and opportunity for circulation of equipment (e.g. roaming), thus bringing benefits to EU economy and citizens.

It is therefore essential that the EU and its Member States seek to establish a coordinated position for all WRC-15 agenda items, in particular through the definition of "common policy objectives" for the agenda items relating to EU policies described in this Opinion. This is reflected in the RSPG Opinion on the preparation of ITU World Radiocommunication Conferences[1] which recommends:

"*to develop and adopt an RSPG opinion for each WRC, proposing to the European Parliament, the EU Council and the European Commission "Common Policy objectives" for the corresponding conference, to be adopted in time for the CPM (i.e. 9 months before WRC);*"

In addition the RSPG opinion on the Radio Spectrum Policy Programme[2] addressed the issue of EU external relations in relation with preparations of international conference such as WRCs:

− Where a potential for conflict of interest between differing groups of stakeholders arises, the Commission should provide guidance on European priorities in regard to those WRC agenda items relevant to the EU. This guidance should be based on an evaluation of social and economic consequences which should be undertaken in parallel with the compatibility analysis conducted by CEPT. The assessment of the social and economic impacts for all stakeholders should be discussed with Member States through RSPG;

− During the conferences, Member States should make their best efforts to coordinate **the** evolution of ECPs in line with EU and CEPT policy objectives and to find a balanced compromise on all WRC agenda items taking into account the relevant policy objectives;

− The identification of European spectrum interests and priorities shall be followed by the development of a programme for regular discussions on spectrum policies with non-EU countries and other regions. This programme should contain actions aimed at presenting EU spectrum policy objectives and understanding those of non-EU countries and other regions in order to obtain their understanding and support to reach the EU policy goals.

The recent RSPG opinion on Common Policy Objectives for WRC-12[3] contained elements which are directly relevant to objectives for WRC-15, particularly the objective to secure an agenda item related to harmonisation of spectrum for electronic communications services.

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[1] See RSPG09-294
http://rspg.groups.eu.int/_documents/documents/opinions/rspg09_294_preparation_itu_wrc.pdf
[2] See RSPG10-330 http://rspg.groups.eu.int/_documents/documents/opinions/rspg10_330_rspp_opinion.pdf
[3] See RSPG10-350
http://rspg.groups.eu.int/_documents/documents/meeting/rspg24/rspg10_350_wrc_opinion.pdf

Following the RSPG opinions and the existing practise to address EU policy interest most efficiently the RSPG opinion on Common Policy Objectives for WRC-15 will be developed in two stages:

- This Interim Opinion identifies the main themes of WRC-15 where there is an EU policy in place;

- The final draft Opinion will contain additional information on the main themes based on emerging results from studies conducted in the overall framework of WRC-15 preparation, together with the Common Policy Objectives relevant to these themes.

2. IDENTIFICATION OF RELEVANT EU POLICIES FOR THE AGENDA OF WRC-15

The identification of the EU policies relevant to WRC-15 agenda items is complex. Agenda items are formulated in terms of allocations to radiocommunications services (e.g. mobile, fixed, fixed satellite services, broadcasting, etc.) and conflicting interests may exist between these services. Applications may be relevant to more than one radiocommunication service and may also be relevant to one or several EU policies. Some agenda items may be broad in nature and it may not be possible to identify all relevant policies impacted until the preparatory work is well advanced, for example agenda items which are not limited to specific frequency bands.

The EU policy areas most likely to be relevant to WRC agenda items are information society, internal market, environment, transport, space policy, audiovisual policy, research and development and civil protection. In addition, Common Security and Defence Policy aspects may also be identified as relevant. Other Policies may become relevant as the preparations for WRC evolve.

It should be noted that the scope of the RSPP recognises the right of member states to organise their spectrum for public order, public security and for defence purposes on a national basis.

3. MAIN THEMES WITH RELEVANCE TO EU POLICIES

The RSPG is of the opinion that the following areas of EU policy are relevant to the specific agenda items at WRC-15.

3.1 Information society – Electronic Communications

The RSPG is assessing the possible solutions and options for meeting the future demand for wireless broadband services in the time frame 2013-2020. This work will lead to a report and an opinion on wireless broadband.

WRC-15 Agenda Item 1.1 is the result of proposals from both Europe and other ITU Regions demonstrating broad consensus on the need for additional spectrum for the mobile service for broadband applications. In this context the RSPP requires the identification of at least 1200 MHz of suitable spectrum by 2015 to support growth in wireless data traffic.

WRC-15 Agenda item 1.1 calls for the ITU to conduct studies on the future spectrum requirements for mobile service including IMT systems, for studies on candidate frequency bands, and for WRC-15 to take appropriate action: primarily additional allocations to the mobile service. It is recognised that additional spectrum is one element to meet the capacity requirements of mobile broadband applications and other measures such as technological improvements will also contribute. As the Agenda Item is the result of proposals from various regions including Europe, it demonstrates broad consensus on the expected increase in wireless broadband data traffic and the need to identify appropriate additional spectrum. However preparatory discussions of candidate frequency bands are certain to be controversial and likely to impact a range of EU policy areas. This is one of the most significant WRC issues for many years and the EU common policy objective will have to balance the needs of developing mobile broadband applications with the needs of current spectrum users.

WRC-15 Agenda Item 1.2 follows the decision taken at WRC-12 to allocate the band 694 – 790 MHz to the mobile service, except aeronautical on a co-primary basis with other services and to identify it for IMT. This allocation will become effective immediately after WRC-15 and will facilitate a possible implementation of mobile systems in Europe in this frequency band. The purpose of the agenda item is to determine the technical and regulatory conditions applicable to this mobile allocation, including a possible refinement of the lower band edge which may also relate to Agenda item 1.1. The EU common policy objective should take into account several elements including spectrum requirements of concerned services and the aim for global harmonisation.

WRC-15 Agenda Item 1.3 addresses the international harmonisation on spectrum use for Public Protection and Disaster Relief applications, specifically the revision of Resolution 646 which provides information on regionally used tuning ranges for this purpose. This agenda item was not proposed by Europe, however the on-going discussions on PPDR within Europe will need to be taken into account later in the WRC preparations. The actions required in the WRC context will be dependent on the result of those discussions.

WRC-15 Agenda Item 1.10 addresses potential mobile satellite spectrum allocations in the frequency range 22 – 26 GHz. This agenda item follows the discussion at WRC-12 of possible new MSS allocations in the frequency range 4 – 16 GHz (WRC-12 Agenda Item 1.25) which led to a 'no change' decision. This subject is addressed in greater detail under space policy.

3.2 Space policy

WRC-15 Agenda Item 1.6 concerns possible new primary allocations for the fixed satellite service: 1) of 250 MHz between 10 GHz and 17 GHz in Region 1; and 2) of 250 MHz in Region 2 and 300 MHz in Region 3 in the range 13 GHz to 17 GHz. This is a complex issue due to the fact that the amounts of spectrum allocated to two satellite services, the fixed-satellite service (FSS) and the broadcasting-satellite service (BSS) varies between the three ITU Regions and that the agenda item only addresses one service (FSS) and a limited frequency band (10 – 17 GHz). In addressing the issue, it is also important to consider both satellite service allocations across a wider frequency range.

WRC-15 Agenda Item 1.7 is to review the use of the band 5091 – 5150 MHz by mobile satellite service feeder links (which operate in the fixed-satellite service). This band was intended to be used in the short term for FSS sharing with aeronautical radionavigation, where it is designated as an extension band for the Microwave Landing System (MLS) in cases where its spectrum requirements cannot be met in the band 5030 – 5091 MHz. The FSS use has continued and the MLS has not needed access to this extension band, WRC-15 will review this situation.

WRC-15 Agenda Item 1.8 provides for a review of the regulatory arrangements introduced at WRC-03 for Earth Stations on Vessels (ESVs) which operate in fixed-satellite service networks in the uplink bands 5 925-6 425 MHz and 14-14.5 GHz. The objective of the review is to relax certain requirements following successful implementation of the original regulations.

Resolution 902 (WRC-03) contains provisions for the operation of ESVs including technical conditions and limits, with regard to the protection of terrestrial services operating in the same band. Resolution 902 could be reviewed to take into account the outcome of the studies on this agenda item With the aim to investigate whether present conditions for the operation of ESVs need to be retained or whether they should be modified. These bands are mainly used for commercial purposes. Revised provisions would support the development and use of ESVs as well as the European space and maritime industries.

WRC-15 Agenda Item 1.9, which has two parts, addresses possible new allocations for the fixed satellite service in the band 7150 – 7250 MHz (space to earth) and 8400 – 8500 MHz (agenda item 1.9.1) and 7375 – 7750 MHz and 8025 – 8400 MHz to the maritime mobile service (agenda item 1.9.2). These allocations are intended to be used by defence systems and are within or directly adjacent to those already used by defence systems. These allocations would support the capacity to be provided by the future generation of European military telecommunications satellites which would support the development of European space industry. Coexistence with scientific services will be an important issue in these bands.

WRC-15 Agenda Item 1.10 addresses a potential mobile satellite spectrum in the frequency range 22 – 26 GHz, following the absence of any new allocation at WRC-12 in the frequency range 4 – 16 GHz (WRC-12 Agenda Item 1.25). This agenda item was proposed by countries outside Europe and it seems appropriate to wait for proposals from those countries for

technical studies and candidate bands before taking a position. This agenda item is relevant to both electronic communications and space policy.

Other WRC-15 Agenda items are likely to lead to significant debate on space issues – in particular agenda item 7 - and the specific issues under the various parts of agenda item 9.1. In addition, member states may raise specific issues at the conference in connection with satellite procedures. Ensuring an adequate international regulatory environment for satellite radiocommunications is critical since all ITU procedures applying to the coordination and notification of space networks and systems are fundamental to provide administrations and operators with the right to operate in an interference-controlled environment.

3.3 Transport policy

WRC-15 Agenda Item 1.5 is a follow up agenda item following the discussion at WRC-12 on unmanned aircraft systems (UAS). The specific issue for discussion at WRC-15 concerns the possible use of certain bands allocated to the fixed satellite service for the control and non-payload communications of UAS in non-segregated airspace. Sufficient satellite links are necessary to ensure the usage of UAS for long distance flights. This agenda item is closely linked to the development of appropriate ICAO policy. The timely availability of this usage would support the Single European Sky initiative as well as the European aviation industry.

WRC-15 Agenda Item 1.15 addresses the improvement and expansion of maritime mobile on-board UHF communications to address the reports of congestion on the six frequencies currently identified. Those frequencies are intensively used within port operations by ships, thus this agenda item would support the further development of maritime transportation in the EU – it should be noted however that this type of communication is primarily for the purpose of internal communication on board vessels rather than navigation and hence is not linked to EU maritime policies. It should further be noted that the six channels currently used are within the frequency band $450 - 470$ MHz which is identified for IMT.

WRC-15 Agenda Item 1.16 is to consider regulatory provisions and possible new allocation(s) to facilitate new Automatic Identification System (AIS) technology for both satellite and terrestrial applications. This item has already been brought to the attention of the International Maritime Organisation (IMO), and their input here is likely to have direct relevance to the direction and potential result of this agenda item. This is because the use of AIS is likely to figure in discussions related to the modernisation of the Global Maritime Distress and Safety System (GMDSS), a subject which is currently on the agenda of the IMO. WRC-12 saw allocations for satellite detection for AIS agreed. This agreement, coupled with this agenda item, is seeing new potential satellite delivered AIS applications being considered which may be of interest to the European satellite industry.

WRC-15 Agenda Item 1.17 is to consider allocations and regulatory provisions for Wireless Avionics Intra-Communications (WAIC). This is intended to bring benefits to aviation in terms of weight saving on aircraft, which in turn brings environmental benefits, and also potential safety benefits. Aircraft have an obvious need to be able to operate globally and cross national borders and a WRC decision will support this.

WRC-15 Agenda Item 1.18 is to consider a primary allocation to the radiolocation service for automotive applications in the 77.5 – 78 GHz band. The 77 - 81 GHz band has been identified in Europe as the band for long term deployment of automotive short range radar and industry should be encouraged to develop SRR equipment for that band. The frequency bands 76-77.5 GHz and 78-81 GHz are already allocated to the radiolocation service on a primary basis in all three ITU regions. Therefore Europe has proposed an allocation in the band 77.5-78 GHz to the radiolocation service on a primary basis in all three regions with appropriate technical limitations in order to support a globally harmonised continuous band which would provide the automotive industry with benefits in terms of economies of scale, and would also provide the regulatory certainty needed for this application which has long cycles of development and use.

3.4   Scientific use of spectrum

WRC-15 Agenda Item 1.11 is to consider a primary allocation to the Earth Exploration Satellite Service (Earth to space) in the 7 – 8 GHz range. This allocation is intended for tracking, telemetry and control (TT&C) of satellites to provide an alternative to the congested bands around 2 GHz. The European Space Agency has shown considerable interest in the agenda item.

WRC-15 Agenda Item 1.12 is to consider an extension of the current primary allocation to the Earth Exploration Satellite Service (active) in the band 9300 - 9900 MHz range by up to 600 MHz within the overall 8700 – 10500 MHz frequency range. This agenda item supports the development of the next generation of high resolution synthetic aperture radars (SAR). These imaging satellites enable short- and long-term Earth observations of high accuracy regarding geodetic references over time to monitor environmental changes. As a consequent evolution of the current EESS SAR systems, the next generation, with a high-resolution mode, will provide more beneficial value for relevant industries and citizens. Those systems, being on the cutting edge of space technology, will complement Europe´s Global Monitoring for Environment and Security Programme (GMES).

WRC-15 Agenda Item 1.13 is to review footnote No. 5.268 to the Radio Regulations with a view to relaxing the 5 km distance limitation for the space research service used for communications between space vehicles. This allocation (in the band 410 – 420 MHz) is used by, for example, the International Space Station and there is a need to communicate with vehicles beyond the 5 km limit. This agenda item originated from outside Europe, however Europe will expect to take a positive approach to issues which have a global benefit for space missions.

WRC-15 Agenda Item 1.14 is to consider the feasibility of achieving a continuous reference time-scale, whether by the modification of coordinated universal time (UTC) or some other method. The idea of having a continuous reference timescale, although not strictly related to spectrum management, has attracted considerable attention during the Radiocommunication Assembly in 2012 and is a complex issue having a scientific, social and economic dimension.

It will therefore be necessary for Europe to develop a common policy objective on this key agenda item.

4   FUTURE WRC AGENDA ITEMS

The formulation of positions for future WRC agenda items is a critical issue since it may determine the scope of changes to the global spectrum management environment for several decades. It will be important to identify, as soon as possible, opportunities to promote European policies through action at future WRCs with the objective to promote European arrangements at a global level.