

EUROPEAN COMMISSIONDirectorate-General for Communications Networks, Content and Technology

Electronic Communications Networks and Services Radio Spectrum Policy Group RSPG Secretariat

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RSPG15-628

RADIO SPECTRUM POLICY GROUP

RSPG "the last 3 years"

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The RSPG has been very active during the last 3 years and published a number of deliverables

Further to the publication of the RSPP in 2012, RSPG supported the implementation of this strategic programme by publishing a number of deliverables: wireless broadband, international negotiations, spectrum inventory, sectoral needs, spectrum sharing approaches, cross-border coordination, UHF band including the 700 MHz issue, efficient use of spectrum, spectrum awards and wireless backhaul.

The attached document provides an overview of the RSPG's contribution to the development of the European Spectrum Policy since 2013.

It concludes by recalling the benefits of enhancing the role of the RSPG: cf. recommendations from the draft Opinion on RSPP, section 5.

RSPG is invited to endorse the attached document and to agree publishing it in the RSPG web site.

Attachment: RSPG "the last 3 years"



RSPG "the last 3 years"

RSPG is at the heart of the current institutional European Framework with an advisory role on spectrum policy issues.

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• Radio Spectrum Policy Programme (RSPP)

The first Radio Spectrum Policy Programme (RSPP) was established by Decision 2012/243/EU of the European Parliament and the Council. The RSPP focuses on strategic policy issues related to harmonisation of the use of spectrum to ensure the functioning of the internal market in the Union policy areas involving the use of spectrum, such as electronic communications, research, technological development and space, transport, energy and audio-visual policies. It sets out policy orientations and objectives for the strategic planning and harmonisation of the use of spectrum for the establishment and the functioning of the internal market.

In 2015, RSPG drafted an Opinion entitled "the implementation of the current RSPP and its revision to address the next period" to be published in February 2016. RSPG is making recommendations on spectrum challenges for the next 5 years, on the external relations and on interaction between spectrum regulation and standardization. RSPG supports a streamlined approach to spectrum inventory. This Opinion provides advice to the European Commission on the review of the Radio Spectrum Policy Programme (RSPP). RSPG concluded that the RSPP objectives have been largely achieved. In particular, the 1200 MHz target for wireless broadband and, as requested by article 6, the implementation of harmonised measures to support the internal market.

• RSPG is addressing various spectrum needs

In its **Report on "strategic sectoral spectrum"** in response to Article 8 of the RSPP, RPSG examined the spectrum needs of the non-ECS sectors including Galileo, Copernicus, intelligent transport management systems (ITS), smart energy grids and smart meters, safety services and public protection and disaster relief (PPDR), scientific services and programme making and special events (PMSE). Sectors interrelated with Union policies such as civil aeronautical and maritime communications and Professional mobile radio (PMR) are also covered. This report, published in November 2013, highlights how to address spectrum needs from those various sectors during the next years.

The RSPG provided guidance to the European Commission on assessing and dealing with the future demand for spectrum for wireless broadband in meeting the goals of the Digital Agenda. This **Opinion on** "strategic challenges facing Europe in addressing the growing spectrum demand for "wireless broadband", published in June 2013, focuses on the challenges associated with the provisioning of wireless broadband (WBB), specifically spectrum requirements for terrestrial WBB. It sets out a roadmap for making spectrum available meeting the interim target of at least 1200 MHz. This deliverable provides visibility to the European Commission, policy makers and the industry on how to address future demand for spectrum for WBB. RSPG welcomes the recent harmonisation initiatives from European Commission under Spectrum Decision in line with its recommendations on 1452-1492 MHz and 2.3-2.4 GHz.

• Spectrum Sharing

Due to a more intensive usage of the spectrum by various sectors, it will become more and more difficult to identify frequency bands for exclusive usage. As a consequence, spectrum users will have to rely increasingly on shared use of spectrum.

The **Opinion on** "Licensed Shared Access" paves the way for an innovative regulatory approach in Europe and provides clarification on this regulatory approach and how to implement it at national level. This is RSPG's response to the communication of the European Commission on promoting the shared use of radio spectrum resources in the internal market (COM/2012/0478 final).

The RSPG had already published a number of Reports and Opinions on sharing issues:

- Opinion on "Collective use of Spectrum"
- Report and Opinion on "Cognitive radio"
- Report on "Collective Use of Spectrum (CUS) and other spectrum sharing approaches"

• Long term evolution of the UHF band including 700 MHz

RSPG contributes to the policy debate on the future of the UHF band and provides strategic recommendations on the future use of the UHF band including the 700 MHz.

- Member States are invited to reallocate the 700 MHz (694-790 MHz) for Wireless Broadband as early as possible. RSPG supports end of 2020 for making the band available for ECS. Member States may decide for duly justified reasons and without the need for derogation to delay the availability of the band by up to two years.
- Cross-border coordination agreements shall be reached by 2017.
- The 470-694 MHz band shall remain available for DTT in the foreseeable future, i.e. up to 2030
- Member States should have the flexibility to use the 470-694 MHz band for WBB downlink, if compatible with DTT needs in the relevant Member States and as long as it does not create constraints on the operation of DTT in the neighbouring countries.

European Commission should allow national measures supporting the inclusion of more efficient DVB technologies in TV receivers and clarify the status of possible national compensation with respect to State aid rules.

This **Opinion on "Long term evolution of the UHF band including 700 MHz"** has been developed in a short time frame and published in February 15, further to a public consultation during which 54 responses were received.

A Report on "proposed spectrum coordination approach for broadcasting in the case of a reallocation of the 700 MHz band", published in June 2013, examined the best approach in spectrum coordination between EU countries, in case of use of the 700 MHz frequency band for WBB communications, and the related timeline. This report paved the way for the current bi lateral /multi-lateral cross- border coordination in Europe (e.g. WEDDIP) enabling the future roll out of the mobile networks in the 700 MHz, while preserving development of TV broadcasting in the remaining part of the UHF band.

Efficient use of spectrum and spectrum awards

In 2014 and 2015, RSPG examined issues related to efficient spectrum awards and use of harmonised spectrum bands for Electronic Communications Services (ECS).

RSPG shared views and best practices on spectrum award approaches and related conditions of use with a view to promoting efficient use of spectrum. RSPG analysed the spectrum requirements of future ECS, taking into account different geographical characteristics, market situations, and different usage scenarios so that spectrum is well utilized and future speed, capacity and coverage requirements are met.

RSPG concluded that there is no "one size fits all" and there isn't one single method of awarding spectrum that could be extrapolated across all Member States or all bands without the risk of significantly diminishing overall consumer benefit and economic value. However, there are some key lessons that can be learnt from across the EU and globally in the approach to designing and conducting awards.

RPSG listed the best practice approaches to secure optimal use of the scarce resource that spectrum represents and to contribute to the development of the internal market for electronic communications, thus ensuring efficient use of spectrum and encouraging competition, growth and innovation in all aspects of the communications value chain for the benefits of consumers.

The **Report on** "*Efficient use of Spectrum and Spectrum awards*" will be submitted to public consultation and publish in February 2016.

• International negotiations

The role of the RPSG in the development of common policy objectives to be proposed by European Commission to the European Parliament and the Council is described in EC Decision establishing the RSPG and in the Framework Directive (art 8a-4). The article 10.1 of the RSPP covers the principles which apply when the subject matter of the international negotiations either falls within the competence of the Union or within the competence in the Union and partly in the competence of the Member States.

The RSPG published in 2014 an interim Opinion on Common Policy Objectives for WRC 15 which identified the main themes of WRC-15 where there is an EU policy in place. This has been subject to public consultation and served for the development of the final Opinion. Further to public consultation, RSPG published later in 2015 an **Opinion on "Common Policy Objectives for WRC 15"** during which 46 responses from stakeholders and administrations were received.

• 5G spectrum challenges

The European Commission launched in 2014 the 5G PPP to support the research and development of 5 G in Europe.

The RSPG has already started to address 5G spectrum challenges in its recent deliverables published in 2015:

- The Opinion on "long-term strategy on the future use of the UHF band including 700 MHz" stated that it is too early to assess in the UHF band the effect of the current research projects on the ability of 5G networks to enable efficient delivery of broadcast services.
- The Opinion on "Common Policy Objectives for WRC 15" invited Member States to support a future agenda item addressing "the spectrum needs for the

fifth generation of mobile networks (commonly known as 5G) with the focus above 6 GHz".

- The Report on "efficient usage of spectrum and spectrum awards" highlights how the current harmonised spectrum in Europe could respond to some early and future 5G challenges. Europe benefits from a strategic opportunity of already 1 GHz of harmonised spectrum and near the mid of the decade of 1200 MHz of harmonised spectrum to support further ECS evolution.
- The Report on "Spectrum issues on Wireless Backhaul", published in June 2015, recognises that some frequency bands considered for 5G mobile radio access are currently used or targeted to be used for fixed links. Sufficient backhauling spectrum is needed to support the growth of 5G. The possible future usage of the same spectrum for access and backhauling appears as a major challenge and shall be addressed by the European Commission and Member States during the coming years.

The RSPG will continue its efforts and develop recommendations to support the development of 5G.

• Interference Management

The Report on "furthering Interference Management through exchange of regulatory best practices concerning regulation and/or standardisation" published in June 2013 provides regulatory best practices concerning regulation and /or standardisation. This Report was drafted further to the publication of the European Commission proposals for a Radio Equipment Directive (Directive 2014/53/EU) in October 2012.

It mainly focuses on identification of the basic principles and approaches of efficient Interference Management as well as Member States' best practices in managing interference taking into account increasingly flexible conditions of use in spectrum rights. It highlights the key role of receivers in spectrum regulation and harmonised standards and the ways to improve receiver standards within the current ETSI, CENELEC and EU processes as well as to indicate how the European institutions could facilitate such a breakthrough.

• Spectrum Inventory

RSPG assisted the European Commission in identifying solutions to ensure consistency between various regulations affecting spectrum and to improve the cooperation between bodies involved in spectrum policies, in order to facilitate making spectrum available for new applications and to improve the efficient use of radio spectrum and to avoid harmful interference.

The **Opinion on "Spectrum Review"**, published in February 2012, advised the European Commission and Member States on the issues to be addressed in undertaking a spectrum inventory and in assessing demand for future significant uses of spectrum.

Later in 2014, RSPG responded to the European Commission's Report on the Radio Spectrum Inventory with a **Position Paper**. RSPG recommends a streamlined approach on the inventory in its Opinion on review of the RSPP published in 2016.

Based on the lessons learnt from recent years, **RSPG** identified the benefits of enhancing its role:

- to support the implementation of the strategic objectives of the RSPP and of EU public policies when spectrum is used;
- to assist the European Parliament, the Council and the European Commission in relations, discussions and exchanges of views with third parties on spectrum issues;
- to support dissemination of best practices on the implementation of regulatory principles supporting European spectrum harmonisation and on spectrum management;
- to deliver position papers on the communications, reports and draft regulation proposed by the European Commission on spectrum issues;
- to advise the European Parliament and the Council, where needed.