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RADIO SPECTRUM POLICY GROUP

(DRAFT)

RSPG Opinion

on

the ITU-R

World Radiocommunication Conference 2019

(Draft) **RSPG Opinion on the ITU-R World Radiocommunication Conference 2019**

1. Introduction

The role of the Radio Spectrum Policy Group (RSPG) is to assist and advise the European Commission on radio spectrum policy issues, on coordination of policy approaches, on the preparation of multiannual radio spectrum policy programmes and, where appropriate, on harmonised conditions with regard to the availability and efficient use of radio spectrum necessary for the establishment and functioning of the internal market.

The RSPG notes that under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local levels, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level. The reasons for concluding that a Union objective can be better achieved at Union level shall be substantiated by qualitative and, wherever possible, quantitative indicators. Draft European legislative acts shall take account of the need for any burden, whether financial or administrative, falling upon the Union, national governments, regional or local authorities, economic operators and citizens, to be minimised and commensurate with the objective to be achieved. Having taken into account the legal European framework, this Opinion addresses the following matters:

- * an analysis of the WRC Agenda items including their current preparation on whether or not a decision by WRC may affect common EU rules
- * a recommendation of an appropriate course of action for

Case a), which require an EU position to be proposed by the European Commission for adoption by the Council because a WRC decision may affect common rules;

Case b), ~~for which~~ an EU position to be proposed by the European Commission for adoption by the Council is ~~advisable~~. 

In addition there are instances where RSPG notes an emerging convergence of views, but where an EU position is not required. Those instances are marked as *Case c)*.

- * the relevance of the radio spectrum policy issue in the context of sector-specific (e.g. electronic communications, transport, research and development) and/or horizontal (e.g. internal market, competition, trade) Community policies;
- * the extent to which the policy approaches of the Member States to the issue are consistent;
- * the extent to, and manner in which the public has been consulted with regard to the issue under consideration. A list of the parties responding to the public consultation and of the documents considered is included.

1.1 World Radiocommunication Conference 2019 (WRC-19)

The next WRC will be held in 2019 and will be the culmination of several years of preparatory work within the International Telecommunication Union (ITU). This work, outlined in the different Agenda items, reflects the development and use of radiocommunication technologies and the changing requirements of radio systems. WRC-19 will address necessary revisions of the Radio Regulations (RR)¹, an international treaty between the 193 Member States of the ITU on the use of the radio spectrum and coordination rules to provide access to it. WRC-19 work will follow an Agenda proposed by the preceding WRC held in 2015 (WRC-15), which was finally adopted by the ITU Council as Resolution 1380 (see Annex).

The RR are applicable to the relationship between ITU Member States. A specific provision of the RR² provides administrations with the latitude to make assignments of any frequency to any type of radio usage, providing that the station using such frequency does not cause harmful interference to, and does not claim protection from harmful interference caused by, other stations operating in accordance with the RR in another ITU Member State.

As such, no provision of the RR can affect the rights of the European Union and its Member States to implement any desired harmonised technical conditions and to make available spectrum for stations of any type, although RR provisions set technical conditions and regulatory procedures to avoid harmful interference with other countries (e.g. cross-border rights), in absence of other provisions agreed between countries (e.g. harmonised conditions within the EU or a bilateral agreement).

Allocations in the RR have to be differentiated from actual implementation and use of systems and applications. It is up to each ITU Member state or group of ITU Member States (such as the Member States of the European Union) to decide on the actual use of frequency bands in their territories, taking into account the sharing conditions and coordination requirements defined in the RR in order to protect spectrum use in other countries.

The preparatory proposals are carried out in accordance with guidelines by the ITU³ and contain specific terminology in relation to the treaty of RR. For example, no change or as conference proposal order “NOC” for one Agenda item means that a specific provision or up to the whole RR, whatever is applicable, should be retained without changes. Besides these treaty related proposals, other actions at ITU level which do not belong to the RR may often allow a conference to decide that no change is most viable decision. Such actions are often related to ITU-R Resolutions or Recommendations which are non-mandatory in their legal nature, but form an integral part of the global technical harmonisation of spectrum management.

The Preparation of proposals for the conference is done by the Conference of European Postal and Telecommunication administrations (CEPT), a specialised regional organisation without legal personality comprised of 48 members including EU Member States. CEPT is also one of the six main regional organisations regularly preparing for WRCs and recognised by the ITU in accordance with Resolution 72 (Rev. WRC-07). The preparation is carried out by a working group named Conference Preparatory Group - CPG. This group has the responsibility to develop and agree European Common Proposals (ECPs) for the WRCs, to prepare and approve background material in CEPT-Briefs for the

¹ <http://www.itu.int/pub/R-REG-RR-2016/> .

² See No. 4.4 of Article 4 of the Radio Regulations .

³ See for WRC-15: [https://www.itu.int/fr/ITU-](https://www.itu.int/fr/ITU-R/conferences/wrc/2015/Documents/Guidelines%20for%20Preparation%20of%20Proposals%20WRC15_08052015.pdf)

[R/conferences/wrc/2015/Documents/Guidelines%20for%20Preparation%20of%20Proposals%20WRC15_08052015.pdf](https://www.itu.int/fr/ITU-R/conferences/wrc/2015/Documents/Guidelines%20for%20Preparation%20of%20Proposals%20WRC15_08052015.pdf) .

members of CEPT national delegations and to coordinate CEPT actions during the course of the conference.

1.2 The need for a RSPG Opinion

The RR are key for radiocommunication services of an international nature, such as mobile, aeronautical, maritime or space services and is essential in achieving worldwide harmonisation of spectrum use. Where worldwide harmonisation cannot be achieved, harmonisation within a Region as defined by the RR⁴ may be possible. Such harmonisation potentially translates into economies of scale and among others opportunity for circulation of equipment and the provision of consumer services (e.g. enabling roaming), thus bringing benefits to EU economy and citizens.

The importance of the process to modify the RR is reflected in the RSPG Opinion on the preparation of ITU World Radiocommunication Conferences⁵ which recommends:

“to develop and adopt an RSPG opinion for each WRC[...] to be adopted in time for the CPM (i.e. 9 months before WRC);”

Therefore, it is important that the EU and its Member States identify as early as practicable the policy approach for WRC-19 Agenda Items that are relevant for the EU policies (see section 2 of this Opinion).

1.3 Towards WRC-19

It should be noted that not all WRC-19 Agenda items are of relevance or subject to EU policy. Therefore in its proposal, the RSPG has where necessary balanced the need to satisfy all elements of Agenda items covered as well as Agenda items not covered by EU policies. It should be noted that there may be instances, not evident at this time, where negotiations at the conference may require that the agreed policy approach is adapted within tight timeframe.

Therefore the aim of this Opinion is to:

- assist the European Commission in proposing a Union Position to the Council;
- provide guiding material for the development of CEPT “European Common Proposals” (ECP) to the Member States;
- propose actions for the European Commission, as necessary, in order to provide political support to promote the objectives of common policy approaches in regular meetings between EC and non-EU countries.

As for previous RSPG opinions addressing WRCs and following the existing practise to address EU policy interest most efficiently, this RSPG opinion for WRC-19 has been developed in two stages:

- Stage 1: An Interim Opinion identifying the main themes of WRC-19 where there is an EU policy in place taking into account relevant spectrum harmonisation measures⁶;

⁴ See No. 5.2 of Article 5 of the Radio Regulations.

⁵ See RSPG09-294 -

http://rspg.groups.eu.int/documents/documents/opinions/rspg09_294_preparation_itu_wrc.pdf.

- Stage 2: Based on the results of stage 1, the development of this Opinion containing information on the main themes based on emerging results from studies conducted in the overall framework of WRC-19 preparation, together with a Policy Approach relevant to these themes.

2. Identification of relevant EU Policies for WRC-19

The identification of the EU policies relevant to WRC-19 Agenda Items is a complex task. Agenda Items are formulated in terms of allocations to radiocommunication services as defined in the RR (e.g. Mobile, Fixed, Fixed-satellite, Broadcasting Services, etc.) and conflicting interests may exist between users of these Services⁷. Changes to the international regulatory framework, by addressing those through an Agenda Item, have generally an impact on several radiocommunication services and may require a thorough analysis of current EU policies. Some Agenda Items are broad in nature, for example those Agenda Items which are not limited to specific frequency bands, and it may not be possible to determine all relevant policies impacted. Moreover the EU and its Member States will have to balance the need for a new allocation for some radiocommunication services versus the need for continuing operation and protection of other services in the same frequency range. The RSPG has made every effort to balance these interests and provide a strategic input through this Opinion process.

CEPT is in the process of developing and adopting European Common Proposals (ECP) and associated briefings. It is therefore the right time for highlighting the relationship between the activities within CEPT on WRC-19 Agenda Items and the EU framework as well as a policy approach that Member States should follow at the final ECP adoption phase within CEPT and during WRC-19.

The EU policy areas relevant to WRC Agenda Items are Electronic Communication and Connectivity, Single Market, Transport, Trade, Space, Science and Research. In addition, aspects of the Common Security and Defence Policy⁸ may be considered as having relevance.

3. Response to public consultation

[to be filled in after public consultation in June/July 2018]

4. WRC-19 Agenda items covered by EU policies

The RSPG is of the opinion that the following specific WRC-19 Agenda Items are of relevance for some EU policies. This identification of relevant WRC-19 Agenda Items includes, where applicable,

⁶ See RSPG17-010_FINAL - https://circabc.europa.eu/sd/a/0cd3a364-073b-4978-8bb4-f59b44d5d9da/RSPG17-010_Final_Interim_Opinion_WRC-19.pdf.

⁷ The term „service” in the context of ITU-R has a specific meaning that differs from the terminology used in the EU context.

⁸ The RSPG is recognizing that national security and defense matters are predominantly under national responsibility.

references to harmonisation decisions under the Radio Spectrum Decision⁹. For each of the following Agenda items it is indicated under which case (a, b or c), as indicated in the introduction (see 1.), a recommendation is considered.

4.1 General objective

The RSPG notes the intention of some countries to make proposals to WRC outside the scope of its Agenda. The RSPG is mindful of past occurrences where changes to a WRC Agenda were suggested at a very last stage.

As an example, the RSPG recognized that some countries outside EU have launched initiatives for using the band 27.5 - 29.5 GHz for terrestrial mobile broadband - 5G. That band is outside the scope of Agenda item 1.13. It needs to be taken into account, when necessary, that the Member states objected to any consideration of the 27.5 - 29.5 GHz band for IMT-2020 harmonisation (5G) at WRC-19. For that reason it is addressed under section 4.9 on Agenda item 1.13.

Furthermore it is noted that some Agenda items are addressing the same or overlapping frequency bands. In its work CEPT is seeking a consistent position for such cases. The RSPG endorses this approach.

4.2 WRC-19 Agenda Item 1.5 (ESIM)

This Agenda Item seeks to extend the operation of earth stations in motion into the frequency ranges 17.7 - 19.7 GHz and 27.5 - 29.5 GHz while ensuring at the same time protection of other services. It is a continuation of the work performed during the WRC cycle until 2015 for the frequency bands 19.7 - 20.2 GHz and 29.5 - 30 GHz.

Parts of the frequency band 27.5 - 29.5 GHz are being considered by a ~~small~~ number of administrations in ITU Region 2 (Americas) and Region 3 (Asia-Pacific) for the introduction of 5G wireless terrestrial broadband. Although the band is not considered under the Agenda for WRC-19, it can be expected that there will be an eco-system for 5G services developed in this band together with the 26 GHz frequency band.

4.2.1 Link with EU policies:

European electronic communication policy aims to deliver broadband connectivity to European citizens also while they are in motion as outlined in the EC Communications on the Gigabit society and a 5G Action plan¹⁰. Earth stations in motion ~~would contribute to that goal~~.

⁹ See Decision No 676/2002/EC <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002D0676&from=EN>.

¹⁰ EC Communications COM(2016) 587 <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-587-EN-F1-1.PDF> and COM(2016) 588 - <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-588-EN-F1-1.PDF>.

4.2.2 Relevant spectrum harmonisation decisions:

None

4.2.3 Recommendation:

As a common policy approach, Member States should support the extension of ESIM into the FSS frequency ranges of 17.7 - 19.7 GHz and 27.5 - 29.5 GHz, while ensuring the continuing use of these bands for existing services as well as for FSS applications other than ESIMs.

This recommendation is falling under case e).

4.3 WRC-19 Agenda Item 1.6 (Non-GSO FSS Q/V band)

This Agenda Item deals with the establishment of regulatory provisions for sharing between non-geostationary and geostationary satellites in the 50/40 GHz frequency bands allocated to the fixed-satellite service. It also addresses the protection of passive services (i.e. the Radio Astronomy, Earth-exploration satellite and space research services) in adjacent frequency bands.

4.3.1 Link with EU policies:

European space policy supports the establishment of a sustainable regulatory environment, which is necessary for the development and production of non-geostationary satellites operating in these frequency bands¹¹. This Agenda Item supports the development of such an international regulatory framework.

4.3.2 Relevant spectrum harmonisation decisions:

None

4.3.3 Recommendation:

As a common policy approach, Member States should support the development of a regulatory framework for non-geostationary FSS satellites that ensures the coexistence with geostationary FSS systems both of which may operate in the frequency bands 37.5 - 39.5 GHz (space-to-Earth), 39.5 - 42.5 GHz (space-to-Earth), 47.2 - 50.2 GHz (Earth-to-space) and 50.4 - 51.4 GHz (Earth-to-space). The regulatory conditions with regards to the fixed and mobile services in these bands have to be maintained unchanged. Member States should also support the development of technical and regulatory provisions ensuring the protection of the radio astronomy, Earth-exploration satellite and space research services in adjacent bands as requested by Resolution 159 (WRC-15).

¹¹ EC Communication on a Space Strategy for Europe COM(2016)705.

This common policy approach ~~does~~ not prejudice the consideration of portions of this band for 5G/IMT under Agenda item 1.13, noting that the regulatory conditions for mobile services are maintained.

This recommendation is falling under case ~~c).~~ b).

4.4 WRC-19 Agenda Item 1.7 (Nano-/Picosatellites)

This Agenda item deals with spectrum needs for the technical operation of satellites with short mission durations. Such space missions are often used by academia and industry for testing and research purposes leading to the commercialisation of innovative space applications. The Agenda item aims at a decoupling of such missions from general satellite missions. It will initially study whether existing allocations to space services, in particular the space operation service are sufficient. Otherwise, there is the possibility of making suitable and appropriate new allocations.

4.4.1 Link with EU policies:

The EU is aiming to develop a competitive, independent and global European space industry. Strengthening the European space sector by boosting space research and innovation is vital if Europe is to maintain and safeguard access to and operations in space¹². Ensuring the availability of spectrum for operating satellites with short mission duration may be supportive to these policy objectives, in particular for SMEs.

4.4.2 Relevant spectrum harmonisation decisions:

None.

4.4.3 Recommendation:

As a common policy approach, subject to the successful outcome of ongoing studies, Member States should support all measures in support of the operation of short duration satellite missions, which will not constrain existing allocations.

This recommendation is falling under case c).

¹²EC Communication on a Space Strategy for Europe COM(2016)705.

4.5 WRC-19 Agenda Item 1.8 (GMDSS)

This Agenda Item is dealing with regulatory framework for a modernized Global Maritime Distress and Safety System (GMDSS) in two aspects, used frequency channels and an additional satellite system into the GMDSS. The modernisation is considered within the International Maritime Organisation (IMO).

The separate issue of the potential introduction of additional satellite systems (such as those operating in the 1.6/1.5 GHz frequency range) into the GMDSS, is currently subject to the approval by IMO. Therefore it is noted that any regulatory action of the ITU is interdependent with the decision(s) of IMO. However, the introduction of an additional GMDSS satellite system operating in the mobile satellite service in the 1.6 GHz frequency band will have to ensure protection of the Radio astronomy service in the adjacent band.

4.5.1 Link with EU policies:

European Transport and Trade policies are aiming at maximising safety and efficiency in the maritime sector, in particular improving logistics¹³. Positions for IMO meetings are set by the Council through Decisions under TFEU Art. 218 (9) and the resulting international maritime regulatory changes are incorporated into EU law¹⁴. The issue of protecting the Radio astronomy service is of importance for European Science policy promoting research and technological development¹⁵.

4.5.2 Relevant spectrum harmonisation decisions:

None

4.5.3 Recommendation:

As a common policy approach, Member States should support, taking into account the view from IMO, the modernisation of GMDSS, including consequential regulatory actions regarding the possible introduction of an additional satellite system into the GMDSS, on the condition that this introduction is compatible with existing services (especially with regards to the protection of the radio astronomy service in the 1.6 GHz band).

This recommendation is falling under case c).

4.6 WRC-19 Agenda Item 1.9 (Autonomous maritime devices and VDES satellite)

This Agenda Item comprises two independent issues:

- 1.9.1, dealing with the growing number of autonomous maritime radio equipment which uses spectrum designated to the Automatic Identification System (AIS). This equipment does not

¹³ see TFEU Art. 91 (1c).

¹⁵ see TFEU Art. 179-190.

fully respect in most cases the AIS requirements and therefore endangers traditional AIS uses and maritime safety.

- 1.9.2, a follow-up issue of WRC-15 aiming to allocate an appropriate portion of current allocations to the maritime mobile service in the frequency band 156 - 162 MHz to the maritime mobile-satellite service to support the implementation of the VHF Data Exchange System (VDES).

4.6.1 Link with EU policies:

For Agenda item 1.9.1, AIS is included in GMDSS and in EU law for maritime safety¹⁶. The subject of this Agenda item is to ensure the effective operation of AIS.

For Agenda Item 1.9.2, the European transport policy is aiming at maximising safety and efficiency, which is outlined by improving maritime transport and logistics¹⁷. The implementation of the satellite part of VDES will be beneficial to the efficiency aspect.

4.6.2 Relevant spectrum harmonisation decisions:

None.

4.6.3 Recommendation:

The RSPG recommends that the European Commission propose an EU position to the Council on Agenda item 1.9.1, aiming to ensure that the operation of Autonomous Maritime Radio Devices shall not reduce the integrity of AIS and of GMDSS.

This recommendation is falling under case a).

As a common policy approach for Agenda item 1.9.2, Member States should support the future development of the European maritime sector by facilitating the introduction of the satellite components of VDES.

This recommendation is falling under case c).

Editor's Note: frequency plans are currently being discussed within CEPT CPG PTC and the RSPG Opinion will take into account the latest update of those discussions.

¹⁶ see <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:124243>.

¹⁷ see TFEU Art. 91 (1c).

4.7 WRC-19 Agenda item 1.10 (GADSS)

This Agenda item is dealing within the introduction of a Global Aeronautical Distress and Safety System (GADSS), which is under consideration by the International Civil Aviation Organisation (ICAO). GADSS is a follow-up activity of the question of relevant spectrum bands for a Global Flight tracking system at WRC-15.

RSPG notes that ICAO is of the view that an implementation of GADSS is neither needing new allocations of spectrum nor any further amendments of Art. 5 of the RR.

4.7.1 Link with EU policies:

Safety and Regularity of flights are important aspects of European Air traffic within the objectives of EASA¹⁸ and the Single European Sky¹⁹. A functioning system of systems as currently under consideration by ICAO would internationalize the European objectives.

4.7.2 Relevant spectrum harmonisation decisions:

None

4.7.3 Recommendation:

Due to the on-going considerations within ICAO and taking into account the stable view from ICAO on the spectrum aspects of GADSS, the RSPG recommends taking no further action under Article 5 of the Radio Regulations on this Agenda item.

This recommendation is falling under case a).

4.8 WRC-19 Agenda Item 1.12 (ITS)

This Agenda Item is looking into a potential global or regional harmonisation of spectrum for the development of Intelligent Transport Systems (ITS). Any solution will have to take utmost account of already existing harmonisation in Europe. Since this Agenda Item is limited to frequency bands already allocated to the appropriate mobile service, the preparatory studies may as well look into the aspect of solving the item without revisions to the Radio Regulations, e.g. by means of non-binding ITU documents.

4.8.1 Link with EU policies:

European Transport policy is aiming at maximising road safety and efficiency, which is outlined by halving road death by 2020 and improving logistics and creating smarter ‘travel behaviour’²⁰. It should

¹⁸ European Aviation Safety Agency.

¹⁹ See https://ec.europa.eu/transport/modes/air/safety_en.

be noted that future ITS may benefit from an integration into the wider ecosystem of 5G (see EC Communication on the connectivity for a European Gigabit society²¹).

4.8.2 Relevant spectrum harmonisation decisions:

2008/671/EC – Commission Decision on the harmonised use of radio spectrum in the 5 875 - 5 905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS)²²

4.8.3 Recommendation:

RSPG notes the current actions of Member States regarding the global harmonisation of frequency bands for Intelligent Transport Systems through appropriate ITU-R Recommendations and there is no need for action at WRC-19.

Therefore the RSPG recommends that the European Commission propose an EU position to the Council, supporting “No change” for this Agenda item at WRC-19.

This recommendation is falling under case a).

4.9 WRC-19 Agenda Item 1.13 (IMT2020/5G)

This Agenda Item aims to complement the availability of spectrum for Electronic Communication Systems (ECS) usable for ultra-high capacity links in higher frequency bands. These bands will form a complementary element for the worldwide deployment of the fifth generation of mobile communication systems, so called “5G”. The studies are limited to eleven bands ranging from 24.25 GHz to 86 GHz, mainly within already existing allocations to the mobile service to ensure from the beginning an opportunity of worldwide harmonisation.

It is recognised that “5G” will also make intensive use of already harmonised bands for ECS (all below 6 GHz), which are generally usable for 5G under the principle of technology neutrality.

4.9.1 Link with EU policies:

European Electronic Communication and Connectivity policy is aiming at ubiquitous ultra-high broadband connectivity of all European citizens and fostering innovative applications in the single market.

The EU wants to be at the forefront in the development of technology for mobile networks. Europe’s 5G strategy is outlined in the RSPG Opinion on 5G²³, EC Communication on the connectivity for a

²⁰ see TFEU Art. 91 (1c);

Also proposal in Commission Communication on a European strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility COM(2016) 766;

Also COM(2016) 588 - <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-588-EN-F1-1.PDF> .

²¹ COM(2016) 587 - <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-587-EN-F1-1.PDF> .

²² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008D0671&from=en> .

European Gigabit society²⁴ and the EC Action Plan on 5G²⁵ including the expected benefit of a common ecosystem for a wide range of sectors like e.g. assisted driving, eHealth, energy management, possible safety applications. At the same time the co-existence with other services in the relevant bands, in particular those for the development of the Earth Exploration Satellite System “Copernicus”, needs to be ensured.

4.9.2 Relevant spectrum harmonisation decisions:

None – at this stage. However a mandate to the CEPT on the harmonisation of spectrum for 5G has been issued²⁶ on the band 24.25 - 27.5 GHz. An adoption of an EU technical harmonisation decision is planned for the end of 2018.

4.9.3 Recommendation:

- The RSPG recommends that the European Commission propose an EU position to the Council supporting an IMT identification in the band 24.25 - 27.5 GHz on a global basis. In addition any regulatory provisions intended to be included in the Radio Regulations to protect other services shall be consistent with the forthcoming EU technical harmonisation decision.

This recommendation is falling under case a).

The RSPG, taking account of EU agreements regarding 5G, recommends to the European Commission to include in their international activity, support for this EU pioneer band to be identified for 5G.

- The RSPG recommends that the European Commission propose an EU position to the Council, conditional to the results of studies, support further the identification of the band 40.5 - 43.5 GHz and 66 - 71 GHz for IMT on a global basis.
- ~~The RSPG recommends that the European Commission propose an EU position to the Council opposing any consideration of the 27.5 - 29.5 GHz band under Agenda item 1.13.~~

These recommendations are falling under case b).



4.10 WRC-19 Agenda item 1.14 (HAPS)

This Agenda item is dealing with identification of additional spectrum for High Altitude Platform Stations (HAPS). Such stations are intended to provide several types of different services. There are several concepts of HAPS which are developed by the European industry.

²³ RSPG16-032 - http://rspg-spectrum.eu/wp-content/uploads/2013/05/RPSG16-032-Opinion_5G.pdf.

²⁴ COM(2016) 587 - <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-587-EN-F1-1.PDF>.

²⁵ COM(2016) 588 - <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-588-EN-F1-1.PDF>.

²⁶ EC Mandate on 5G – http://ec.europa.eu/newsroom/document.cfm?doc_id=42093.

4.10.1 Link with EU policies:

The current concepts under study are in support of delivering niche connectivity (e.g. broadband services in emergency situations or localised surge in demand) inside and outside of the EU.

4.10.2 Relevant spectrum harmonisation decisions:

None.

4.10.3 Recommendation:

Member States should, conditional to the results of studies and in accordance with the Agenda item, support the identification of worldwide frequency bands for HAPS with relevant conditions for the protection of existing services.

This recommendation is falling under case ~~c)~~ a).

4.11 WRC-19 Agenda Item 1.16 and Issue 9.1.5 (RLAN 5 GHz)

The Agenda Item 1.16 deals with a possible extension of RLAN in the frequency range 5 150 - 5 925 MHz. It is a continuation of activities performed in view of WRC-15. Two frequency bands had been considered for the mobile service to enhance the spectrum available for Radio Local Area Networks (RLAN): 5 350 - 5 470 MHz and 5 725 - 5 850 MHz. WRC-15 did not introduce such an allocation, notably taking into account Europe's interest to protect the operation of the Sentinel satellites of its Copernicus programme²⁷ in the lower band. Based on a European initiative, WRC-15 decided to conduct further studies looking at the whole band 5 150 - 5 925 MHz to respond to the demand of Wireless Access Systems including RLAN to have access to more spectrum in order to ensure the availability of channels with a bandwidth of up to 160 MHz and to relax conditions in the existing 5 GHz range identified for RLAN. The Agenda Item requests as a first step assessment of the feasibility of suitable sharing techniques in the whole band. In addition to that, new sharing techniques have also been under study. It needs to be noted that sharing studies have shown relaxation possibilities only for the band 5 150 - 5 250 MHz.

Issue 9.1.5 addresses the question whether action under a standing Agenda item for updating the version of referenced ITU-R Recommendation M.1638 and M.1849 in RR footnotes might, in fact, retrospectively place operational limits on existing RLAN devices in use. This matter is still in discussion internationally, but RSPG recognise that matters that introduce retrospective limitations on consumer devices could have major implications.

²⁷ <http://www.copernicus.eu/main/copernicus-brief>.

4.11.1 Link with EU policies:

- Ensuring the full operation of the Sentinel satellites with their Earth observation capabilities is an essential political requirement of the Copernicus policy programme²⁸.
- RLAN forms part of EU Framework for Electronic Communication Services and Networks²⁹. The European Council called in June 2016 for very high-capacity fixed and wireless broadband connectivity across Europe, as a precondition for future competitiveness³⁰.
- Common European Security and Defence Policy is relying on accurate information provided also by Radars, such as those operated in the 5 GHz range.
- European Transport policy is aiming at maximising safety and efficiency, which also involves improving logistics and creating smarter 'travel behaviour' by making the best use of modern ICT, in particular Transport and Traffic Telematics, and satellite-based technology³¹. This implies studying in which way innovative ITS applications can be protected³².

4.11.2 Relevant spectrum harmonisation decisions:

RLAN (2005/513/EC as amended by 2007/90/EC)³³; SRD (2017/1483/EU)³⁴; ITS (2008/671/EC)³⁵.

4.11.3 Recommendation:

Therefore the RSPG recommends that the European Commission propose an EU position to the Council, to

- support no change in the RR in the 5 250 - 5 350, 5 350 - 5 470 and 5 850 - 5 925 MHz frequency band;
- ensure compatibility with other services and applications in the 5 725 - 5 850 MHz range, in particular Road Tolling, eTachograph in the band 5 795 - 5 815 MHz covered by EU legislation, as well as radars taking into account the effectiveness of any mitigation technique;
- support, conditional on the results of studies on the bullet above, developments in response to the demand for Wireless Access Systems, including RLAN, within the 5 150 - 5 250 MHz and 5 725 - 5 850 MHz frequency ranges, including new mobile allocations and relaxation of existing conditions where applicable;

²⁸ see Article 4 (2b) of Regulation 377/2014/EU of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010 (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0377&from=EN>).

²⁹ See RSPP Art. 6.

³⁰ European Council conclusions, 28 June 2016 (EUCO 26/16).

³¹ see TFEU Art. 91 (1c).

³² http://europa.eu/european-union/file/1232/download_en?token=xCqI9RmY.

³³ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007D0090&from=EN>.

³⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D0752&from=EN>.

³⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008D0671&from=EN>.

- support under Agenda item 9.1 issue 9.1.5 that any amendments for the bands 5 250 - 5 350 MHz and 5 470 - 5 725 MHz should not impact the current coexistence conditions between RLAN and other services.

This recommendation is falling under case a).

4.12 Agenda item 10 (New Agenda items for WRC-23)

This Agenda item is to agree on the agenda for the WRC-23. The previous Conference (WRC-15) already set the preliminary Agenda for WRC-23 as included in Resolution 810 (WRC-15). In addition to the so called standing Agenda items for every Conference, five preliminary specific Agenda items together with supporting Resolutions are already proposed. The RSPG is of the view that according to their current wording, two of these Agenda items would benefit from an EU position:

- 2.1 to consider possible spectrum needs and regulatory actions to support Global Maritime Distress and Safety System (GMDSS) modernization and the implementation of e-navigation, in accordance with Resolution **359 (WRC-15)**;
- 2.5 to review the spectrum use and spectrum needs of existing services in the frequency band 470 - 960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470 - 694 MHz in Region 1 on the basis of the review in accordance with Resolution **235 (WRC-15)**.

It is noted that the final European proposals for new Agenda items will be agreed close to the beginning of the Conference and some even during the Conference.

4.12.1 Link with EU policies:

At this stage: European Transport and Trade policies and European Electronic Communication and Connectivity. European Transport and Trade policies are aiming at maximising safety and efficiency in the maritime sector, in particular improving logistics³⁶.

The “Lamy – Report” contains strategic policy elements for the future use of the UHF-Band.

4.12.2 Relevant spectrum harmonisation decisions:

700 MHz - (EU)/2016/687 Decision (EU) 2017/899 of the European Parliament and of the Council of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union;

800 MHz - 2010/267/EU Commission Decision of 6 May 2010 on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union;

³⁶ see TFEU Art. 91 (1c).

900 MHz - 2011/251/EU Commission Implementing Decision of 18 April 2011 amending Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community;

Report of a high level group on the future use of the UHF band³⁷

4.12.3 Recommendation:

The RSPG recommends that the European Commission propose an EU position to the Council supporting the inclusion of the following preliminary items of Resolution 810 (WRC-15) with potential European policy relevance into the Agenda of WRC-23:

- 2.1 to consider possible spectrum needs and regulatory actions to support Global Maritime Distress and Safety System (GMDSS) modernization and the implementation of e-navigation, in accordance with Resolution **359 (WRC-15)**;
- 2.5 to review the spectrum use and spectrum needs of existing services in the frequency band 470 - 960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470 - 694 MHz in Region 1 on the basis of the review in accordance with Resolution **235 (WRC-15)**.

This recommendation is falling under case b).

4.13 Other Agenda Items

For WRC-19 Agenda Items 1.1, 1.2, 1.3, 1.4, 1.11, 1.15, 2, 4, 7 as well as for Issues under Agenda Item 9.1 (except issue 9.1.5), the current information indicate no relevance on EU policy, in particular no affection of common rules.

Annex: Agenda of the WRC-19 (Resolution 1380 (rev. ITU Council 2017))

³⁷ <https://ec.europa.eu/digital-single-market/en/news/report-results-work-high-level-group-future-use-uhf-band> .

Annex

RESOLUTION 1380

Place, dates and agenda of the World Radiocommunication Conference
(WRC-19)

The Council,

noting

that Resolution 809 of the World Radiocommunication Conference (Geneva, 2015):

- a) resolved to recommend to the Council that a world radiocommunication conference be held in 2019 for a maximum period of four weeks;
- b) recommended its agenda, and invited the Council to finalise the agenda and arrange for the convening of WRC-19 and to initiate as soon as possible the necessary consultation with Member States,

resolves

to convene a World Radiocommunication Conference (WRC-19) in Sharm el Sheik (Egypt) from 28 October to 22 November 2019, preceded by the Radiocommunication Assembly from 21 to 25 October 2019, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC-15 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the frequency bands under consideration, to consider and take appropriate action in respect of the following items:

1.1 to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution **658 (WRC-15)**;

1.2 to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz, in accordance with Resolution **765 (WRC-15)**;

1.3 to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz, in accordance with Resolution **766 (WRC-15)**;

1.4 to consider the results of studies in accordance with Resolution **557 (WRC-15)**, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix **30 (Rev.WRC-15)**, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;

1.5 to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary

space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution **158 (WRC-15)**;

1.6 to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution **159 (WRC-15)**;

1.7 to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution **659 (WRC-15)**;

1.8 to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution **359 (Rev.WRC-15)**;

1.9 to consider, based on the results of ITU-R studies:

1.9.1 regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution **362 (WRC-15)**;

1.9.2 modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth-to-space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix **18**, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in *recognizing d) and e)* of Resolution **360 (Rev.WRC-15)**;

1.10 to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution **426 (WRC-15)**;

1.11 to take necessary actions, as appropriate, to facilitate global or regional harmonised frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution **236 (WRC-15)**;

1.12 to consider possible global or regional harmonised frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution **237 (WRC-15)**;

1.13 to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **238 (WRC-15)**;

1.14 to consider, on the basis of ITU-R studies in accordance with Resolution **160 (WRC-15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations;

1.15 to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution **767 (WRC-15)**;

1.16 to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the

appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution **239 (WRC-15)**;

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-15)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27 (Rev.WRC-12)**;

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, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution **86 (Rev.WRC-07)**, in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

8 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)**;

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.1 on the activities of the Radiocommunication Sector since WRC-15;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations^{*}; and

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

10 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, in accordance with Article 7 of the Convention.

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-19,

* This agenda item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations.

instructs the Secretary-General

- 1 to make all the necessary arrangements, in agreement with the Director of the Radiocommunication Bureau, for the convening of the Conference;
 - 2 to communicate this Resolution to international and regional organizations concerned.
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