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## RAI RESPONSE TO DRAFT RSPG OPINION ON A RSPP

### A. BACKGROUND

RAI - Radiotelevisione Italiana Spa is the Italian public broadcaster. It is one of the largest media companies in Europe and operates in the radio-television, film production and internet sectors, providing broadcasting infrastructures through its subsidiary companies (e.g. Rai Cinema, Rai Way). RAI is a holding company controlled by the Italian Minister of Economy and Finance.

RAI initiated its first TV terrestrial transmissions in the 1954, by using in its infancy the VHF III Band and quickly moving to include also the UHF Band.

RAI's experts contributed to the development of technical studies, within the ITU framework, regarding TV and Audio broadcasting.

As public Broadcaster, RAI is particularly concerned to guarantee pluralism by ease and free access to the terrestrial broadcasting platform that in Italy experiences by far the largest penetration in the country. In protecting terrestrial broadcasting, Rai shields democracy and assists the cultural development of the Italian population as in the aim of its mission.

RAI welcomes the opportunity to comment on the draft Radio Spectrum Policy Group ('RSPG') Opinion on a Radio Spectrum Policy Programme ('RSPP') and will comment the draft Opinion only on specific relevant points for PSM.

### B. COMMENTS ON THE DRAFT RSPG OPINION ON RSPP

#### 2. STRATEGIC SPECTRUM ISSUES

##### 2.2. Licensing and Spectrum Awards

*"In addition to nationwide licenses and in order to respond to demand for local licenses, the RSPG identifies the following licensing regimes for local networks:*

- There is a need to remain flexible and to enable different network solutions and topologies. Local networks could be provided by mobile operators, third-parties or directly by the local users themselves. The response to demand for local spectrum can be met through spectrum leasing (voluntary/mandatory), by dedicated spectrum allocations for local networks and/or by third party operated local networks.*
  - Another option is the use of unlicensed spectrum where possible"*
- (page 3)

Broadcasters and other PMSE users have a long track record of deploying and operating their own wireless network which can be local and permanent, but also temporary (i.e. from a few hours to several days) and / or nomadic (i.e. for touring performances). It is important to ensure timely and flexible access to adequate spectrum for such applications in the future, including for private networks based on new wireless technologies such as 5G.

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With reference to the option of using unlicensed spectrum, it is also necessary to identify the portions of the unlicensed spectrum within the 694-960 MHz band with particular reference to those already identified for the Supplementary Down Link.

### **3. SPECTRUM NEEDS AND SUPPORTING EU VISION / POLICIES**

*"The RSPG considered a policy target of making available at least 12 GHz of spectrum below 100 GHz (including already EU-harmonised spectrum) to promote innovative wireless services, including next generation mobile and wireless access systems (such as Wi-Fi). With initiatives well underway, there is in fact already more than 12 GHz of harmonised spectrum available for wireless services and no need to define any quantitative target in RSPP to respond to EU policies:*

*- RSPG confirms the need for inclusion of policy objectives supporting the development of innovative wireless services based on generic description rather than quantitative.*

*- In addition, as has been done recently for 5G, the RSPG can develop long-term spectrum availability plans including needs for harmonisation initiatives for key EU policy areas upon request."*

*(page 5)*

In this regard, Rai is aware of the great interest for the identification of further spectrum availability for IMT and is radically open to cooperate in order to assist any development of a framework for sharing and compatibility studies between broadcasting and IMT. Nevertheless, RAI wants to underline that more than 12 GHz of harmonized spectrum are already available for wireless services and therefore there is no need to define any quantitative target in RSPP to meet EU policies. More spectrum can be made available for new wireless services by further improvement of the harmonization of adjacent frequency bands which have been already identified for IMT services in different slot of time.

#### **3.4. Broadcasting and PMSE**

*"RSPG is of the view that the future of broadcasting and PMSE in regard of the UHF Band 470-694 MHz shall not be subject of a new RSPP [...]. The UHF 470-960 MHz band is on the agenda for the upcoming WRC23 conference and RSPG intends to provide a recommendation to the EC on an EU position accordingly in its opinion towards WRC23. The current Council and European Parliament Decision is providing legal certainty until 2030 to terrestrial broadcasting including conditioned national flexibility." (page 7)*

Concerning RSPG's vision on this issue, RAI would like to underline that a possible support given to the flexible use of the portion of UHF band should be avoided, as it would result in the actual impossibility for broadcasters in providing their services to the population. As it is known, the latest WRCs results have confirmed that co-primary attribution to broadcasting and mobile services (IMT) has always resulted in broadcasters' release of the band.

Moreover, we would like to highlight that more than 90% of Italian population accesses TV through DTT platform (Report ITU-R BT.2301-2 "National field reports on the introduction of IMT in the bands with co-primary allocation to the broadcasting and the mobile services" -

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[https://www.itu.int/dms\\_pub/itu-r/opb/rep/R-REP-BT.2301-2-2016-PDF-E.pdf](https://www.itu.int/dms_pub/itu-r/opb/rep/R-REP-BT.2301-2-2016-PDF-E.pdf) or latest

version), which is based on UHF band, and it is thus essential that the currently available spectrum for broadcast organisations be maintained.

The experience of the pandemic and the lock down have confirmed the central role of DTT platform for the protection of pluralism and for the performance of a service of pre-eminent general interest, constitutionally recognized, with a constant supply of information, qualified and verified and a cultural and entertaining programming equally fundamental for its social function able to extend civic sense and social cohesion.

The audio-visual sector - meaning the television sector and the industry that revolves around it - which operates mainly on the terrestrial platform in many European countries, represents the national and European cultural production, made of original content that has its own identity and is not homologated on models alien to European culture.

RAI believes that the transition of audio-visual media services to new technologies can be one of the main drivers for European digitization only if it is able to preserve the accessibility, the prevalence of free and widespread presence of the terrestrial platform in the homes, considering also the value of the content that is conveyed on it.

In Italy, DTT platform - considering the above indicated percentage of users connected through it - is far from being dismissed and in fact it is expected that in 2022 the transition to the new DVB-T2 standard and HEVC coding will be made in accordance with the provisions of national legislation.

Broadcast technology in its most advanced version - DVB-T2 - is efficient, ecological and the least expensive for the diffusion of contents to a very high number of people at the same time and in real time. Broadcasting systems are the most respectful of users' privacy and constraints on electromagnetic emissions.

All Italian broadcasters and in particular RAI as PSM are therefore continuing to invest heavily in the DTT platform both in networks plant restructuring, in order to allow the release of frequencies within the 700 MHz band which are currently used, and for the start of DVB-T2 broadcasts. As a consequence, DTT platform will stay the main platform to deliver audio-video contents towards national population. This will take place also by widening the editorial offer and improving the technical quality of our services by increasing HD contents, with possible insertion of UHD programs, and thus maintaining the DTT platform at the highest level allowed by current technologies.

In the context of national refarming operations, Rai is engaged in making a huge communication effort aimed at facilitating the process of updating the technological equipment among users towards more efficient broadcasting standards (as DVB-T2) which has slowed down due to the pandemic.

As for a flexible use of the UHF band, this could be considered within 700 MHz and 800 MHz bands, which are already assigned in a co-primary way to broadcasting and IMT, and in the future also in the 900 MHz band in order to make the new 5G broadcast system implementable, since it is based on a network structure compatible with channelling provided in those bands. Moreover, the flexible use of the band should be bi-directional in order to have the opportunity to share the upper bands up to 6 GHz for PMSE applications (unlicensed spectrum).



In the end, Rai expresses its appreciation of the reference to the 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, which foresees stability at least until 2030, since Rai has recently been granted the attribution of frequencies right of use for a renewable period of **10 years**, ensuring a DTT platform availability at least until 2032. Rai also suggests to explicitly refer to broadcasting as an EU strategic sector supporting long term **exclusively PRIMARY** use of sub-700 MHz band for broadcasting at the next WRC-23 Conference, recognizing its social, economic and cultural role for European citizens.



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