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Digital Decade and Connectivity Radio Spectrum Policy Group RSPG Secretariat

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RADIO SPECTRUM POLICY GROUP

Progress Report of the RSPG Sub Group on Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU

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- The RSPG Working Group on "Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU" (hereafter: the UHF SG) continued to work on its assigned tasks, holding five more meetings since RSPG plenary #60 (15 February 2023):
 - Meeting #10 on 2nd of March 2023, virtual;
 - Meeting #11 on 22nd of March 2023, virtual;
 - Meeting #12 on 26th of April 2023, virtual;
 - Meeting #13 on 15th of May 2023, virtual;
 - Meeting #14 on 30th of May 2023, virtual.
- 2. The participants registered in the group represent the following Administrations: Austria, Croatia, Cyprus, Czechia, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Turkey, plus the representatives of the European Commission.
- 3. With respect to the three main points to be adequately addressed in the Opinion, according to the Work Programme, the status is as follows.
- 4. First point: *a review of the background and recommendations of the 2015 RSPG opinion*. It covers 1) the part of the European regulatory framework and its evolution since the publication of the RSPG15-595 FINAL Opinion, and 2) a review of the 2015 Opinion's recommendation points, where an assessment was provided, in terms of, whether they have actually been implemented, whether they are still in the process of being realised, or whether there have been changes in the meantime that make some points no longer necessary or of interest.
- 5. Second point: discuss how the flexibility set out in Article 4 of Decision (EU) 2017/899 could be implemented in practice. The UHF SG analysed the conditions under which the GE06 envelope concept could be applied in order to facilitate the implementation of Article 4. The UHF SG also identified existing technical solutions that allow for a certain level of flexibility: SDL, 5G Broadcast; Dedicated band (example: 600 MHz band plan), Dynamic Spectrum Access. Each solution was described in relation to its opportunities and limits and evaluated with respect to its compatibility with Article 4.

The SG worked in order to elaborate on the conclusions of the previous analysis. The fact that the flexibility of Article 4 has, so far, found no noteworthy application was thoroughly discussed and various elements which may affect the application of Article 4 were identified along with the opportunities of the existing tools.

6. Third point: *develop/describe possible and technically feasible scenarios concerning development of use in UHF band.* The **UHF SG** completed the work about the drivers to be considered, in order to describe the possible future scenarios focusing on the effective usage of the sub-700 MHz band in each Member State, balanced with the need for cross border coordination. The SG recognised that a common path for all Member States seems difficult even after 2030, due to different national spectrum needs and cross border issues. Under

this consideration, three possible future **national scenarios** were developed, considering the main drivers, the technologies and trends as well as existing broadcasting landscapes in the EU.

Briefly, in Scenario1, DTT would remain the prevalent mean for distributing linear audiovideo in sub-700 MHz, at least for the 2030-2040 decade, in a given country. In scenario 2 DTT would still be the most wide-spread platform, but also mobile SDL and/or 5G Broadcast may exist in a given country. In Scenario 3, there would be less (up to no) need for broadcasting in the 470-694 MHz in a given country, which would give the opportunity for introduction of, for example, mobile broadband by implementation of the 600 MHz band plan, including uplink transmission.

- 7. The SG concluded also on some recommendations on possible and technically feasible scenarios concerning the development of use of the sub-700 MHz band which are included at the last Section of the draft Opinion.
- 8. The draft Opinion is submitted to the Plenary for approval at this stage.

RSPG work item: update to Plenary	
Work item	Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU
Rapporteur/s	Elena Nanou, Hellenic Telecommunications and Post Commission, Greece Umberto Mascia, Ministry of Economic Development, Italy
Rationale	In 2015, the RSPG published its Opinion on a "long-term strategy on the future use of the UHF band (470-790 MHz) in the European Union". In addition to recommendations regarding the availability of the 700 MHz band for mobile, the RSPG also expressed its vision about the long term use of the band 470-694 MHz, in particular in its recommends 7, 8, 9 and 11.
	In 2017, this RPSG Opinion and the Lamy report recommended the main elements of the compromise which was the basis of the EU Decision 2017/899 on "the use of the 470-790 MHz frequency band in the Union". This Council and European Parliament Decision is providing legal certainty until 2030 to terrestrial broadcasting and PMSE in the frequency band 470-694 MHz.
	Article 4 of EU Decision 2017/899 establishes that Member States shall ensure availability at least until 2030 of the 470-694 MHz ('sub-700 MHz') frequency band for the terrestrial provision of broadcasting services, including free television, and for use by wireless audio PMSE on the basis of national needs, while taking into account the principle of technological neutrality. Member States shall ensure that any other use of the sub-700 MHz frequency band on their territory is compatible with the national broadcasting needs in the relevant Member State and does not cause harmful interference to, or claim protection from, the terrestrial provision of broadcasting services in a neighbouring Member State. Such use shall be without prejudice to obligations resulting from international agreements, such as cross-border frequency-coordination agreements. By mid 2021, the European commission launched a one year study "to examine latest developments and trends that are relevant for the current and future use of the 470-694 MHz band", in response to Article 7 of this decision.
	As an element of context, WRC-23, on the basis of the review of the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz, will consider possible regulatory actions in the 470-694 MHz band in Region 1 based on the results of the studies foreseen in Resolution 235 (WRC-15). It has to be noted that, regardless of any decision made at WRC-23, it does not impact EU Decision 2017/899 and does not create any obligation on the EU after 2030 to change the current harmonised use in the band 470-694 MHz.
	Therefore, in order to support the European Commission to respond to Article 7 of the EU decision 2017/899, there is a need for the RSPG to contribute, from an EU perspective, with a strategic vision for sub-700 MHz spectrum use, including an analysis of latest developments with a review of the background and recommendations of the 2015 RSPG Opinion, and the consideration of possible post-2030 scenarios, taking into account what it is established in Article 4 of the EU Decision 2017/899.

Scope	 Building on the 2015 RSPG opinion, RSPG will investigate the latest development, as underlined in Article 7 of the EU decision 2017/899, relating to the band 470-694 MHz and develop a strategic vision for sub-700 MHz spectrum use beyond 2030. This includes the following: A review of the background and recommendations of its first opinion. Discuss how the flexibility set out in Article 4 could be implemented in practice. Develop/Describe possible technically feasible scenarios concerning development of use in this frequency band with relevant key assumptions and conditions, including potential consequences in terms of EU harmonisation framework in this band, in particular for
	post-2030, and taking into account the links with content regulation.
	This activity will not address WRC-23 agenda item 1.5 which remains to be addressed solely under the activity regarding the preparation of EU position for WRC-23.
	This activity will be the first step for RSPG to support the European Commission in its response to Article 7 of the Decision. The priority of RSPG will be to address bullet 2 above. RSPG intends to develop subsequent opinions if necessary, in a timely manner.
Planned deliverables and timing	RSPG Opinion.Draft Opinion for public consultation: February 2023Final Opinion: June 2023
Analytical approach	Sharing a common knowledge base and discussions with an open mindset, in a think-tank style, in order to envisage societal and technical developments in the distant future (10 years and beyond).
	Use of the principles and some techniques of Strategic Foresight.
Project plan	 Phase 1 – "diverge" phase, creating choices to hypothesise more possible futures. Phase 2 – "converge" phase, describe appropriate choices compatible with the various hypothesised futures.
Dependencies	No dependencies identified at present.