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## **ORF Comments on the “RSPG Draft Opinion on the Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU”**

### **INTRODUCTION**

The Austrian Broadcasting Corporation (ORF) is Austria's largest media provider, operating four national television and twelve radio channels, as well as a comprehensive range of websites. ORF is formally a foundation under public law and as such must fulfill a number of duties and mandates laid down in the currently modified and renewed ORF Act. Being a public service radio and television company, ORF is not profit-oriented, and invests all revenue – two-thirds of which comes from radio- and TV-licence fees, the rest from advertising and other income – directly into the programs and services it provides to its ORF audiences. The ORF's main headquarters and studios are located in Vienna, and the company also operates regional studios in all nine Federal Provinces and maintains a worldwide network of correspondents who contribute to its varied range of programs in all three media.

ORF is the leading multimedia platform in Austria and one of Europe's most successful public service broadcasters with an audience of millions. ORF is the undisputed Austrian market leader in television, radio and online. The entire ORF television-fleet (also including ORF III and ORF Sport +) reached a market share of 34,6% in 2022. Every day, 58,2% of Austrians are tuning in to the ORF-radio-programs (4,6 million listeners) and in 2022, the ORF radio-fleet reached 69% market share. 134,6 million visits per month in 2022 make ORF.at by far the most successful Austrian news-website. ORF-TVthek is the most successful video on demand platform in Austria with 12,2 million visits per month.

The ORF welcomes the opportunity to comment on this RSPG “Draft Opinion” and appreciates the efforts taken by the RSPG to encompass aspects of the uses of the Lower UHF band not only from a technical point of view, but also from a social perspective, which is a major mandate for Public Service Media (PSM) providers like the ORF. The ORF notes that all the scenarios for use of the band after 2030 discussed in the draft Opinion retain the use by broadcasting services in different degrees. Broadcasting services are essential for PSM as they provide free to air high-quality content and services to inform, educate and entertain every citizen wherever they are. They also support national sovereignty in providing reliable information to citizens, vital in times of crisis and in emergency situations. **Broadcasting services in Austria need to retain access to the 470-694 MHz band well beyond 2030 and possibly up to 2050.**

## THE ROLE OF THE UHF BAND FOR MEDIA IN AUSTRIA

The 470-694 MHz band is crucial for the public and private audiovisual industry in Austria, as it is fully used by Digital Terrestrial Television (DTT) up to channel 48 and the most important band used for Program-Making and Special Events (PMSE) audio systems. The ORF needs to continue using both to fulfil its public service obligations stated in the currently updated ORF Media Law, as Terrestrial Transmission of our TV programs is the mandatory distribution technology, whilst the content that is thereby distributed is created using PMSE equipment that operates in this band. Moreover, audio PMSE services operating in the UHF band are crucial to produce our audiovisual content whatever the form of delivery, be it live on stage, live or on-demand online, on cable, satellite, or terrestrial broadcasting.

Although DTT currently accounts for only approx. 6% of the overall TV consumption in Austria, this is expected to increase over the next years, as household incomes decline and DTT reception is a very attractive alternative to cable and streaming service packages. In addition to 20 free TV channels (10 in HD quality), there is a low-cost offering of an additional 60 special interest Channels. Those offerings are crucial especially for persons and households with low income, with diverse backgrounds or special needs. The ORF and its subsidiary company ORS under the product name "simpli" have built a solid business case on packaging and delivering pay-TV and special interest TV and Radio channels via DTT to the population in Austria.

In addition, there are many Upcoming innovations within the DTT technology domain, including the introduction of Ultra-High Definition in the DTT platform (ensuring even better quality of user experience), and the deployment of 5G Broadcast (to bring broadcast's robustness, reliability and quality to mobile devices). **This development will ensure the effective usage of the entire UHF Band for many years to come.**

The UHF band 470-694 MHz is governed, in ITU Region 1, by the ITU Geneva 2006 Agreement (GE06) which is a fundamental pillar of the regulatory framework alongside Decision (EU) 2017/899. GE06 will continue to apply in this band, and that should be acknowledged in the Draft Opinion.

## COMMENTS ON THE DRAFT RSPG OPINION

As mentioned, access to the Lower UHF (470-694 MHz) band is crucial for both main aspects of PSM activities: production and distribution of high-quality content to inform, educate and entertain all people in Austria. The ORF would therefore commend the following remark in the Draft Opinion:

*"The importance of DTT and the need to provide certainty for investments are reflected by recommendations 8-10 [of the RSPG15-595 FINAL Opinion], which aimed to define a stable framework for the use of the sub-700 MHz band, with a time horizon beyond 2030."* This recommendation was implemented in Article 4 of Decision (EU) 2017/899 and are indeed cardinal for the Draft Opinion. **Therefore, we conclude that the principle of Article 4 is applicable far beyond 2030.**



## 1) Flexibility of Spectrum Assignment and Usage

ORF agrees that, as pointed out in section 3.3.3 of the Draft Opinion, various studies have shown that broadcasting and mobile services cannot operate on the same frequencies in the same or adjacent areas without causing harmful interference to each other. The interference can be reduced by geographically separating the services with large distances, which could go, in some cases, up to several hundred kilometers, in particular in case of interference to uplink mobile services. The geographical situation of Austria with a long border and many neighboring countries, makes this especially challenging.

The Draft Opinion also recognizes that Member States have not made use of the existing regulatory flexibility in Article 4 and the GE06 envelope concept, apart from some local trials with 5G Broadcast and SDL. We note that no Member State has extended this flexibility to introduce mobile cellular (IMT) networks or PPDR services below 700 MHz. As mentioned in section 3.4 of the Draft Opinion, there has been no market demand or business case identified so far to our knowledge in Austria for new applications other than broadcasting and PMSE. **The national regulatory body RTR/KOMMAUSTRIA as well as the governmental departments responsible for spectrum regulation maintain a very open and positive communications approach with both broadcasting and mobile network providers, and a lively exchange, fact finding, and compromise culture has been established.**

## 2) Technical Solutions and possible Scenarios

The Draft Opinion analyses three different new applications which could use the flexibility in Decision (EU) 2017/899 and in the GE06 Agreement: mobile downlink only (SDL), 5G Broadcast and mobile FDD (uplink and downlink band plan).

5G Broadcast is the only one of these that is a 'broadcasting service' and it is to be deployed as broadcast networks which are mainly high power/high tower sites complemented by gap fillers of lower power and height. **Recent trials have shown that such configurations are viable, in contradiction to the claim in section 3.3.2 of the Draft Opinion that this "configuration ... does not enable to have sufficient received field strength, necessary for a good mobile reception..."**. In addition, under this network configuration, similar to DTT, 5G Broadcast does not create additional interference issues to what exists with DTT. Similar adjacent channel situations will occur and can be solved in the same way as between DTT signals (e.g. co-siting, modifying antenna diagrams, orthogonal polarization usage). ORF would also like to point out that with the addition of 8 MHz channel bandwidth, 5G Broadcast can use the full potential of GE06 digital entries, which are harmonized at 8 MHz. **The ETSI Standard has recently been updated accordingly and we propose to reflect this in the Draft Opinion.**

**We fully agree with scenarios 1 and 2** (Broadcasting [DTT and 5G Broadcast], Mobile limited [SDL]). In scenario 2 the most widespread platform for accessing linear audio-visual content in the 470-694 MHz band would still be DTT. PMSE would be specifically addressed and 5G Broadcast would exist as DTT in a given country. As in Scenario 1, Scenario 2 would help enable blending the benefits of broadcast and unicast networks via HbbTV, DVB-I but also even more enables hybrid distribution scenarios with 5G Broadcast and broadband to bring together live and on demand distribution as IP-native technologies. This would also allow the reception of free-to-air broadcast services in increasingly ubiquitous mobile devices, including vehicles, via 5G Broadcast and enable new use-cases like seamless switching between networks or broadcast on-demand. The prospects of scenario 3 (Broadcasting limited, Mobile (Full FDD band plan)) are very low, due to the technical compatibility difficulties described in sections 3 and 3.3.

**5G Broadcasting Technology is actively developed in Austria and supported by the ORF.** Current information on trials is provided by other respondents for possible inclusion in Annex III of the Draft Opinion.

Some of the arguments listed by the RSPG in favor of DTT distribution are fully applicable to the situation in Austria, and to endorse and strengthen those positions we want to reflect and emphasize the respective wordings from the RSPG document:

- *DTT is an easy-to-access and inexpensive platform for consumers (no annual fee for the public channels in Austria)*
- *the investments of broadcasting operators in technological evolution (e.g. DVB-T2 and HEVC) and innovation need adequate time for return on investment;*
- *the licenses of current operators expire near 2030 with a reasonable possibility of renewal for another 10-15 years;*
- *free accessibility to content remains a politically supported value for its social and democratic benefits, including pluralism, diversity of opinion, cultural and entertainment nature;*
- *non-traceable access is recognised as a particular value for the protection of personal privacy (a delicate and difficult issue in IP-based broadband distribution modes);*
- *well-designed DTT networks are efficient with respect to energy consumption and go well with climate change objectives;*
- *broadcast networks, including DTT, provide national resiliency and redundancy in case of crisis, natural disasters and/or cyberattacks.*

### 3) Recommendations

The ORF believes that the recommendations in the Draft Opinion are balanced and well justified. The ORF also supports the important recognition by the RSPG that in addition to the technical evolution of television services, there are other important non-spectrum-related, and often nation-specific, factors such as market demand, audiovisual policy and sovereignty, which will be crucial in the coming years in shaping the use of the 470–694 MHz band after 2030. The existing regulation provides flexibility to take account of the diversity of national situations.

The following RSPG recommendations are of special importance for the ORF and as such are cited and explained:

*“6. RSPG considers that any long-term evolution of the national use in sub-700 MHz band may impact the spectrum available for audio-PMSE. RSPG recommends that those Member States introducing other usages than broadcasting, should preserve sufficient spectrum for PMSE needs, taking also into account the transition of PMSE towards new spectrum efficient technologies.”*

ORF fully supports this recommendation **with a focus on the preservation of sufficient spectrum** for PSME needs, as a transition to a new technology within budgets and estimated timelines is currently not within reach.

*"8. RSPG recognises that the evolution of UHF band broadcasting reception during the current decade, including factors such as the number of programs, the content format (HD/UHD) and technological advancements (e.g. DVB-T2/HEVC, 5G Broadcast) plays a role in shaping any timeline post 2030. Further, any decision on these factors is a national matter determined by market demand and audio-visual policy. Nevertheless, RSPG recommends that Member States RSPG23-021 FINAL 20 wishing to continue to use sub-700 MHz band primarily for broadcasting, strive to implement most efficient technologies (such as T2/HEVC)."*

ORF will always innovate and work towards more efficient technologies. However, one of the most important obligations of a public broadcaster is also **long-term reliability and protection of legacy investments** in the households. As such, we are obliged to serve existing installed devices as long as possible, this is especially true in the case of DTT audiences and demographics.

Concerning a possible Council and EP decision on UHF and its review by the RSPG before 2030, ORF is willing to contribute to such a process.

Best regards,



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