



# ETNO comments to the RSPG Draft Opinion on Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU

August 2023



The European Telecommunication Network Operators' Association (ETNO) welcomes the opportunity to provide feedback to the Radio Spectrum Policy Group (RSPG) Draft Opinion on the “Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU”.

In this document we provide first general remarks on the content of the Draft Opinion, then more specific comments related to existing flexibility, scenarios beyond 2030, and finally on the recommendations.

## 1. General remarks

We welcome that the RSPG recognised the diverging situations in the European Union (EU) markets and acknowledged the need for flexibility to serve the needs of all countries including those not having Digital terrestrial television (DTT) anymore (at least after 2030). However, in general, ETNO believes the Draft Opinion is taking a conservative stance on the strategy of the future use of the UHF band beyond 2030, as elaborated below.

The demand for mobile broadband services is increasing also in sparsely populated areas and other areas which are difficult to reach with higher frequency bands. Additional availability of spectrum in the UHF band would support delivering these demands and would support targets for digital inclusion and equal digital opportunities, and provide better access to digital healthcare, education and media services in remote areas.

Having in mind that the topic addressed by this Draft Opinion was to be treated separately from the WRC-23, ETNO believes that considerations on a “Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU” for the benefit of the European society should be **more forward-looking** instead of only recognising that a single scenario might not be applicable. In addition, we consider the draft Opinion provides quite limited analysis to support EC responding to its reporting obligation under Article 7 of the Decision (EU) 2017/899. It mainly focuses on technical developments and challenges.

*Article 7: The Commission shall, in cooperation with the Member States, report to the European Parliament and to the Council on developments in the use of the sub-700 MHz frequency band, with a view to ensuring efficient use of spectrum, pursuant to the applicable Union law. The Commission shall take into account the **social, economic, cultural and international aspects** affecting the use of the sub-700 MHz frequency band pursuant to Articles 1 and 4, further **technological developments, changes in consumer behaviour and the requirements in connectivity to foster growth and innovation in the Union.***

ETNO also thinks that the consideration of EU spectrum strategies for the future should be driven by the **broader EU policy contexts**. The European Union has agreed on Digital Decade targets for 2030 including gigabit connectivity in order to provide sufficient capacity to all end users. It would also serve TV content distribution and reception.

ETNO acknowledges the diverging situation between the different Member States regarding the role of DTT for TV distribution and agrees that it is challenging to satisfy the different requirements for a harmonised approach. However, future scenarios provided in the Draft Opinion are not fully recognising the availability of other TV distribution platforms and the changes of user behavior with

respect to media consumption. It is assumed that terrestrial broadcasting continues and is allowed to continue as today in countries with expected high DTT demand. This creates priority for one future scenario over the others and creates limitations to the other scenarios. We also note that **the future scenarios provided in the Draft Opinion focus on the technical feasibility of possible future use in single countries, but there is no scenario considering possible steps towards harmonised future use in Europe.**

We urge the RSPG to use this opportunity to include a more detailed analysis and summary on the development of how the band is used for terrestrial provision of TV broadcasting services in different Member States, and similar analysis of the other means to distribute TV content. As there are already today several **parallel platforms in use to distribute and receive TV content (linear and non-linear), it would be appropriate to analyse the different means, their current availability, popularity, and expected development towards 2030.** In addition, the Opinion could include analyses on **whether the national media policies are neutral towards different distribution means**, and if not, whether the obligations/priorities are still justified. Such additional analyses are essential when considering the future of the TV content distribution, and the use of the UHF band both from efficient spectrum use of perspective and efficient socio-economic perspective.

ETNO recognises **the need for a harmonised European approach** and recognises the difficulties to achieve that. However, we would like to invite the RSPG to be more future looking and to think more out-of-the-box when further discussing this issue.

## 2. Existing flexibility (section 3)

The description of the **main points of Article 4 of Decision (EU) 2017/899** may lead one to conclude that the Article 4 provides sufficient flexibility in the band. Unfortunately, in practice, it is not helpful for sustainable solutions for many other services.

**The GE-06 envelope concept** is in principle flexible but not usable for providing nationwide mobile communication. Also, as indicated in the Draft Opinion GE06 envelope concept is targeted for other primary services. Without primary allocation to mobile service, it may not support sufficient clarity nor flexibility for developing mobile services in the band in the future.

### **Supplementary Downlink implementation:**

*SDL in interleaved spectrum* is not suited to widespread harmonised use in EU or at CEPT level. It might only be used for a local solution. Such fragmented use would not support efficient spectrum use, nor equipment ecosystem development.

*SDL in a block of spectrum* could provide flexibility for usage of broadcasting and mobile DL, but for one-way communication only. The Draft Opinion indicates “significant replanning and cross-border coordination efforts with neighbouring countries” but does not elaborate this further, nor recognises scenarios in which all the countries may not have DTT demand anymore or may have less DTT demand after 2030. In such cases, replanning and cross-border coordination may not require significant efforts for enabling SDL, at least on national basis.

**5G Broadcast:** As also indicated in the Draft Opinion 5G broadcast is a DTT technology. As such, it can only address linear demand but not customer demand for non-linear video content consumption. Already today, it is possible to consume TV content either linear or non-linear on mobile devices by streaming from the content provider or via OTT apps.

We believe it is not necessarily logical to replace one nationwide terrestrial linear TV platform (DVB-T/T2) with another (5G broadcast) when a video content viewing trend is moving heavily towards non-linear. The network plan may need to change (away from the existing DTT network using the GE06 envelope concept) to enable the efficient provision of services in line with customer needs – be they linear with widespread 5G broadcast networks, nonlinear with mobile networks, or both. Ultimately, the technology implemented should be left to the market as much as possible, adopting the familiar technology neutral approach as much as feasible.

Potentially, downlink solutions enabling both SDL and 5G broadcast could provide flexibility where needed and serve both mobile and TV linear and non-linear demands.

**600 MHz band plan implementation:** We note that the already existing 600 MHz mobile ecosystem would support deployment of mobile in the 600 MHz without needing to push and wait for new solutions to be standardised and implemented in the commercial equipment. We agree that 600 MHz would be challenging to implement in Europe with the current regulatory framework, and if the DTT demand in European countries remains the same as today beyond 2030. However, the DTT use and demand are already low in many countries, and we believe trends on TV consumption (other distribution platforms, and non-linear viewing) will decrease the DTT demand further.

Concerning the possible replanning and cross-border coordination efforts, we note that it is the mobile uplink that requires the largest separation distances from TV transmitter operating in the same frequency. Noting this, and the decreasing DTT demand at least in some countries, the actual replanning for enabling 600 MHz mobile in high mobile demand countries may be possible. Decreased demand of DTT in some countries releases allotments below 600 MHz and may ease the refarming of DTT from 600 MHz uplink frequencies in the countries that continue to have high DTT demand.

**Dynamic Spectrum Access / White spaces:** The use of TV white spaces would be possible for lower power use, but as noted in the Draft Opinion there has not been commercial follow up on trials. This is because the use would also need to be commercially viable. We note that in essence, a network plan that leaves white spaces everywhere may not be the most efficient use of spectrum. We acknowledge that PMSE relies on these white spaces but uses only parts of them very locally.

**In the conclusion,** the mentioned opportunities for flexibility do neither address the real needs of countries nor stakeholders without considering the steps for future harmonisation in Europe. Harmonisation would support a predictable regulatory environment and clarity on market potential. These are necessary for development of the equipment ecosystem. An available equipment ecosystem beyond 2030 will be necessary for any future use scenario.

### 3. Neutral and equal consideration of different future scenarios (section 4)

ETNO acknowledges the consideration on future scenarios. However, we note that the focus on technical feasibility of future scenarios only in single countries is quite limited. Additionally, future scenarios seem to assume that DTT demand remains diverging and that the terrestrial broadcasting continues and is allowed to continue as today in countries with expected high DTT demand. This assumption creates priority for the first scenario over the other scenarios and causes limitations to the other scenarios. **Noting that the Decision (EU) 2017/899 provides priority to broadcasting only until at least 2030, and that the Draft Opinion is about “Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU”, we would have expected also a future scenario providing considerations towards harmonised approach in the EU.**

**The Opinion should include a fourth scenario assuming a predominantly mobile use in EU or at least in several countries after 2030.** We note that already today there are countries with no DTT demand and low DTT demand in Europe. This fourth scenario should be accompanied with an evaluation of the situation in different countries after 2030 (e.g. DTT penetration, availability of other distribution platforms), and illustrating this in a map. This would support evaluation on the possible needs for replanning and cross-border coordination and defining steps towards harmonised future approach in the EU.

Additionally, we note that the three different scenarios do not seem to be analysed at the same level. The first scenario “prevalent broadcasting scenario” provides a list of factors, which partly seem like an advertisement, to support this scenario. No justification is provided to those factors, nor are they compared with the possible other alternatives. For example, “easy to access” and “inexpensive platform for consumers” may not be correct considering that DTT distribution cost may be covered by taxes or alike fees, and also other platforms provide easy to access solutions. Also as noted above, it seems that the used assumptions create a priority to the first scenario over the other scenarios, and cause restrictions to single countries that plan to implement other scenarios. Such assumption and priority to the first scenario may not be justified after 2030.

### 4. Recommendations (section 5)

In general, ETNO proposes RSPG to include considerations and recommendations on concrete steps towards an harmonised EU approach for the UHF band beyond 2030.

**Recommendation 1 and 2:** Concerning the flexibility until 2030, we support and encourage Member States to explore circumstances, in partnership with neighbouring countries, of flexibility near their shared border.

**Recommendation 3:** We propose that clearer recommendations on steps towards harmonised use beyond 2030 are provided.

The Draft Opinion is lacking a scenario of predominant mobile use in Europe post 2030, including evaluation of the situation in different countries after 2030, and e.g. a map illustrating where logical boundary would be between mobile versus broadcast countries after 2030. This would support the discussion and planning also between countries.

The actual steps and possibilities to enable mobile after 2030 should also be considered, including a scenario to enable countries to implement 600 MHz mobile with the right for protection and analysing actual need for possible changes for DTT in countries where DTT still remains popular, noting the aspects we describe in chapter 2, under “600 MHz band plan implementation”.

**Recommendation 4 and 9:** Spectrum regulations at ITU-R level should provide the regulatory certainty to support the efficient use of the band – a step towards this is to support the primary co-allocation at WRC-23.

**Recommendation 5 and 6 PMSE:** ETNO notes that the need for audio applications is typically very local, and often also timely limited. DTT spectrum use as defined today is inefficient in the sense that it leaves white spaces everywhere. Audio PMSE operates in these white spaces, but only very locally. Thus, when DTT use decreases it does not make sense to reserve nationwide spectrum for local PMSE spectrum needs. Possible sharing approaches with mobile should be considered (e.g. low band demand for mobile use may be higher in sparsely populated areas whereas PMSE services need spectrum in densely populated areas). Beyond 2030 also new technical solutions e.g. 5G/6G-based will likely have better capabilities to serve also the audio PMSE demands (capacity and latency) than today.

**Recommendation 5 PPDR:** We note that PPDR demands can be served also within public mobile networks, and some countries already are taking this approach. The means to ensure priorities exists. This is also an economical approach, compared to deploying a new nationwide dedicated PPDR network with good coverage and capacity. Such network would also need to be regularly upgraded and updated to ensure secure communication and enhanced features.

**Recommendation 8 DTT efficiency:** When considering the post-2030 situation, the focus should be put also on the DTT efficiency. This recommendation notes technological advancements such as DTV-T2/HEVC, and HD/UHF to play an important role post-2030. Those technologies have been available for a long time and cannot be considered as advancements anymore post-2030.

**Recommendation 10 RSPG contribution to UHF review:** We invite RSPG to be more future looking and thinking more out-of-the-box when further considering this issue.

ETNO (European Telecommunications Network Operators' Association) represents Europe's telecommunications network operators and is the principal policy group for European e-communications network operators. ETNO's primary purpose is to promote a positive policy environment allowing the EU telecommunications sector to deliver best quality services to consumers and businesses.

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