Reply of the German Alliance

for Broadcasting and Cultural Frequencies to

(Draft) Radio Spectrum Policy Group (RSPG) Opinion on

Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU

August 25, 2023

The German Broadcasting and Cultural Spectrum Alliance welcomes the opportunity to comment on the (Draft) RSPG Opinion on Strategy on the future use of the frequency band 470-694 MHz beyond 2030 in the EU. This RSPG initiative is an important contribution to the establishment of a long-term and coordinated EU spectrum management strategy.

Many members of the Alliance for Broadcasting and Cultural Frequencies will submit their own statements on the RSPG Opinion in view of their specific concerns and expertise. The Alliance therefore focuses on the presentation of the importance of terrestrial broadcasting and wireless production technology as well as the political demands derived from this.

About the Alliance for Broadcasting and Cultural Frequencies

The Alliance for Broadcasting and Cultural Frequencies is a joint German initiative of public and commercial broadcasters, network operators, trade associations, media regulators and manufacturers, namely: ARD, Deutschlandradio, Media Broadcast, the media authorities, SOS - Save Our Spectrum, Sennheiser, VAUNET, ZDF and the German Electrical and Digital Manufacturers' Association ZVEI. The alliance is committed to securing the spectrum in the 470 to 694 MHz range even after 2030 in order to enable the future of terrestrial broadcasting as well as the maintenance of cultural events for the people in Germany and Europe.

A. Importance of terrestrial broadcasting and wireless production technology

a) Why broadcasting needs the frequencies

Broadcasting needs the frequencies between 470 and 694 MHz in the long term. This also applies to the period after 2030, which is being discussed at the World Radiocommunication Conference.

The importance of broadcasting itself is undisputed.

Whether public or private, broadcasting ensures a broad supply of information. It also provides education, culture and entertainment. All this is of particular importance today. Quality media are the answer to disinformation and hate speech. Quality media are part of the process of will formation. Therefore, broadcasting is relevant to the system.

Broadcasting content must be disseminated.

There are different ways to do this. One important way is terrestrial broadcasting (DVB-T2) which is the number one platform for TV distribution in Europe.

There are good reasons to secure television broadcasting via DVB-T2. In the event of a disaster, DVB-T2 is indispensable. Thanks to secure transmitter sites, cleverly planned emergency power supplies and redundant signal feeds, DVB-T2 continues to transmit even during events such as storms and flood disasters. This is not guaranteed with mobile communications. Moreover, DVB-T2 is independent of the internet and can be operated autonomously. In contrast to the internet, network congestion is ruled out with terrestrial broadcasting (DVB-T2), even during intensive use. This means that broadcasting, as part of the critical infrastructure, can save lives in the event of a disaster. Broadcasting informs the entire population reliably, quickly, and comprehensively. In this way, measures, including those to save lives, can be communicated.

Broadcasting is working to further improve its dissemination in the event of a disaster, but also in normal circumstances. The aim is to reach the population directly on mobile devices. This is to be done in such a way that no data volume is consumed, optionally even without a contract with a mobile phone company. The broadcasting standard 5G Broadcast is fundamental for this. Broadcast network operators and ARD are working on specifying the requirements of the new broadcasting channel in the responsible standardisation bodies (ETSI, 3GPP) and testing them in pilot trials. This would make it possible to use broadcasting on mobile phones in a cost-effective, energy-efficient and possible for everyone.

b) Why the cultural and creative industries need the frequencies

Wireless microphones are used at almost all events: professional productions such as the World Cup or the European Football Championship, festivals such as Glastonbury Festival, on theatre stages, in churches, at conferences or lectures and political events. In 2021, the cultural and creative industries had the second highest gross value added in a German industry comparison, despite the pandemic

that had made live events impossible in the meantime. Broadcasting also uses wireless microphones for its productions.

> The TV UHF band is indispensable for wireless production equipment such as radio microphones.

At the leading microphone manufacturers, about 85 per cent of the product portfolio is designed for the range between 470 and 694 MHz. Musicians, actors and others want to use exactly this range. The reason is the physical properties of the band: There is sufficient range, acceptable battery life, minimal latency (delay) and sufficiently low body attenuation to move freely on stage setups. Other frequencies cannot meet these requirements. The TV-UHF band also offers another major advantage: thanks to broadcasting, it is harmonised worldwide for the use of wireless microphones. This enables a worldwide, cross-border exchange of culture. This allows artists to buy their means of production, as they are produced in large quantities, at acceptable prices.

> Already today there is a shortage of frequencies for culture.

This was demonstrated, for example, by the Lollapalooza 2022 music festival in Berlin.[1] Here, 525 radio links had to be coordinated, with 103 additional uncoordinated uses in the same spectrum. This resulted in a spectrum requirement of around 200 MHz. However, this spectrum was not available. Individual artists could not perform as planned. The problem also exists in other regions of Germany. In many places on the western border, festivals like Lollapalooza can no longer take place at all. Other events require an immense amount of coordination and are constantly threatened by radio interference. At the same time, the number of events that require more than 110 MHz of spectrum is increasing, as is the number of large events with more than 174 MHz.[2] The frequencies in the range between 470 and 694 MHz are therefore still needed in full. There is even a need for additional frequencies in the TV UHF spectrum.[3]

B. Political demands

Further planning of a terrestrial broadcasting and media distribution infrastructure requires certainty regarding the frequency resources available in the 470-694 MHz range in the long term. Therefore, the Alliance for Broadcasting and Cultural Frequencies demands:

- in principle: development perspective and planning security for terrestrial broadcasting/media distribution beyond 2030

[1] "Frequency Management at Lollapalooza Berlin", 30 January 2023, https://kurzelinks.de/lollapalooza.

[2] Georg Fischer / Thomas Ackermann: Spectrum demand of professional wireless production tools (PMSE), Studienbericht, FAU University Press, 2022; https://kurzelinks.de/opus4 (PDF); SRF/Daniel Künzi: Report on spectrum requirements for Audio PMSE, Bern 2022; https://kurzelinks.de/apwpt (PDF).

[3] Around half of all EU Member States reported in 2021 that demand for PMSE spectrum has increased, for example by 10% per year in the Netherlands and 20% per year in Spain. Source: EU study: Study on the use of the sub-700 MHz band (470-694 MHz), October 2022.

- concretely: unchanged allocation of the UHF TV frequencies (sub-700 MHz band) at the World Radiocommunication Conference 2023 (WRC-23) primarily to broadcasting alone and secondarily to wireless means of production, i.e., no co-primary or secondary allocation of the UHF TV spectrum to other radio services
- the extension of the current EU regulatory framework, i.e. the possibility of using the UHF TV frequencies for broadcasting as well as for wireless means of production beyond 2030

Contact

Broadcasting and Cultural Spectrum Alliance
c/o Media Broadcast GmbH
Michael Moskob, Head of Regulatory and Corporate Communications
Erna-Scheffler-Straße 1, 51103 Cologne, Germany
Mail: michael.moskob@media-broadcast.com