

ATET response to the public consultation on

Draft RSPG Opinion on the role of radio spectrum policy to help combat the climate change

ATET is the technical association bringing together French DTT broadcasters. ATET members operate in the television broadcasting sector. All together, members of ATET represent circa 90% of the audience of linear television in France, and DTT network is providing 50% of this share. As this sector is extremely important for society and concerns all citizens, the issue of carbon emissions associated with the distribution of TV programs is a strategic issue.

ATET would like to provide the following comments on the Draft RSPG Opinion on the role of radio spectrum policy to help combat climate change:

- **We totally agree with RSPG on the usefulness of development of methodologies to assess the impact of ECS wireless services energy efficiency, and this is relevant for broadcasting services.**

Following the BBC study¹ published in 2020 concluding that television distribution and viewing represent a significant share of national electricity consumption and that DTT is the most energy efficient distribution platform, compared to cable, satellite or streaming, ATET joined a similar project but on a European scale in equal association with a variety of sponsors operating in various countries and including DTT transmission operators, leading TV channels present on all platforms, one SVOD operator and one neutral technology actor. The project has commissioned an independent company, specialising in corporate responsibility and sustainability, supported by a leading academic laboratory. This long-term project was launched in July 2020. Final results are expected in autumn 2021 but intermediate results confirm the findings of the BBC study and suggest that DTT is significantly more energy efficient than IPTV or OTT, when comparing the energy consumption of the delivery platforms in 2020 per device viewing hour, at a European scale and also under a variety of country contexts.

Moreover, taking into account the evolution of usages (e.g. linear vs non linear) and the expected progress in energy efficiency of internet networks, the preliminary result is that the better performance of DTT is confirmed in the longer term (by 2035) under a variety of evolution scenarios for platform penetrations.

In the context of European spectrum policy and climate change, it is relevant to note that the most popular television distribution platform, DTT, present in 42% of European households, is also the most energy efficient, and is likely to remain so for the long term.

- **We think the Draft Opinion should not limit the scope of the methodologies and assessment only to wireless ECS services** but also incorporate in a consistent manner ECS fixed technologies so as to allow system level comparisons, taking into account the complementarity and intertwining of fixed and radio components in modern ECS networks and services. In the case of television distribution, various wireless and fixed platforms coexist, compete and cooperate (ie. DTT, IPTV, OTT through fixed and wireless networks, cable and satellite).

¹ BBC Research & Development White Paper WHP 372, September 2020

- We note that the Draft Opinion rightly recommends taking the energy efficiency assessment into account for funding research and in elaborating MS strategies on which a EU wide strategy could be put forward. **We think it is also warranted to consider those aspects in upcoming EU spectrum policy decisions, such as preparation of the WRC -23 or EU harmonization decisions.** While energy efficiency may be only one factor among others to consider, it would seem contradictory if it was ignored.

For instance, the allocation in the UHF band is on the agenda of WRC-23, and protection and enhancement of terrestrial broadcasting spectrum allocation would be a concrete step to combat climate change.

The fight against climate change involves reconsidering some of the basic hypothesis and reasoning which have prevailed in the past decades. In spectrum management, a strong trend was that there was a need for more spectrum for wireless broadband services, and less need for terrestrial broadcasting, because of the progress of source and channel coding. But we can no longer take this assertion as an obvious fact: wireless broadband has already 14 GHz of spectrum identified, and has already been allocated the majority of the UHF spectrum between 470 MHz and 1 GHz. In addition, the terrestrial broadcasting sector has already made significant efforts for spectrum efficiency allowing more service in less spectrum, and has now reached a threshold where the viability of the service would be at stake if further reductions were considered.

As the terrestrial broadcasting platform is the most energy efficient one, significantly better than alternatives, the European success of terrestrial broadcasting also plays in favor of environmental goals. Decisions by administrations or signals such as the identification of IMT as a coprimary service in Region 1 at WRC-23 might create a threat to the long term access of Terrestrial Broadcasting to the 470-694 MHz spectrum, with negative impact on the carbon emissions of the overall sector of television distribution.

Proposals for the Final Opinion:

- 1- On recommendation 1) Add at the end: **Those methodologies should incorporate in a consistent manner ECS fixed technologies so as to allow system level comparisons, taking into account the complementarity and intertwining of fixed and radio components in modern ECS networks and service.**
- 2- Add a new recommendation (2 or after): **RSPG invites the European Commission and MS to always take energy efficiency and other climate related aspects into account in preparation of EU spectrum harmonization decisions or positions in international fora.**