Persidera

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to the **RSPG Secretariat**

By Email CNECT-RSPG@ec.europa.eu

Response to the public consultation on the Draft RSPG Opinion on ITU-R World Radiocommunication Conference 2023

WRC-23 Agenda Item 1.5 (UHF Review)

Persidera S.p.A. is a network operator providing services to TV broadcasters and media companies operating in Italy. Persidera has rights of use on three Multiplex operating in the frequency band 470-694 MHz until 2032 and is therefore directly interested in the outcome of Agenda Item 1.5.

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Agenda Item 1.5 has to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and to consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15).
In Europe, 470-694 MHz frequency band is mainly used for terrestrial television broadcasting with secondary allocation to programme-making and special events (PMSE). After the release of the 800 MHz and 700 MHz band in favour of IMT, it is the only remaining band available for terrestrial television.

It is therefore evident that the decision that will be taken at the next WRC-23 on the future use of the 470-694 MHz band is of crucial importance for the future of terrestrial television in Europe and in Italy.

The digital terrestrial platform is essential for the diffusion of free to air, general interest and universal services not only in Italy, but in many European countries, as also represented by the Association of European Public Services – EBU in the White Paper'"No Change' at WRC-23 maximizes public value and innovation in the UHF band – Nov 2021".

According to Fondazione Ugo Bordoni and SWG research1 for the Italian Developing Ministry in Italy, 91.9% of families use the digital terrestrial platform to access universal free to air television.

Compared to other technologies, the digital terrestrial platform is the most efficient in providing free to air linear services with universal coverage. The capacity of a channel in DVB-T2 is close to the Shannon limit and terrestrial broadcast networks are indifferent as the number of users who simultaneously use the service increases. In times of crisis and health emergency this platform has demonstrated reliability in providing information and resilience.

[1] Report FUB-SWG "Diffusione degli apparati TV in Italia e scenari evolutivi" - June 2022.

From an energy point of view, it is the technology with the lowest CO2 emission. A recent study by Carnstone 2 shows that in Europe digital terrestrial television offers maximum energy efficiency and a CO2 impact for the diffusion of TV content ten times lower than that those on Internet networks.
Terrestrial diffusion is the mean to reach some parts of the population and it is the only one able to enhance the diffusion of local contents.

In Italy, a profound transformation of television broadcasting on terrestrial frequencies platform is currently underway with the release of 700 MHz band which was completed by network operators on 2022, June 30 in favor of fifth generation 5G mobile services.
The Italian policy makers set this transformation on the technological evolution of the platform towards the "second generation digital terrestrial", the DVB-T2. This implies the replacement by end users of obsolete DVB-T TV sets in households.
To release 700 MHz band, new national frequency rights have been assigned, some of these also through a public tender, and at local level via a beauty contest, all with a ten-year duration and expiring in 2032.
This means that the Italian legislator believes in this technology, as it is demonstrated, among other things, by the measures to support the replacement of obsolete equipment.

In February 2020, in order to gather information ahead of WRC-23, the ITU-R sent a questionnaire to all 3administrations on spectrum use and future needs for the broadcasting service.
The questionnaire was answered by 106 Administrations out of a total of 121 Administrations included in Region 1. Among the responses acquired by the ITU, 95 Administrations (equal to 90% of respondents) indicated a prospective request for at least 224 MHz of spectrum for terrestrial broadcasting, corresponding to the entire 470-694 MHz.
Filtering these results at European level shows that 38 out of the 39 CEPT Administrations that have reposted or have indicated a prospective need for at least 224 MHz of spectrum for terrestrial broadcasting.
The Italian Administration responded in August 2020 with a position regarding the need to prospectively preserve 224 MHz of the UHF band for the terrestrial broadcasting service.

This position should be highlighted in the context of the activities in preparation for the next WRC-23 at European level, against any proposal for the adoption of regulatory measures that provide for a non-exclusive attribution to the broadcasting service in the 470-694 MHz band.

Cost-benefit ratio of an additional "digital dividend" in favour of mobile services has to be carefully assessed bearing in mind that on one hand the only universal offer of free television and services of general interest would be lost and on the other there would be a limited and questionable incremental value for mobile services. Mobile services are moving to higher frequencies, above 1 GHz, in search of contiguous spectrum of at least 40 MHz and with features for low-latency services that the 470-694 MHz band cannot guarantee.
The introduction of 5G and 6G technologies brings with them the concepts of virtualization, cloud, and orchestration that require overcoming current spectrum fragmentations for mobile services below 1 GHz. In this regard, it is the same Radio Spectrum Policy Group RSPG, in the Radio Spectrum Policy Programme (RSPP)of June 2021 to suggest to the EU Commission and Member States to overcome these fragmentations to evaluate the phase-out of legacy technologies (2G, 3G and also 4G) in the next ten years.
The Internet enables the development of new types of services, new deployment models, and new business models. The dissemination of information on the Internet is intermediated and passes through several gatekeepers, many of them non-European.
The problem of these intermediaries is to establish their jurisdiction and to succeed in enforcing the fundamental principles for the protection of the person and human dignity, as well as ensuring the dissemination of verified and reliable information and promoting the promotion and circulation of European works. The broadcast diffusion is not intermediated and all these problems are overcome a priori.
The specialty of broadcasting services, also linked to the peculiarities of the diffusion in digital terrestrial technique

[2] The Low Carbon TV Delivery Project – LOCAT Project - Quantitative study of the GHG emissions of delivering TV content.
[3] Circular Letter 6/LCCE/104 of 27 February 2020 - https://www.itu.int/md/R00-SG06-CIR-0104.

deriving from a stringent regulatory discipline, could hardly be replicated in the Internet world in which global players play with economic and market strength that are impossible to be paired by the national content industry.

Studies confirmed by experience in the field have shown that broadcasting services and mobile services cannot operate on the same frequencies either in the same area or in adjacent areas without causing unavoidable harmful interference. Consequently, in Europe no country can decide independently from neighboring countries how to use the UHF band (much less Italy, that borders radio-electrically with more than fifteen countries) without conditioning the neighboring countries. On this subject any decision must be taken at Community level, in compliance with international regulations.

For all these reasons, Persidera S.p.A. calls for preserving the existing exclusive primary allocation to broadcasting in the 470-694 MHz frequency band with secondary allocation to programme-making and special events (PMSE) and strongly supports "NO-CHANGE" at WRC-23.

Persidera S.p.A. agrees with RSPG recommendation "that the European Commission proposes an EU position to the Council to ensure that the decision of WRC-23 on this Agenda item is compliant with the Decision (EU) 2017/899 providing priority to broadcasting and PMSE usage until at least end 2030" and strongly recommends to ensuring it by supporting the first option of a NO-CHANGE at WRC-23.

However, the second option, that is not motivated by any technical or economic analysis nor explains the potential consequences of "a co-primary allocation to the mobile service which should become effective at a later stage (e.g. 31.12.2030)", **would challenge the stability of the 470-694 MHz band used by broadcasters and PMSEs. Any co-primary allocation has to be avoided as it would endanger the future of TV broadcasting in Europe.**

Persidera believes also that a review "with a possible agenda item for WRC-27 or WRC-31" would threaten the certainty of the EU UHF Decision that secures access to the 470-694 MHz band for broadcasting services until at least end 2030.

470-694 MHz band is essential for the broadcasting market to innovate by developing new technologies within existing DVB-T2 standard and new 5G Broadcasting which will be key in the future.

For more information, please contact Cecilia.vicedomini@persidera.it .

Best regards

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