DIGITALEUROPE Vision on the long-term future of the UHF spectrum

Background and vision

In 2013, DIGITALEUROPE published a position paper recommending repurposing the 694-790 MHz band for Mobile Broadband (MBB) whilst carefully managing the impact on consumers and their legacy equipment.

Discussions are also taking place in the European Conference of Postal and Telecommunications Administrations (CEPT), the EC's High Level Group on the UHF band (HLG) and the Radio Spectrum Policy Group (RSPG) on the longer-term options beyond 2020 for the 470-694 MHz band. This could potentially allow for complementing or converging services of Digital Terrestrial Television (DTT) and MBB which would lead to innovation of enhanced technologies and services.

However, this would also likely require new operational, business and regulatory models. In this context, DIGITALEUROPE sees Supplemental Downlink (SDL) as a promising field to explore and recommends further research to develop concepts and proposals for the next decade while carefully considering compatibility with replacement cycles of devices necessary in the migration to protect consumer interests.

Benefits for stakeholders

The mobile industry and consumers can benefit from additional capacities where spectrum frequencies are not needed by broadcast services and where there is no interference with legacy broadcast receivers and installations.

MBB based on SDL in the 470-694 MHz band can trigger innovative use of the band while allowing flexibly for co-existence with conventional DTT within a region or at a region's borders. SDL allows for additional mobile capacity to be introduced at a different pace across European Member States with a common mobile terminal ecosystem.

Since DTT and SDL will be of a similar unidirectional nature (transmitter towards receiver-only in this band), this will minimize the interference potential and assist cross border allocation. This will then help to protect existing DTT services and their evolution while allowing Member States to decide to introduce SDL for MBB at their own pace. In large terrestrial TV markets, DTT deployment was mainly based on reusing existing installations. Any SDL scenario should not constrain current and future DTT networks.

SDL capacity can also be used to provide broadcast content in a point-to-multipoint mode (e.g. eMBMS) as an extension of existing mobile standards, which are easier to integrate into mobile devices than DTT technologies.

Our recommendations

DIGITALEUROPE invites CEPT, the HLG and the RSPG thoroughly to explore the scenario of SDL for mobile services in the 470 – 694 MHz band as this would be a catalyst for the development of further convergence between mobile services and the delivery of broadcast content. In order to realise this opportunity, DIGITALEUROPE advocates:

- The investigation and development of an appropriate regulatory and spectrum licensing regime for the range 470-694 MHz taking careful account of all the numerous stakeholder interests. Given the importance of DTT, this framework should preserve current and future deployments of DTT, and avoid any disruption to current and future DTT installations. This implies for instance that potential licensees must not interfere with legacy DTT receiver installation and that re-planning additional DTT deployments or redeployment of the latter must be possible without additional constraints for DTT on a national or international level.

- Equally, it appears that DTT will continue to evolve and will remain an important delivery system in many Member States. An evolution of DTT delivery is beneficial for the availability of spectrum. As a consequence, introducing policies for DTT evolution in countries is recommended. For example, a voluntary policy towards DTT next generation systems (driven by better DTT service and or subsidies for users) together with concerned stakeholders in the member states may help to release spectrum whilst helping the DTT ecosystem to evolve.

Further information

- DIGITALEUROPE position on 700 MHz Band
- DIGITALEUROPE position on WRC-15 Agenda Item 1.1 and 1.2

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ABOUT DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies.

DIGITALEUROPE ensures industry participation in the development and implementation of EU policies. DIGITALEUROPE's members include 58 corporate members and 36 national trade associations from across Europe. Our website provides further information on our recent news and activities: http://www.digitaleurope.org

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