

DSA Position Paper on Spectrum Provisions of the draft European Electronic Communications Code

Introduction

The Dynamic Spectrum Alliance (DSA) is a global organization advocating for laws and regulations that will lead to more efficient and effective spectrum utilization. Our membership spans multinationals, SMEs, and academic, research, and other organizations from around the world, including Europe, all working to create innovative solutions that will increase the amount of available spectrum to the benefit of consumers and businesses alike. Our activities include providing input to the deliberations of spectrum managers, including regulators in Europe and the Radio Spectrum Policy Group.¹

The DSA's central goal is to close the digital divide. We believe this can be achieved by reducing the cost of deploying last-mile wireless networks, freeing up an ample supply of spectrum for innovative uses, and enabling the Internet of Things and other forward-looking applications. The DSA supports a broad mix of spectrum allocation methodologies, including exclusive licences, licence-exemption, and shared spectrum. Furthermore, we believe there needs to be an appropriate mix of these methodologies to support the widest range of innovation opportunities.

Spectrum scarcity is not a law of nature – actually, most spectrum is unused most of the time because today's static system of spectrum allocation uses old tools to avoid interference. Innovative dynamic sharing techniques have been proven to enable a more efficient use of spectrum while ensuring protection of incumbent services. They can help eliminate the spectrum fights of the past by moving the focus from spectrum scarcity to spectrum utilization and abundance. These potential benefits are only becoming more important as the demand for wireless connectivity in Europe continues to increase.

Ensuring the Code's spectrum provisions extend connectivity for Europe's citizens

The proposed European Electronic Communications Code (EECC) provides an important opportunity to update the regulatory objectives of spectrum managers to more clearly embrace the valuable tool of spectrum sharing. The DSA is engaging now as the Council and Parliament approach critical points of their scrutiny of these proposals, and we urge the legislators to take account of our recommendations on a limited number of critical provisions of the EECC.

- **Use-it-or-share-it**

We strongly support the proposals which would empower spectrum managers to reallocate spectrum which is not being used. This is an important principle to follow to help ensure

¹ <http://dynamicspectrumalliance.org/regulations/>

buildout of services and ensure more efficient use of spectrum. Specifically, we welcome the provisions to allow the withdrawal of spectrum rights under (Article 19(2)) and to allow for alternative use of a band where a national or regional lack of demand is identified (Article 45(3)). Indeed, legislators should find a way to more clearly state the ability of spectrum managers to withdraw exclusive use rights due to lack of use – the so-called ‘use it or share it’ principle – in the final Code.

- **Spectrum sharing**

We also strongly support the inclusion of promoting spectrum sharing as a regulatory objective (Article 45(2)(e)) and the prominence given to shared use of spectrum in Article 46. New technologies and regulatory approaches allow for dynamic spectrum sharing to make more efficient use of spectrum while protecting incumbents. These Article 45 and 46 provisions should therefore be safeguarded and embraced by the Council and Parliament to foster the increased application of a variety of spectrum sharing approaches by national spectrum managers.

- **Provisions to extend license-exempt capacity**

The importance of a balanced regulatory approach allowing licensed, license-exempt and – in the case of shared use of spectrum – lightly licensed, is perfectly illustrated by the case of wireless connectivity. While exclusive-use licenses have been a critical component in enabling mobile operators to build out their networks, the majority of Internet traffic is actually carried over license-exempt Wi-Fi – in 2016, 43% of traffic was carried over Wi-Fi, compared to 8% over mobile networks, and these figures are forecast to increase to 55% (Wi-Fi) compared to 20% (mobile) by 2021.² License-exempt spectrum is also expected to connect the vast majority of IoT devices - over 88% by 2022.³ In addition to Wi-Fi and IoT, new 3GPP technologies such as LTE-LAA and LTE-LWA utilize license-exempt spectrum to boost the performance of the licensed band “anchor” service.

We therefore warmly welcome the provisions to allow greater access to, and sharing of, radio local access networks (Article 55) and to enable greater use of small-area wireless access points (Article 56).

- **Duration of rights**

The proposal for minimum 25-year license terms (Article 49) would be very damaging and we urge its deletion from the final text. Establishing such lengthy license terms not only risks constraining competition and stifling innovation; it would also greatly restrict the flexibility of national authorities to keep pace with the rapid advances of technology and evolving consumer demand.

² Cisco Virtual Networking Index, <http://www.cisco.com/c/en/us/solutions/service-provider/visual-networking-index-vni/index.html#mobile-forecast>

³ Ericsson, Ericsson Mobility Report (Nov. 2016), <https://www.ericsson.com/assets/local/mobility-report/documents/2016/ericsson-mobility-report-november-2016.pdf>