

DSA Submission in Response to Ofcom Consultation on Policy for the DECT guard band

(1876.7-1880 MHz, paired with 1781.7-1785 MHz)

Document available at: <https://www.ofcom.org.uk/consultations-and-statements/category-1/DECTGB>
End of consultation period: 08 December 2016

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, small-and medium-sized enterprises, and academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the amount of available spectrum to the benefit of consumers and businesses alike.

DSA's primary goal is to close the digital divide globally. 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, enabling the Internet of Things ("IoT") and other forward-looking applications.

DSA is pleased to file a submission in this consultation.¹ Our overarching view is that spectrum allocation should optimise the efficient use of spectrum, and spectrum sharing arrangements are well-suited to provide material benefits.

DSA agrees with Ofcom's preliminary view to not trigger a change to a high power single regime. Although this change could generate relatively good revenue from the auction, there would be questionable benefits for the citizens living in areas already under-served by MNOs, and ultimately might not foster innovation, nor allow the most efficient use of the spectrum over the whole UK territory.

The recent autumn statement committed the government to supporting innovation in the digital space, and DSA believes that opening these frequencies beyond the current set of licensees would encourage applications such as rural internet connectivity and the Internet of Things.

To deliver such innovation this DECT guard band spectrum should be opened to more parties than the current twelve licensees. This could lead to either a light-licensing system or a licence-exempt regime.

DSA believes that it is important that Ofcom puts in place ways to acquire information about the spectrum use, so to be able to take informed decisions about further sharing policies that can be enforced in the future.

DSA encourages Ofcom, to set in place a regime with mandatory coordination through a centralised spectrum database and then consider a review after 2-3 years. The regime could either be licence-exempt or light-licensing, but in either case Ofcom should mandate radio systems have in place techniques and procedures to handle interference.

These can be obtained through radio-level techniques, such a "listen-before-talk", or through an authorization database. In practice, it would be easier to coordinate through device registration on a spectrum database as this approach would not constrain the design and cost of the radios.

¹ Ofcom consultation – Policy for the DECT guard band, published 29 September 2016.

DSA believes that the specific techniques for handling interference and coordination should be left to the industry, as the characteristics of the radios using the DECT guard band might not be uniform.

Devices that will operate shall be registered on the spectrum database reporting location and characteristics, including the techniques available to avoid interference and allow coordination; if Ofcom will regulate towards a light-licensing regime, every device will also be associated with a licence number.

In the case where operators will coordinate with each other to avoid interference, the changes to the original deployments should be reported to the database, so that Ofcom will be able to have realistic and accurate information about the way the spectrum is used, and would be able to review the regulatory framework in the future. Additionally, it would be possible for Ofcom to review their licensing fee approach.

The spectrum database could be run by one or more parties and the data collected and certified by Ofcom similarly to the TV white space framework.

Respectfully submitted,

A handwritten signature in black ink that reads "Paul Garnett". The signature is written in a cursive style with a long horizontal stroke at the end of the name.

Paul Garnett
Chairman
Dynamic Spectrum Alliance