

Ofcom consultation on improving spectrum access for Wi-Fi
TalkTalk response

March 2020

NON-CONFIDENTIAL

This is TalkTalk Group's response to Ofcom's consultation on improving spectrum access for Wi-Fi relating to spectrum use in the 5 and 6 GHz bands published on 17 January 2020.

<u>Overview</u>

We endorse Ofcom's assessment that Wi-Fi demand is growing as device take-up rises, new applications launch, and the availability and take-up of ultrafast and fibre broadband services is increasing. We agree that individuals and businesses expect more from their Wi-Fi connections and require "consistent and seamless" Wi-Fi connectivity "across different devices and locations" (para 2.2).

Improving access to spectrum will enable Communication Providers (CPs), device manufacturers and the wider technology sector to develop and innovate their products and services to enhance the customer experience of Wi-Fi and expand the range of use cases. We support Ofcom's proposals to change the access rules for 5 GHz and 6 GHz spectrum in support of these aims.

Responses to consultation questions

Question 1: Do you have any comments on our proposal to open access to the 5925- 6425 MHz band for licence-exempt Wi-Fi use?

TalkTalk agrees with Ofcom's proposal to open 5925-6425 MHz for licence-exempt Wi-Fi use, along with the proposed technical conditions.

Question 2: Do you have any comments on our technical analysis of coexistence in the 5925-6425 MHz band?

No.

Question 3: Do you agree with our proposal to remove DFS requirements for indoor Wi-Fi up to 200mW from the 5725-5850 MHz band?

Yes, we agree the removal of the DFS requirement for indoor Wi-Fi up to 200mW from the 5725 - 5850 MHz band. In addition, we think that Ofcom should consider the case for relaxing the DFS requirement for indoor Wi-Fi in the 5250 - 5725 MHz band (excluding 5600 - 5650 MHz), as set out below.

Question 4: Do you have any comments on other options that may be available for Wi-Fi and RLANs within the 5 GHz band?

DFS protection requirements (in EN 301 893 v2.1.1) present a significant inhibitor to the use of most Wi-Fi channels in the 5 GHz band for the reasons set out by Ofcom (p.22). While recognising the need to protect meteorological radar in the 5600 – 5650 band, it is less obvious that state-of-the-art military radar operating in the wider 5250 – 5850 MHz band requires protection from low power (<=30dBm) indoor Wi-Fi access points. While considering 5725 – 5850 MHz for this consultation, Ofcom's own assessment is that "the interference risk to radars from indoor Wi-Fi use is very low" (p.2) and "the DFS requirements are intended to protect radars from the risk of harmful interference. However, our analysis indicates that the risk of undue interference from indoor Wi-Fi use to radars is extremely low" (p.20).

NON-CONFIDENTIAL

We believe that the same statements could equally be applied to the whole 5250 – 5850 MHz band (excluding 5600 – 5650 MHz). The protection required by the classification of band 5250 – 5850 MHz as a NATO class A band is to prevent "loss of or harmful interference" (p.23, footnote 14). Accordingly, we suggest that Ofcom should undertake studies to evaluate whether low power indoor Wi-Fi use in band 5250 – 5725 MHz, without the burden of DFS, is likely to present a significant degradation of MoD or NATO operational capability.