



Non-confidential

# Vodafone Response to Ofcom's Consultation:

## Improving consumer access to mobile services at 3.6GHz to 3.8GHz



# Introduction

Vodafone welcomes the opportunity to contribute to Ofcom's Call For Inputs on the topic of making the 3.6-3.8GHz band available for mobile services. As we have previously commented, Vodafone is (along with BT) uniquely positioned to comment on the issues around making the transition away from the band's existing usage, having a "foot in both camps" of being an incumbent satellite user and prospective 5G operator.



## Answers to questions

*Question 1: Do you agree with our proposed approach towards registered fixed link and satellite earth stations users of the 3.6GHz to 3.8GHz band?*

*Question 2: Do you have any comments on our assessment of the likely costs and benefits of our proposed approach?*

Given the analysis undertaken by Ofcom, Vodafone agrees that Option B presents the best way forward. We consider that with a suitable transition period, the costs should not be significant in comparison to the benefits of making the band available for mobile usage. It is worth noting that the transition period will comprise both the time during which incumbent users have formal protection and the time during which they could likely have *de facto* protection, given the relative geographic locations of satellite earth stations and early 5G deployments in the band.

### **Proposed approach to incumbent applications – timing of removal of protection for existing and new links**

Vodafone notes that the variation to satellite licences will take effect from 1<sup>st</sup> June 2020. There is an apparent disconnect between this timing and the "withdrawal for spectrum management reasons" condition that routinely forms part of spectrum licences, and provides for at least five years' notice. Vodafone acknowledges that the spectrum management condition relates to total withdrawal of the right to use spectrum, whereas in this case Ofcom is not actually doing that, instead withdrawing coordination measures that make usage of the spectrum commercially acceptable. Nevertheless, there is a need for Ofcom to demonstrate that there are compelling reasons for a shorter notice period, otherwise we run the risk of setting a precedent that means the withdrawal condition is implemented as "five years unless we think it should be shorter". ✂

Vodafone considers that the hurdle for justifying a shorter transition period has comprehensively been cleared in that it is internationally acknowledged that the whole 400MHz of spectrum between 3.4GHz and 3.8GHz needs to be made available for mobile in order to fulfill the potential of 5G services. Maintaining protection for



incumbent users (Option A) would significantly compromise the geographic areas in which the 3.6GHz band can be used. However, in order to remove the risk of further legal challenges, Ofcom must explicitly set out its justification for the June 2020 date.

Vodafone disagrees with Ofcom's approach with respect to further licensing of incumbent applications in the intervening period. There is absolutely no reason why an operator of an existing earth station should be prevented from deploying new links in the band, with the assurance of proper protection, if they accept that this protection is temporary and will not be there post-2020. Indeed, it may well make sense to use such links on a transitional basis as part of clearing the band. Arbitrarily ceasing to process such licence amendments is inevitably inefficient in spectrum terms, as it means the band falls fallow until it is taken up by mobile.

As a parallel, it is Ofcom's policy that the 700MHz band is made available for mobile usage by 2020, and to facilitate this Digital Terrestrial Television (DTT) will be compressed into the frequencies below 694MHz. Knowledge that this would happen did not prevent Ofcom from issuing licences to operate interim DTT muxes until such a time that the spectrum was unavailable (or indeed, subsequently as part of the acceleration process, moving them to the 700MHz band which will subsequently be used for mobile). **We can see little reason for treating the 3.6GHz band differently – permit new links, so long as the applicants understand that they're only usable on a temporary basis.**

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We further note that Ofcom's policy of placing a moratorium on new incumbent applications has been implemented unilaterally without consultation – the letters setting out the detail of the policy were sent weeks after the consultation document was issued and we first learned about the moratorium when applications were rejected. Paragraph 8.10 of the consultation states:

*We will take account of any representations made by affected stakeholders on the proposed changes to their licence or grant, before reaching a decision on our proposed approach.*

Vodafone struggles to reconcile this statement with the fact that Ofcom has already implemented the policy of not allowing changes to licences in the band. A proper consultative approach is for there to be a Consultation document followed by consideration of stakeholder responses, then a Statement of the consequent policy: Vodafone considers that Ofcom has fallen short of its usually high standards on this occasion, by implementing policy without first consulting upon it.

### **Fees for existing links**

Vodafone notes that Ofcom is effectively not now providing any services to maintain protection for incumbent links in the band (protection is being maintained, but only insofar that new applications are not being processed). Against this backdrop, there may be a case for fees for incumbent users of the band to be subject to a discount when compared to the current AIP rates (inherently they aren't blocking other satellite/fixed link users, as Ofcom is not allowing such applications to be processed).



## Restriction Zones around satellite earth stations

Vodafone raised the prospect of early 5G deployments being in close proximity to and directly in the bore of satellite earth stations, hence we suggested that there be some measures to mitigate against this. However, we must be clear that we consider such zones should be ones requiring *coordination* rather than being *exclusion* zones, and should be for a temporary basis only.

Vodafone proposes that within the zones, mobile operators would be required to implement coordination procedures under which they notify the incumbent satellite user, and negotiate in good faith to carry out mitigation measures as set out in para 8.20 of the consultation. However, if such mitigation measures were not possible without compromising mobile service, or insufficient to prevent interference, we do not believe that the mobile licensee should ultimately be prevented from deploying. We consider that zones of the order 1-3km represent a reasonable compromise between providing some safeguard for satellite earth station operators and not disrupting the rollout of 5G services. We believe the relevant licence conditions should be time-bound, expiring at a time five years from the point at which Ofcom issues a statement confirming its policy to adopt Option B (i.e. in alignment with the timing that would have applied had the "spectrum management measures" condition been invoked).

## Conclusions

Vodafone supports Ofcom in designating the 3.6GHz band for mobile usage, and in the medium term removing protection for incumbent users. We disagree with Ofcom's approach of removing this protection for new links with immediate effect, and profoundly disagree with the manner in which this has been implemented without prior consultation.

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Vodafone UK

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