

TELEFÓNICA UK LIMITED RESPONSE TO:

“Mobile phone repeaters:

A consultation on extending the range of mobile phone repeaters that can be used without a licence and on measures to improve information for consumers”

July 2021

I. INTRODUCTION

1. Telefónica UK Limited (“Telefónica”) welcomes the opportunity to respond to Ofcom’s consultation on extending the range of mobile phone repeaters that can be used without a licence and on measures to improve information for consumers.¹

II. GENERAL COMMENTS

2. As we stated in our response to Ofcom’s 2017 consultation², which proposed to allow the use of repeaters on a licence-exempt basis, Telefónica is aware of the high priority that Ofcom attaches to mobile coverage and we fully appreciate that customers’ expectations, including in relation to coverage, are increasing over time. This is why Telefónica has committed to improving network coverage for all its customers, through investment in a variety of initiatives and solutions.
3. We have invested heavily on improving both the coverage and quality, of our network, in order to provide our customers with the best possible service. This focus continues today, as evidenced by our commitment to the Shared Rural Network initiative, the introduction of Wi-Fi calling capability and most recently, the leading role we have taken in the development of new coverage solutions based on the Joint Operator Technical Specifications (JOTS) Neutral Host In-Building (NHIB) specification.

¹https://www.ofcom.org.uk/_data/assets/pdf_file/0023/219245/mobile-phone-repeaters-condoc-2021.pdf

²https://www.ofcom.org.uk/_data/assets/pdf_file/0017/100277/Mobile-phone-repeaters.pdf

4. As we have previously highlighted to Ofcom, we have engaged at various stages in relation to the issues surrounding the use of mobile repeaters, setting out our significant concerns. This includes the serious interference risk that they pose, which is demonstrated by our ongoing experience of such devices impacting our customers by causing service disruption and degradation to our network. Uncoordinated and unregistered deployment of such devices severely compromises the careful design and operation of an ever more complex mobile radio network.
5. We have consistently expressed the strong view that any repeaters authorised for use must be required to be registered in order that MNOs are able to identify where a repeater is located, as is the case currently with any repeaters that are pre-authorised by MNOs.
6. We remain of the firm view that this should be a mandatory requirement for all mobile repeaters. This is evidenced by the fact that we continue to experience harmful interference to our network, including from well-known brands of multi-band repeaters. This has necessitated removal of such equipment by Ofcom's spectrum enforcement team.
7. Existing regulation has been designed to protect mobile operator's networks from undue interference for the benefit of customers. Yet Ofcom appears to be content to continue to further erode this protection with its proposals. We urge Ofcom to take notice of the evidence and avoid moving forward with proposals which will not only result in a continuation of interference to mobile networks and harm to consumers, but will also exacerbate it.
8. We focus the remainder of this document on our responses to Ofcom's specific consultation questions.

III. RESPONSES TO QUESTIONS

Question 1: Do you agree that Ofcom should consider working with relevant industry partners to develop a voluntary testing standard, and publishing a list on our website of static indoor mobile phone repeaters that comply with our licence exemption requirements?

9. Telefónica supports an approach to indoor mobile repeaters that involves a robust technical testing process. This must sit alongside a pro-active enforcement regime, led by Ofcom. We do not support the use of licence-exempt repeaters on an unregistered basis.

Question 2: Do you agree that we should modify IR 2102.1 to allow for 'provider specific' mobile phone repeaters? If you do not agree, please explain your reasons.

10. Whilst we understand the basis of Ofcom's technical reasoning in relation to this particular issue, the key point is that we do not support the use of licence-exempt repeaters on an unregistered basis.

Question 3: Do you agree that we should make 'multi-operator' mobile phone repeaters complying with the technical requirements outlined above (and set out in the draft UK Radio Interface Requirement IR 2102.3 at Annex A3) licence exempt? If you do not agree, please explain your reasons.

11. No. We do not agree with Ofcom's proposal to make 'multi-operator' mobile phone repeaters complying with the technical requirements outlined above, licence-exempt. Ofcom needs to be clearer in stating that static indoor repeaters are intended for residential use only. The current headline description of "indoor" has seen the continued misuse of devices being deployed into commercial environments such as offices, industrial units, hotels, universities etc causing harmful interference. Solutions to improve coverage should instead be deployed in a more appropriate and robust form, such as in-building deployments.
12. Ofcom should take a more active role in providing information to all mobile users on how to improve mobile coverage, for example through greater and more prominent consumer information about using Wi-Fi calling, as well as in-building solutions, which are suited to commercial premises.

Question 4: Do you agree with our provisional view as set out in paragraph 3.48 above? If you do not agree, please explain why you think the requirement is not necessary.

13. Ofcom's analysis of 4G only repeaters highlights one of the many aspects of why licence-exempt, unregistered repeaters are harmful. As the mobile industry progresses, so requirements change. For example, spectrum usage changes through re-farming between technologies, as well as the development and rollout of new technologies. We do not support the use of 4G only repeaters on a licence-exempt and unregistered basis, as there would be no ability to detect their location. This is of key importance in relation to changes and re-configurations across the mobile networks.

Question 5: Do you agree that it would not be appropriate to allow the use of licence exempt repeaters in the 2.6 GHz band? If you do not agree, please explain your reasons.

14. Yes. We agree that it would not be appropriate to allow the use of licence-exempt repeaters in the 2.6GHz band. In addition (further to our overall position on the use of licence-exempt, unregistered repeaters) it would not be appropriate to allow the use of such repeaters in the 2.3GHz band, nor for any other TDD mobile spectrum.

Question 6: Do you agree that we should allow the use of static indoor mobile phone repeaters (on a licence-exempt basis) in the paired 700 MHz mobile band?

15. No. We do not agree with the proposal to allow the use of static indoor mobile phone repeaters (on a licence-exempt basis) in the paired 700MHz mobile band.
16. One reason for this is the likelihood of generation of intermodulation distortion when a repeater is designed to operate across, for example, 700MHz, 800MHz and 900 MHz.
17. Repeaters operating across these bands concurrently, can produce excessive uplink interference. This can negate the benefits that the repeater is supposed to bring, resulting in harmful interference to our network and causing consumer harm. Identifying this and tracking this down would be extremely difficult if they were allowed to be used on a licence-exempt and unregistered basis.