
Decision to make the Wireless Telegraphy (Mobile Repeater) (Exemption) Regulations 2018

Regulatory Impact Assessment

1. Regulatory Impact Assessment

Introduction

- 1.1 Ofcom acts in accordance with Government practice that, where a statutory regulation is made, a Regulatory Impact Assessment (“RIA”) must be undertaken. We also comply with our duty under section 7 of the Communications Act 2003 (the “2003 Act”) to undertake impact assessments.
- 1.2 The analysis in this document is a regulatory impact assessment relating to the Wireless Telegraphy (Mobile Repeater) (Exemption) Regulations 2018 (the “Regulations”). It is consistent with the Government practice on RIAs and Ofcom’s duty under the 2003 Act.
- 1.3 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the 2003 Act, which imposes a duty on Ofcom to carry out impact assessments where our decisions would be likely to have a significant effect on businesses or the general public, or when there is a major change in our activities.
- 1.4 As a matter of policy, we are committed to carrying out and publishing impact assessments in relation to the vast majority of our policy decisions. For further information about our approach to impact assessments, see the guidelines, Better policy-making: Ofcom’s approach to impact assessment, which are on our website:
http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf.
- 1.5 This RIA relates to our decision to make the Regulations relating to certain mobile phone repeaters for static indoor use and for low gain in-vehicle use.

Legislative background

- 1.6 In the UK, Ofcom is responsible for authorising use of the radio spectrum. We permit the use of the radio spectrum either by granting wireless telegraphy licences under the Wireless Telegraphy Act (the “2006 Act”) or by making regulations exempting users of particular equipment from the requirement to hold such a licence.
- 1.7 Under section 8(1) of the 2006 Act, it is unlawful (a criminal offence) to establish or use a wireless telegraphy station or install or use wireless telegraphy apparatus without holding a licence granted by us, unless the establishment, installation or use (for ease of reference, the ‘deployment’) of such equipment is exempted from the need for a licence. We can exempt the deployment of wireless telegraphy stations and apparatus by making statutory regulations under section 8(3) of the 2006 Act. Such exemption may be absolute or subject to such terms, provisions and limitations as may be specified.

- 1.8 Under section 8(4) of the 2006 Act, we have to make regulations to exempt equipment if its deployment is not likely to:
- involve undue interference with wireless telegraphy;
 - have an adverse effect on technical quality of service;
 - lead to inefficient use of the part of the electromagnetic spectrum available for wireless telegraphy;
 - endanger safety of life;
 - prejudice the promotion of social, regional or territorial cohesion; or
 - prejudice the promotion of cultural and linguistic diversity and media pluralism.
- 1.9 In accordance with the requirements of section 8(3B) of the 2006 Act, the terms, provisions and limitations specified in the regulations must be:
- objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate;
 - not such as to discriminate unduly against particular persons or against a particular description of persons;
 - proportionate to what they are intended to achieve; and
 - transparent in relation to what they are intended to achieve.

Proposal and decision

- 1.10 At present, the use of a mobile phone repeater is only authorised if it is supplied and operated under the control of a mobile network operator (under its Wireless Telegraphy licence). The use of consumer (self) installed repeaters is unlawful. However, such repeaters are sometimes used (often without a real appreciation by the consumer that the use of the device they buy is unlawful). Typically, these are crude wideband amplifiers that can cause harm to the mobile operators' networks and therefore to other consumers. The interference or other adverse effects on the technical quality of service caused by the unlawful use of such wideband repeaters has become one of the categories of complaint most reported to Ofcom. We have a duty to secure efficient use of the spectrum and we have, and use, powers to enforce against unlawful use.
- 1.11 In 2017, Ofcom consulted on and made a policy decision to exempt from the need for a licence under the 2006 Act the establishment, installation and use (deployment) of static indoor and low gain in-vehicle mobile repeater devices, under certain conditions. We made the Regulations to give effect to this decision.

The citizen and/or consumer interest

- 1.12 Our principal duty under section 3 of the 2003 Act is to further the interests of citizens in relation to communications matters; and of consumers in relevant markets, where appropriate by promoting competition.
- 1.13 We take account of the impact of our decisions upon both citizen and consumer interests in the markets we regulate. We must, in particular, secure the optimal use for wireless

telegraphy of spectrum and have regard to the principle under which all regulatory activities should be targeted only at cases in which action is needed.

- 1.14 Accessing the mobile network within their own home (or other indoor premises) can be troublesome for some consumers, particularly where they live towards the edge of mobile network coverage. The same can be said of accessing the network from within a vehicle. In both cases, the penetration loss involved can mean that, where the mobile phone signal is weak outdoors, it falls below a usable level once inside. One potential solution to this problem is to use a device called a mobile phone repeater (sometimes also referred to as signal boosters or signal enhancers) which amplifies the network signals. However, as discussed above, the use of consumer (self) installed repeaters is unlawful.
- 1.15 There is a clear consumer demand for mobile phone repeater products and some consumers have purchased unauthorised devices due to the lack of an authorisation regime for these devices. The illegal use of these devices has the potential to cause harm to the mobile networks and to reduce the capacity for other consumers to access these networks. It was our intention that, by creating the licence exemption this would create a clear distinction between legally and illegally used products and ultimately stem consumer demand for and the availability of illegally used repeaters.
- 1.16 We believe our decisions to make a licence exemption and then to make the Regulations to give effect to that exemption will be of benefit to consumers for the following reasons:
- a) the measures concern the use of radio equipment on a licence-exempt basis, which reduces the regulatory and administrative burden on our stakeholders and helps to secure the optimal use of spectrum;
 - b) the new provisions permitting the use of certain low powered repeaters may help citizens and consumers who have mobile reception problems by improving coverage in their homes and other indoor premises and in vehicles; and
 - c) the licence exemption is only applicable in circumstances where use of equipment is unlikely to have an adverse impact on technical quality of service and cause undue interference to other spectrum users.

Our policy objective

- 1.17 We seek wherever possible, to reduce the regulatory burden upon our stakeholders, in this instance users of the radio spectrum. One way in which we can do this is to remove the need for spectrum users to apply for individual licences to authorise the use of radio equipment. Exemption is realised by describing the details of equipment and the parameters under which it may be used in a Statutory Instrument (secondary legislation called regulations) that exempts users of such equipment from the need to hold a licence provided they comply with the terms of the regulations.
- 1.18 Our regulatory policy objective in this area is to facilitate the ability of consumers to improve their mobile coverage within the home (and other indoor premises) and in vehicles, without giving rise to the risk of the kinds of deleterious effects described in our consultation

document “Mobile Phone Repeaters Indoor and in-vehicle” (the “Repeater Consultation”)¹ and our policy decision statement “Licence Exempt Mobile Phone Repeaters Indoor and in-vehicle” (the “Repeater Statement”)². We seek to facilitate the provision of a service to a consumer in the home (and other indoor premises) or vehicle that is equivalent to that available outdoors at the same location. We made a policy decision in October 2017, set out in the Repeater Statement, to make a licence exemption in respect of relevant mobile repeaters to achieve this objective. The Regulations give effect to that. This is just one of a number of different initiatives Ofcom is undertaking to support improved mobile coverage in general.

- 1.19 We also take account that, in accordance with the 2006 Act, we must exempt from licensing the deployment of specified equipment that meets the requirements of sections 8(4) and 8(5) of the 2006 Act. The Regulations meet that requirement.
- 1.20 Ofcom conducts market surveillance of radiocommunications products placed on the market. We would consider our policy decision and the Regulations a success if we see a reduction in:
- the sale and use of unlawful apparatus in the UK; and
 - for the numbers of complaints to Ofcom about interference and other adverse effects caused by repeaters.

Options considered

- 1.21 The options open to us having made our October 2017 decision on authorising certain mobile phone repeaters for static indoor use and for low gain in-vehicle use were:
- i) to make the Regulations line with that policy decision; or
 - ii) to do nothing and not implement that decision.

Analysis of options

Make new regulations

- 1.22 When considering the authorisation of the deployment of equipment Ofcom can either licence them or make regulations to exempt them from licensing. Section 8(4) of the WT Act requires that if Ofcom is satisfied that the criteria set out in section 8(5) of the WT Act are met, we must make regulations to licence-exempt the deployment of equipment. If the requirements of section 8(5) are not met, this does not prevent us making an exemption, but any decision would need to consider the impacts and benefits of doing so.
- 1.23 We have devised a set of technical conditions in which the installation and use of specified repeater devices is not likely to have the effects described in section 8(5) of the Act. We

¹ https://www.ofcom.org.uk/_data/assets/pdf_file/0017/100277/Mobile-phone-repeaters.pdf

² https://www.ofcom.org.uk/_data/assets/pdf_file/0019/107254/Repeaters-Statement-2017.pdf

take account that we are, accordingly, required under section 8(4) to make a licence exemption. One impact of making the Regulations is to comply with that legal obligation.

- 1.24 In our assessment, the likely practical impact of the Regulations would be improvements in mobile coverage for consumers, without adverse effects on mobile networks and other consumers. In our 2016 Call for Input document³, which preceded the Repeater Consultation, we noted that, whilst 72% of rural households can reliably make a voice call outdoors, only 31% have reliable indoor voice call coverage. The increasing use of metallic construction materials to improve the thermal insulation performance of buildings is further increasing mobile phone signal losses inside buildings, making indoor reception harder to achieve. The use of mobile repeaters authorised by the Regulations could help improve coverage in these cases. Our assessment is that, in relevant cases, consumers will take the opportunity lawfully to improve the coverage they obtain.
- 1.25 The Regulations would also make it easier to improve mobile coverage in locations where the broadband backhaul connection required by alternative coverage improvement approaches (e.g. femtocells or voice over Wi-Fi (VoWiFi)) cannot be easily provided, such as in vehicles and inside buildings with no fixed broadband subscription.
- 1.26 The further likely impact of the Regulations, in our view, is that manufacturers will respond to consumer demand by developing appropriate repeater products. In those circumstances, there should be no overall cost to manufacturers. Instead, they would benefit from the creation of a legitimate retail market for them to service.
- 1.27 There would be further knock-on effects on mobile network providers. An increase in the lawful use of compliant repeaters, at the expense of the unlawful use of non-compliant ones, would help to reduce the risk of interference over the long term caused by consumers trying to improve their coverage by unlawful means.
- 1.28 In particular, by having a legal alternative that minimises the risk of interference, the consumer demand for repeaters would be satisfied by the supply of legally compliant equipment. We would accordingly expect that, over time, the demand for illegal repeaters would be diminished. This would in turn reduce the impact on network providers caused by interfering illegal equipment (the effect of which may be to deny their customers service). All of this would help secure optimal use of the spectrum.
- 1.29 Additionally if, as we anticipate, making the Regulations led to increased consumer demand for, and lawful use of, repeaters which are unlikely to cause interference, at the expense of unlawfully used equipment likely to have that effect, we would also expect this to reduce network operators' and Ofcom' costs in investigating and dealing with problems to networks caused by illegally used devices. In this connection, over the last three years Ofcom's enforcement team has spent more than 5,600 hours investigating complaints about the effects of such use. The estimated cost to us of doing so was around £550,000. We will continue to investigate such cases but, where consumers would have a lawful alternative that minimises the impact on mobile networks, we expect these costs to be reduced.

³ https://www.ofcom.org.uk/_data/assets/pdf_file/0031/68737/statement.pdf

- 1.30 Accordingly, in our judgment, the Regulations would have the following impacts:
- an increase in the ability of consumers to take steps to improve the mobile coverage they receive, by self-installing and using licence exempt-repeaters;
 - where they exercise that ability, an improvement in coverage for those consumers, without deleterious effects on mobile networks and other users;
 - a reduction in the need for consumers to resort to the purchase of repeaters who use is unauthorised and unlawful; and
 - where demand for such repeaters is reduced, a decline in the offering of them for sale in the UK.
- 1.31 We also take account that licence exemption presents the lowest barrier to entry compared with other forms of authorisation, such as individual licences. Costs to business (and consumers) are likely to be lower under a licence-exemption regime than where there is a requirement for users to obtain individual licences. Businesses, for example, would not have to incur the time, opportunity and administrative costs associated with applying for a licence and the cost of the licence itself (consumers could also save some of these costs).
- 1.32 There are one-off administrative costs for Ofcom associated with making Statutory Instruments. These are low, however, both in absolute terms and compared to licensing alternatives that might require, for example, the maintenance of an ongoing administrative scheme. Moreover, the costs such as they are will also be offset by the benefits to businesses and consumers outlined above.
- 1.33 Overall, therefore, we judge that making the Regulations is likely to generate a net benefit for UK citizens, consumers and businesses, or at worst would have a neutral outcome (to the extent that benefits may depend on the uptake of the new opportunities afforded by the Regulations). It is unlikely to impose costs on other users. On that basis, the effect of making the Regulations would likely be positive.

Do nothing

- 1.34 The alternative to making the Regulations was to do nothing: not making the Regulations. One impact of that would have been a failure to comply with the requirements of section 8(4) of the Act.
- 1.35 In addition, citizens and consumers would not be able to benefit from better coverage that repeater devices could provide. This would lead to continued demand for the use of unauthorised repeater devices by them. They might themselves obtain better mobile coverage under these circumstances, but there would be continued negative effects on networks and other consumers overall, and they would be exposed to the risk of committing a criminal offence.
- 1.36 We also note that, in September 2017 we published some qualitative research we commissioned on the impact of poor coverage on consumers and Small and Medium

Enterprises (SME).⁴ This concluded that poor coverage meant consumers and SMEs were much more limited in how they are able to use their phones. Issues with coverage means that consumers could not rely on even basic functionality, namely the ability to make and receive calls and to send and receive text messages. The report detailed several impacts that poor coverage causes. If we did not make the Regulations some consumers and SMEs, whom these devices could help, would not benefit from:

- Improved social connectedness, both in terms of contact being made to others and contact being received. Consumers would continue to feel socially excluded in an immediate sense as they miss out on contact and social plans with loved ones.
- A greater sense of safety, as mobile phones provide a safety net for consumers by enabling them to deal with emergency situations of varying degrees of seriousness, from the inconvenient (for example, running late) to the life threatening (for example, involvement in a serious accident). Poor coverage reduces the effectiveness of this safety net, thereby potentially increasing the harm consumers are exposed to when an emergency situation arises.
- Better economic opportunities: consumers in areas of poor or no coverage express considerable resentment towards paying the same amount for their mobile phone services as those in areas of good coverage while receiving a far inferior level of coverage. They also describe being restricted in their choice of mobile phone provider and/or contract as commonly there was only one viable provider in their area. For SMEs, a lack of connectivity prevents or hampers contact, be it phone calls, emails or social media interactions, with potential and existing customers and suppliers. The majority of them feel that this creates a loss of potential and actual sales. Some SME consumers also believe that this damages their credibility as a business, because poor and inconsistent communications are unprofessional.
- More convenience: consumers have developed workaround solutions to help them mitigate against the impact of poor coverage, but these can be inconvenient and time-consuming, as well as ineffective.

1.37 Another relevant factor is that, in some cases, consumers unlawfully using repeaters have denied mobile coverage to large numbers of other consumers nearby, resulting in Ofcom having to investigate the source of the interference. As noted above, these investigations have taken up over 5,600 hours of Ofcom’s Enforcement Team’s time, with an estimated cost of £550,000, over the last three years. If we did not make the Regulations, these effects and costs would likely continue at a similar level.

1.38 By not making the Regulations there would be no additional cost to Ofcom relating to making a Statutory Instrument. However, again, these costs are slight compared to those that would with ongoing investigations and enforcement action and those incurred in the development of the policy decision that the Regulations would implement. Not making the Regulations would also mean that we would not be implementing the policy decision we

⁴ https://www.ofcom.org.uk/_data/assets/pdf_file/0021/108129/jigsaw-mobile-coverage-qualitative-research.pdf

made in October 2017 (the Repeater Decision). That would have an impact on the regulatory certainty stakeholders derive where Ofcom does what it says it will.

The preferred option and decision

- 1.39 Our preferred option was to make the Regulations and we have done so. This is consistent with the policy decisions we took in October 2017.

Equality Impact Assessment

- 1.40 Following an initial assessment of our policy proposals, we consider that it is reasonable to assume that any impacts on consumers and citizens arising from the Regulations would not differ significantly between groups or classes of UK consumers and citizens, all of whom would have access to licence exempt use of repeater devices, potentially at end-user prices reflective of all general input costs.
- 1.41 We do not consider that there is evidence to suggest that the decision to make the Regulations would have a significantly greater direct financial impact on groups including based on gender, race or disability or for consumers in Northern Ireland relative to consumers in general.
- 1.42 We have not carried out a full Equality Impact Assessment in relation to race equality or equality schemes under the Northern Ireland and disability equality schemes. This is because we do not think our decision here would have (and it is not intended to have) a significant differential impact on different gender or racial groups, on consumers in Northern Ireland or on disabled consumers compared to consumers in general.

Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed

Philip Marnick

Group Director, Spectrum Group

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Contact Point:

Eniola Awoyale
Ofcom, Riverside House
2a Southwark Bridge Road
London, SE1 9HA
020 7981 4680