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Dear Mr Wilson,

## Subject: Decision to take enforcement action

Following our meeting on 8 October 2019 concerning emissions from the Openreach VDSL network affecting wireless telegraphy, I agreed to set out our rational for deciding to instigate enforcement action in instances of harmful interference affecting radio amateurs.

## **Background**

Ofcom is the statutory regulator for communications. That includes regulating the use of the electromagnetic spectrum ("the spectrum") – used for wireless communications such as mobile telephones, as well as television and radio. The way the spectrum is used for those sorts of communications is known as "wireless telegraphy."

We were set up by the Office of Communications Act 2002. Our main duties and functions, and the powers we have to carry them out, are in the Communications Act 2003 and the Wireless Telegraphy Act 2006. Some of our powers are also set out in secondary legislation – statutory instruments – made under those Acts.

Section 3 of the Communications Act 2003 ("CA03") sets out one of Ofcom's main duties. It says that, in carrying out our functions, we are required to secure the optimal use of the spectrum for wireless telegraphy. It also says that we must take into account the different needs and interests, so far as the use of the spectrum for wireless telegraphy is concerned, of all those who may wish to make use of it.

The most relevant Act in this dealing with harmful interference, however, is the Wireless Telegraphy Act 2006 ("WTA").

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Switchboard: +44 (0)20 7981 3000 or +44 (0)300 123 3000 Section 3 of the WTA says that, when carrying out our spectrum functions, we must have regard, amongst other things, to the extent to which the spectrum is available for use for wireless telegraphy and the demand for such use. We must also take into account the desirability of promoting the efficient management and use of the spectrum that is available for use for wireless telegraphy.

One thing these duties reflect is that there are many different uses and users of the spectrum. The way they use the spectrum has the potential to interfere with one another (because, for example, all electrical equipment including that that uses the spectrum, gives off some electromagnetic energy and natural phenomena like the weather can affect the airwaves). Our statutory duties require us to balance the needs and interests of the different spectrum users and uses. Importantly, none of these duties require us to eradicate all interference and guarantee any particular user interference-free spectrum use.

The WTA also sets out a number of functions we have to carry out and a number of powers we are given in order to do so (and when we carry out these functions and exercise these powers we have to comply with the duties described above). These functions and powers also reflect the potential for different spectrum uses to interfere with one another and they set up a statutory scheme for managing that issue.

In particular, section 8 sets up a scheme for scheme for licensing spectrum use. Users must either have a licence for their spectrum use, issued by Ofcom, or be exempt from the need for a licence under regulations we have made. These licences and exemptions contain conditions which regulate how, when and where a person may use the spectrum. Using the spectrum without a licence or the benefit of an exemption, or in breach of the conditions of a licence or an exemption, is criminal offence and Ofcom has enforcement powers in sections 35, 39 and 41. Again, these provisions are designed to manage the potential for conflict between spectrum users and uses.

There are also specific provisions that can be used where there are interference problems caused by apparatus. Under section 54, Ofcom can make regulations which set requirements to ensure that, when it is used, apparatus does not cause undue interference to wireless telegraphy. Under section 55, we can serve prohibition notices which prevent a person using equipment that causes certain kinds of undue interference. Failure to comply is a criminal offence under section 58.

One of the regulations Ofcom has made under section 54 is the Wireless Telegraphy (Control of Interference from Apparatus) Regulations 2016. Apparatus specified in the Regulations is "(...) apparatus which generates, or is designed to generate, or is liable to generate fortuitously, electromagnetic energy at frequencies not exceeding 3,000 gigahertz." This does not include cables, wires and other passive components.

Section 4 of the WTA, meanwhile, gives Ofcom a function which also reflects the potential conflict between spectrum users and use. It says we must provide a service of advice and assistance for people who complain to us about interference to the spectrum. Again, though, it does not require that Ofcom ensures or guarantees that any particular spectrum use or user is free from interference.

For completeness, it is also worth noting that the WTA contains specific definitions of "interference" and "undue" and "harmful" interference. Those are quite detailed, but the former covers where electromagnetic energy or signals mean that all or part of a wireless communication cannot get through properly to the intended recipient. Such interference is "undue" and "harmful" if it endangers navigation or safety of life services or it degrades, obstructs or repeatedly interrupts lawful wireless telegraphy transmissions.

## How Ofcom exercises its functions

There are also some statutory provisions that deal with how we should perform our duties and exercise our functions. Section 3(3) of the CAO3 requires that, in performing our duties, we must have regard, in all cases, to the principles that our regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed.

These principles inform the way we carry out all our functions, including in relation to spectrum management. We take them into account when handling complaints of interference and in deciding whether and how to take enforcement action of the kinds referred to above. We have published guidance about this on our website (<a href="https://www.ofcom.org.uk/spectrum/interference-enforcement">https://www.ofcom.org.uk/spectrum/interference-enforcement</a>) providing an introduction to Ofcom's role in protecting and managing the airwaves (the spectrum). As you will see, it refers to some common causes of spectrum interference, but notes that Ofcom does not guarantee interference-free spectrum. It also contains links to a number of other web-pages providing specific guidance on Ofcom's functions and the way we carry them out.

The website also explains to people how they can report interference to Ofcom and request our advice and assistance (that we are required to provide under section 4 of the WTA).

As you will see, that guidance notes that, "We may also send a spectrum engineering officer to carry out an investigation. We will not usually investigate a case unless we are satisfied that the interference is 'harmful', outside your control and all reasonable steps have been taken to minimise the effect." It also says, "Ofcom will exercise discretion on whether to investigate a report of interference," and re-iterates that, "The regulatory regime does not necessarily guarantee that interference will not arise or that enforcement action will be taken to prevent it occurring."

A particular part of the guidance provides information about "harmful interference." It includes the statutory definition of such interference (as described above) and says that, "An ability to detect an electromagnetic disturbance or noise is not in itself interference. We are unlikely to investigate unless there is evidence of 'harmful interference.'" It also says that, "It is unlikely that Ofcom would undertake to investigate a report of interference that is not regarded as 'harmful'. Ofcom do not undertake investigations into this type of interference, it is not our policy and we do not have the required powers that would allow for us to do so effectively."

A further piece of guidance (attached) relates specifically to amateur radio users. It provides such users with advice and assistance about interference to their use of the spectrum. Again, it describes harmful interference and notes that we would be unlikely to investigate interference that is not harmful. It explains that, "Ofcom will exercise discretion on whether to investigate a report of interference. The regulatory regime does not guarantee that interference will not arise or that enforcement action will be taken to prevent it occurring."

The final piece of guidance attached to this letter explains how we exercise our enforcement powers. In particular, it describes the principles we apply in deciding whether and how to use our discretion to act (both to ensure we act fairly to our stakeholders in line with our duties and use our limited resources efficiently).

The guidance notes that the principle of proportionality underpins the decisions we make. That includes targeting enforcement action on areas of greater risk. As explained, we are more likely to focus on more serious circumstances and, "In selecting which complaints or reports of interference to investigate, and in deciding the level of resources to be used, Ofcom will consider the following:

- severity and scale of any potential or actual harm;
- seriousness of any potential breach of the law;
- practicality of achieving results; and
- wider implications of the event, including whether there is serious public concern."

## Application to VDSL interference reports affecting amateur radio

Ofcom will always provide a service of advice and assistance to those reporting interferences regardless of the source or stakeholder.

Where we proceed to investigate and are satisfied that there is sufficient evidence to take enforcement action, we would consider whether it was proportionate to act.

Ofcom would consider the extent of the evidence that particular 'apparatus' was causing interference, and that it appeared to be undue or harmful interference within the statutory definitions. We would need to be satisfied that the affected service or station had taken steps to minimise the effect. We would also consider that any interference was being caused to in relation to a hobby interest rather than a critical, safety of life service (such as communications used by the emergency services). We similarly take into account any ability to use an alternative communication (frequency or method) to avoid any interference.

On these bases, and in line with both our duties to balance the interests of different users of the spectrum and the principles described above, we may decide a not to take further action. That decision reflects, in particular, the principle of proportionality as set out above.

We make our judgment, in light of the factors referred to in the preceding paragraph, the severity and scale of any potential or actual harm, the seriousness of any potential breach of the law, the practicality of achieving results and the implications of the matter complained of did not warrant enforcement action.

We can understand that some radio amateurs are disappointed by the decisions we take. However, we do not enter into enforcement action lightly and will only do so if proper and appropriate. We take full account of our duties in relation to spectrum management and the principles on which we operate and treat all stakeholders fairly.

Yours sincerely,

Cliva Conia.

Clive Corrie