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# The Wireless Telegraphy (Licence Charges) (Amendment) Regulations 2021

Regulatory impact assessment

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# Regulatory impact assessment

- 1.1 This document sets out in summary form a Regulatory Impact Assessment for the Wireless Telegraphy (Licence Charges) (Amendment) Regulations 2021 ("Regulations").
- 1.2 Ofcom's full reasoning is set out in the document entitled *"Setting licence fees for 412 MHz – Decision to apply Administered Incentive Pricing for the frequency band 412-414 MHz paired with 422-424 MHz"*, published by Ofcom on 7 October 2021 and available on Ofcom's website at [www.ofcom.org.uk](https://www.ofcom.org.uk) (the "Statement"). Any conflict should be resolved in favour of that document.

## Background

- 1.3 A licence to use spectrum in the United Kingdom in the 412.0-414.0 MHz paired with 422.0-424.0 MHz frequency band (the "412 MHz spectrum") is currently concurrently held by Arqiva and Airwave.
- 1.4 To date, Ofcom has not charged annual licence fees ("ALFs") in respect of the 412 MHz spectrum.
- 1.5 Ofcom has considered at what level ALFs should be set for the 412 MHz spectrum, having regard to its statutory duties, and has made the Regulations to implement that level. This document assesses the impact of the Regulations.
- 1.6 The applicable legal framework is described in full in Ofcom's Statement at paragraphs 2.7 to 2.10 and in Annex A1 to the Statement.

## Ofcom's approach

- 1.7 Ofcom's power to impose fees for the use of spectrum includes a power to set fees greater than those necessary to recover the administrative costs that Ofcom incurs in connection with its radio spectrum functions, having regard in particular to Ofcom's general duty to further the interests of citizens and consumers, where appropriate by promoting competition, and by securing the optimal use of the spectrum and its specific duties when carrying out its spectrum functions.
- 1.8 In order to meet these duties, Ofcom set out its general policy position for setting spectrum fees in its Strategic Review of Spectrum Pricing (the "SRSP") in 2010<sup>1</sup>, which it said would be used in future as a guide to setting fees above administrative cost (which it referred to in the SRSP as administered incentive pricing or "AIP").<sup>2</sup> Ofcom explained that AIP should apply to spectrum that is expected to be in excess demand from existing and/or feasible alternative uses, in future, if cost-based fees were applied. Ofcom also explained that the purpose of

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<sup>1</sup> Ofcom, *Strategic Review of Spectrum Pricing: The revised Framework for Spectrum Pricing*, December 2010, [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/42909/srsp-statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/42909/srsp-statement.pdf)

<sup>2</sup> Following the convention of more recent documents, we typically refer to ALFs (annual licence fees) hereafter but any reference to ALF should be read as equivalent to AIP.

AIP was to set fees for spectrum holdings to reflect the value of the spectrum (based on its opportunity cost) in order to promote the optimal use of spectrum. We set out a high-level framework for setting AIP fees, and noted that we would need to take account of the particular circumstances of a case when setting specific fees.

- 1.9 We therefore carefully considered whether AIP would be appropriate in this particular case and, if so, how most appropriately to determine the market value of the relevant spectrum:
- a) firstly, we considered whether we expect there to be excess demand for the 412 MHz spectrum from existing and/or feasible alternative users, in future, if cost-based fees were applied and we concluded that excess demand was likely, implying that an AIP based fee was most appropriate;
  - b) we then estimated the market value of the 412 MHz spectrum, by assessing what the opportunity cost was of the use of the spectrum. We determined that the highest value alternative use for this spectrum is Business Radio, which operates in the adjacent UHF 1 and UHF 2 bands, and that our best estimate of the market value of 412 MHz spectrum is (on the basis of revealed preference) likely to be at least equal to the fees charged for a UK-wide Business Radio Area Defined licence with exclusive use of a national channel (i.e., £9,900 per 2 x 12.5 kHz or £396,000 per MHz); and
  - c) finally we considered what the likely impact of setting fees at our estimate of the market value would be and whether, in light of our statutory duties, there is any reason for us to set fees at a different level.
- 1.10 In light of this assessment, we reached the view that it is appropriate to set ALFs by reference to the fees we already charge Business Radio users in the adjacent bands for a national exclusive licence (i.e., £396,000 per MHz per year).

## **Impact on securing the optimal use of spectrum**

- 1.11 The aim of setting spectrum fees based on market value is to provide users with a sustained long-term signal of spectrum value as indicated by its opportunity cost in the next highest use and, as a result, to give them incentives to use it in a way that maximises benefits for society over time. We consider that, if the price charged for any limited resource does not reflect its opportunity cost, there will be less incentive to use it efficiently and this can result in wasteful use of resources which ultimately impacts consumers. We also considered that trading by itself may not be enough to ensure that spectrum is allocated most efficiently.
- 1.12 We therefore considered that setting an ALF at market value is likely to secure optimal spectrum use by creating appropriate incentives to hold or release spectrum and that in general terms, benefits to society will be maximised over time if spectrum is priced to reflect opportunity cost, and that AIP fees set in this way have an effect similar to the prices that would emerge in a well-functioning spectrum market.
- 1.13 Notwithstanding the above, we considered the risks to spectral efficiency of using our estimate of market value and, in particular, the risk of setting fees too high or too low.

- 1.14 We recognised that fees set above market value would not secure the optimal use of spectrum. We also recognised however that fees set below market value risk spectrum not being efficiently utilised, and that higher value users may be prevented from obtaining access to spectrum because the fee level is too low to encourage existing users to consider other options. In this context, we noted that setting ALFs below market value would effectively give the licensees a subsidy (please also refer to the section “Impact on citizens and consumers” below).
- 1.15 The exercise of identifying the market value of spectrum necessarily involves us exercising regulatory judgement when considering the evidence. In this specific case, however, we did not consider that the fees that we are setting are too high or low. We were satisfied that the fees paid by Business Radio users provide a reliable but conservative proxy for the market value of the 412 MHz spectrum, and we would not expect that ALFs based on this would likely be too high or too low.
- 1.16 In light of the above, we took the view that setting ALFs based on our estimate of market value will secure the optimal use of the 412 MHz spectrum.

## **Impact on competition**

- 1.17 Our general view on spectrum fees and competition, as set out in the SRSP, is that fees are unlikely to introduce distortions to competition in downstream markets when they reflect the opportunity costs of spectrum. We have also not identified any reasons in this particular case why it might be appropriate to discount 412 MHz fees below the market value of the 412 MHz spectrum in order to promote competition.
- 1.18 In particular, we recognised that if the 412 MHz ALF were set above the opportunity cost of that spectrum, this could have a detrimental effect on competition, especially in the case where not all providers in the relevant downstream market are liable to pay the fee. However, we equally considered that if the fees were set below the opportunity cost of the spectrum this could have a detrimental effect on competition as it would effectively give Arqiva/Airwave as the licence holder a subsidy. This has the potential to distort economic incentives in terms of pricing and investment decisions, for instance by causing prices to deviate from the true cost of supply, or by distorting the efficient choice between spectrum-related investments and other investments.
- 1.19 In light of the above, we concluded that setting the 412 MHz ALF based on our conservative estimate of market value is consistent with our duty to promote competition.

## **Impact on citizens and consumers**

- 1.20 Consistent with our wider policy on spectrum fees, we consider that retail prices should reflect the input cost of spectrum, and that this does not reflect a market failure, or markets failing to work in the interests of consumers. As such, we do not consider that it would be appropriate to maintain the price of spectrum below its market value in order to artificially suppress consumer prices through a spectrum subsidy.

- 1.21 Rather, we consider that setting ALFs in accordance with market value will provide efficient price signals for the use of scarce spectrum which will overall benefit consumers by ensuring that spectrum is used in the most efficient way for the provision of downstream services for which there is greatest value. We note that if the price of spectrum was below the opportunity cost, there would be a risk that it would continue to be held by Arqiva/Airwave even if it was not the highest value user of that spectrum, which could be harmful to consumers and society more widely.
- 1.22 Airwave uses the 412 MHz bands for its TETRA Emergency Services network, while Arqiva uses it to provide smart water energy metering. Whilst we recognised that the services provided by this spectrum may generate positive externalities, we reached the view that it would not be appropriate to maintain the ALF of the 412 MHz spectrum below its market value in order to artificially suppress consumer prices. As explained in the SRSP, we believe that if it is considered that a subsidy should be provided to support wider policy objectives, it is more efficient for those services to be explicitly subsidised by government from general taxation, leaving those providing them to have the same incentives to use resources, such as spectrum, efficiently, rather than seeking to provide such services through concessions on the fee charged.
- 1.23 We did not therefore consider that the nature of the services provided by Arqiva and Airwave justified a decision to set the ALF below market value, and we considered that setting an ALF based on our estimate of the market value will provide efficient price signals, which in general should lead to better welfare outcomes.

## **Impact on investment and innovation**

- 1.24 We concluded that investment decisions should reflect the true costs of inputs, and that this is achieved by setting ALFs on the basis of market value, as operators are required to pay the opportunity cost of their spectrum holdings.
- 1.25 We analysed the impact on investment by making a distinction between efficient and inefficient investment and considered the impact on efficient investment only. We recognised the possibility that setting ALFs at market value could in theory reduce the ability of licence holders to make investments that they otherwise would have made. We, however, concluded that this outcome is likely to be efficient as they will either pursue more efficient investment solutions or choose not to invest.
- 1.26 We also considered that ALFs set at market value could encourage the existing licensees to innovate and utilise their 412 MHz spectrum more efficiently.
- 1.27 Overall, we concluded that setting the ALF based on our estimate of market value will promote efficient investment and innovation.

## Summary of overall conclusion

- 1.28 For all the reasons set out in Ofcom's Statement and summarised above, we therefore decided to set ALFs based on market value for Arqiva and Airwave's 412 MHz spectrum with reference to a conservative estimate of the market value i.e., £396,000 per MHz per year, and to implement this in the Regulations.

## Declaration

**I have read the Regulatory Impact Assessment and Ofcom's Statement and I am satisfied that the benefits justify the costs.**

Signed

*Philip Marnick*

Group Director, Spectrum Group (Office of Communications)

6th October 2021