



BAA's Response to Ofcom's Consultation
"Business Radio Trading and Liberalisation"

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BAA welcomes the opportunity to respond to Ofcom's consultation "Business Radio Trading and Liberalisation".

BAA is the world's leading private airport operator, with seven UK airports including the three London airports Heathrow, Gatwick and Stansted and twelve international airport interests. Heathrow is the world's busiest international airport in terms of passenger numbers. Every year over 140 million passengers travel through our UK airports. The UK Government forecasts that passenger numbers will double over the next 20 years.

BAA's airports are some of the most complex radio environments in the UK, with a large number of service types and a heavy demand on spectrum. Radio communications are critical to airport operations, helping to ensure the safety and security of all airport users. Airport expansion and the provision of new wireless-based services will lead to increasing demands on the radio spectrum.

BAA strongly supports Ofcom's proposals for the liberalisation and simplification of business radio licensing, provided this does not adversely affect existing radio systems at BAA's airports. We believe that the liberalisation measures proposed by Ofcom would give BAA and airport stakeholders greater flexibility in using spectrum.

Answers to specific questions in the consultation document are given below.

Question 1) Ofcom would welcome comment on its proposals for the Business Radio Technically Assigned Licence class

The vast majority of BAA's private business radio licences would fall into the Technically Assigned class. BAA previously indicated in its response to Ofcom's consultation on Spectrum liberalisation that we were very supportive of liberalisation, as long as Ofcom could demonstrate that liberalisation measures would not increase interference risk significantly.

The removal of artificial and unnecessary distinctions between classes of licence in the same spectrum is supported by BAA. The liberalisation measures which allow new technology (e.g. digital PMR) to be introduced are also strongly supported. These measures would remove some of the existing constraints on the use of spectrum and the way it is managed at BAA's airports.

It is of paramount importance to BAA that spectrum quality is protected for 'BAA essential services'. Safety of life issues may arise from any increase in interference at BAA's airports. BAA would take such measures as necessary within the liberalised regulatory environment to ensure that its spectrum quality was maintained.

BAA is concerned that Ofcom's proposals do not fully address issues concerning interference which may arise from the proposed liberalisation.

Under Ofcom's proposals for the technically assigned class, management of interference can be significantly improved by the introduction of MASTS. BAA agrees with Ofcom that the use of a propagation model for assignments would allow stakeholders to quickly and unambiguously determine their compliance with the power density condition of the licence. However, in practice, if undue interference is observed, the victim will still need to be able to resolve the interference issue, whether or not the interferer is determined to be compliant with his licence terms.

Ofcom is proposing to use the MASTS tool along with a power spectral density within a designated service area (at -104dBm/12.5kHz) and a geographical boundary (-116dBm/12.5kHz).

BAA observes that MASTS will give much greater accuracy to the computation of likely interference effects than the current approach, which does not use computer based methods to the same extent. It is possible, therefore, that the introduction of the tool as proposed would give rise to more aggressive 'frequency reuse', especially in heavily congested areas, where there is high demand for spectrum. Since the accuracy of the prediction of the ITU model is subject to a significant standard-deviation, the result of the more aggressive frequency re-use would be an increased number of cases where Ofcom could be required to intervene to resolve interference issues, or where spectrum users suffer interference despite the fact that all neighbouring users of the spectrum are operating within the terms of their licence.

In its consultation on spectrum usage rights, Ofcom indicated (in paragraph 5.45.3), that in this case it would *'consider appropriate intervention action and will generally intervene if the victim's spectrum quality is reduced below its benchmark level.'* BAA believes that Ofcom should estimate the number of potential interventions necessary if the ITU model is used to define designated service areas without a margin as described in Annex 6 of the consultation, and potentially reduce the interfering signal level at the boundary below -116dBm/12.5kHz level (e.g. by an amount related to the standard deviation of the prediction accuracy of the ITU model). BAA sees this measure as particularly relevant to users who pay for 'exclusive' access to spectrum. 'BAA essential services' would fall into this category. Spectrum quality is particularly important in these cases, since safety of life issues may arise from any unintentional increase in interference at BAA's airports.

BAA has a number of licences where usage is simplex mobile to mobile within a given service area. In the case of 'low-height' to 'low-height' propagation, the ITU-R P.1546-2 model is not appropriate to the calculation of interference. The consultation does not consider how assignment would be done in this case, although in hilly terrain, interfering signals emanating from mobiles at the edge of the designated service area could travel a significant distance. This type of use might also be expected to increase if a significant number of users migrated to digital technologies such as TETRA where both 'direct' and 'trunked' modes are supported and where the direct mode repeater is specifically designed to increase range and would consequently increase interference. In a regime where the numbers of mobiles will cease to be regulated, BAA would expect to see more analysis of these potential issues.

Question 2) Ofcom would welcome comment on its proposals for the Business Radio Area Defined Licence class

The removal of artificial and unnecessary distinctions between classes of licence in the same spectrum is supported by BAA. The liberalisation measures which allow new technology (e.g. digital PMR) to be introduced are also strongly supported. These measures would remove some of the existing constraints on the use of spectrum and the way it is managed at BAA's airports.

Question 3) Ofcom would welcome comment on its proposals for the Business Radio Light Licence class

The removal of artificial and unnecessary distinctions between classes of licence in the same spectrum is supported by BAA. The liberalisation measures which reduce

administrative overhead by moving to on-line application and a 5-year payment period are also supported by BAA.

The consultation does not specifically identify the frequencies that would be set aside for users to share and self-coordinate in the proposed 'light-licence' class. These frequencies should include at least all of those that are currently set aside for the licence classes that will become 'lightly managed' so that no user of existing equipment is required to modify his frequency assignment.

Question 4) Do you agree with Ofcom proposals to extend trading in the Business Radio sector?

Question 5) Do you agree with Ofcom proposals to extend trading flexibilities?

BAA strongly supports Ofcom's proposals for the liberalisation and simplification of business radio licensing. We believe that the liberalisation measures proposed by Ofcom would give BAA and airport stakeholders greater flexibility in using spectrum. In particular, BAA would encourage Ofcom to publish the 'range of trading options' proposed for this sector (paragraph 5.13 of the consultation) in more detail, where these go beyond the mechanisms describe in Ofcom's 'Trading Guidance Notes' (document OfW224).

The ability to partition and trade spectrum to a granularity of 6.25 kHz is supported by BAA since it will tend to encourage the use of newer and more spectrally efficient technologies. BAA supports the proposed introduction of concurrent transfers for the new licence classes, since this is likely to promote the most flexible use of spectrum, and will allow greater flexibility of the service provision model at BAA's airports.

Question 6) Do you agree with Ofcom proposals to extend trading to the UHF 1 band?

BAA supports the extension of trading to the UHF 1 band. Ofcom has indicated that the requirement for coordination with RAF Fylingdales (the original issue that led to Ofcom not making this band tradable) can be resolved by the use of tools that allow Ofcom to validate any change in spectrum use within UHF 1. Under these circumstances, BAA would like to encourage the extension of trading to the UHF1 band.

Question 7) Do you agree with Ofcom's proposals to extend information currently available about tradable licence classes to those licences made tradable as a result of the proposals set out in this document?

BAA is fully supportive of Ofcom's proposals to extend information currently available to those licence classes made tradable as a result of the proposals set out in this document.

In order to make trading as successful as possible, it is important that potential buyers and sellers can 'meet' in the market. BAA believes that to this end, as much information as possible should be contained in the Wireless Telegraphy register. In our previous consultation response on Spectrum liberalisation, we indicated that we believe this information should contain spectrum usage information, and should be fully searchable, for example, by geographic area, frequency or licensee. BAA believes that the economic benefit from such information being in the public domain will outweigh the potential disadvantages that come from not disclosing what is considered by some to be security related or commercially sensitive information.

This information will also be important for holders of the new 'light licence' class where under these proposals they would be required to share and self-co-ordinate with other users.

In view of the much larger numbers of licences that will be entered in the Wireless Telegraphy register, BAA believes that the geographical search index of the current wireless telegraphy register should be improved, for example by returning the licences within a given distance from a map reference.

Question 8) Do you agree with Ofcom proposals to extend licence term to 5 years notice period

BAA is supportive of the proposal to extend the licence term to 5 years notice. This measure will, in general, help to give licensees sufficient security of tenure to invest in modernising their communications equipment.