BAA's Response to Ofcom's

Licence-Exemption Framework Review Consultation

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BAA welcomes the opportunity to respond to Ofcom's Licence-Exemption Framework Review consultation.

BAA is the world's leading private airport operator, with seven UK airports including the three London airports Heathrow, Gatwick and Stansted. Heathrow is the world's busiest international airport in terms of passenger numbers, and number two for air cargo. BAA also operates the Heathrow Express rail link. Currently over 130 million passengers travel through our UK airports annually, however 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. The lack of available spectrum, especially at Heathrow, is a significant constraint on airport operations and the provision of services.

Licence-exempt (LE) spectrum is an extremely valuable resource at BAA's airports, used in some cases for operationally critical applications. The 2.4 GHz band in particular is used extensively for WiFi applications by BAA, passengers and airport stakeholders, and demand for spectrum is likely to increase rapidly over the next few years. Similarly, the 865 – 868 MHz band is likely to be used extensively with RFID technology for applications including identification of airline baggage and location tracking in the near future. Use of these and other LE bands is being carefully managed by BAA to maximize value and spectrum efficiency, although it is difficult for BAA to manage personal area network applications used by passengers. BAA is strongly in favour of increases in the amount of suitable LE spectrum to help alleviate congestion we observe especially within the 2.4GHz ISM allocation. We note that there is a significant lack of available spectrum for use with RFID technology in the UK compared to in the USA.

Lightly-licensed spectrum is also used by BAA for fixed links in the 5.8 GHz band. Ofcom states that light-licensing allows multiple operators to co-ordinate the operation of their radio systems using an open centralised database. BAA would indeed like information on other operators' systems in order to assess the risk of interference; however, we are disappointed that Ofcom has not yet confirmed whether information from the 5.8 GHz light-licensing database will be made available.

BAA is generally supportive of Ofcom's LE strategy as laid out in this Framework Review; however, we expect that Ofcom will consult fully on any future proposals for specific bands. Consultations should be carried out well in advance of any binding EC decisions so that Ofcom can influence those decisions as appropriate.

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

Q1: Do you agree that the spectrum commons model should be the preferred approach for licence-exempt use of spectrum, and that application-specific allocations should only be considered where technical constraints or safety issues require this?

Yes. However we would emphasise that there are some applications for which due to technical limitations application specific LE spectrum is essential, for example because they are highly intolerant of interference or variation in link latency. Such technologies include RFID at 865 – 868 MHz and wireless video cameras at 1394 MHz. BAA would be strongly opposed to implementation of a spectrum commons model in such cases.

Q2: Do you agree with the proposal for multiple classes of spectrum commons?

Yes. We agree that polite low-power applications do not co-exist well with high-power impolite applications and are supportive of Ofcom's suggestion of different classes of spectrum commons for communications ranges of the order of metres, tens of metres and hundreds of metres.

Q3: Do you agree with the distinction made between the licence-exemption and light-licensing regimes?

Yes.

Q4: Do you agree with the view that the licence-exemption and light-licensing regimes will converge in the future?

Yes, although we feel that in practice, this convergence relies on adoption of adequate 'polite' protocols across multiple applications. It is BAA's expectation that this convergence is still many years away.

Q5: Do you agree with the proposed mixture of licence-exempt and light-licensed use of the 105−275 GHz spectrum? Do you agree with the bands that have been identified for such use?

No comment.

Q6: Do you agree with the view that the use of the 275−1000 GHz spectrum should be licence-exempt?

No comment.

Q7: Do you agree with the view on the levels of future demand for licence-exempt usage in the 40−105 GHz spectrum? Do you agree that the Group-A bands identified above should be considered for licence-exempt use? Do you agree that licence-exempt and light-licensed use of the Group-C bands identified above should only be considered when there is evidence of demand for such use?

BAA has no comment on the levels of future demand. We agree that Group-A bands should be considered for LE use. BAA has no comment on the Group-C bands.

Q8: Do you think it could be desirable for transmissions at levels below certain power spectral density limits to be exempt from licensing?

Yes, subject to the correct choice of limits such that no material performance degradation is caused to existing users.

Q9: Do you agree with the transmission limits proposed in this document?

BAA feels that significant further work investing the effects on specific technologies is required to ensure that appropriate limits are defined.

Q10: Do you agree with the harmonisation strategy discussed above in the context of licence-exempt devices?

Yes, however see also our response to Q1.

Q11: Do you agree with the view that no additional regulatory instruments, beyond those available today, are required for the protection of licence-exempt equipment?

Yes, provided that existing Statutory Instruments can include all the restrictions that might be required, such as a requirement for a device to know its location and obey geographically dependent transmission rules.