



BAA's Response to Ofcom's Consultation

“Award of available spectrum: 2500-2690, 2010-2025 and
2290-2300 MHz”

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BAA welcomes the opportunity to respond to Ofcom's consultation "Award of available spectrum: 2500-2690, 2010-2025 and 2290-2300 MHz".

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.

BAA therefore welcomes the release of this spectrum and is strongly supportive of Ofcom's proposals for technology neutral awards. BAA is considering use of the spectrum for safety, security and operational applications. However BAA is concerned that Ofcom's current proposals will not result in sufficient competition and diversity of services. We suggest that a safeguard cap of 30 MHz (rather than 90 MHz) is placed on the amount of spectrum that any one bidder could win in an award for the 2.6 GHz band, and that the two other bands are awarded *after* the 2.6 GHz band.

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

Question 1: Do you agree with these proposals for the awards of the three bands or have any other comments on the contents of this document?

BAA is generally supportive of Ofcom's proposals to award the bands as soon as practicable and on a technology neutral basis, however we believe that some changes are required to increase competition and diversity of services, see responses to other questions below.

Question 2: Do you agree with the analysis in section 5 or have any comments on adjacent interference issues?

Yes in general, although we note from discussion at Ofcom's related seminar that some of the techniques suggested by Ofcom to mitigate interference may not be practicable.

Question 3: Do you agree that Ofcom should authorise use of the spectrum bands 2500-2690 MHz, 2010-2025 MHz and 2290-2300 MHz?

Yes, BAA strongly supports the increased availability of spectrum for new and improved services and increased competition.

Question 4: Do you agree that awarding licences by auction would be the appropriate mechanism for authorising use of the spectrum bands 2500-2690 MHz, 2010-2025 MHz and 2290-2300 MHz?

Yes, although BAA regrets that national awards makes it more difficult for BAA and other organisations with local requirements to gain access to this spectrum for their own specific needs.

Question 5: Do you agree that it is likely to be in the interests of citizens and consumers to proceed with the award of the 2.6 GHz and 2010 MHz bands as soon as practicable, rather than to delay the award pending reduction in uncertainty relating to other bands?

Yes, as this allows new and improved services to be available sooner. Similarly we believe the 2290 MHz band should be released as soon as practicable.

Question 6: Do you agree Ofcom should aim to award the bands 2500-2690 MHz, 2010-2025 MHz and 2290-2302 MHz by the end of 2007, while keeping the position on the 2.6 GHz and 2010 MHz bands under review in the light of possible developments in European regulatory fora?

Yes. We recommend however that Ofcom issues a statement on European developments at the same time as publication of the Information Memorandum, and at other times as information becomes available to Ofcom. This will help minimise uncertainty amongst potential bidders.

Question 7: Do you agree with Ofcom's proposals for licence conditions (technology neutrality, tradability, conditions of tenure and absence of roll-out obligations)?

Yes.

Question 8: Do you have views on whether or not there should be a "safeguard" cap on the amount of spectrum that any one bidder could win in an award for the 2.6 GHz bands and, if so, do you have a view on whether 90 MHz would be an appropriate size for a safeguard cap?

BAA strongly believes a cap is required to promote competition and innovation, consistent with Ofcom's SFR Statement. We believe however that 90 MHz is far too high a cap. We note that Ofcom's market research indicates that around 30 MHz of spectrum is required for national services, and believe a cap of 30 MHz (over the 2.6 GHz band only) should be imposed to provide sufficient competition and innovation. BAA notes also that the DECT-GSM guard band award was structured to create a minimum of 7 winners in order to increase competition and innovation rather than maximise auction revenue. BAA accepts that future services may require more spectrum, however this could be achieved by secondary trading of licence, although BAA believes Ofcom should not allow acquisition beyond 30 MHz immediately after the award. BAA's preference is therefore that Ofcom specify a cap profile,

perhaps 30 MHz for the first 5 years followed by 60 MHz for the rest of the initial 20 year term.

Question 9: Do you agree with Ofcom's proposal to package spectrum as lots of 2 x 5 MHz for paired use and 5 MHz lots for unpaired spectrum and to allow the aggregation of lots by bidders?

Yes, although BAA regrets that national awards makes it more difficult for BAA and other organisations with local requirements to gain access to this spectrum for their own specific needs.

Question 10: Do you agree with Ofcom's proposed approach to allowing the respective amounts of paired to unpaired spectrum for the band 2500-2690 MHz to be varied (maintaining the 120 MHz duplex spacing and allowing additional unpaired spectrum, if needed, at the top end of the band)?

Yes.

Question 11: Do you agree with Ofcom's proposals for a 5 MHz restricted block between FDD and TDD neighbours and between TDD and TDD neighbours and with a modified out-of-band base station mask for second adjacent 5 MHz blocks?

Yes.

Question 12: Do you agree with Ofcom's proposals to award the 2010 MHz band as a single 15 MHz lot?

Yes.

Question 13: Do you agree with Ofcom's proposals to award the 2290 MHz band as a single 10 MHz lot?

Yes.

Question 14: Do you agree with Ofcom's proposals to combine the award of the 2.6 GHz and 2010 MHz bands and to hold the award of the 2290 MHz band separately and in advance?

No, BAA believes strongly that there are considerable differences between the 2.6 GHz and 2010 MHz bands (standards, availability of equipment, etc.) and that they should therefore *not* be awarded together. A combined award would complicate the award process and make it more difficult for non-MNOs to acquire the 2010 MHz band. We believe that the 2010 MHz band award process should begin *after* the 2.6 GHz award has been completed and full details published.

Similarly BAA believes strongly it would be very difficult for organisations to value the 2290 MHz band in advance of the 2.6 GHz award, which would be disadvantageous to smaller organisations. We believe therefore that the 2290 MHz band should be awarded *after* the 2.6 GHz and 2010 MHz awards and publication of full details.

Question 15: Do you agree with Ofcom's proposals for a two-stage auction design for the 2.6 GHz and 2010 MHz bands?

Yes. Although the auction process is complicated BAA believes this is appropriate as it allows flexibility.

Question 16: Do you agree with Ofcom proposals to award the 2290 MHz band through a second price sealed bid auction?

Yes, although BAA does not agree that this award should occur in advance of the 2.6 GHz award.

Question 17: Do you have a preference for either of the two approaches to specifying technical licence conditions?

BAA prefers the masks approach for all three bands as we are concerned that SURs might allow more powerful transmitters and therefore increased in-band and out-of-band interference to other services on airports.

Question 18: Do you have any comments on the transmitter spectrum masks defined below?

BAA has no comments on the masks.

Question 19: Do you have any comments on the SUR parameters defined below?

BAA has no comments on the SUR parameters.

Question 20: Do you have any comments on the SUR methodology and assumptions detailed in this annex?

BAA has no comments on the SUR methodology and assumptions.

Question 21: Do you have any comments on the use of the Visualyse tool as described, on the assumptions or the propagation model proposed in this annex?

BAA has no comments on the tool, assumptions or propagation model.

Question 22: Do you have any comments on the assumptions detailed in this annex?

BAA has no comments on the assumptions.