

**UK Defence Spectrum Management
A Consultation on: An Implementation Plan for Reform**

The BBC's response

The BBC welcomes this consultation and the work undertaken by the Ministry of Defence (MoD) to inform other users on the potential implications for them of its audit of its spectrum use. A greater certainty as to MoD's intentions will enable other users to ascertain the future availability of spectrum in particular bands and hence the implications for their business plans; it also reduces the risk associated with investment in particular bands (through participation in auctions or purchase of band-specific equipment).

The BBC has a long and successful history of sharing spectrum with MoD - albeit indirectly in the case of spectrum used for wireless video cameras, as access to this spectrum has been handled by a band manager appointed by Ofcom (JFMG). Our low-power, location-specific usage has been able to co-exist well with MoD's operations in the relevant bands, ensuring a more efficient use of spectrum. Therefore, the BBC looks forward to this relationship continuing in the best interest of the MoD, the BBC and the general public.

We have not attempted to respond in detail to all the questions asked in the MoD's consultation document, but we would like to make a few comments in the areas of significance to the BBC.

Availability of spectrum for BBC World Service and BBC Monitoring

The operations of both BBC World Service and BBC Monitoring, which are funded by the Government, currently rely heavily on 3400 to 4200 MHz ("C Band"). Therefore, we have a particularly keen interest in the Department's plans to release and/ or share 3400 to 3600 MHz.

The World Service mostly uses spectrum above 3600 MHz, and hence we are keen to ensure that the conditions under which adjacent spectrum is made available to other users are such as to minimise interference to our operations (for example, through the inclusion of appropriate terms and conditions in the licences). The BBC will be very happy to discuss further with the MoD how to draft such technical licence conditions.

The BBC would thus insist on the importance of its ongoing access to this band.

Should, in spite of this, the MoD decide to make available these frequencies to other users; the BBC would urge the Department to consult further interested parties before doing so, in particular, on the conditions under which these bands would be made available and on the criteria the Department would use in allocating the band between competing uses.

Availability of spectrum for wireless cameras

The BBC, like other broadcasters and news agencies, use wireless video cameras for newsgathering, programme-making and coverage of special events. - As

MoD is aware, they stand to lose access to a significant part of the spectrum they currently use for these operations, as a result of Ofcom's auction of 2500-2690 MHz. Whilst we still do not know exactly when we will actually lose access to these frequencies, as a result of the legal challenge of Ofcom's decision on the timing of the auction brought by T-Mobile and O₂; this could occur as early as February 2009.

The BBC and the other wireless camera users are therefore very keen to retain access to other bands we currently use, in particular 3400 to 3600 MHz, for as long as possible, including on a regional basis and/or on a shared basis.

As with the band previously mentioned, in the event that the MoD decides to release and/or share this band, the BBC would urge the Department to inform and consult further interested parties before doing so, in particular, on the conditions under which it would make them available and on the criteria it would use in allocating the band between competing uses.

Such information will allow wireless camera users to understand how much longer this band might continue to be available to them, and to plan accordingly.

Although these bands are not mentioned in Table 6 of MoD's consultation document "PMSE Bands (70 MHz – 15.7 GHz)", the BBC would like to stress that wireless cameras also currently use 2025 to 2110 MHz and 2200 to 2290 MHz. We note from Figure 2 that these bands are not included in Phases 2 or 3 of MoD's review, but may be included in Phases 4 or 5. Ofcom's consultation on its band manager proposals "Digital Dividend Review: band manager award", published 31 July, suggests that in the interim, access to this spectrum will continue to be available (on broadly the same terms and conditions as currently) via a band manager appointed by Ofcom. We welcome this decision and would appreciate its confirmation by the MoD.

The BBC is also keen for some of the other bands which MoD is reviewing to become available for use by wireless cameras, even if this were on a partial or regional basis. In particular, we would be keen to get access to the spectrum which is adjacent or near-adjacent to bands we already use, including 2700 to 3400 MHz, 2310 to 2450 MHz and 5000 to 5850 MHz. With regards to 2700 to 3400 MHz, we would therefore urge MoD to reconsider its proposal not to share further this band at this time.

Availability of spectrum for programme links

The BBC, like other programme-makers, also uses spectrum for programme links. Given our investments in band-specific equipment, we are very keen to retain access to the frequencies we currently use, which include one of the first bands MoD is proposing to release and/ or share, 406.1 to 430 MHz, and one of those considered as part of Phase 3, 137 to 154 MHz. We would welcome any opportunity to continue to use these bands, including on a regional basis.

Again, if the Department decides to release and/or share the 406.1 to 430 MHz band, the BBC would urge the Department to inform and consult further interested parties before doing so, in particular, on the conditions under which these bands would be made available and on the criteria the Department would use in allocating the band between competing uses.

Availability of spectrum for radio cars

The BBC local radio operations also use, for radio cars, spectrum in the band 430 to 450 MHz, which MoD is considering as part of Phase 3. We are keen to retain access to this band, given existing investments.

Availability of spectrum for DAB

The BBC notes that Phase 3 includes 230 to 400 MHz. We believe that some of this band – 230 to 237 MHz in particular – could be used for DAB, and look forward to seeing information on MoD's intentions with regards to this spectrum.

Channel 36

Phase 3 also includes Channel 36, – 590 to 598 MHz– which Ofcom plans to auction as part of the Digital Dividend. It is important that the MoD provides as much information as possible on its intentions with regards to this band prior to Ofcom's auction, in order to reduce uncertainty to potential bidders.

Nature of any band manager

The BBC has considerable experience of accessing spectrum via a band manager, as we access the spectrum we use in Programming-Making and Special Events (PMSE- discussed above) from the band manager appointed by Ofcom, JFMG. We have found it enormously helpful to have a band manager with extensive industry knowledge as well as expertise in managing the day-to-day applications for use of spectrum, often on a time-limited or location-specific basis, from a wide range of spectrum users.

If MoD is minded to set-up a “for profit” band manager, the BBC has no strong preference with regards to whether MoD or a third party manages MoD's engagement with commercial users of spectrum. What is more important to us is the nature of any engagement and the terms and conditions on which any such band manager operates. These terms and conditions will be particularly important if, as seems likely, there will be only one band manager or if frequencies it manages are relatively weak substitutes, as commercial users will not be able to rely on competition to “keep honest” the band manager.

The BBC is still considering the consultation document Ofcom has published regarding its band manager proposals. However, our initial view is that many of the sorts of terms and conditions Ofcom proposes attaching to the band manager should also be attached to any band manager which manages MoD's engagement with commercial users. In particular, we believe that any band manager should be required to at least:

- Have sufficient expertise to manage the day-to-day applications for use of spectrum, often on a time-limited or location-specific basis, from a wide range of spectrum users;
 - Specify what users can expect to receive (in terms of quality of service etc) in return for the money they pay (and recompense users when this is not delivered);
 - Ensure that the prices they charge are fair, reasonable and non-discriminatory (FRND);
 - Supply any user prepared to pay FRND prices (except in specific, objective circumstances, such as when the user is deemed to be a threat to national security etc);

- Provide sufficient cost information so that users can determine whether or not prices levied are FRND;
- Put in place a process for resolving disputes with users in a timely and cost-effective manner;
- Consent to having the option of disputes with users adjudicated by an independent arbitrator.

We look forward to further engagement with MoD on the terms and conditions to be attached to the operations of a band manager.

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