

BBC Response to Ofcom Consultation:

Authorization of terrestrial mobile networks complementary to 2 GHz mobile satellite systems

The BBC welcomes this consultation. Ensuring that the regulatory environment is as conducive as possible to new platforms and services coming into existence at reasonable cost is an issue of considerable importance to us. In particular, we believe mobile satellite systems could play a key role in the future, and we welcome the process launched by Ofcom as a major step which would give certainty to prospective operators and allow an early deployment of services in the UK.

However, it is also important that any new services be introduced in a manner which minimises interference caused to existing services operating in adjacent bands – in particular, digital radio camera (wireless camera) operations in 2200-2290 MHz. The BBC has, in previous consultations, raised significant concerns regarding the future availability of spectrum for wireless cameras, given the auction of a significant proportion of the spectrum they currently use, scheduled to take place sometime between May and July this year. The BBC is also part of the “Spectrum for Programme Makers Forum” (SPMF), a group comprising of broadcasters, hire companies and equipment manufacturers, which has been expressing its concerns to Ofcom about this issue.

Lower frequencies, such as the 2200-2290 MHz band are particularly important in newsgathering and covering events of major cultural or sporting significance as, unlike higher frequencies, they permit coverage ‘on the move’ and over wide areas, and hence permit coverage of marathons, sailing etc. Therefore, we welcome Ofcom’s decision to attach terms and conditions to the auction of 2010-2025 MHz and 2500-2690 MHz which would minimise interference to wireless camera operations in adjacent bands. The BBC would argue for similar conditions to be set for the award of 2200-2290 MHz. To this end, out of band emissions should be at least 92dB lower than the CGC transmitter power (e.g. -38dBm/ MHz for a CGC transmitter power of 54dBm/ MHz). Ideally we would like to see an out of band PFD limit over 95% of the coverage area no greater than -125dBW/ m² MHz measured at 100m height. This is necessary to preserve performance of our city-centre PMSE receive stations.

Our responses to the questions raised in Ofcom’s Consultation Document are below.

Responses to the Discussion Questions

Question 1: *Do you agree that the CGC licence should be in the form of a spectrum access licence with standard terms and conditions?*

The BBC agrees that the CGC licence should be in the form of a spectrum access licence with standard terms and conditions, which is consistent with the constraints and obligations created by European harmonisation and the results of the EU selection and authorisation process.

We note paragraph 7.2 of Ofcom's consultation document which states that these conditions "will include specific technical requirements to permit coexistence with... systems operating in adjacent frequency bands". As stated above, we would suggest that the terms and conditions attached to use of 2200-2290 MHz are similar to those Ofcom is proposing to attach to the auction of 2010-2025 MHz and 2500-2690 MHz, in order to minimise interference to wireless camera operations in adjacent bands.

Question 2: *Do you agree that such licences should be awarded on a UK-wide basis?*

Given the types of services likely to be deployed in this spectrum, the BBC agrees that licences should be awarded on a UK-wide basis.

Question 3: *Do you agree that the CGC licence should authorise the complete set of frequencies assigned under the EC process?*

The BBC agrees that the CGC licence should authorise the complete set of frequencies an MSS operator has been assigned under the EC process. MSS operators should have the flexibility to assign frequencies between the satellite and CGC component, according to operational and commercial needs.

Question 4: *Do you agree that the initial grant of the CGC licence should be made to the MSS operator only?*

The BBC agrees that the grant of CGC licences should be made to MSS operators only.

Question 5: *Subject to certain safeguards, would it be appropriate to license the CGC in advance of the satellite service coming into operation and if so, what criteria should be applied to determine whether the satellite component of the MSS network is operational and what period of time do you consider would be appropriate?*

The BBC fully agrees with Ofcom's proposal that the CGC should be licensed in advance of the satellite service coming into operation (but after the completion of the EC selection and authorisation process). This will reduce regulatory uncertainty and hence encourage early build-out of networks,

which will in turn increase the likelihood of the services using the CGC coming into operation as soon as possible.

It is difficult for us to comment on what criteria should be applied to determine whether or not the satellite component is operational; however, the criteria Ofcom suggests in its paragraph 7.13 seem reasonable. However, we would argue that the third criterion, in relation to consumer equipment availability might be more difficult to achieve before the services are effectively on air and would suggest that Ofcom take a pragmatic approach whilst applying this criterion.

We would consider a period of approximately two years as reasonable.

Question 6: *Do you agree that the CGC licence should not include a coverage obligation?*

It is difficult to see why the terms and conditions attached to this spectrum, including those with regards to network roll-out, should be different from other spectrum being awarded by Ofcom, except where required by the EC Decisions. However, should broadcasting services be carried on these frequencies, it would seem appropriate to require operators to be licensed as broadcasting multiplex operators, and to apply the conditions attached to such licences.

Question 7: *Do you agree that the CGC licence should be provided on a service and technology neutral basis?*

The BBC agrees that, within the constraints of the EC Decisions, the CGC licence should be provided on a technology neutral basis. However, as this spectrum has been harmonised at European level and allocated for MSS, we do not think the spectrum should or could be auctioned on a service neutral basis. Indeed, the conditions which Ofcom proposes, in compliance with the European rules, do not allow, and rightly so, for an entirely service neutral approach.

In addition, the BBC welcomes Ofcom's decision to ensure that the licences contain "requirements to permit coexistence with... as well as systems operating in adjacent frequency bands." As noted above, the BBC has significant concerns around interference management at band edges, and would favour a Block Edge Masks approach rather than SURs. The BBC would be glad to participate in any further consultation or discussions with Ofcom on how best to determine rights of use on these bands.

Question 8: *Do you agree that CGC licences should be tradable and, if so, that they should be both totally or partially tradable and both outright or concurrently tradable, that Ofcom's consent should be required for transfers and that the grounds on which Ofcom may withhold consent should be limited as proposed?*

We agree that of trade of CGC licences mentioned should be permitted, but believe that change of use should not be allowed without formal consent, which should only be given if it is clear that the new use is consistent with European rules and will not generate higher interference than permissible under the previous use.

Question 9: *Do you agree that AIP should be applied to CGC licences at a level that reflects the associated opportunity cost?*

Question 10: *Do you agree that the licence fees should be set at around £554,000 per 2 x 1 MHz?*

Question 11: *If you believe that setting fees at this level would result in CGC systems not being deployed, please provide your reasons and full supporting evidence including a detailed business case.*

The BBC has expressed the strongest reservations on the application of AIP to broadcasting, and maintains its position. It is also worth noting that in this case, because of international agreements, there are no alternative uses for this spectrum.

Should Ofcom however decide to impose spectrum charging on these bands, we would argue that the fees should be set at a very low level, so as not to jeopardise the economic viability of mobile television services in the UK.

25 March 2008