

Intellect response to Ofcom Consultation

“Authorisation of terrestrial mobile networks complementary to 2 GHz mobile satellite systems”

[Due on 1st December 2008]

1 Introduction

Intellect responded to the Ofcom consultation of March 2008 on 2 GHz CGC and is supportive of many of the conclusions reached by Ofcom so far, in particular with respect to licence trading and with the potential use of CGC in advance of satellite operation.

On the issue of CGC licence fees, Intellect remains concerned at the proposals in the original consultation document and is concerned with some of the statements which are included in of the current consultation document. The statements do not appear to have addressed our previous comments which, among other things, asked what spectrum management objective Ofcom was trying to *incentivise* with AIP. Furthermore, Intellect does not concur with the suggestion that international constraints can be ignored when evaluating the opportunity costs. To do so runs the significant risk that spectrum would be priced at a value based on a service which cannot be deployed, meaning spectrum is likely to go unused. We therefore wish to remind Ofcom to consider and address the previous comments from Intellect as it proceeds with its analysis into licence fees.

Intellect appreciates the opportunity to comment on the proposed licence conditions for CGC and provides comments below.

2 Answers to Questions

Question 1: Do you agree with our proposals for the detailed terms and conditions of the CGC Licence set out in this document or have any other comments on the issues raised in this document?

Generally yes, but see specific comments below.

Question 2: Do you agree with our proposed approach for including the conditions imposed by Decision No 626/2008/EC in the CGC Licence?

Yes, noting that this consultation addresses only one element of the necessary authorisations, other elements being the licence exemption for CGC terminals and the proposed statutory instrument to allow the UK to fulfil its obligations. As indicated by Ofcom, we anticipate further consultation on these additional elements.

Question 3: Do you believe that the technical parameters used to define transmission rights should be based on spectrum usage rights or spectrum masks?

In this particular case we believe the spectrum mask is the better way to define the CGC transmission rights.

Question 4: Do you agree with our proposed SUR parameters for CGC?

Intellect believes the testing requirements imposed by the SUR approach are complicated and add uncertainty to the process, hence in this case Intellect prefers the use of the spectrum mask approach. Ofcom should note that due to the complexity of the SUR approach a considerable amount of time and effort is required by potential operators to evaluate the resulting constraints on network deployment. If Ofcom wishes to propose SUR in other bands in the future, a much longer period of time than was made available during this consultation would be necessary.

Question 5: Do you agree with the spectrum masks parameters proposed?

Intellect agrees with the spectrum mask limits proposed.

Question 6: Do you agree with the proposed changes to the other standard technical licence terms and conditions?

In general yes. However Intellect would support higher values for the maximum permissible transmitter power which might be needed in some, relatively few, cases to maximise coverage in rural areas. In particular, Intellect suggests values of 58 dBm/MHz EIRP (in line with the current limits on terrestrial operators in the 2 GHz bands), with a further limit of 65 dBm/10 MHz to allow for the use of wideband carriers.

Question 7: We have assumed that the CGC base station and user terminal characteristics will be similar to those for equivalent 3GPP equipment. Specifically, we have assumed a maximum transmitted power of 31 dBm/5 MHz for CGC handsets, and a maximum transmitted power of 61 dBm/5 MHz for the CGC base stations. Do you agree these are reasonable assumptions?

They are reasonable assumptions for the purpose of compatibility analyses but we propose that the CGC base station limit be relaxed, as described above. The maximum power of 31 dBm/5 MHz for a CGC handset is a reasonable assumption, but it should be noted that the Draft ETSI standard ETSI EN 302 574-2 allows for 39 dBm \pm 2.7 dB. The value of 31 dBm/5 MHz should not be viewed as a potential limit for CGC handsets. We assume a further consultation when the licence exemption regulations are being developed.

Question 8: We have based our analysis of compatibility between CGC and other radio systems on studies of analogous scenarios conducted for the 2.6 GHz award – do you agree with this assumption?

Yes.

Question 9: Do you have any comments on the assumptions of the deployed network modelled for the SUR parameters?

No.

3 Other comments

As a rather detailed comment, Intellect notes that the definition of “earth station” given in paragraph 7.60 and included in the draft licences appears to have some words missing. Assuming it is intended to follow the definition included in No. 1.63 of the Radio Regulations, the full text of the definition should read:

earth station: A station located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication:

- with one or more space stations; or
- with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

Also the definition of “mobile earth station” included in Draft Schedule in Annex 13 of the consultation document (page 96) appears to be incorrect.

-----end of Intellect consultation response-----