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Cliff Mason
Ofcom
Spectrum Markets Team
Riverside House
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19 March 2010

Dear Cliff,

Hutchison 3G UK Limited ("3UK") response to "Application for a variation to 3G licences (and consequent proposal to vary draft 2GHz MSS/CGC Base station licences)", dated 5 February 2010 ("The Consultation").

This response provides 3UK's current views on Ofcom's proposals to vary the five Wireless Telegraphy 3G mobile licences by increasing the permitted maximum in-band EIRP from 62dBm to 68dBm per 3G carrier. We fully understand that this increase in 3G power is an opportunity and not an obligation for mobile operators, however 3UK has two main concerns around Ofcom's proposal;

- The original request from Vodafone was to increase the maximum power from 62dBm to 65dBm to deploy the latest available technology. Ofcom have now proposed to increase 3G power by a further 3dB to 68dBm. 3UK believe that this new proposed increase could be detrimental in a multi-operator environment, whereby this level of increase in power may cause significant problems with International Commission on Non Ionizing Radiation Protection (ICNIRP) compliance. 3UK believe that this new proposed increase to 68dBm may change future radiated power levels and therefore increase network exclusion zone requirements for all the mobile operators. If all the operators were to radiate at the newly proposed 68dBm per 3G carrier then the multi-operator exclusion distances required become prohibitively large and could be very costly to individual operators.
- 3UK believe that there should be no discrimination in giving the satellite operators preferential opportunities to access increased power for mobile services because this would distort competition between satellite and 3G mobile operators. This increase in 3G power should



only be used by satellite operators to improve the availability of the mobile satellite services within the satellite footprint and not for the provision of mobile services.

3UK agrees that Ofcom should increase 3G power limits universally for all UK mobile operators to allow them to optimise their networks and use technology more effectively. However further work needs to be done around the new proposed increase to 68dbm and the impact on mobile networks. Please see our response to Ofcom's two consultation questions below.

Q1) Are there any reasonable grounds why Ofcom should not grant the request to vary the five Wireless Telegraphy Third Generation Mobile Licences by increasing the permitted maximum in-band EIRP to 68dBm as soon as practicable? If so, please explain your reasoning for this.

Yes there are reasonable grounds why Ofcom should not grant the request to vary the five Wireless Telegraphy licences for this particular increase to 68dBm. 3UK's main concern is that this substantial increase of 6dB noise equates to a doubling of exclusion zones from the previously proposed 65dBm and consequently it would double the area over which we have to consider other operators sites as well as our own from Radio Frequency safety view point. On a number of sites where we are close enough to other operators this could be a major problem for our network. In particular, while one mobile operator can increase their power and stay within ICNIRP limits, this could send another mobile operator's site a few metres away out of ICNIRP specification. It is important that we adhere to the ICNIRP public exposure compliance.

As a consequence of this and the likely further increases associated with using the additional spectrum yet to be auctioned off, i.e. 800MHz and 2.6GHz, it is important to review the current assumptions and methodology applied in deriving the multi-operator exclusion distances to see if there is any defensible way of constraining these significant increases. We believe that the Mobile Operators Association (MOA) compliance committee is investigating the impact this increase in power will have with regards to compliance and we think that judgement is withheld until this process has been completed and all MNOs are agreed. We also have concerns regarding the overall impact this change may have on our network and the potential financial impact whereby other operator's actions increasing exclusion zones could lead to changes regarding access that could also have knock on costs to 3UK.



Q2) Are there any reasonable grounds why Ofcom should not also apply the increased permitted maximum in-band EIRP to future 2 GHz MSS/CGC licences? If so, please explain your reasoning for this.

3UK has concerns around increasing the power limits for MSS CGC networks and yes there are reasonable grounds why Ofcom should not apply the increase to satellite operators. The mobile satellite spectrum being addressed by this consultation is adjacent to the 2 GHz spectrum that is allocated to the 3G mobile operators. As such this is prime mobile spectrum which ideally should have been auctioned. However we recognise that this is harmonised Mobile Satellite spectrum and as such it was awarded via a European process. Our specific concern is if this process resulted in operators being able to obtain quality mobile spectrum cheaply, deploy a mobile network and thereby compete in a discriminatory manner with mobile operators who have bought spectrum via market mechanisms, this in essence would risk distorting the competitive market for mobile services. Ofcom should ensure that CGC is used to improve the availability of the mobile satellite services within the satellite footprint and not for the provision of mobile services.

For spectrum management reasons 3UK believe that further investigation needs to be carried out around this new increase in 3G power and the variation should only be applied as soon as the issues discussed in this letter have been resolved.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mark Falcon'.

Mark Falcon
Head of Economic Regulation
Hutchison 3G (UK) Ltd