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25 March 2008

Dear Mr Phillips,

**Hutchison 3G UK Limited (“H3G”) response to Ofcom consultation “Authorisation of terrestrial mobile networks complementary to 2GHz mobile satellite systems”, (the “Consultation”) published 15 January 2008**

It is imperative that any 2GHz Mobile Satellite System (“MSS”) which is authorised in the UK and, in particular, any associated Complementary Ground Component (“CGC”) system is introduced in a way which does not distort and harm existing competition to provide mobile broadband services. One key element of this will be the Administered Incentive Pricing (“AIP”) applied to the CGC in the UK.

H3G has concerns that the proposals contained in the Consultation regarding the proposed level of AIP for CGC systems are inappropriate as they simply replicate the flawed GSM 1800 AIP charge which fails to take account of 3G services and has discounts applied for propagation and coverage considerations which do not apply in the CGC case. The Consultation also fails to take account of competition and discrimination considerations as required by Ofcom’s primary duties. The licensing of the CGC must be closely coupled to the launch of commercial MSS services and not be treated as a separate event. Finally, the definition of CGC systems should be consistent with that given in the proposed Article 95 Decision currently under consideration by the European Parliament and the Council.

**Introduction**

The Consultation includes proposals, inter alia, for:

- the form of licensing to be used in the UK for the CGC element of associated 2 GHz MSS systems;
- the terms and conditions attached to the proposed Wireless Telegraphy Act licences;



- the restriction on the initial grant of CGC licences to MSS operators that emerge from the EC selection process;
- whether it would be appropriate to license CGC prior to the satellite service being operational; and
- a number of questions related to AIP.

This response sets out H3G's concerns with a number of these proposals; in particular, the proposal to use an AIP charge merely replicating the existing GSM 1800 charge without any consideration of the true marginal opportunity costs that would be appropriate for CGC; that Ofcom raises an expectation (in question 11) that a lower AIP charge may be considered if respondents provide 'evidence' that fees set at the GSM 1800 level may stall deployment of CGC systems and the proposal to license CGC prior to the associated satellite service becoming operational.

### **The regulatory context**

Ofcom, in consulting on CGC licensing and an appropriate AIP charge, is required to take into account the affect its proposals may have on competition in any relevant market or closely related markets. In this specific case, Ofcom has a duty to ensure that its proposals do not distort existing competition in the mobile sector and that there is no material discrimination between the relevant parties.<sup>1</sup>

In this context, the services that will be provided to consumers by MSS and associated CGC networks might, to a large extent, be competing in the same sector as the terrestrial 3G operators. The UK terrestrial mobile operators obtained their 3G licences through an auction process, paying £22.5 billion between them.

The CGC will be providing 3G services and, therefore, the use of the GSM 1800 AIP charge would be completely inappropriate. A consistent application of Ofcom's current AIP policy would mean that the AIP charge should reflect the marginal opportunity cost of a 3G service and not be based on the AIP charge for 2G cellular networks. The current GSM AIP charge was initially determined in the Report<sup>2</sup> produced by Nera-Smith in 1996. The AIP charge was subsequently and arbitrarily capped by the Government<sup>3</sup> at 50% of the full rate **and** various modifiers (discounts) were added to further reduce the AIP charge to approximately one-third of the rate determined by Nera-Smith. A further review of AIP for 2G services was held in 2004 with a substantial study undertaken by Indepen and associates. Indepen recommended

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<sup>1</sup> As Ofcom is aware H3G considers that the mobile markets are already subject to a number of distortions relating to Mobile Number Portability and mobile termination rates. These competitive distortions are being dealt with through other Ofcom and Competition Appeal Tribunal procedures. It is important that the authorisation of any CGC system in the UK does not further add to such competitive distortions.

<sup>2</sup> Study into the use of Spectrum Pricing, Nera-Smith, April 1996

<sup>3</sup> Spectrum Management: Into the 21<sup>st</sup> Century, published 17<sup>th</sup> June 1996, Executive Summary paragraph 10



increasing AIP for cellular mobile to £1.68 m for 2 x 1 MHz of national spectrum. In the event, Ofcom decided to reject Indepen's recommendations for reasons which are unclear to H3G. Ofcom's decision was attributed, at least in part, to the uncertainty at that time in the public mobile sector due to significant change as the combined 2G/3G operators increasingly rolled out 3G services. A further review was scheduled for 2007 which H3G notes has yet to be held.

H3G believes that it is important that the CGC licence charge is set at an appropriate level, taking account of the fact it is 3G mobile spectrum, to ensure that there is not a distortion to competition. If the AIP is not set at such a level there is a significant risk that the existing 3G market in the UK will be materially distorted to the detriment of the existing terrestrial operators and UK consumers and citizens.

Unless Ofcom plans to consult on an alternative approach to setting AIP, its current approach would suggest that an AIP must be determined which reflects the full marginal opportunity cost of providing a 3G service. H3G considers that it is therefore surprising that the proposals in the Consultation make no reference to the current state of flux and impending revision of the AIP for the 900 MHz and 1800 MHz cellular mobile spectrum. It is disingenuous of Ofcom to ignore these directly related developments.

#### Further deficiencies with using an AIP charge based on GSM 1800 spectrum

In addition to the inappropriateness of using an AIP based on 2G services for a 3G service, there are other issues that further undermine the choice of GSM 1800 spectrum pricing as an appropriate proxy for CGC spectrum pricing.

- The AIP charge of £552,000 per 2 x 1 MHz of national spectrum is purely based on an analysis of 2G cellular networks where the next 'least cost alternative' was assumed to be the option of installing more base stations. This analysis goes back to a study completed by Nera-Smith for the Radiocommunications Agency in 1996. It is far from clear that this type of analysis is appropriate for CGC.
- More fundamentally, a discount was applied to the GSM 1800 spectrum in recognition that the propagation characteristics for the 1800 MHz band is inferior to the 900 MHz band and therefore more base stations would be needed to build an equivalent UK network. This concession clearly would not apply to the CGC system as the wide area coverage would be provided by the MSS footprint. Any discount is therefore not justified. It would appear more logical to apply the 900 MHz charge of £792,000 although this is still based on 2G services and therefore flawed.
- The proposal in the Consultation to use the existing GSM 1800 AIP charge falls far short of the standard necessary to demonstrate that Ofcom has carefully considered market distortion and discrimination issues adequately. Ofcom has produced a proposal that is clearly not evidence based and fails to consider all relevant issues.



### Setting lower charges than those proposed

It follows from the above that it would be completely unacceptable if the proposed AIP charge was subsequently further reduced by Ofcom in response to claims that these fees (based on GSM 1800) could harm the deployment of CGC systems. The AIP for CGC needs to reflect the full opportunity cost of the service. The current proposal is already inappropriate and needs to be linked to the future revision of AIP charges that take account of 3G services. A reduced AIP for CGC would only serve to further exacerbate market distortions and would be more discriminatory. The effect on investment incentives for the CGC needs to be considered in the wider context and as part of a wider consideration of static and dynamic efficiency.

### **Recent activities to revise the mobile AIP charge**

The previous attempt at determining a revised AIP for the 2G mobile spectrum was briefly described in the previous Ofcom consultation (and ensuing statement) on 'Spectrum Pricing'<sup>4</sup>. As noted above, Ofcom decided to retain the original Nera-Smith derived AIP charge and rejected the Indepen Report<sup>5</sup> that had been commissioned to revise the AIP charges. Indepen had recommended that the charge be increased to a level similar to the valuation determined by Nera-Smith (i.e. a significant increase on the existing 2G spectrum charges) and that the marginal value of the 900 MHz and 1800 MHz bands be made equal. Ofcom provided little information on the factors that lead to its conclusion to leave the AIP charge unaltered but, in recognition of the significant changes that 3G services would bring to the public mobile sector, Ofcom promised to return to this subject within three years and review the impact of 3G developments on the AIP charge.

H3G has on several occasions registered its concern over the lack of clarity provided in the review of the GSM spectrum AIP regime conducted in 2004 and, more importantly, the future methodology to be used for setting the AIP charge for public mobile services (for example, see H3G's responses to the Mobile Liberalisation Consultation<sup>6</sup> and the consultation on SFR:IP<sup>7</sup>).

### Use of market pricing signals

Ofcom has made reference in its recent Mobile Liberalisation Consultation that the proposed auction of 900 MHz spectrum for 3G applications would be taken into account as relevant information when Ofcom determines any future AIP charge for liberalised mobile spectrum. However, no details have been provided of how this information will be factored into the other considerations that will influence the estimation of AIP. As H3G has noted previously, Ofcom

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<sup>4</sup> Spectrum Pricing: A consultation on proposals for setting Wireless Telegraphy Act licence fees published by Ofcom on 29<sup>th</sup> September 2004.

<sup>5</sup> Indepen Report on An Economic Study to Review Spectrum Pricing, dated February 2004.

<sup>6</sup> See section 4.1 of H3G's response of 30 November 2007 to "Application of spectrum liberalisation and trading to the mobile sector", published 20 September 2007 (the "Mobile Liberalisation Consultation").

<sup>7</sup> See section 5.7.3 of H3G's response of 24 March 2005 to "Spectrum Framework Review: Implementation Plan", published 13 January 2005 (the "SFR:IP Consultation").



has provided no information on what account (if any) it will take of bids in the 2600 MHz auction or any other relevant auction, whether AIP would be uniform between operators or different for some and whether or not it is likely to be the same for 900MHz and 1800MHz. Certainly, there is nothing to allow H3G to take an informed view on the actual amounts that will be payable or how these will compare to the prices set through an auction. Previous levels of AIP have been set by reference to the opportunity cost of the spectrum (though, as Ofcom is aware H3G considers that such calculations were not appropriately applied). Taking account of any auction price will clearly mean a new methodology being applied for which there is no precedent and therefore H3G is unable to take any sensible view of what this will mean. Ofcom's current plans will require these issues to be addressed in the 2009-2010 timeframe which is consistent with the CGC licensing timeframe.

It is therefore very clear that revising AIP for public mobile services is under active consideration by Ofcom. Ofcom obviously considers that an AIP charge based on 3G services is seen as being vital to address related competition issues in the liberalised mobile market. H3G therefore expects that existing 2G spectrum AIP charges will be revised in the relatively near future and it would be inappropriate for this not to be taken into account in setting any AIP for the CGC component of any MSS system. The approach set out in the Consultation, of using the existing AIP levels, is therefore premature and inappropriate.

H3G has previously requested that Ofcom provide a detailed methodology and a description of the assumptions to be used when determining the revised AIP charge.<sup>8</sup> In the absence of this information, H3G cannot reasonably provide any further detailed comments on the suitable level of any AIP but continues to be concerned that any new approach to setting AIP will be novel, require consultation and careful consideration.

### **Definition of the CGC**

The proposed Article 95 Decision has the following definition of CGC in Article 2(2)b:

*“complementary ground components’ of mobile satellite systems shall mean ground based stations used at fixed locations in order to improve the availability of the mobile satellite service in zones where communications with one or more space stations cannot be ensured with the required quality.”*

This definition clearly states that CGC is subordinate to, and intended to be used for the improved availability of, the associated MSS system in defined areas where communications quality may fall below planned objectives.

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<sup>8</sup> See, in particular, H3G's response of 3 December 2004 to "Spectrum Pricing: a consultation on proposals for setting Wireless Telegraphy Act licence fees" published 23 September 2004 and H3G's letter from Tim Lord to Philip Rutnam of 2 June 2005 relating to the same topic.



The text in paragraph 6.14 of the Consultation appears to imply a far broader and therefore inappropriate interpretation of the role that any CGC could play. H3G considers that Ofcom should confirm that it will apply the same definition as the definition in the proposed Article 95 Decision. *Inter alia*, this will avoid any confusion as to the scope of CGC systems. The WT Act CGC licence should therefore incorporate the text from Article 8 (d) of the Article 95 Directive, i.e. complementary ground components shall constitute an integral part of a mobile satellite system and shall be controlled by the satellite resource and network management system; they shall use the same direction of transmission and the same portions of frequency bands as the associated satellite components and shall not increase the spectrum requirement of the associated mobile satellite system.

#### **CGC licensing prior to the satellite system becoming operational**

H3G notes that Ofcom is minded to license CGC systems prior to the commercial deployment of the satellite system. It is noted that Ofcom may constrain the licensing by requiring that certain safe guards are met. However, the CGC is an adjunct to the satellite system. As such, Ofcom has not established any justification for issuing CGC licenses ahead of the commercial availability of the MSS system. Licensing the CGC for commercial use prior to the MSS being operational could lead to consumer harm if the MSS system failed to deploy.

#### **Other Regulatory Issues not covered**

In common with other terrestrial mobile networks, terrestrial frequency co-ordination agreements with the UK's near neighbours need to be negotiated and agreed. The Consultation has no reference to this requirement.

Ofcom should confirm that the CGC licence will provide no more than 18 months grace should the MSS satellite cease providing a service. After that period the CGC licence should be subject to revocation procedures and H3G urges Ofcom to make this explicit.

In summary, the Consultation leaves a number of critical issues unresolved concerning the launch of any CGC system in the UK and, in H3G's view, does not provide a robust basis for such a service to be provided in the UK.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Tim Lord', enclosed in a light grey rectangular box.

Tim Lord  
Regulatory Director