

CONSULTATION ON RADIO SPECTRUM MANAGEMENT REVIEW HUTCHISON3G UK Ltd

HUTCHISON 3G UK Ltd (“HUTCHISON 3G”) is a UK start-up company that will set up and operate a third generation mobile network using the largest of the five UMTS licences awarded by the British government. HUTCHISON 3G is a joint venture between Hong Kong based Hutchison Whampoa Ltd (65%), Japan’s NTT DoCoMo (20%) and the Netherlands’ KPN Mobile (15%).

Hutchison3G observes the UK attitude towards the existing and future mobile market and concludes that in order to become a successful new entrant it has to put in place a series of investment platforms. Since winning the licence in Q2 2000, Hutchison3G has been moving fast to recruit highly motivated staff, forge strong partnerships with creative and innovative suppliers and to develop groundbreaking 3G products and services. Investment is also placed on customer service and the design and rolling out of the necessary network infrastructure for a new 3G national network.

Hutchison3G has to develop a brand that reflects its values and transmits those on to the customer arena. All these factors will help to support the development of mobile communications across the UK and will allow H3G to develop a whole set of products and services that try to serve consumer needs and meet all their expectations.

At the moment Hutchison3G is in the process of developing its business model and will therefore be highly affected by any decision taken on the spectrum arena. Bearing that in mind, Hutchison3G is not in a position to issue a definitive statement on each of the issues addressed by the consultation. Developments on the future business model could introduce additional concerns. Any consultation process conducted within the UK should be used to set up a framework that brings certainty on the future spectrum allocations and the economic value attached to those.

The future 3G businesses should benefit from a stable spectrum environment. By that, any authority responsible for its allocation and value should define a transparent scheme that allows new operators into the market to make future investment decisions. The pace of change of the spectrum value should be carefully measured in order not to bring uncertainties to the existing expensive allocations and potentially disrupt developing business models. The real need for a review should be carefully assessed and only used in order to confirm the need for a stable framework and to address future spectrum needs.

On the other hand it should be clear which is the economic model, applied to the spectrum valuation. It is H3G opinion that it should take into account the economic benefits that the introduction of a highly competitive technology brings to the consumer. As stated in the Information Memorandum issued within the UK for the allocation of Third Generation Licenses¹: “ The

¹ Information Memorandum issued by N M Rotschild&Sons on behalf of HM Government

Government's overall aim is to secure, for the long-term benefit of UK consumers and the national economy, the timely and economically advantageous development and sustained provision of UMTS services in the UK".

"Subject to this overall aim, the Government's objectives are to (i) utilise the available UMTS spectrum with optimum efficiency, (ii) promote effective and sustainable competition for the provision of UMTS services, and (iii) subject to the above objectives, design an auction which is best judged to realise the full economic value to consumers, industry and the taxpayer of the spectrum."

The five licence auction was intended to deliver the Government's objective for the efficient use of the spectrum and, in particular, would encourage market entry and sustainable competition by ensuring that at least one New entrant could enter the UK market.

Competences and powers of the future radio authority should be clearly defined within the OFCOM exercise. To develop appropriate mechanisms to control the spectrum allocation and its administration is key for understanding government future strategy and for industry to plan its resources (finance, planning, resource).

Finally, the mechanisms for refarming and secondary trading should be independently treated and analysed. The economic value attached to spectrum in those cases should be set taking into account the developments of the technology, the impact in the structure of the market and the level of competition. As quoted in the Information Memorandum "To enable refarming in Europe, the UK would expect that an ERC Decision would be developed providing for 3G use of the 900 MHz and 1800 MHz bands before they could be so used, to ensure that refarming takes place within the framework of European spectrum management. Therefore a consultation should be held before reaching a decision as to how and when this should be implemented within the UK. This would need to cover a number of issues including the timing and scope of refarming, the means by which any refarmed spectrum would be assigned and the level of, and arrangements for, payment of corresponding licence fees. Any decision would need to take account of views from, amongst others, 2G and 3G operators and their customers, the Government's telecommunications policy at the time and the requirements of national, European and international legislation. The Government would expect to take account of potential effects on the viability of existing 2G and 3G operators and of the case for rectifying any distortions in the market caused by historic assignments".

Economic asset

H3G has dedicated a significant investment (in the form of the licence) in a particular segment of spectrum. In economic terms the commercial value of that spectrum is the discounted value of the profits available to H3G. In turn, this is dependent on the volume and price of services that can be sold over that spectrum. The volume and price of services is, in turn, dependent on the

range and price of the alternatives that are available to potential customers of those services. Hence, the extent of competition in the downstream (final product) market has a significant impact on the value of the upstream spectrum.

The impact on the downstream markets needs to be considered when making significant changes to the use of spectrum so existing 3G operators are not undermined because of the different value that was assigned to the spectrum at the time 3G licences were granted.

Consumer needs should be addressed when opening the spectrum to a whole new range of opportunities but bearing in mind the impact that this approach could have in the industry. The result of a promotion of a different spectrum policy that would allow further 3G capacity to be made available on terms that were different to the original allocation would *affect* 3G future business plans.

More importantly if, in general,

- the price of 3G spectrum in the UK reflects an absolute scarcity value of that spectrum, and
- in the future some spectrum that can be used to provide substitute products is allocated using administrative pricing, then
- there is a significant danger that 3G operators who got a licence through a highly competitive auction process could be discriminated from certain providers who would have a lower cost base as a result of government policy, rather than as a result of efficiency.

Therefore where spectrum becomes available that could be used for services that become substitutes for any services potentially supplied over 3G's networks the spectrum should be subject to as rigorous market pricing as the auction process that allocated 3G spectrum.

As an example current TV and radio broadcasters should not be positively discriminated towards telecoms operators as they have access to considerable spectrum that they might turn over to alternative uses as a result of them easily meeting their existing broadcasting obligations.

International dimension of spectrum management

Harmonisation of spectrum at an international level has been a key factor in the successful and rapid expansion of mobile communications in the last 15 years and the overall customer benefits that derive from that.

International standardisation over and above interoperability across national boundaries for mobile transmitters/receivers is key.

In addition, there appears to be a dynamic impact on creating critical mass, which in innovating markets may also be a significant driver of innovation

take-up. Thus the economic efficiency of spectrum usage in any one geographic area should not be achieved at the cost of economic efficiency in any of the downstream (or upstream) markets, which may be global. This has been critical for the development of international brands.

National dimension

Hutchison 3G UK would like to see more clarity on what is exactly meant by the role that intermediaries could play in buying rights to manage a particular frequency band and then selling access to parts of this spectrum to users on a commercial basis.

It could still be said that where spectrum can be used for many different types of service (ie like 3G spectrum) economic efficiency could be considered through the way the network operator manages capacity. As far as end users are concerned the network operator already acts like an intermediary providing the means to use spectrum for different purposes. Interposing a “spectrum” intermediary may not be necessary to achieve flexibility of use of spectrum.

Broadcasting

One issue that seems to have been ignored within this consultation is to which extent spectrum trading would allow the trading of spectrum for the *same* use (eg Channel 5 trading its spectrum with another TV broadcaster) or for a *different* use (eg Channel 5 trading its spectrum to a mobile telephony provider). The two types of trading are rather different.

Trading between uses would allow “more valuable” uses take spectrum away from “less valuable” use. Such trading would tend to increase the value of “less valuable” spectrum, and *decrease* the value of the “more valuable” spectrum.

There are also significant potential problems with usage trading if consumers and operators have invested in spectrum specific equipment that would become stranded if the trade took place. Under conditions where a significant amount of consumer and operator equipment could become stranded it is not guaranteed that a trade of spectrum between uses is overall economically efficient as the consumer and operator loss may not be taken into account.

Trading within the same use is less problematic. The possibility of increasing (single firm) market power by acquiring spectrum from competitors is likely to make such acquisitions difficult from a competition law perspective. Therefore the rules of the game should be transparent. Selling the spectrum to a third party is not much different from selling the existing licence, so the effect could be achieved by relaxing the existing change of ownership restrictions.

To the extent that H3G could require more spectrum as it expands its scope and range of services, spectrum trading has the potential to deliver additional spectrum more effectively than the present arrangements. However, to the

extent that the new spectrum is made available in general for 3G services the absolute value of its existing spectrum is likely to decline

Licence-exempt spectrum

Hutchison3G is aware of the exercise to be conducted by DTI and RA on the regulatory framework to be applied to licence-exempt spectrum and will input in due course.

The same point about the impact on competition in the downstream market applies here: if licence-exempt (and cheap) spectrum is used to provide 3G type of services in competition with licensed (and expensive) spectrum the market and the value of that licensed spectrum is distorted. Although congestion and interference may limit the ability of licence-exempt spectrum to compete, technical innovation may reduce this barrier, especially over short ranges.