

**Submission by Hutchison Global Communications Limited to the Industry**  
**Consultation Paper “Licensing Framework for Deployment of Broadband Wireless Access”**

Introduction

Hutchison Global Communications Limited (“HGC”) is pleased to provide its comments on the consultation paper entitled “Licensing Framework for Deployment of Broadband Wireless Access”, issued by the Office of the Telecommunications Authority (“OFTA”) on 20 December 2004 (the “Consultation Paper”).

HGC is in principle in support of OFTA’s proposals in the Consultation Paper that:

- (i) the Broadband Wireless Access (“BWA”) spectrum be awarded to FTNS licensees to facilitate rollout of alternative customer access networks; and
- (ii) the 3.4 – 3.6 GHz frequency band be allocated for BWA.

HGC has, however, some comments on certain specific issues raised in the Consultation Paper:

Spectrum Issues

A desirable policy of spectrum assignment should allow operators to deploy services meeting customers’ demand. In this regard, the demand for broadband service, especially for residential customers in Hong Kong, is quite different from that in other countries. Residential broadband service with bandwidth of 10 Mbps is considered as norm in Hong Kong, and higher bandwidth services of 100 Mbps or 1Gbps are either already in the market or will be available in the market very soon. This contrasts with other countries where demand for broadband is more moderate. The higher demand for bandwidth means spectrum allocation that works well in other countries (e.g. the UK where pairs of 2 x 20 MHz have been allocated) might not be suitable for the particular situation in Hong Kong.

HGC is currently studying its proposed mode of operation and its bandwidth requirement for deploying BWA spectrum to develop and enhance its customer access network. We agree with the concerns raised by OFTA, such as interference issues, and will study ways to tackle these. Upon conclusion of these internal studies, HGC will work closely with OFTA while it develops the band plan for BWA which we would like to see concluded by the end of this year so that the designated BWA spectrum can start to be deployed for the development of alternative customer access networks before 2006.

A related issue is the total spectrum to be awarded. HGC is of the view that awarding all the 200 MHz of radio spectrum in one go may have the effect of suppressing the value of the spectrum and limiting the flexibility of successful bidders to obtain additional spectrum for expansion purpose. To preserve the value of the radio spectrum, it is desirable for the TA to award the radio spectrum in phases. HGC recommends that an initial lot of 100 MHz of radio spectrum can be awarded within this year, followed by another lot of 100 MHz by 2008. Early bidders, which enjoy the benefit of an early headstart, will attach higher value and the economic value of the radio spectrum can be realized.

### Eligible licensees for award of BWA spectrum

The Consultation Paper has identified a few applications for BWA including:

- Overcome practical limitations that prevent traditional wireline technologies from reaching certain potential customers
- Deployed as access solution for rural and outlying areas with low population density
- Enables provision of broadband service within a relatively short period of time
- As an alternative to access via underground cables which would otherwise be uneconomical due to low teledensity and / or the need of disruptive road digging

All of them are designed to overcome limitations, both physical and economical, in providing access to customers, in particular, after the expiration of the current mandatory Type II interconnection regime.

Currently, non-incumbent FTNS operators have relied on Type II interconnection for customer access to various extents. As at July 2004, more than 427,000 lines were provided using Type II interconnection, representing about 11% of the total lines in services. In July 2004, the Government announced its policy to gradually withdraw mandatory Type II interconnection on a building-by-building basis until 30 June 2008, by which the entire mandatory Type II interconnection will be lifted. With gradual withdrawal of Type II interconnection at the local exchange level, the Government has estimated that there would still be about 20 – 25% of the population that will not have a choice of alternative service provider upon the expiry of the mandatory Type II policy. The need to have alternative means of customer access thus becomes more apparent. In fact, the availability of new technologies is one of the various factors the TA has based upon in forming his decision to retire mandatory Type II interconnection in the latest consultation.

It is based on the need for an alternative access solution after the expiration of mandatory Type II interconnection in 2008 and other considerations that the TA has suggested BWA to be awarded to FTNS / fixed carriers only. We support the TA's proposal to allow FTNS / fixed carrier licensees to deploy BWA as an alternative to Type II interconnection based on the above analysis, and we accordingly agree that only those licensees which are currently entitled to Type II interconnection should be entitled to bid for the BWA spectrum.

Some mobile operators have suggested that, given BWA can support mobility services, the BWA spectrum should be open to mobile operators as well. HGC does not agree with this. First, OFTA has already identified in the Consultation Paper that fixed access is likely to be the major commercial application of BWA in the near future. The current standard of BWA, as it stands, is still not able to support full mobility services. It is envisaged that full mobility functions would only be ready by 2007 the soonest (if at all). Granting BWA spectrum for the reserved purpose of providing full mobility services at a later date might jeopardize the interest of those FTNS / fixed carrier licensees, which need to deploy BWA for last mile extension in this critical time frame. We will work closely with OFTA in the next few months while it develops its band plan for deployment of BWA spectrum for fixed access.

Secondly, the Government has announced its plan to conduct a spectrum policy review later this year. The review will decide, among other issues, the allocation and assignment of radio spectrum vacated by the expiry of existing 2G mobile licences for telecommunications and related services. If OFTA decides at this stage that mobile operators are allowed to apply for BWA spectrum, this would invariably pre-empt the outcome of that review and give the mobile operators an inequitable head start on the race of fixed-mobile integration.

#### Assignment of BWA spectrum

HGC supports the use of auction to award BWA spectrum. As a scarce public resource, radio spectrum should be allocated based on efficient economic principles. Spectrum auctioning is often considered as a more transparent and objective approach and allows the real value of the spectrum to be fully realized. Through competitive bidding, the spectrum will go to the party attaching the highest value to it, thus ensuring efficient allocation. As the TA has successfully implemented spectrum auctioning for awarding radio spectrum for 3G services, HGC does not see any need to adopt a different approach for the award of BWA spectrum. Having said that, there are notable differences between the award of 3G licence and BWA spectrum and it might not be appropriate to mimic the auctioning mechanism in the award of 3G licence in the current exercise.

As it is still uncertain how the BWA policy will be framed in due course and there can be quite a few alternatives as to how the designated spectrum may be made available, HGC submits that the mechanism of the auction and its implementation should be subject to a separate industry consultation after the BWA policy is finalized, which separate consultation would decide, among other issues, the reserve price and the bidding process.

Among the payment options identified by the TA in the Consultation Paper, HGC supports in principle the deferred cash payment approach based on its easy-to-administer feature, although this should be studied again in the context of the auction mechanism during the later consultation. The later consultation would also be an appropriate forum to consider whether any mechanisms should be put in place to safeguard against loss in Spectrum Utilization Fee (SUF) due to pre-matured surrender of spectrum, for example imposing any requirement that licensees awarded the spectrum should be required to deliver a bank guarantee for the total SUF during the entire spectrum usage period to be given by a reputable financial institution.

#### Timing

HGC agrees and fully supports that BWA should be offered as a wireless extension of the conventional wireline based fixed network service. In fact, it is critical that this should be put in place before the end of this year in light of the current gradual withdrawal of mandatory Type II interconnection and the full withdrawal of the same by 1 July 2008.

Apart from the stated purpose, deployment of BWA for any other purpose, for example full mobility services, warrants careful consideration by OFTA as it is a complicated issue and should not be done in a rushed manner. This is even more so in light of the upcoming review on fixed mobile convergence. Any error made in the current consultation might have serious impact on the other issues. OFTA should therefore take a cautious approach and refrain from any decision which might pre-empt the outcome of the upcoming consultation exercises.

It is widely recognized that BWA is a new evolving technology and it is yet to be seen whether it suits the Hong Kong environment. The novelty of this technology means extra caution needs to be exercised in designing the appropriate licensing framework. The licensing of local wireless FTNS operators in 2000 is a good case on point. Despite favourable feedback received from 18 applicants resulting in the award of 5 licences, none of the successful bidders has been able to operate successfully and some of them have even exited the market or have their licence converted to wireline FTNS upon full liberalization in 2003 and shut down their wireless operations. OFTA should

therefore carefully consider the appropriate timing in formulating any policy for deployment of BWA other than for fixed access.

### Conclusion

HGC concurs in general with the proposed assignment of BWA spectrum to FTNS / fixed carrier licensees to facilitate a more effective rollout of alternative customer access networks. HGC disagrees that the BWA spectrum should be made available to mobile operators as well: Considering mobile operators as eligible BWA licensees is pre-mature at this stage and would seriously jeopardize the interest of fixed operators who have a genuine and urgent need to deploy BWA for last mile extension especially in light of the full withdrawal of the mandatory Type II interconnection in 2008.

On spectrum planning, HGC would also recommend that OFTA assigns the BWA spectrum in phases, making available, say, 100 MHz in the first phase and assigning the rest according to market demands. HGC also supports the use of spectrum auctioning for the assignment of spectrum, but would strongly urge OFTA to conduct a separate industry consultation on this subject after the main BWA policy is decided.

On timing, HGC agrees that deployment of BWA as a wireless extension of the conventional wireline based fixed network service should be implemented before the end of 2005. HGC would however urge OFTA to consider and review carefully the award of the BWA spectrum for any other purposes and not to do so in a rushed manner, as the decided policy on BWA will definitely have a serious impact on other important consultation exercises which OFTA has indicated it will be conducting, such as the upcoming spectrum policy review and the review on fixed mobile convergence.

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