# Comments of Hong Kong Cable Television Limited on the consultation paper "Licensing Framework for Deployment of Broadband Wireless Access"

### I. Introduction

1.1 Hong Kong Cable Television Limited ("HKCTV") welcomes the opportunity to express its comments on the consultation paper "Licensing Framework for Deployment of Broadband Wireless Access" ("Consultation Paper") issued by the Telecommunications Authority ("TA") on 20 December 2004. Unless otherwise stated, reference to paragraph number is to paragraph number in the Consultation Paper. For the reasons set out below, HKCTV is of the view that the TA should allow broadband wireless access ("BWA") services to have "full" mobility rather than "limited mobility" and should allocate more frequency for BWA service.

# **II.** Limited mobility

2.1 In the Consultation Paper, the TA intended to limit the scope of the proposed BWA services and would only allow BWA services of a Fixed Carrier to have "limited mobility" for the time being. According to the Consultation Paper (see paragraph 38), "'limited mobility' shall be interpreted as no cell handoff capability allowed". HKCTV is of the view the BWA service of a Fixed Carrier should be a full mobile service instead of "limited mobility" as suggested by the TA. In paragraph 4 of the Consultation Paper, the TA stated:

"While BWA at this stage may not be mature for mobile services, the Telecommunications Authority (TA) recognises that such technologies have the potential to support fully fledged mobile services."

In paragraph 38 of the Consultation Paper, the TA stated:

"To differentiate BWA services from a full mobile service, the TA proposes that the service offered by a fixed carrier licence through BWA would only be allowed to have 'limited mobility'. 'Limited mobility' here shall be

interpreted as no cell handoff capability allowed."

In an article under the title "Blurring Boundary between Fixed and Mobile Services" on 23 January 2005 available at OFTA's website, the Director General of OFTA wrote:

"In a few years' time, BWA technology will be capable of providing full mobility services like the existing 3G services. It would then be meaningless to distinguish between fixed/mobile networks when a single access network is connected to both fixed and mobile users."

2.2 The Director General of OFTA explained the reasoning for the proposal concerning "limited mobility" in an article under the title "From 'Hotspots' to 'Hotzones" dated 20 February 2005 at OFTA's website:

"In the first few years, the BWA technology will not be able to support "full" mobility similar to 3G services. Therefore, it cannot be used inside fast-moving vehicles. This is the main reason behind OFTA's proposal that the BWA spectrum should initially be confined to "fixed" services. "Fixed" services, however, include the provision of "nomadic" services for palmtop and notebook computers, meeting market demand that is not well served at present. The timing for the technology to have the capabilities of full mobility and for the widespread availability of consumer equipment as well as the status of development of 3G services at that time cannot be accurately predicted at this point in time. If we should invite bids for the spectrum for full mobility services at this stage, there would be too many uncertainties for the bidders to make their decisions." (Emphasis added)

2.3 HKCTV is of the view that the TA has exaggerated the uncertainty in the evolution of BWA technology and the TA should leave the investment decision to the commercial enterprises. As in any sector in the telecommunications industry, BWA technology evolves every day and will become mature as time goes by. However, the TA's concern of technological advance in BWA should not completely dictate the design of the regulatory framework which, as we shall demonstrate below, ironically will inhibit future development of BWA technology. The restriction in the scope of service due to "limited mobility" makes business planning and revenue forecast by BWA operators difficult. For

Fixed Carrier licensees, the difficulty in predicting the time of lifting of "limited mobility" restriction poses at least the same if not greater uncertainty than that arising from technological advance. On the other hand, a holder of Fixed Carrier Licence is able to assess the risk associated with possible advance in BWA technology and take into account of this factor in its bidding decision concerning spectrum. For this reason, the TA should leave the bidding decision to the Fixed Carrier licensees instead of limiting the scope of BWA service.

2.4 The TA's proposed regulatory restraint concerning the so-called "limited mobility" of BWA services would stifle innovation and may prevent the introduction of advanced BWA technology in Hong Kong. The danger was highlighted in an article commenting on the Consultation Paper in the South China Morning Post on 3 January 2005. According to the article in the South China Morning Post, the proposed "limited mobility" of BWA services may give rise to an anomaly that a Personal Digital Assistant with WiMax technology may need to be switched off in view of the "limited mobility" requirement:

"Contradictions also arise in practice. Would a WiMax powered personal digital assistant have to be disabled when used for a voice call outside the home? ...

The risk is that by trying to direct the technology [concerning Broadband wireless access], its development is stifled, reducing consumer choice and leaving Hong Kong lagging further behind regional neighbours in advanced telecommunications services.".

2.5 In short, the TA should permit Fixed Carrier to offer BWA service with "full" mobility. If the TA does not accept our view, the TA should allow BWA service of Fixed Carrier licensees to have "full" mobility as soon as BWA technology support "full" mobility.

### III. FTNS licensees should be allowed to bid for the BWA spectrum

3.1 According to the Consultation Paper (see paragraph 37), the "TA is of the preliminary view that BWA in Hong Kong may initially be offered as a wireless extension of the conventional wireline based fixed network service". Under this proposal, BWA spectrum should be reserved for carriers with an intention to establish fixed networks in Hong Kong. The Consultation Paper proposed that

interested parties who were not existing Fixed Carrier licensees should apply for a Fixed Carrier Licence before they were eligible. However, the TA only made reference to Fixed Carrier Licence in paragraph 37 of the Consultation Paper and did not mention Fixed Telecommunications Network Services ("FTNS") licensees. Since a FTNS licensee is a provider of "conventional wireline based fixed network service", the TA, for the avoidance of doubt, should clarify that a FTNS licensee is in the same position as a Fixed Carrier licensee in this aspect. The TA should also make clear that both FTNS and Fixed Carrier licensee do not require another Fixed Carrier licence before they are eligible to bid for BWA spectrum.

### IV. TA should allocate more frequency for BWA service

4.1 According to the Consultation Paper, the TA intended to allocate three 14 MHz paired frequency blocks and four 20 MHz unpaired frequency blocks for BMA services. In our view, this is not enough in view of the number of new entrants which are interested in providing BWA service and this is likely to result in insufficient bandwidth for each licensee. For this reason, in order to enable prospective operators to provide comprehensive BWA services, the TA should assign more frequency blocks and capacity for BWA service.

### V. Conclusion

## 5.1 To conclude, HKCTV submits that:

- (a) the TA should allow BWA services to have "full" mobility instead of "limited mobility";
- (b) the TA should also make clear that both FTNS and Fixed Carrier licensee do not require another Fixed Carrier licence before they are eligible to bid for BWA spectrum; and
- (c) the TA should assign more frequency blocks and capacity for BWA service.

Hong Kong Cable Television Limited 14 March 2005