



The submission of

Hong Kong CSL Limited and New World PCS Limited in

response to the consultation paper released on 26 January 2007

by the Commerce, Industry and Technology Bureau on

“Digital Broadcasting: Mobile Television and Related Issues”

1 Introduction

1.1 Hong Kong CSL Limited and New World PCS Limited (“we”) are pleased to provide our comments in response to the consultation paper entitled ‘Digital Broadcasting: Mobile Television and Related Issues’ issued by the Commerce Industry and Technology Bureau (“CITB”) on 26 January 2007 (“**Consultation Paper**”).

2 Summary

2.1 To ensure the success of mobile TV, we agree with the Government that it should work with the industry in deciding the following issues:

- (a) the spectrum to be available for mobile TV;
- (b) the spectrum to be allocated for mobile TV;
- (c) how the spectrum to be assigned for mobile TV; and
- (d) the licensing regime for mobile TV.

- 2.2 However, in order to make decisions about these issues, we believe it is vital for the Government to clarify what is meant by the term “mobile TV” so that we can offer more detailed comments on the subject. At this stage, the loose use of the term makes it difficult to know what the Government is intending to regulate, particularly as some broadcast services currently or soon to be provided by the existing domestic free-to-air terrestrial broadcasters may already be classified as ‘mobile TV’. Additionally, new wireless broadband access services which may soon enter the Hong Kong market, also display characteristics that are virtually indistinguishable from, say, a DVB-H handheld service. An internet browser on a mobile handset using 14 Mb/s peak speed High Speed Download Packet Access (“**HSDPA**”) will enable consumers to access video content from ‘YouTube’-type websites that looks and feels very similar to broadcast ‘mobile TV’.
- 2.3 Although some may argue that mobile TV is a relatively new media market, the Government is contemplating the licensing of the network and service arrangements for mobile TV under the existing statutory provisions of the Telecommunications Ordinance and Broadcasting Ordinance. As such, this raises questions about how existing rules, activities or initiatives which apply to, or have an impact on, other telecommunications and broadcasting services will affect mobile TV and the provision of mobile TV services (for example, cross media ownership rules, foreign ownership rules, the convergence of the telecommunications and broadcasting industries (as well as the regulator), ‘must carry’ obligations, licence fees, interconnection and interoperability arrangements, copyright and competition issues).
- 2.4 Further the Government is currently conducting reviews on public service broadcasting, the Copyright Ordinance and universal service obligations. These consultations will have a direct impact on mobile TV.

- 2.5 Whilst it is helpful that the Government has indicated in the Consultation Paper that there is to be at least one further round of consultation, the Government will need to consider and consult upon such issues so as to ensure the policy and implementation issues associated with digital broadcasting has been contemplated and devised in a comprehensive and logical manner.
- 2.6 We look forward to receiving further information from the Government on the above so as to better understand how the Government intends to make spectrum for mobile TV available and the basis for assignment. It is therefore difficult to comprehensively provide comments to the Government on the issues raised in the Consultation Paper and our comments are limited to those areas where sufficient information is available or where precedents exist. For example, we agree with the Government's proposal that the assignment of spectrum for mobile TV purposes should be via auction and spectrum utilisation fees should be payable for the use of the spectrum.

3 What is mobile television ?

- 3.1 According to the Legislative Council Secretariat, "Mobile Television is a television-like subscribed service over mobile telecommunications network"¹. The definition in the Consultation Paper "mobile TV refers to the wireless transmission of video for reception on the move by mobile or portable devices"² is equally as broad. In both cases, the term could relate to the provision of a variety of services.
- 3.2 For example, the services currently provided by domestic free-to-air broadcasting licensees could fall within the definition of mobile TV since a person with a small portable handheld TV device can currently receive the analog signals of the free-

¹ Paragraph 2.1 of the Information Note regarding Mobile Television, IN07/06-07.

² Paragraph 7, Consultation Paper.

to-air broadcasters and view TV content whilst on the move. Is this what the Government means by 'mobile TV' ?

- 3.3 Another example is the STiMi technology (of the CMMB standard) that we understand will be used by the digital terrestrial television broadcasters for the provision of digital free-to-air broadcast services. We understand that it may be possible to use the technology to watch digital broadcast services on portable devices whilst on the move. Again, does this mean that the free-to-air terrestrial broadcasting licensees will already be providing 'mobile TV' services when they launch their digital television services ?
- 3.4 From our perspective there needs to be a more precise definition of the term before the industry and the public can fruitfully discuss issues about the use of the relevant spectrum and the licensing regime applicable to the service. We trust that the Government will provide more and better particulars of what is 'mobile TV' in the second round of consultation on this issue.
- 3.5 In addition to the issue of mobility, and depending on how the term is defined, mobile TV can or could result in a variety of services being offered to viewers including video-on-demand, live television programs, and podcasts; however this may depend on the way in which the services are delivered. New wireless broadband access services which may soon enter the Hong Kong market, also display characteristics that are virtually indistinguishable from, say, a DVB-H handheld service. An internet browser on a mobile handset using 14 Mb/s peak speed HSDPA will enable consumers to access video content from 'YouTube'-type websites that looks and feels identical to broadcast 'mobile TV'. If 802.16e (mobile WiMAX) technology lives up to the hype surrounding it, then this will be equally the case for a mobile WiMAX handset.

- 3.6 For the purposes of this submission we will assume there are two main ways of delivering mobile television, being via a two-way cellular network (utilising a unicast or multicast system) or a one-way dedicated broadcast network.
- 3.7 A recent press release by Ericsson³ cites the launch of over 120 commercial mobile TV services worldwide with 90% of them based on existing two-way cellular networks. As systems employing two-way cellular networks are already being utilised in the market and 3G mobile carriers using their existing telecommunications licences are already able to provide mobile television-like services by two-way cellular networks in Hong Kong, we presume when the Government uses the term ‘mobile TV’ it is primarily concerned with the broadcast of video for reception on portable wireless devices and so we will limit our comments to such services (“**Mobile TV**”). However, this is merely a presumption and is being used for the purposes of providing feedback to the Consultation Paper only (and does not negate our belief that more information needs to be provided to the public to explain what constitutes ‘mobile TV’).
- 3.8 Irrespective of how the Government seeks to define ‘mobile TV’, the decision to make available spectrum for ‘mobile TV’ services and to license the use of the spectrum must in no way affect, restrict or otherwise inhibit the ability of the existing mobile carriers to provide services pursuant to their existing telecommunications carrier licences that may be similar to ‘mobile TV’ services or are mobile TV-like services.

³ http://www.ericsson.com/ericsson/press/facts_figures/doc/mobiletv.pdf

4 Digital Broadcasting: An Overview

Question: We welcome advice on other emerging mobile technologies that support video transmission services. What forward planning the Government should take to facilitate the deployment of such technologies in Hong Kong?

(i) Chinese Standards

- 4.1 We note that the Government has included information about some emerging technologies that support the provision of Mobile TV services in the Consultation Paper and also provided information about some international experiences in the Annex to the Consultation Paper.
- 4.2 Whilst there is a reference to a trial of the CMMB standard in the People's Republic of China ("PRC") in the Annex, no detail about the Government's view of the CMMB standard has been provided in the Consultation Paper (unlike other standards, see paragraph 8).
- 4.3 We note with interest the current debate in the PRC about the CMMB standard and T-DMB standard and we refer the Government to a recent article detailing the debate⁴. We also note that there are concerns in the PRC that Mobile TV using the CMMB standard may not be able to be commercially deployed. As it appears there are problems with the CMMB standard, we urge the Government to provide information about the Government's position on the Chinese standards as it is important for the industry to understand how the Government views technological developments in the PRC and whether it intends to mandate the use of the Chinese CMMB standard.

⁴ http://big5.ce.cn/cysc/communications/cesj/200705/08/t20070508_11280839.shtml

4.4 Whilst we understand it is usually the Government's position to adhere to a technology neutral stance and not dictate a specific technology or standard (and therefore it may be unnecessary to understand the Government's position on one or other technology in most instances), in a recent statement of the Telecommunications Authority ("TA") with respect to the licensing of spectrum in the 850MHz band⁵, the TA deviated from the technology neutral stance and dictated the use of the CDMA2000 standard. Therefore we seek further discussion and information from the Government in connection with this important aspect of Mobile TV in order make more informed decisions.

(ii) Cross Media Ownership Restrictions

4.5 Currently, there is a cross media ownership restriction under the Broadcasting Ordinance, the purpose of which is to ensure pluralism in the broadcasting industry. With the introduction of Mobile TV, the Government should review its applicability to Mobile TV, particularly given the existing rules and regulations.

4.6 For example, currently, each of TVB Pay Vision Limited and Television Broadcasts Limited (collectively, "**TVB Entities**") are unable to share television content with the other. We understand the Government has placed these restrictions on the TVB Entities for cross-media ownership and dominance reasons. If due to the introduction of Mobile TV, the TVB Entities can share their content via Mobile TV platforms, this has the potential to distort the Mobile TV and other television markets. As a result, the Government must consider how such restrictions will continue to be enforced with the introduction of Mobile TV.

(iii) Content distribution channels

4.7 We note that the same or similar content can be transmitted to users via digital terrestrial TV ("**DTT**"), IPTV, Mobile TV and mobile television via 3G technologies. Also, as mentioned above, WiFi and WiMAX technologies may

⁵ Paragraph 15 of the Statement of the Telecommunications Authority issued on 27 April 2007 entitled "Licensing of Spectrum in the 850MHz Band to Enable the Provision of CDMA 2000 Service".

potentially also allow viewers to access Mobile TV-like services via wireless devices, however this has not been discussed in the Consultation Paper. Given the multiplicity of access platforms by which similar content can be viewed, the Government must ensure that the levies that it imposes on spectrum which is utilised in conjunction with the access platforms (for instance, licence fees and spectrum utilisation fees) are set at comparable levels so as to not create a distortion in the relevant markets.

(iv) Foreign Ownership Rules

4.8 Currently, there is a foreign ownership restriction under the Broadcasting Ordinance so as to ensure that the broadcasting industry is locally controlled. With the introduction of Mobile TV, the Government should review its applicability to Mobile TV as the current restrictions may preclude interested parties from bidding for the spectrum.

5 Spectrum Availability

Question: We welcome comments on the above analysis on of spectrum availability for digital broadcasting services. In particular, we invite comments on whether the spectrum in Band III and L Band and two SFN multiplexes in the UHF Band should also be made available for mobile TV services, subject to review of the spectrum allocation and assignment arrangements.

5.1 We agree with the comments in the Consultation Paper that the S Band (2500 MHz-2690 MHz) is currently allocated as an expansion band for 3G mobile services which is in accordance with the recommendations of the International Telecommunication Union and it would be inappropriate at this time to be considering whether this band could be made available for Mobile TV services. Apart from this reason, there is also the problem of potential interference due to the proximity of the frequency bands being used in future for the provision of 3G services should the S band also be used for Mobile TV purposes.

- 5.2 We agree that the spectrum allocation and spectrum assignment arrangements are critical in assisting to determine which band may be allocated to Mobile TV services and believe it would be premature to comment on which particular band should be utilised given the interdependencies of the other arrangements, but at this stage, we tend to view the use of the UHF band as appropriate for Mobile TV services, however await further information from the Government on the other issues raised in this submission before having a concluded view. Further, we assume that the implementation decisions made with respect to Mobile TV will be aligned and consistent with the statements set out in the Government's recently published spectrum policy framework⁶.
- 5.3 Irrespective of the spectrum made available for Mobile TV purposes, we urge the Government to allow existing mobile carriers and potentially Mobile TV operators to have the same rights currently granted to the domestic free-to-air television licensees under their Fixed Carrier Licences issued pursuant to the Telecommunications Ordinance to establish, maintain, possess or build and operate infrastructure on the hill tops of Hong Kong in order to provide services. If the Government does not grant such rights to other licensees who are providing services that are competing with free-to-air television licensees then the Government will not be maintaining a level playing field in the converged broadcasting-telecommunications industry.

⁶ Radio Spectrum Policy Framework issued by the Commerce, Industry and Technology Bureau on 26 April 2007 (“**Spectrum Policy Framework**”).

6 Spectrum Allocation

Question: We invite comments on the approach to allocate spectrum resources for the three digital broadcasting services in question. We also welcome any suggestions other than the above three proposed options.

- 6.1 It is difficult to assess which approach should be used to allocate spectrum when it is not clear what is meant by ‘mobile TV’ and we again urge the Government to provide clarity on what the term means. Once this is clarified the appropriate approach to allocating the spectrum can be worked out.
- 6.2 From our perspective, irrespective of the method of allocation, the relevant spectrum must be used for the provision of broadcast services only and should not be used for bi-lateral or multi-lateral voice communications or video-telephony services. For example, if a mobile TV operator wished to provide an IP data casting service utilising a band made available for digital audio broadcasting, they would need to obtain a separate telecommunications licence to offer this service. This is consistent with the current licensing regime for paging operators who are required to hold a telecommunications licence to provide paging services.

7 Spectrum Assignment

Question: We invite comments on whether, in pursuance of a market-led approach, we should assign the spectrum available in Band III and L Band and the two SFN multiplexes in the UHF Band for relevant digital broadcasting services by auction with appropriate rollout obligations, and whether a SUF should be charged for such use.

- 7.1 First, we assume that in order for a Mobile TV operator to provide a Mobile TV service it will need to acquire an infrastructure or network licence (currently granted pursuant to the Telecommunications Ordinance) and a service based licence (granted under the Broadcasting Ordinance). We believe that in order to ensure there is no distortion in the relevant telecommunications market and the television programme service market, two types of licence fees need to be paid (one for the broadcasting service and the other for the spectrum).
- 7.2 With respect to the network or telecommunications licence, we agree that the Government should auction the relevant spectrum and the auction should be conducted in the same manner as the 3G auction in 2001.
- 7.3 Further, the Government should set the reserve price of the spectrum at unit rates which are at least the same as the 3G spectrum in order to create a level playing field between the two types of licensee and require the payment of spectrum utilisation fees for the validity of the licence, as the spectrum is being used for a commercial purpose and the Government should be imposing taxation in an equitable and consistent manner. As a reminder, the Government would be aware that it set a reserve price of \$1.3 billion on the 3G spectrum, based on a fixed rate for the first five years of the licence and then an escalating minimum fee for the remaining term of the licence (at a rate of \$1.74 million to \$4.36 million per MHz).
- 7.4 In relation to the broadcasting service, we believe that a fee similar or equal to the existing domestic pay television programme service licence fees should be paid.
- 7.5 We note that Mobile TV contents may also be transmitted by DTT. As DTT licensees were not required to go through an auction process to obtain spectrum for DTT purposes, the Government needs to consider how to deal with this spectrum assignment imbalance given that some spectrum holders have paid vast amounts for the commercial use of spectrum whereas others have not and

potentially will be competing by offering similar content to the market. As the spectrum is being used for commercial purposes we would assume that a SUF will be levied for DTT spectrum as this is consistent with Government policy as set out in the Spectrum Policy Framework.

8 Licensing Arrangements

Question: We invite comments on whether mobile TV programme services should be licensed under the Broadcasting Ordinance and regulated accordingly through appropriate licensing conditions and codes of practice by the relevant authorities, and if so, how this should be achieved vis-à-vis the current licensing framework.

(A) Telecommunications Carrier Licence

8.1 First, in relation to the terms and conditions of the telecommunications carrier licence, we request the Government to provide further information about the licence. We understand the intention is to utilise a unified carrier licence (“UCL”) as described in paragraph 44 of the Consultation Paper should one be in place at the relevant time. We note that whilst the TA has indicated that the carriers who are granted or transition to, a UCL will have the same rights under the UCL, the TA has provided little information as to a carrier’s obligations under the UCL, other than to say that some licence obligations of existing licensees may be transplanted to the UCL⁷ and that he may conduct a further consultation on the special conditions of the UCL⁸. Therefore it is not clear which licence obligations are contemplated.

8.2 This uncertainty needs to be clarified in order for carriers to understand how the UCL may operate. Further, we note that under the spectrum policy framework consultation, the CITB’s consultant recommended the creation of generic radio

⁷ See paragraph 25 of the consultation paper issued by the TA on 21 September 2005 entitled “Revision of Regulatory Regimes for Fixed-Mobile Convergence”.

⁸ See paragraph 144 of the Statement of the Telecommunications Authority issued on 27 April 2007 entitled “Deregulation for fixed-mobile convergence”.

frequency licences separate from service/network licences (as is the situation in other jurisdictions such as Australia)⁹. The Government has not provided any guidance in relation to this issue in the recently published Spectrum Policy Framework and we urge the Government to indicate whether it intends to pursue this initiative as the recommendation will have impacts upon the assignment of any spectrum for Mobile TV purposes and it would be helpful for potential Mobile TV licensees to know how the Government intends for the licensing arrangement to operate.

(B) Broadcasting Licence

8.3 When we look again to the definition of ‘mobile TV’ and the examples we have provided in paragraphs 3.2 and 3.3 above, it appears that the difference between the services being provided pursuant to the existing licensing regime and ‘Mobile TV’ services may be the means by which the content can be viewed (as the content itself may be the same as that available via analog and digital terrestrial television means). If this is the case, then logically the same licensing regime should apply and Mobile TV operators should be required to obtain a service licence under the Broadcasting Ordinance as the programs or content being broadcast will be the same.

8.4 This may be distinguished from the situation of the mobile carriers whom, whilst potentially providing on-demand content that may sometimes be similar to the content as provided by existing broadcasters, do not utilise broadcast means to provide the service and provide communications or transactional services in addition to content.

8.5 As there are a number of inter-related issues relating to the licensing of Mobile TV programme services including the applicability of existing program rules (such as public service broadcast and other requirements) and interconnection

⁹ See recommendation 4.11 of the Final Report - Spectrum Policy Report of Ovum, Indepen, Aegis:
http://www.citb.gov.hk/ctb/eng/paper/pdf/SPR-Final_report.pdf

arrangements with existing television operators, we look forward to receiving further information from the Government about its preliminary views so as to consider these matters further.

9 Confidentiality

We do not regard any part of this submission as confidential and has no objection to it being published or disclosed to third parties, however, this submission in its entirety is made on the basis that is without prejudice to our rights and the rights or our associated corporate entities.

-END-

Date: 16 May 2007