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**Panel on Information Technology and Broadcasting**

**Meeting on 12 January 2009**

**Background brief on  
consultation exercise on the implementation framework of  
mobile television services in Hong Kong**

**Purpose**

This paper sets out the background of the consultation exercise on the implementation framework of mobile television (mobile TV) services in Hong Kong and provides a summary of views and concerns expressed by the Panel on Information Technology and Broadcasting (the Panel).

**Background**

2. The development of mobile TV services<sup>1</sup>, which exemplify multimedia convergence and opens up opportunities for more content and programming choices for the viewing public, is gaining momentum in the broadcasting and telecommunication sectors of Hong Kong. At present, Hong Kong is taking the lead in the adoption of Internet Protocol Television technology with over one million subscribers. In addition to the digitization of the cable and satellite TV services, digital terrestrial television service has also been launched in December 2007. While third generation mobile telephony technology and mobile phones have already been capable of receiving multimedia contents streamed to them (known as "streaming-type mobile TV"), point-to-multipoint broadcasting technologies for mobile reception (known as "broadcast-type mobile TV") are developing rapidly in overseas market. Technical trials on such technologies have also been conducted by some local operators. The broadcast-type mobile TV is more spectrum efficient when broadcasting audio-visual content to mobile devices, but involved allocation of additional frequency spectrum.

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<sup>1</sup> Generally refers to the provision of television programme services by wireless transmission of audio-visual content for reception by mobile phones or other portable devices. The inherent characteristics distinguishing mobile TV services from conventional TV services are mobility and personalized consumption.

## The consultation

3. To facilitate the launch of mobile TV services in Hong Kong, the Administration conducted the first round of consultation on this subject in early 2007. The consultation aimed to seek views from the public and the industry on the introduction and regulation of commercial mobile TV services in Hong Kong with focus on four major regulatory aspects, namely, spectrum availability, spectrum allocation, spectrum assignment, and licensing arrangements. As the majority of the respondents in the first consultation exercise supported an early introduction of mobile TV services in Hong Kong and a number of broadcasting and telecommunications operators had expressed interest in rolling out mobile TV services, the Administration prepared a draft implementation framework for broadcast-type mobile TV services for a second consultation in early 2008. The main proposals are summarized as follows:

- (a) On spectrum availability, two multiplexes in Band III (174 MHz – 230 MHz) capable of carrying a maximum of six mobile TV channels (assuming using the T-DMB technology<sup>2</sup>), and one multiplex in UHF Band (470 MHz – 806 MHz) capable of carrying a maximum of 20 mobile TV channels (assuming using the DVB-H technology<sup>3</sup>), were proposed to be deployed primarily for the development of point-to-multipoint broadcast-type mobile TV services.
- (b) On spectrum allocation, a pro-mobile TV approach was proposed to be adopted. At least 50% of the transmission capacity in Band III and UHF Band should be used to carry mobile TV content, while the remaining capacity could be used for other ancillary services, e.g. DAB, datacasting, etc to facilitate the development of digital radio.
- (c) On spectrum assignment, spectrum identified in (a) above was proposed to be assigned through auction, subject to simple pre-qualification criteria (no ownership or cross-holding restrictions), appropriate rollout obligations, and the payment of spectrum utilization fees.
- (d) On licensing arrangements, to foster the growth of mobile TV having regard to international practices and the need to protect public morals and children, a light-handed approach was proposed for licensing and regulating mobile TV content by way of two options: either to license and regulate mobile TV as a new category of TV programme service

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<sup>2</sup> T-DMB refers to a variant application of the Eureka 147 technical standard originally developed for digital audio broadcasting (DAB). The development of this technology, conducted in South Korea, optimizes the potential of Eureka 147 into a broadcasting technology for transmitting mobile multimedia services, instead of just DAB. A 1.5 MHz multiplex using T-DMB technology in Band III or L Band (1 466 MHz – 1 480 MHz) can carry two to three mobile TV channels for 7-inch displays.

<sup>3</sup> DVB-H is a member of the European DVB broadcasting standards and is widely adopted internationally. A multiplex using DVB-H in UHF Band can carry about 30 mobile TV channels (some 22 channels based on the trials so far conducted in Hong Kong) for 7-inch displays.

through amendment to the Broadcasting Ordinance (BO) (Cap. 562), or to regulate mobile TV by general laws and self-regulatory codes of practice promulgated by the industry.

- (e) On geographical coverage, it was proposed that mobile TV services should provide territory-wide coverage similar to conventional free-to-air broadcasting services.
- (f) On the use of hilltop transmission sites, the sharing of the facilities was proposed to be subject to mutual agreement through commercial negotiation, but the TA had the power to intervene and adjudicate if mutual agreement could not be reached.

### **Discussion at the Panel on Information Technology and Broadcasting**

4. The Panel was consulted on the implementation framework of mobile TV services and development of DAB in Hong Kong at its meetings on 6 February 2007 and 29 January 2008. Some members expressed concern over the lack of progress in the development of DAB despite years of discussion and increasing public demand for the opening up of airwaves for community channels. In the light of competing demand for frequency spectrum, the Panel was concerned whether the future development of DAB would be significantly restricted by the deployment of frequency spectrum for mobile TV services.

5. According to the Administration, frequency spectrum in Band III and L Band had been reserved for the development of digital broadcasting since 2000. However, market response had not been positive and no operators had indicated interests in providing digital broadcasting services. The Administration assured members that it was the Government's intention to take the opportunity of developing mobile TV services to also facilitate the roll out of DAB.

6. On the Government's proposal to assign the multiplexes in Band III and the UHF Band and levy the spectrum utilization fee through auction, some members were concerned that small organizations wishing to operate community channels would not have the financial means to meet the high licence fee. They opined that the assignment of frequency spectrum through auction and the universal coverage requirement were advantageous to big financial conglomerates and would create entry barrier for financially less viable groups. Some members considered that the proposed spectrum assignment and licensing regime had failed to cater for the needs of community/minority groups and non-profit making organizations in developing community channels for expression of diverse public views. Noting that community channels were not required to pay a licence fee in a number of overseas jurisdictions, members called for a comprehensive review of the fee structure to facilitate the development of community channels in Hong Kong.

7. Some members pointed out that the consultation on the development of mobile TV and DAB services had not addressed the needs for the development of community channels in the interests of community/minority groups. In this connection, they suggested that the Administration should put in an additional paper on the development of community radio channels for non commercial minority/community groups and non-profit making organizations for public consultation. The Administration took note of members' suggestion.

### **Latest position**

8. According to the Administration, the majority of the respondents to the second consultation accepted the proposed implementation framework. Broadcasting and telecommunications operators have indicated interest in introducing local broadcast-type mobile TV services and some of them have already tested a number of mobile TV technologies with the assistance of the Office of the Telecommunications Authority (OFTA).

9. On 22 December 2008, the Administration held a press conference to promulgate the implementation framework.

10. The Administration will brief the Panel on the subject at the Panel meeting to be held on 12 January 2009.

### **Relevant papers and submissions**

Information paper provided by the Administration for the Information Technology and Broadcasting Panel meeting on 6 February 2007

<http://www.legco.gov.hk/yr06-07/english/panels/itb/papers/itb0206cb1-853-5-e.pdf>

Minutes of Information Technology and Broadcasting Panel meeting on 6 February 2007

<http://www.legco.gov.hk/yr06-07/english/panels/itb/minutes/itb070206.pdf>

Information papers provided by the Administration for the Information Technology and Broadcasting Panel meeting on 29 January 2008

<http://www.legco.gov.hk/yr07-08/english/panels/itb/papers/itb0129cb1-661-3-e.pdf>

<http://www.legco.gov.hk/yr07-08/english/panels/itb/papers/itb0129cb1-736-1-e.pdf>

Minutes of Information Technology and Broadcasting Panel meeting on 29 January 2008

<http://www.legco.gov.hk/yr07-08/english/panels/itb/minutes/itb080129.pdf>

LegCo brief on framework for development of mobile television services

[http://lcsfcbtlbs1.legco.gov.hk/sharedoc/r&d/Mobile\\_TV\\_Services\(Devpt-Framwork\)e.pdf](http://lcsfcbtlbs1.legco.gov.hk/sharedoc/r&d/Mobile_TV_Services(Devpt-Framwork)e.pdf)

Submissions to the two public consultations (available on the website of the Communications and Technology Branch of the Commerce and Economic Development Bureau)

<http://www.cedb.gov.hk/ctb/eng/paper/index.htm>

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