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#### Panel on Information Technology and Broadcasting

#### Meeting on 11 May 2009

# Updated background brief on the progress of the implementation of digital terrestrial television broadcasting in Hong Kong

#### Purpose

This paper sets out the progress of the implementation of digital terrestrial television (DTT) broadcasting in Hong Kong, and also a summary of views and concerns expressed by the Panel on Information Technology and Broadcasting (the Panel).

#### Background

2. DTT broadcasting is a new technology of transmitting television (TV) services, in which pictures and sound are processed electronically and converted into digital format for transmission. The signals will be re-converted by appropriate devices, such as set-top boxes, into TV programmes. DTT broadcasting, as compared with analogue broadcasting, brings major benefits in enhancing efficiency in utilizing radio spectrum, resolves some reception problems, and offers opportunities of new services such as multi-channel broadcasting, standard definition TV (SDTV)<sup>1</sup>, high

<sup>&</sup>lt;sup>1</sup> A picture on the television screen is formed by a large number of small dots called pixels. The higher the number of pixels, the better the resolution hence picture quality. Conventional analogue TV broadcasting provides a resolution of up to 720 (horizontal) × 576 (vertical) pixels, which is known as 576 lines.

Standard definition television (SDTV) broadcasting can be considered as the digitized version of the conventional analogue television broadcasting. However, SDTV pictures are free from reception problems including "ghosting" and "snowing", and thus have a picture quality similar to digital versatile disk (DVD) (typically having a resolution of 525 lines).

High definition television (HDTV) broadcasting, on the other hand, provides a high picture resolution of at least 720 lines or up to 1080 lines and typically on a wide screen (with an aspect ratio, i.e., the ratio of picture width to height, of 16:9). Hence, HDTV provides a much better picture quality than analogue television and SDTV broadcasting and enables viewers at home to have the same experience as watching movies in a cinema.

definition TV  $(HDTV)^1$ , broadcasting with multi-viewing angles, interactive services and datacasting (e.g., financial quotes).

3. Pursuant to the implementation framework for DTT broadcasting announced by the Government in 2004, the two domestic free television programmes service licensees, i.e. Asia Television Limited (ATV) and Television Broadcasts Limited (TVB), officially launched DTT on 31 December 2007. The DTT network has been extended to 18 districts covering 75% of the Hong Kong population in August 2008. As of December 2008, there are more than 726 000 or about a third (32.3%) of Hong Kong households receiving DTT via set-top boxes, integrated digital TV sets or computers.

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

4. The Panel has followed up closely issues related to the implementation of DTT broadcasting, and discussed the subject and received views from deputations, including the two domestic free TV programmes licensees, at a number of meetings since 2003.

5. At the Panel meeting on 12 November 2007 and 19 February 2008, members were updated on the latest progress of the implementation of DTT and issues covering the relevant regulatory decisions made by the Broadcasting Authority (BA), coverage areas of DTT broadcasting, the upgrade of In-Building Coaxial Cable distribution System (IBCCDS), labelling scheme for DTT receivers, as well as promotion and publicity activities and environmental concerns arising from the disposal of old TV sets.

6. On the implementation of DTT broadcasting, the Panel noted that the construction of the five transmission stations at Castle Peak, Cloudy Hill, Golden Hill, Kowloon Peak and Lamma Island would be completed in stages on or before end-2008, by which time the reception areas would cover at least 75% of the total population of Hong Kong. Panel members urged the Administration to target at completing the five transmission stations by June/July 2008 the latest, thus allowing time for the electronic manufacturers to produce sufficient DTT receivers for the Hong Kong market and for the public to purchase and install the set-top boxes. Members also suggested that part of the provision for the publicity and promotion of the 2008 Beijing Olympics be used to expedite the roll-out of transmission network to achieve close to 99% digital coverage by the 2008 Beijing Olympics.

7. After discussion with the two domestic free TV broadcasters, the Administration advised that they had brought forward their plan to complete construction of the five transmission stations and the one at Mount Nicholson to extend digital coverage to 75% of the population from end 2008 to early August 2008, so as to enable more people to enjoy viewing of the Beijing Olympics with DTT. The Administration would work closely with the two

broadcasters to increase the digital coverage as early as practicable and hopefully to achieve close to 99% coverage by 2011.

8. The Panel noted that the two broadcasters were supportive of the use of a "combined" set-top box although they objected to pay TV operators bundling free TV service channels into pay TV channels. As consumers in general would welcome the convenience of a "combined" set-top box, members called on the Administration to facilitate discussions among the broadcasters to bring about an early consensus. There should also be publicity on the choices of DTT receivers available and the best time to purchase a set-top box for DTT reception to address consumers' concerns in this respect. The Panel was assured that the Administration and the BA would continue to make efforts to coordinate among different broadcasters to address the concerns.

9. The Panel noted that free-to-air terrestrial television signals are generally received by common antenna and then distributed by the IBCCDS to individual building flats. The Office of the Telecommunications Authority promulgated the specifications and guidelines for DTT reception on 1 August 2007 for the IBCCDS operators as well as other relevant system contractors to upgrade the existing IBCCDS. Apart from a dedicated website, an on-line database for DTT service coverage area, announcements of public interest on TV and radio, information leaflets and education kits for schools, public education programmes would also be launched in collaboration with the Consumer Council. Members suggested that the on-line database of DTT service coverage should be enhanced to include information on buildings which had completed the upgrading work of IBCCDS, to facilitate the public to obtain relevant information.

#### Latest position

10. The Administration will brief the Panel on 11 May 2009 on further progress of the DTT implementation, including the on-going network construction extending the coverage, status of DTT take-up by the viewing public and the latest publicity.

#### **Relevant papers**

11. A list of relevant papers is at **Appendix**.

Council Business Division 1 Legislative Council Secretariat 5 May 2009

## Appendix

### List of relevant papers

Committee	Paper	LC Paper No.
Meeting of Panel on Information Technology and Broadcasting (ITB Panel) on 11 June 2007	Administration's paper : "Implementation of Digital Terrestrial Television"	CTB(CR)9/1/9 (07) Pt. 24
	Submission from deputations	(please refer to the agenda)
	Minutes of meeting	CB(1)2308/06-07
Meeting of ITB Panel on 12 November 2007	Administration's paper : "Progress in the implementation of digital terrestrial television broadcasting"	CB(1)203/07-08(03)
	Generic Code of Practice on Television Technical Standards	CB(1)230/07-08(01)
	Background brief on the progress in the implementation of digital terrestrial television broadcasting in Hong Kong	CB(1)203/07-08(04)
	Follow-up paper	CB(1)826/07-08(01)
	Minutes of meeting	CB(1)461/07-08
Meeting of ITB Panel on 19 February 2008	Administration's paper : "Progress update on the implementation of digital terrestrial television broadcasting"	CB(1)805/07-08(06)
	Minutes of meeting	CB(1)1418/07-08