

Television Broadcasts Limited ASIA TELEVISION LIMITED

SUPPLEMENTARY INFORMATION TO RESPONSES TO

**THE ITBB CONSULTATION PAPER ON
DIGITAL TERRESTRIAL BROADCASTING IN HONG KONG**

(Issued by the Information Technology and Broadcasting Bureau, 1 December 2000)

Asia Television Limited

Television Broadcasts Limited

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Introduction

We trust that, no doubt, the ITBB, Government departments and committees concerned are fluent with the Digital Terrestrial Television (DTT) development in China. Nonetheless, we would like to share with you what we have learned of updated information, from technical and broadcasting professionals, on the Mainland's efforts in developing a proprietary DTT country standard. Some of the information had also been published in technical journals¹.

The Mainland's Timetable

Since our 3 April 2001 Supplementary Response, the timetable for the Mainland's DTT development had been revised:

End of April 2001	Deadline for digital TV systems/standards proposals
Before October 2001	Submission of technical testing parameters
October 2001	Begin testing in Beijing, Shanghai and Shenzhen
2002-2003	After testing had been completed, would coordinate efforts in the improvement and development of potential systems and protocols
2003	Decide on the digital TV standard for the country & Start DTT pilot broadcast

The Mainland's Proposed New/Improved DTT Standards

We understand that a National Digital Television Steering Group, under the State Department, had been established mid-2000 to oversee the digital television development in China. Different departments concerned joined efforts to work towards developing a proprietary country DTT standard that could support mobile, portable TV, data and other multimedia services as well as fixed reception services. Consideration had also been given to HDTV in its DTT development.

The Mainland had tested the three prevailing standards (DVB-T, ATSC, and ISDB-T), comparing their merits and demerits, in 2000. As far as we know, there had been five proposed standards that would be tested starting October this year, in Beijing, Shanghai and Shenzhen. The five standards are:

- 1. The Academy of Broadcasting Science (ABS), State Administration of Radio, Film and TV, Proposal - CDTB-T Standard**

The proposed CDTB-T (Chinese Digital Television Broadcasting-Terrestrial) standard would divide the existing 8MHz TV frequency width into two bands, a wider band to be used for fixed reception services and a narrower band, for mobile multimedia reception services

2. The HDTV Technical Expert Executive Group (TEEG) Proposal No. 1 - ADTB-T (Improved VSB) Standard

Since the existing VSB (Vestigial Sideband) Standard could not support mobile services, this Improved VSB ADTB-T (Advanced Digital Television Broadcast--Terrestrial) Standard would be developed to support mobile multimedia applications.

3. The HDTV Technical Expert Executive Group (TEEG) Proposal No. 2 - BDB-T/OFDM (Improved OFDM) Standard

This TEEG's second proposal would be an improved OFDM (Orthogonal Frequency-Division Modulation) Standard.

4. The Tsinghua University (Qinghua) Group Proposal - TDS-OFDM based DMB-T Standard

The Tsinghua DMB-T (Terrestrial Digital Multimedia Television Broadcasting) Standard would utilize TDS-OFDM (Time-Domain Synchronous Orthogonal Frequency Division Multiplex) modulation technology to increase frequency efficiency. The standard would also use an advanced FEC (Forward Error Correction) system to deal with interference and error correction. It could also allow frequency division and support mobile reception as well as fixed and portable reception services.

5. The Chengdu Electronic Technology University Proposal - SMCC Standard

This proposed SMCC (Synchronized multi-Carrier CDMA) standard would be an improved COFDM (Coded Orthogonal Frequency Division Modulation) standard for better application catering for both mobile as well as fixed reception.

Case for Considering the Mainland's DTT Standard

Once again, we would like to urge the Administration to wait and consider the Mainland's decision on which standard to adopt before deciding on the DTT standard for Hong Kong. It is of paramount importance to note that we are no longer merely talking about in-home fixed TV reception services in the DTT world. DTT services would mean fixed reception

and mobile multimedia data services, interactive commerce, banking and entertainment, etc., besides television entertainment. We also agree with views of broadcasting professionals that the close correlation among the choice of standard, business models and their related regulatory system is the key element for the success of DTT. For all the obvious reasons stated in our previous submissions of 26 February and 3 April 2001, it remains our considered view that Hong Kong SAR should adopt the same DTT standard as that adopted by the Mainland if it is technically sound and suitable for Hong Kong. Adopting the same DTT standard as the Mainland's would not only make frequency planning easier to coordinate and cross-border interference easier to manage, there would also be added business opportunities for Hong Kong. Compatibility of DTT standards would also mean efficient communication and convenience for consumers with the increase of business and people traffic between Hong Kong and neighbouring commercial and recreational centres in the Pearl River Delta. Also, more efficient communication and data exchange would foster further economic growth for the area as well as Hong Kong.

¹ Published sources included:

- Du, Bai Chuan (2001). "The Development of Digital Television in China," *BIRTV2001 News*, 23-26 August 2001, pp. 1 & 8-9.
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- Tan, Min Wang (2001). "Witnessing the First Milestone Meeting: A sketch of the National Digital Television Special Projects Meeting," *International Broadcasting Information*, Vol.15 No. 4, April 2001, p.45.
- Xinhuanet, 34 March 2001. "Our Country Had Mastered Key Technology for Digital Television."