

**TVB's Response**

**to**

**The Second Consultation on**

**Digital Terrestrial Broadcasting in Hong Kong**

(Issued by the Communications and Technology Branch,  
Commerce, Industry and Technology Bureau,  
5 December 2003)

**by**

**Television Broadcasts Limited**

**5 March 2004**

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# 1 Introduction

1.1 Television Broadcasts Limited (TVB) appreciates the efforts of the Government, in particular, the Communications and Technology Branch (CTB) and Commerce, Industry and Technology Bureau (CITB), in conducting a “Second Consultation on Digital Terrestrial Broadcasting in Hong Kong” (2<sup>nd</sup> Consultation) to steer Hong Kong into the digital age.

1.2 ***TVB urges the Government to give the strongest possible consideration to the fact that it is the consumer who has to pay for the transition from analogue to digital terrestrial television (DTT).***

For the public to enjoy the benefits of DTT, they would have to directly bear the cost of a set-top box (STB) or an integrated digital TV set (idTV). In addition, they would have to indirectly or directly bear the cost of possible re-tuning of their VCRs (Video Cassette Recorders), and necessary upgrades to existing antenna systems and in-building coaxial cable distribution systems (IBCCDS).

1.3 ***TVB therefore strongly believes that the success of DTT in Hong Kong depends critically on the Government instituting policies which maximise the benefits of DTT for the public and minimises the cost.***

In a separate submission to the Legco Panel on Information Technology and Broadcasting, we have given our views on the major policies deemed essential for speedy DTT adoption in Hong Kong. A copy of this submission is given in Annex 2 and it forms part of our response to this 2<sup>nd</sup> consultation.

1.4 In the rest of this paper, we will respond to the Government’s proposals concerning Technical Standard; Launch Date, Frequency Planning and Coordination, Simulcast Arrangements and Multiplex Licensing, and Analogue Switch-off and Other Issues from our stand point of achieving the following objectives: -

- ◆ *To maximise the benefits of DTT for the people and economy of Hong Kong, and*
- ◆ *To speed-up DTT adoption aiming for earlier analogue switch-off.*

## **2 Technical Standard**

- 2.1 *TVB strongly disagrees with the proposed “Market-led” – “each-operator-to-decide” approach in deciding on the DTT standard(s) for Hong Kong. TVB also believes that the Government should not recommend DVB-T as the technical standard for DTT transmission in Hong Kong at this point in time when the Mainland had not made the decision on which standard to adopt.*

### **Single Standard, the Mainland’s Standard**

- 2.2 *TVB recommends that Hong Kong must have one single DTT standard, and, that standard should be China’s national standard, the Mainland’s standard, for Hong Kong to enjoy the full range of benefits offered by DTT.*

*Hong Kong must have the same standard as the Mainland’s for a faster rate of DTT adoption, for knock-on benefits to Hong Kong’s economy and most important of all, for greater consumer benefits.*

- 2.3 *Since the Government’s first public consultation on digital terrestrial broadcasting in December 2000, Hong Kong has seen the economic benefits offered by the vast China market and closer economic ties with the Mainland. For the benefit of the people and economy of Hong Kong, we are even more convinced that Hong Kong should adopt the same DTT standard as the Mainland’s, whether it is a newly developed*

***China Standard or any prevailing standard chosen by China as its National Standard.***

**2.4 Consumer Benefits**

2.4.1 An advantage of digital over analogue transmission is its delivery of discrete signals resulting in better visual and sound quality. The down side is that because the signals are discrete, in case of interference or when the signals are overpowered by other signals of the same frequency, the service would be interrupted with no sound and no picture or just a static mosaic of the last frame received.

Digital, and analogue, signals do not stop at national boundaries nor do they know geographical borders. In fact, neighbouring areas sharing a common border should use the same technical standard, such was the advice from experts at the Broadcasting Authority (BA) and Office of the Telecommunications Authority (OFTA) Symposium on "Digital Broadcasting & Convergence" (15 February, 2001).

2.4.2 A major advantage of the DTT technology is that it enables mobile reception of data as well as entertainment services. With the increase of people traffic between Hong Kong and the Mainland, having the same system would mean that the same mobile/portable handheld sets and multimedia devices can be used in Hong Kong and across the border, on the Mainland. It would also mean that cross border buses and other vehicles could be able to use the same mobile sets on both sides. With the speed of media convergence, data services via DTT would become as important as entertainment. Being able to access such services via the same portable and mobile devices would be of

great benefit and convenience to visitors from the Mainland as well as Hong Kong's frequent travellers to the Mainland.

2.4.3 The Government seemed to have neglected the effect of inexpensive appliances on the adoption of new technology. With the same standard, due to the economy of scale, the people of Hong Kong would be able to enjoy less expensive integrated digital TV (idTV) and HDTV sets, Set-top Boxes (STB) and devices for multimedia applications, etc. That would be a great incentive for the adoption of DTT. The penetration rate of VCD and DVD players in Hong Kong is a good example. With Mainland produced sets available and selling at Mainland pricing, penetration of DVD players especially had picked up since 2000 at more than 10% each year and VCD and DVD players' penetration in Hong Kong had reached 79% and 57% respectively in 2003 (see Appendix 1). Of course, having inexpensive VCDs and DVDs with content that appealed to the consumers were major contributing factors as well.

2.4.4 Having the same standard as the Mainland's would mean a wider audience base for supporting more enhanced-TV applications and multimedia data and entertainment services. That means the consumers, the people of Hong Kong, would have a much wider choice of multimedia services which providers of such services might otherwise not even consider developing for the small Hong Kong market.

## 2.5 Economic Benefits

2.5.1 *It seems that while on one hand the Government was trying to instil more economic leverage for Hong Kong through the development of Information Technology (IT) and through closer economic integration with the Mainland in the Digital 21 Strategy 2004 (released 4 March 2004), on the other hand it*

***has side-stepped the economic benefits of having the same DTT standard as the Mainland's in the 2<sup>nd</sup> Consultation on Digital Terrestrial Broadcasting in Hong Kong.***

2.5.2 With the business opportunities and potential of the vast Mainland market, Hong Kong can benefit from participating in the Country's DTT development – that would mean new opportunities for Hong Kong's information technology, media and related industries, which would translate into more jobs for the people.

2.5.3 As Hong Kong's broadcasting and multi-media industries are more commercially-oriented, we would also be able to contribute, even play a leading role, in the Country's DTT development, especially in the development of middleware and software for applications in enhanced-TV and multimedia services.

That, in turn, would also enhance Hong Kong's position as a regional broadcasting hub in terms of software and application development.

2.5.4 Furthermore, ***in the context of Closer Economic Partnership Arrangement with the Mainland (CEPA) and other policies to help Hong Kong to harness the potential of the Mainland Market, the CTB's recommendation of adopting a DTT standard possibly different from the Mainland's and forgoing all the possible benefits of using the National standard would simply be against the professed policy of Greater Economic Integration with the Mainland and out of sync with policy directions in the Digital 21 Strategy 2004.***

## 2.6 Speed Up DTT Adoption and Analogue Switch-off

2.6.1 The consumer benefits of cross border convenience and inexpensive sets, as mentioned in 2.4, would help to speed up DTT

take-up and contribute to earlier analogue switch-off and earlier redeployment of freed-up frequencies.

### **The Disadvantages of the “Market-led” Approach**

2.7 ***As a responsible broadcaster, TVB must point out that the Government’s proposed “Market-led” - “each-operator-to-decide” approach – on the DTT standard(s) for Hong Kong is most unacceptable in the interest of the general public.***

2.8 In the Second Consultation Paper (Paragraph 16), the Government had lightly brushed over the disadvantages of operators adopting different and possibly incompatible DTT standards as “This may cause inconvenience to viewers, as they may have to buy different set-top boxes for receiving all DTT services.”

The Government had not pointed out that it would not only be inconvenient but also **costly** for the consumer to receive all the programme and additional services across different multiplexes using different transmission standards. Multi-standard idTVs or even STBs, would cost more and would not be available for quite some time until the market has matured. In terms of programme enjoyment, though the programme itself is transmission standard-neutral, the enhanced and interactive features would be standard-dependent. To enjoy all the services available, the consumer would need a few STBs for each TV set or different idTVs to receive the programme services and buy a whole range of mobile or portable devices, or their adaptors, for the different standards for receiving additional data and multi-media services. As a TV set might not have enough input sockets to accommodate the number of STBs, the audience might have to endure the added inconvenience of unplugging and re-plugging different STBs for receiving the programmes from different multiplexes.



2.9 A “market-led” approach on technical standard would also mean that the operators could change standard according to market changes. That would mean even more costs for the consumers and slow down the take-up rate of DTT adoption.

### **Market-led Approach Not Truly So for Incumbents**

2.10 ***Even if TVB believes in a market-lead approach, which we do not, the “Market-led” Approach proposed by the Government is not truly market-led in the case of existing terrestrial broadcasters because of the following reasons:***

- (a) There is a requirement for the existing terrestrial broadcasters to start simulcast in 2006 which we disagree with;
- (b) If the start of simulcast is mandated sometime in 2006, the existing terrestrial broadcaster must decide its choice of technical standard by June 2005 the latest;
- (c) Clearly the existing terrestrial broadcaster will not be able to ensure that its technical standard is the same as the Mainland and meet a mandated 2006 start date at the same time. Thus it does not have a free choice as implied by the words “market-led”.

### **Set-top Boxes and Other Interoperability Issues**

2.11 ***TVB support the proposal for a separate consultation on STB and other interoperability issues.***

## **3 Launch Date**

3.1 ***In order for Hong Kong to be assured of having a common DTT standard with the Mainland, we recommend that the Hong Kong DTT launch date to be set after the Mainland has announced its choice of standard.***

***Hong Kong's DTT launch will not be rendered uncertain because the Mainland's launch date for DTT is clear – It is tied to the objective of providing a world-class showcase for the 2008 Beijing Olympics.***

- 3.2 The National DTT standard would have to be decided at the end of 2004 or within 2005 for the country to build the networks to meet the 2008 Olympics broadcast deadline.
- 3.3 The difference in DTT launch date is no more than a year.
- 3.4 The Government should not be worried about Hong Kong's image or being deemed to be "behind" in the introduction of digital broadcasting. The Government's own analysis (paragraph 5, 6 and illustration) had demonstrated that Cable, Satellite and Broadband network platforms have already started broadcasting in digital format.
- 3.5 ***Hong Kong's decision on mapping out a DTT launch timetable after knowing the Mainland's decision on the National DTT standard would be seen as a wise and forward-looking decision which maximises the potential of economic integration with the Mainland market and confers great consumer benefits, thus enhancing the confidence of DTT adoption in Hong Kong. We strongly believe that experts in DTT adoption strategy would unanimously concur with our view. After all, the success of DTT is not early introduction but rapid adoption.***

## **4 Frequency Planning and Coordination**

### **The Principle of No Interference**

- 4.1 ***TVB agrees with the Government on the principle of no interference – on existing and future telecommunications and broadcasting services and with services in neighbouring areas and to ensure coverage and good-reception of the DTT networks – in Hong Kong's frequency plan.***

***We would like to remind the Government to make provisions to bind operators of the DTT multiplexes to the protection of existing analogue services from harmful interference. With a 98% coverage, free analogue TV services are part of Hong Kong's emergency announcement system besides being the people's major sources for news, information and entertainment. The speeding-up of DDT adoption should not be at the expense of the degradation of existing analogue services.***

***The Government must also guarantee that there is no interference from networks across the border in frequency plan coordination with Mainland authorities.***

### **The Proposed Frequency Plan**

4.2 From reviewing the summary of the technical details of the proposed frequency plan available on OFTA's website, we see that the Government has taken into account industry and other public responses on the First Consultation. The Government had also completed frequency coordination with the Mainland since.

In the 2<sup>nd</sup> proposed network plan, the number of DTT networks has been reduced to 5, instead of 6, with some of the frequencies reallocated to form 1 Multiple (or Multi-) Frequency Network (MFN) and 4 Single Frequency Networks (SFNs) instead of the 3 MFNs and 3 SFNs proposed previously. However, some of the issues raised previously on the difficulties in using SFN technology and certain "problem" frequencies have not been addressed in this 2<sup>nd</sup> Consultation:

4.2.1 The main problem with using a SFN network is signal synchronisation. Because there would be time-delay differences in signals being transmitted from the different location transmitters using the same frequency, signals must be synchronised for signal

reception. For example, DVB-T relies on GPS (Global Positioning System), for providing the time reference signal source for the synchronisation of signals. However, reception of GPS signals is susceptible to breakdown in thundering and severe weather. Thus far, there have been few proven or tested successful cases of SFNs in congested environments similar to that of Hong Kong. Besides, it is also risky that the networks' reliability is dependent on an external system, GPS, which might be out of service during wartime or unforeseen situations like interference, etc. Therefore, with the hilly terrain in Hong Kong and with a long thunder storm season, using SFNs in Hong Kong is fraught with challenges.

4.2.2 There are reception problems involved with each of the frequencies assigned to the proposed SFNs –

- SFNs Channel (Ch.) 35 and Ch.37 – Most VCR sets use Ch. 35 to 37 as playback channels. For those TV sets without AV inputs, operators would have to ask viewers to re-tune their TV sets to use an alternative empty channel for playback. If there were no alternative channel available, consumers would have to change their TV sets. It would be costly for consumers to do so.
- SFN Ch. 47 – As the same frequency is being used by TV stations in Guangdong, there would be interference in high elevation areas such as the Peak
- SFN Ch. 62 - There would be distribution loss in IBCCDS and upgrades of equipment, such as distribution amplifiers and feeder cables and/or group antennae, etc., might be required.

4.3 For interference assessment, TVB and ATV had jointly requested more technical details on the proposed frequency plan for Hong Kong and raised

our concerns on interference from Guangdong and adjacent areas on the Mainland. OFTA had kindly provided extracts from the PA Consultant's report (PA Report) on technical details on the frequency plan and proposed DTT networks in Hong Kong on 30 January 2004.

**TVB and ATV will be submitting a supplementary response at a later date to provide comments and interference assessment of the Government's proposed DTT frequency network plan, after a more thorough study of extracts from the PA Report.**

## **5 Simulcast Arrangements and Multiplex Licensing**

### **The Assigned 50% MFN for Simulcast**

5.1 ***We accept the Government's direct assignment of the 50% of the MFN for the digital simulcast of our Free TV programme services for the period of our existing licence (from 1 December 2003 to 30 November 2018); but we do not accept the prescribed conditions in their entirety.***

5.1.1 MFN is a more tested and comparatively more reliable transmission technology as most operating DTT networks in other parts of the world are MFNs.

5.1.2 SFNs are more expensive to build and maintain and potentially not as reliable. In case of malfunction of GPS reception, signals would lose synchronisation causing network failure. In a recent DTT technical training course in Hong Kong, network experts pointed out that **it would be a challenge to build a SFN in an environment such as Hong Kong.**

5.1.3 With the technical reliability of MFN and existing broadcasters' experience in operating multi-frequency networks, the digital simulcast of TVB Jade and Pearl and ATV Home and World on

MFN would ensure that the people of Hong Kong could enjoy free and trusted TV services in digital format at the introduction of DTT.

### **Reservations on the Prescribed Conditions**

**5.2 The Government has prescribed three conditions for the direct assignment of 50% of the MFN to TVB for the simulcast of our Free TV programme channels (paragraph 22 of the 2<sup>nd</sup> Consultation) on which we have considerable reservations.**

#### **5.3 Condition (a) Launch and Coverage Deadlines**

5.3.1 As a general principle we hope the Government would apply the same launch and coverage requirements to new licensees as it does to existing broadcasters.

5.3.2 As stated earlier, TVB recommends strongly the use of the same technical standard as the Mainland's, therefore, the launch date can only be set after the Mainland had announced its decision on the choice of DTT standard.

5.3.3 The "territory-wide" coverage deadline should be adjusted depending on the launch date allowing at least 2 years from the the launch date to achieve territory-wide coverage.

5.3.4 Prescribed territory coverage deadline can only be met if there are no problematic interference from transmissions from other multiplexes and across the border; and there are no hold-ups in procedures involving different Government departments.

5.3.5 The most important issue concerning simulcast, and DTT take-up, is not network coverage but reception. There are obvious problems in channel congestion within In Building Coaxial Cable Distribution Systems (IBCCDS), which are trying to accommodate terrestrial, in-building services (such as close-circuit security

channels, etc.), cable, satellite master antenna television systems (SMATV) and pay TV channels. The situation would be worse with the adoption of DTT with even more channels.

***The Government must draw-up provisions/regulations to ensure that the last mile in DTT transmission is not a stumbling block to territory-wide reception.***

## 5.5 Condition (b) Sharing of Facilities

5.5.1 ***TVB is fully open to the sharing of facilities such as equipment rooms and antenna mounting towers, but we must make it clear that the sharing of facilities would be according to fair commercial terms.***

Though transmission sites are on lease from the Government, the buildings and antennae are the broadcasters' property, and both TVB and ATV are commercial broadcasters answerable to shareholders.

5.5.2 Furthermore, TVB and ATV have invested much financial, manpower and other resources, in developing the analogue terrestrial transmission network the know-how of which forms the basis for the DTT transmission network plan proposed by the Government. This Know-how is valuable intellectual property.

## 5.6 Condition (c) Promotion of DTT take-up

5.6.1 ***The burden of promoting DTT take-up should be shared by programme services licensees, additional services licensees and Government as well as multiplex operators. TVB recommends that a committee should be set up for the promotion of DTT in Hong Kong. The promotion costs and efforts should be coordinated and shared by members of the***

***committee, i.e. the Government, multiplex operators and programme service providers and additional services providers using the multiplexes.***

### **Direct Assignment insufficient to Existing Operators**

**5.7 *We are strongly of the view that existing broadcasters should be given direct assignment of more than just one multiplex which is only sufficient for the digital simulcast of existing Free TV services in SDTV.***

5.7.1 Digital terrestrial TV is possible in Hong Kong only because of the strong infrastructure of transmission facilities and TV sets built up over more than 35 years by the existing analog free TV broadcasters. It would not be possible to launch DTT otherwise. When new broadcast frequencies are made available and the new networks ride on the existing transmission and reception infrastructure built up by incumbent broadcasters, it is only commercially fair that preferential access be given to these players who provided all the investment to build this infrastructure in the first place.

5.7.2 The direct assignment of half a multiplex for simulcasting of existing Free TV services is not considered preferential treatment to existing broadcasters by any measure because it is an essential requirement for the transition from analog to digital.

5.7.3 The cost of operating half a multiplex is not much less than the cost of operating a full multiplex or indeed the cost of operating several multiplexes. Requiring TVB to invest in digital multiplex operation but providing only half a multiplex bandwidth is robbing us of the economy of scale in our operations. Such treatment is most unfair to existing broadcaster who built the infrastructure and



who have been assisting the Government fully in working towards DTT, such as the technical trials.

- 5.7.4 Furthermore, the existing analogue networks would be affected as some of the frequencies in use have to be switched-off to make way for the MFN. That would mean extra costs and resources for existing operators to continue their analogue service as well.

### **Request for Direct Assignment for 2 SFNs to Provide HDTV and Enhanced-TV Services**

- 5.8 ***We propose that TVB should be assigned 2 SFNs on top of the 50% of one MFN in order for TVB to develop and produce HDTV and enhanced TV programmes and to provide maximum enhanced coverage of the 2008 Beijing Olympics.***

5.8.1 HDTV production is rapidly becoming the norm. It is predicted that half of all TV production equipment will be HD compatible in 5-7 years and nearly all TV production equipment will be HD compatible in 10-15 years. HDTV is compulsory for local TV production to maintain Hong Kong's leading role in Chinese-language TV production and its competitive edge in the world market.

5.8.2 Enhanced-TV would be another attractive feature for DTT which can encourage the development of Television-commerce (T-commerce) and programme and advertising related data services which would be beneficial to the economy as well as the audience.

5.8.3 TVB is the largest Chinese-language programme producer in the world and has invested heavily on digital production – the new TVB City at Tseung Kwan O alone involved an investment of HK\$2.2 billion. TVB should be encouraged to move towards

HDTV production and the Government should award additional multiplexes for TVB to broadcast their own HDTV programmes and produce enhanced-TV content.

5.8.4 With TVB's established branding and viewers' loyalty, TVB's broadcast of quality local and international programmes in HDTV would be an attractive incentive and a driver of DTT adoption, helping to speed-up take-up rate, and early analogue switch-off. It would be a win-win for all -- industry, economy and the public.

5.8.5 With TVB's experience in event programme production and broadcast and years of experience in Olympics coverage, TVB is in a position to provide world-class enhanced-TV coverage and broadcast of the 2008 Beijing Olympics, including the possibility of HDTV. Such high quality coverage will provide a boost to DTT adoption and will also be appropriate given the national importance of the 2008 Beijing Olympics and Hong Kong's showcase role in the Nation.

### **Multiplex Licensing**

5.9 While the proposed licensing framework was based upon the principle of separate licensing for Multiplex Operators, Programme Services Providers and Additional Services Providers, the Government must take special care in drawing up the licensing criteria to realise the professed benefits of the introduction of DTT in Hong Kong.

5.9.1 ***In the Government's licensing regime, special considerations must be given to the provision of quality free TV programme services in the award of DTT multiplex licences.***

## 5.9.2 HDTV

***We recommend that there should be guaranteed availability of high definition TV (HDTV) services so that DTT introduction truly provides a new product benefit to consumers instead of merely providing more TV channels. More TV channels is a product benefit which is already available via satellite, cable, broadband services and other platforms.***

If the Government examines the advantages of various digital TV platforms carefully, it would find that other platforms would have the capacity and be much more suitable in delivering quantity of channels. In effect, one could easily find out from the BA website that Satellite, cable and broadband services in Hong Kong are already delivering around 200, pay and free, channels to viewers in Hong Kong.

- 5.10 ***As separate licensing of multiplex operation and programme provision is a highly complicated process, we can only comment on the Government's envisaged multiplex licensing criteria after further details are known. We urge the Government to provide further details and opportunity for further consultation before finalising the licensing criteria.***

### **Review of Related Legislation**

- 5.11 As the Government has announced that a public consultation on the review of regulatory structure and regime of the telecommunications and broadcasting industries early 2004 (from the Public Consultation on Digital 21 2004 Strategy), ***TVB urges the Government to map out the DTT licensing framework after the completion of the comprehensive review.***

5.12 ***In the forthcoming review, the Government must also review the requirements and licensing conditions of Terrestrial Free TV Programme Services in the context of the introduction of DTT and future broadcasting and telecommunications landscape.***

***In particular, the Government must make provisions to enhance the Free TV business model in the digital era to ensure the continued availability of Free TV.***

5.12.1 Existing terrestrial Free TV Programme Services must compete with new and existing programme services, Free or Pay, on the DTT and other platforms for audience. In view of the review's objective to move towards convergence and deregulation, ***for existing programme service providers to compete on a level playing-field, TVB and ATV's programme service licence requirements on quota and "positive" programme should be lifted; and programme and advertising restrictions should be relaxed.***

5.12.2 ***The Government must assure that whatever regulations, restrictions and requirement, etc., imposed on free TV licensees should be the same whether transmitted in analogue or digital, across DTT, satellite, broadband or other platforms or delivery means.***

5.13 ***Cross platform copyright issues must be addressed. The Government must draw up legislation to protect programme service providers using the DTT platform from unauthorised zapping of programmes, commercials and enhanced-TV features as well as unauthorised insertions of materials/features not originally broadcast by the programme service provider.***

## **6 Analogue Switch-off and Other Issues**

- 6.1 *TVB agrees in principle on the proposal that a review would be conducted within five years of the commencement of simulcast or when penetration of DTT reached 50% whichever is earlier to decide on analogue switch-off time. However, since the average number of sets in Hong Kong has reached about 2 sets per household, we suggest that penetration rate should be defined as 50% of all sets instead of all TV households.*
- 6.2 *As investment in a multiplex operation is a long-term investment, Government should provide assurances on the broadcasting policy framework after analogue switch-off.*

## **7 Conclusion**

- 7.1 *Television Broadcasts Limited believes that the adoption of DTT and successful transition from analogue to DTT would happen only when there are tangible benefits and substantial incentives which outweigh the inconvenience and costs to consumers.*
- 7.2 *In the transitional stage, the people of Hong Kong must be able to receive both the analogue and digital signals without interference before they can appreciate and enjoy the benefits of DTT.*
- 7.3 *TVB believes that the adoption of the National DTT Standard, the same standard as the Mainland's, and not the proposed "Market-led" approach, should be the way forward. Inexpensive STBs and idTVs*

***available in Mainland pricing would be an incentive for DTT adoption. It would also facilitate greater economic integration with the Mainland.***

***7.4 And, the Government should encourage the continuing development of Free TV in Hong Kong for the benefit of the people and faster DTT adoption. The Government should award more multiplex capacity for existing Free TV services to offer HDTV which would provide a tangible and new benefit for the consumer; and the Government must make provisions to enhance the Free TV business model in the digital era to ensure the continued availability of Free TV.***

7.5 As always, Television Broadcasts Limited would welcome the Government's consultation, formal or informal, at all stages of the DTT development and roll-out process. TVB would continue to do our best in providing constructive comments and practical advice, thus contributing to the success of DTT for the people and economy of Hong Kong.

## **Annex 1**

### **Summary of Views and Recommendations from TVB's Response to the Second Consultation on Digital Terrestrial Broadcasting in Hong Kong**

(5 March 2004)

***TVB urges the Government to give the strongest possible consideration to the fact that it is the consumer who has to pay for the transition from analogue to digital terrestrial television (DTT).***

***TVB therefore strongly believes that the success of DTT in Hong Kong depends critically on the Government instituting policies which maximise the benefits of DTT for the public and minimises the cost and speed-up DTT adoption aiming for earlier analogue switch-off.***

TVB's comments and recommendations on the Second Consultation on Digital Terrestrial Broadcasting in Hong Kong (2<sup>nd</sup> Consultation) are summarised as follows:

1. ***TVB strongly disagrees with the proposed "Market-led" – "Each-operator-to-decide" – approach to the decision on the DTT Standard for Hong Kong:***
  - ◆ ***It would be costly besides inconvenient for the people to receive services across the multiplexes using different standards – multiple set-top boxes, idTVs and fixed and mobile multimedia reception devices; unplugging and re-plugging STBs; and more expensive and cumbersome multi-system set-top boxes and reception devices which might not be available for quite some time.***

- ◆ *It would cost consumers even more to keep up with the changes if multiplex operators were to change standards due to market competition.*
- ◆ *It would slow-down DTT adoption.*
- ◆ *in the context of Closer Economic Partnership Arrangement with the Mainland (CEPA) and other policies to help Hong Kong to harness the potential of the Mainland Market, the CTB's recommendation of adopting a DTT standard possibly different from the Mainland's and forgoing all the possible benefits of using the National standard would simply be against the professed policy of Greater Economic Integration with the Mainland and out of sync with policy directions in the Digital 21 Strategy 2004.*

**2. *TVB recommends that Hong Kong must have one single DTT standard for Hong Kong; and that standard must be the same standard as the Mainland's, whether China adopts its own newly developed standard, or any prevailing technical standard:***

- ◆ *Having the same DTT standard would enable the people and Hong Kong to enjoy all the cross-border convenience, inexpensive appliances, multimedia services developed for the greater Hong Kong-China market and economic benefits of greater economic integration with the Mainland.*
- ◆ *Those benefits, in turn, would help to speed-up DTT adoption and enable earlier analogue switch-off and earlier redeployment of analogue frequencies.*
- ◆ *With the same technical standard, telecommunications, broadcasting, information and technology and other related industries in Hong Kong would be able to participate and*



*contribute to the Nation's DTT development. Hong Kong would perhaps be able to take a leading role in the development of commercial interactive enhanced-TV applications for the Country.*

3. *In order for Hong Kong to be assured of having a common DTT standard with the Mainland, TVB recommends that the Hong Kong DTT launch date to be set after the Mainland has announced its choice of standard. That means the Government must not mandate 2006 as the launch date.*

◆ *The launch date would be less than a year's difference – China's aim is to have maximum coverage of the 2008 Beijing Olympics via DTT. That means a decision on the technical standard would have to be made in 2004 or 2005.*

◆ *Hong Kong's image would not be affected nor deemed as "behind" when digital services on other platforms, such as Cable, Satellite and Broadband, had been launch and the people of Hong Kong have been enjoying more than 200 channels, free or pay.*

*Furthermore, Hong Kong's decision on mapping out a DTT launch timetable after knowing the Mainland's decision on the National DTT standard would be seen as a wise and forward-looking decision which maximises the potential of economic integration with the Mainland market and confers great consumer benefits, thus enhancing the confidence of DTT adoption in Hong Kong. We strongly believe that experts in DTT adoption strategy would unanimously concur with our view.*

◆ *The success for DTT is not early introduction but early analogue switch-off.*

4. ***The proposed frequency plan have inherent problems for using the MFN and SFN technology and in the frequencies assigned to each multiplex.***

***TVB, together with ATV, will be submitting a supplementary response at a later date to provide comments and interference assessment of the Government's proposed DTT frequency network plan after a more thorough study of extracts of the PA Consultant Group's report kindly provided by OFTA.***

5. ***TVB believes that assigning the MFN for the digital simulcast of Free TV programme services is appropriate since MFN is a more tested technology and reliable, plus existing broadcasters have experience in operating multi-frequency networks.***

6. ***TVB accepts the Government's direct assignment of the 50% of the MFN for the digital simulcast of our Free TV programme services for the period of our existing licence (from 1 December 2003 to 30 November 2018), but has considerable reservations on the prescribed conditions entailed:***

- ◆ ***Simulcast launch date should be decided when the China DTT standard had been decided and territory-wide coverage in-step accordingly. As a general principle we hope the Government would apply the same launch and coverage requirements to new licensees as it does to existing broadcasters.***

- ◆ ***TVB is fully open to the sharing of facilities such as equipment rooms and antenna mounting towers, but we must make it clear that the sharing of facilities would be according to fair commercial terms.***

- ◆ ***The cost and efforts for the promotion of DTT take-up should be shared by the Government as well as all multiplex operators,***

*programme service providers and additional services providers. And, TVB suggested that a committee should be set up for coordinating such efforts.*

**7. We are strongly of the view that existing broadcasters should be given direct assignment of more than just one multiplex which is only sufficient for the digital simulcast of existing Free TV services in SDTV:**

- ◆ Digital terrestrial TV is possible in Hong Kong only because of the strong infrastructure of transmission facilities and TV sets built up over more than 35 years by the existing analog free TV broadcasters.
- ◆ The direct assignment of half a multiplex for simulcasting of existing Free TV services is not considered preferential treatment to existing broadcasters by any measure because it is an essential requirement for the transition from analog to digital.
- ◆ The cost of operating half a multiplex is not much less than the cost of operating a full multiplex or indeed the cost of operating several multiplexes. Requiring TVB to invest in digital multiplex operation but providing only half a multiplex bandwidth is robbing us of the economy of scale in our operations. Such treatment is most unfair to existing broadcaster who built the infrastructure and who have been assisting the Government fully in working towards DTT, such as the technical trials.
- ◆ Existing analogue networks would be affected as some of the frequencies in use have to be switched-off to make way for the MFN. That would mean extra costs and resources for existing operators to continue their analogue service as well.

8. ***TVB proposed that the Government should award 2 SFNs on top of the 50% MFN to TVB in order for TVB to develop and produce HDTV and enhanced-TV programmes:***
- ◆ ***It would provide incentive for TVB to produce HDTV programmes if TVB has its own distribution network, its own multiplexes, to broadcast HDTV programmes***
  - ◆ ***HDTV production is rapidly becoming the norm. TVB is the World's largest producer of Chinese language TV programming. To maintain Hong Kong's competitive edge, the Government should encourage the industry and TVB to produce HDTV programmes.***
  - ◆ ***With its branding and audience loyalty, TVB's Free TV services broadcasting in HDTV would be a driving force in the adoption of DTT in Hong Kong.***
  - ◆ ***With TVB's experience in event programme production and broadcast and years of experience in Olympics coverage, TVB is in a position to provide world-class enhanced-TV coverage and broadcast of the 2008 Beijing Olympics, including the possibility of HDTV. Such high quality coverage will provide a boost to DTT adoption and will also be appropriate given the national importance of the 2008 Beijing Olympics and Hong Kong's showcase role in the Nation.***
9. ***In the Government's multiplex licensing regime, special considerations must be given to the provision of quality free TV programme services in the award of DTT multiplex licences.***
10. ***TVB recommends that there should be guaranteed availability of high definition TV (HDTV) services so that DTT introduction truly provides***

***a new product benefit to consumers instead of merely providing more TV channels.***

- 11. As separate licensing of multiplex operation and programme provision is a highly complicated process, we can only comment on the Government's envisaged multiplex licensing criteria after further details are known. We urge the Government to provide further details and opportunity for further consultation before finalising the licensing criteria.***
- 12. TVB urges the Government to map out the DTT licensing framework after the proposed (consultation to be conducted early 2004) comprehensive review of the regulatory structure and regime of the telecommunications and broadcasting industries.***
- 13. The Government must make provisions to enhance the Free TV business model in the digital era.***

***TVB also urges the Government to review licensing requirements and conditions of Terrestrial Free TV Programme Services in view of the competition from Free and Pay services after the opening up of the DTT market – quota and “positive” programme requirements should be lifted and programme and advertising restrictions relaxed; and restrictions and requirements on Free TV programme services on all platforms should be the same for existing Free TV services to compete with new players.***

- 14. The Government must draw up legislation to protect programme service providers using the DTT platform from unauthorised zapping of programmes, commercials and enhanced-TV features as well as unauthorised insertions of materials/features not originally broadcast by the programme service provider.***

- 15. TVB agrees in principle to have a review to decide on the date for analogue switch-off – to be conducted within 5 years of commencement of simulcast or when penetration, in terms of number of TV sets, of DTT reached 50% , whichever is earlier. However, since the average number of sets in Hong Kong has reached about 2 sets per household, we suggest that penetration rate should be defined as 50% of all sets instead of all TV households.**
- 16. As investment in a multiplex operation is a long-term investment, Government should provide assurances on the broadcasting policy framework after analogue switch-off.**
- 17. TVB agrees that a separate public consultation should be conducted on the standard of STBs and interoperability issues.**

## **Annex 2**

### **Television Broadcasts Limited**

*Presentation Paper to*

*The Legco Panel on Information Technology and Broadcasting on  
The Second Consultation on Digital Terrestrial Broadcasting in Hong Kong  
For the Meeting on 8 March 2004*

Honourable Members,

Television Broadcasts Limited (TVB) thanks the Panel for the opportunity to present our views on the Second Consultation on Digital Terrestrial Broadcasting in Hong Kong.

*TVB strongly believes that the success of DTT in Hong Kong depends critically on the Government instituting policies which are designed to achieve the following objectives:*

- ◆ *To maximise the benefits of DTT for the people and economy of Hong Kong, and*
- ◆ *To speed-up DTT adoption aiming for earlier analogue switch-off.*

*Experience gained from the launch of DTT in other markets indicates clearly that the introduction of DTT would fail without well thought out policies and adequate consumer incentives. The Government's Second Consultation Paper does not contain enough such considerations.*

*TVB believes that the following recommendations are essential for the success of DTT in Hong Kong:*

1. *TVB recommends that Hong Kong must have one single DTT standard.*

*TVB strongly disagrees with the proposed "Market-led" – "Each-operator-to-decide" – approach to the decision on the DTT Standard for Hong Kong:*

- ◆ *If different operators use different DTT standards, consumers would have to purchase one set-top-box (STB) or integrated*

*digital TV set (idTV) for each standard. This would be costly and inconvenient for the public and would also lead to confusion.*

- ◆ *Multi-system STBs and digital TV sets will not be available until market maturity and such multi-system appliances will cost considerably more.*
- ◆ *It would cost consumers even more to keep up with the changes if multiplex operators were to change standards due to market competition.*
- ◆ *The above inconvenience and costs would definitely slow-down DTT adoption and lead to the delay of analogue switch-off.*

2. *Hong Kong's DTT standard must be the same standard as the Mainland's, irrespective of whether the Mainland adopts its own newly developed standard or any other existing standard.*

- ◆ *Having the same DTT standard would mean inexpensive STBs and idTVs for the people of Hong Kong. This would be a tremendous incentive for DTT adoption.*
- ◆ *Mobile reception and good quality portable reception are important new consumer benefits of DTT. As two-way travel between Hong Kong and China is now an essential and important part of daily life, a common Hong Kong-China DTT standard would be of great benefits to both Hong Kong consumers and visitors from the Mainland. Indeed we expect more and more consumers would consider this a necessity because in the digital era, TV will be relied upon to provide not only entertainment but also vital information services.*

*Failure to recognise such highly likely developments and thus the importance of a common standard is indeed short-term thinking.*

- ◆ *Having the same DTT standard would mean that multimedia applications, middleware and standard-dependent devices*



*developed for Hong Kong by our telecommunications, broadcasting and IT industries would find an additional huge market in China because of our language-compatibility. This would induce more investment in these industries and bring about great economic benefits for Hong Kong.*

◆ *A common DTT standard will undoubtedly contribute to greater economic integration with the Mainland. The importance of this contribution cannot be under-estimated because digital technology is advancing and converging at an unstoppable speed.*

◆ *All the above benefits, in turn, will speed-up DTT adoption.*

3. *In order for Hong Kong to be assured of having a common DTT standard with the Mainland, we recommend that the Hong Kong DTT launch date to be set after the Mainland has announced its choice of standard. Hong Kong's DTT launch will not be rendered uncertain because Mainland China's launch of DTT is clear – It is tied to the objective of providing a world-class showcase for the 2008 Beijing Olympics.*

◆ *Hong Kong's decision would be seen as a wise and forward looking decision which maximises the potential of economic integration with the Mainland market and confers great consumer benefits, thus enhancing the confidence of DTT adoption in Hong Kong. We strongly believe that experts in DTT adoption strategy would unanimously concur with our view. After all, the success of DTT is not early introduction but rapid adoption.*

4. *We recommend that there should be guaranteed availability of high definition TV (HDTV) services so that DTT introduction truly provides a product benefit that is new and currently unavailable to the consumer. The vital importance of product differentiation as a tool for the adoption of new technology is proven and undeniable.*

*The people of Hong Kong have been enjoying digital services with close to 200 SDTV channels on other platforms, such as Cable, Satellite and Broadband. Just providing more Standard Definition TV channels is insufficient to drive adoption.*

5. *Free TV can be a strong consumer incentive for DTT adoption as seen in the example of FreeView in the U.K. The Government must make provisions to enhance the Free TV business model in the digital era.*

◆ *The provisions include the relaxation of programme and advertising regulations and the provision where necessary of bandwidth for high definition and enhanced TV Services.*

◆ *Only by making the advertising-funded business model of Free TV more robust in the highly competitive digital era, can the healthy provision of Free TV be ensured.*

◆ *We shall be making separate recommendations to the Government in this regard as part of the overall broadcasting and telecommunications review.*

6. *As to the Government's proposed frequency plan, TVB agrees with the Government on the principle of no interference – there should be no interference on existing and future telecommunications and broadcasting services; and with services in neighbouring areas – to ensure coverage and good-reception of the DTT networks.*

*The speeding-up of DDT adoption should not be at the expense of the degradation of existing analogue services which are part of Hong Kong's emergency system besides being the people's major source for news, information and entertainment.*

*TVB, together with ATV, will be submitting a supplementary response at a later date to provide comments and interference assessment of the Government's proposed DTT frequency network plan after a more thorough study of extracts of the PA Consultant Group's report kindly provided by OFTA.*

- 7. *The Government is an important player in the successful introduction of DTT in Hong Kong. The costs and efforts for the promotion of DTT take-up should be shared by the Government as well as all multiplex operators, programme service providers and additional services providers. And, TVB suggested that a committee should be set up for coordinating efforts in promoting the adoption of DTT in Hong Kong.***

The above are our primary recommendations on how Hong Kong could harness the opportunities offered by DTT for the benefits of the people and the economy. Our recommendations also help to define the Government's role in steering Hong Kong towards a world-leading pace of DTT adoption.

For TVB's response on other matters in the Second Consultation on Digital Terrestrial Broadcasting, Honourable Panel Members can refer to our forthcoming Response to the Communications and Technology Branch (CTB) dated 5 March 2004.

Thank you.

1 March 2004

# Appendix 1

