



Hong Kong Cable Television Limited
Response to Digital Terrestrial Broadcasting in Hong Kong
Consultation Paper

Introduction

Hong Kong Cable welcomes the opportunity to respond to the consultation paper. We believe that there should be a minimum common digital standard such that all digital set top boxes and idTVs are able to receive and display free-to-air broadcasts transmitted in the clear. However, we are of the opinion that each digital platform - terrestrial, cable and satellite - should be able to use its own conditional access system and associated services including EPG.

We consider that the free-to-air market has been artificially constrained due to UHF spectrum limitations and think it appropriate that DTT should be used to introduce a greater degree of competition into this marketplace. In our view no multiplex operator should be allowed to submit an application for more than one multiplex and each multiplex should be required to carry at least two domestic free television programme services

The paper does not discuss the implications of DTT on other delivery platforms. A major concern for other platforms will be the competitive benefits that DTT will gain from the carriage of existing domestic free television programme services. Irrespective of the programming provided by other licensees, viewers will still wish to retain access to the existing free-to-air services. Therefore it will be essential for other delivery platforms to make these services available to their viewers. To ensure non-discriminatory treatment it is essential that the alternative platforms are able to carry existing domestic free television programme services, if they so choose, to enable viewers connected to the alternative platform to be able to receive these services directly over the chosen delivery platform.

To facilitate non-discriminatory carriage of domestic free television programme services, domestic free television programme licensees should be required to co-operate with other delivery platforms, i.e. platforms other than DTT, and provide them with the necessary assistance and information so that the other operators are able to transcontrol without incurring unnecessary or unreasonable expense.

We have responded in detail to the key proposals below.

2. Response to Specific Questions

The numbering below refers to that used in Chapter 2 of the consultation paper.

Regulatory Proposals for Digital Terrestrial Television (DTT)



2.1 *To invite views from the industry and the community on the proposal to adopt Digital Video Broadcasting Terrestrial (DVB-T) as the DTT standard for the Hong Kong environment (paragraph 4.12).*

The paper explains the rationale for the selection of DVB-T as a standard for DTT transmissions. We trust that the selection was made after careful consideration of the technical results of the trials conducted by Government and the two terrestrial television broadcasters.

2.2 *To invite views from the industry and the community on the proposal to adopt Dolby AC-3 as the sound system for the DVB-T standard in Hong Kong (paragraph 4.17).*

The paper explains the rationale for the selection of DVB-T as a standard for DTT transmissions. We trust that the *on the proposal to adopt Dolby AC-3 as the sound system for the DVB-T standard in Hong Kong* was made after careful consideration of the technical results of the trials conducted by Government and the two terrestrial television broadcasters.

2.3 *Unlike Single Frequency Network multiplexes, the Multiple Frequency Network multiplexes should not be mandated to achieve territory-wide coverage to avoid possible disruption to existing analogue TV services (paragraph 4.7).*

HKC was not a party to the discussions and technical tests and does not consider it is in a position to make a meaningful comment.

2.4 *To require multiplex licensees to encourage video cassette recorder (VCR) users to make use of the audio-visual input/output to replace the radio-frequency (RF) connection (paragraph 4.9).*

HKC believes the paper makes light of the problems that could arise from the use of channels 35 and 37. Many viewers will have little understanding of the issues and will need help to implement corrective action. We consider that it is not sufficient to place an undefined obligation on the users of these spectrums to encourage viewers to make use of A/V connections. There should be a positive licence requirement for the licensees to provide assistance to resolve any difficulties with VCR tuning as a condition of making the spectrums available for DTT use. Indeed the proposals to resolve this issue should be one of the factors taken into account during the licensing (franchising) process.

2.5 *To license and regulate set-top boxes and integrated TVs in relation to conditional access systems under the Telecommunications Ordinance (Cap. 106) (paragraph 4.20).*



The consultation paper deals predominantly with DTT. We consider the interoperability referred to in paragraph 4.21 should refer solely to interoperability of DTT multiplex operators. We consider that each digital platform - terrestrial, cable and satellite - should be able to use its own conditional access system and associated services including EPG. This would be consistent with the recommendation of the Information Infrastructure Advisory Committee (IIAC) Task Force on Technical Standards which said that Government should permit DTH licensees to make private decisions regarding which technology they use for the delivery of their services...”.

2.6 *High-definition television and mobile reception should not be made mandatory at the initial stage of implementation of DTT so as to allow more operational flexibility for multiplex operators (paragraph 4.22).*

Whilst HKC would support this proposal in the short term, we believe there should be a requirement on the existing domestic free television broadcasters to introduce HDTV services for a percentage of their broadcasting hours within an agreed time scale. This would promote the benefits of digital services and encourage the introduction of HDTV receivers. Without the provision of HDTV services by the domestic free television broadcasters it is unlikely that other Hong Kong licensees would have the viewership to generate interest in HDTV and therefore delay the introduction of such benefits to the viewing public of Hong Kong.

HKC will, when it launches its digital service, wish to broadcast HDTV services if adequate IBCCDS capacity is made available to it to carry such services.

2.7 *To simulcast the existing four terrestrial television programme service channels in analogue and digital format. The concerned multiplex operators should be obliged to promote the take-up rate of digital terrestrial television so that the frequency spectrum currently used for analogue broadcast could be released as soon as possible (paragraph 4.23).*

We agree with the simulcast proposal. We consider the obligation that requires the multiplex operator to promote the take-up of DTT to be one of the most crucial factors to be taken into account in the selection of the multiplex operator.

2.8 *To conduct a review in 5 years following commencement of simulcast or when the penetration of digital terrestrial television reaches 50% of all television households, whichever is the earlier, whether and when a switch-off date should be set for analogue broadcast (paragraph 4.24).*

HKC agrees with a 5 year (or earlier) review to assess the switch-off date for analogue. We would however point out that the transition from analogue to digital will be driven not only by DTT but also by digital cable and digital satellite. For example, if HKC converts an



analogue pay TV subscriber to digital then with appropriate regulatory and technical arrangements the subscriber should also be able to receive the digital domestic free channels. In this case the driver for conversion was cable and not DTT. Any review for the switch-off of analogue would need to have a wider remit than DTT.

Licensing Approach for DTT

2.9 *To adopt “separate licensing” approach for the three kinds of services in relation to DTT, viz. multiplex operator, programme service provider and additional service provider (paragraph 5.7).*

We realise that Government wishes to use the separate licensing model. Such a model is based on the telecoms practice which, in our view, is not necessarily appropriate for the broadcasting industry. The separate licensing model works well where the product being sold is carriage. We are not convinced that it is equally successful for broadcasting where the product is content and NOT carriage. The arrangement puts the multiplex operator in a quasi “common carrier” role and broadcaster one step removed from the consumer. This is not, in our view, the most effective and efficient arrangement.

For DTT to be successful we believe it will be important that the multiplex operator licence is held by the programme provider whose programming will drive the business. Equally the same programme provider should be encouraged to provide interactive services to ensure that the benefits of convergence offered by DTT are made available to the Hong Kong viewers.

Licensing Regime for DTT

2.10 *To adopt a set of extensive criteria to assess applications for multiplex licences (paragraph 6.2).*

HKC agrees with the three criteria listed but considers that there should be a fourth overriding criterion that prospective licensees should have, namely the financial strength and proven ability to establish and maintain the DTT service and see the project through to a successful completion”.

2.11 *Multiplex licences should be categorised as a carrier licence under the Telecommunications Ordinance (Cap. 106) (paragraph 6.3).*

We have already expressed our view, in response to 2.9, that we think separate licensing is inappropriate. We believe for DTT to be successful it is important that the multiplex licence is held by the programme provider whose programming will drive the business. Categorising the multiplex licence as a telecoms licence issued under the Telecommunications Ordinance is, in our view, not conducive to such an outcome.



2.12 *A company should not be allowed to submit applications for more than two multiplex licences (paragraph 6.4).*

We consider that the free-to-air market has been artificially constrained due to UHF spectrum limitations. We therefore think it appropriate that DTT should be used to introduce a greater degree of competition into this marketplace. We believe the proposal to allow one company to apply for two multiplexes does not go far enough to encourage competition. It is likely that the number of multiplexes readily available is possibly 4 and not the 6 mentioned in the paper because of IBCCDS system design. Allowing 2 multiplexes per licensee could result in the number of effective operators being reduced to two. This would again introduce very restricted competition in the free-to-air market. In our view no multiplex operator should therefore be allowed to submit an application for more than one multiplex.

Additionally, to further increase competition in the free-to-air market we consider that each multiplex should be required to carry at least two domestic free television programme services.

2.13 *To include the following general conditions, among others, in the multiplex licences to require the licensees to (paragraph 6.5) –*

- (a) provide multiplex service to programme services and additional services in non-discriminatory way,*
- (b) ensure all services are licensed,*
- (c) conform to relevant technical standards, and*
- (d) fulfill bid commitments.*

The non-discriminatory requirement in condition (a) is based on treating the DTT business in the same manner as the telecom industry and the multiplex operator effectively as a quasi common carrier. As we have argued earlier that we consider this to be inappropriate because DTT, like other television delivery systems, sells television programmes and not carriage. DTT, like subscription television before it, will only be successful if television programmes are sold to viewers, either directly by subscription or indirectly by selling airtime. DTT success will therefore depend on programming and not multiplex carriage. Carriage and content should be considered as a single entity.

Additionally in a digital environment the allocation of capacity (bit rate) is dynamic. Therefore how the capacity should be used is partially a programming scheduling function. For example, should a certain programme be broadcast in HDTV format rather than a multiple number of STV programmes. This decision is a scheduling/programming decision not a technical multiplexing decision. Separating the programming and multiplex operator function complicates this issue.



In our view the programming and multiplex provider functions are inextricably linked. We recommend strongly that the regulatory regime is not used to impose unnecessary and bureaucratic boundaries for the operation of the DTT business.

2.14 *Of the four categories of television programme services, only “domestic free television programme service” and “domestic pay television programme service” should be allowed to be carried on a multiplex during the simulcast stage (paragraph 6.7).*

We agree that the spectrum limitations are such that initially only television services targeted at Hong Kong and serving the whole Hong Kong television market should be carried by DTT. Additionally, to meet the requirement to increase competition in the free-to-air market, we consider that each multiplex should be required to carry at least two domestic free television programme services.

2.15 *The licence conditions for television programme services carried on a DTT multiplex should be similar to the general conditions in the existing domestic free or domestic pay television programme service licences, as the case may be (paragraph 6.8).*

We agree that in a technology neutral licensing regime they should be identical. The method of delivery should not be material. However, there may be a case on competition grounds for any new domestic free television programme services to have different conditions from existing licensees because of the market power of the incumbent operators.

2.16 *Subject to spectrum or other physical constraints, there should not be a ceiling on the number of licences to be issued for television programme services carried on DTT multiplexes (paragraph 6.9).*

In principle we would agree with this proposal subject to the comments we have made in response to 2.13.

2.17 *A domestic free/pay television programme service licensee should not be allowed to take up the bit-rate capacity of more than one multiplex (excluding the guaranteed slots allocated for simulcast services) (paragraph 6.9).*

We are not persuaded that this arrangement provides for a level playing field. We do not see any justification for existing domestic free television programme licensees to be treated more favourably than any other licensees and therefore believe the restriction of one multiplex per licensee should include and not exclude the slots allocated for simulcast.

2.18 *Licences for additional services should be categorized as Public Non-Exclusive Telecommunications Service licences issued under the Telecommunications Ordinance (Cap. 106) (paragraph 6.11).*



Treating non-television services as telecommunication services requiring PNETS licenses unnecessarily complicates the television licensing regime. Success of DTT will come from the multiplex operator, television programme service provider and additional service provider appearing as a single entity to the consumer. Separating the licensing arrangements as proposed in the paper is not conducive to this outcome.

2.19 *A multiplex licensee should be allowed to reserve a maximum of 25% of the multiplex capacity exclusively for the provision of additional services (paragraph 6.12).*

Because of the limited spectrum available for DTT we would support the proposal that no more than one STV channel per multiplex should be allocated for telecommunication services.

2.20 *To regulate the provision of electronic programme guide service under the competition provisions in the Broadcasting Ordinance (Cap. 562) and/or the Telecommunications Ordinance (Cap. 106), as appropriate (paragraph 6.14).*

We agree that EPG services have the potential to distort competition and therefore would support the proposal that they should be subject to anti-competitive regulation. We assume that because services accessed via the EPG could be either broadcasting or telecommunication services they would be subject to regulation under either the Broadcasting or Telecommunications Ordinances as appropriate. However, in our view it would be impractical for two regulators to be involved. Given that broadcasting is the major EPG user responsibility, EPG regulation should be undertaken by the BA.

Transition from Analogue to Digital Terrestrial Television

2.21 *To reserve “guaranteed slots” on two Multiple Frequency Network multiplexes for the simulcast of the existing free-to-air analogue television channels (paragraph 7.7).*

We agree that existing domestic free television programme services should be guaranteed simulcast channels but only on the following basis:

- i) the licensees should not be allowed to take up more than one multiplex including simulcast services, and
- ii) they should not be given carriage free of charge as proposed in paragraph 2.22 and 7.7.

2.22 *To require the two multiplex licensees mentioned in paragraph 2.21 to carry the existing free-to-air analogue television channels free of charge until the analogue services are switched off (paragraph 7.7).*



We have some difficulty in understanding why the existing free-to-air television broadcasters should not be responsible for the costs of establishing the transmission network which they will use to access their consumers. We consider a more balanced arrangement would be that the existing domestic free television service providers should be required to make a contribution to DTT distribution costs if they themselves are not awarded the multiplex licence which carries their service. Guaranteed slots should not mean free carriage.

See also other comments referring to other digital platforms below.

2.23 *To require that all the programme hours provided on the existing analogue channels should be simulcast on the guaranteed digital channels (paragraph 7.8).*

Such an arrangement is essential if existing broadcasters are being given preferential treatment with regard to guaranteed slots.

2.24 *To invite applications for multiplex licences as soon as possible with a view to commencing simulcast of analogue and digital terrestrial television services in end 2002 or early 2003 (paragraph 7.9).*

No comment.

Other digital platforms

Non-discriminatory carriage of domestic free services

Since the consultation paper focuses solely on DTT it does not discuss the implications of a new delivery platform (DTT) being established in relation to the other delivery platforms of cable and satellite. A major concern for other platforms will be the competitive benefits that DTT will gain from the carriage of existing domestic free television programme services. The existing services have been known and watched by the Hong Kong viewers for many years and have exceedingly high viewership levels. Irrespective of the programming provided by other licensees, viewers will still wish to retain access to the existing free-to-air services. Therefore it will be essential for other delivery platforms to make these services available to their viewers.

The carriage of existing free-to-air services by DTT will give DTT a huge marketing advantage over other delivery platforms. To ensure non-discriminatory treatment it is essential that the alternative platforms are able to carry existing domestic free services, if they so choose, to enable viewers connected to the alternative platform to be able to receive domestic free television programme services directly over the chosen delivery platform. The viewers would then be able to access the domestic free television programme services via the set top box and EPG of the delivery platform of their choice.



To ensure non-discriminatory treatment there should be a licence obligation placed on existing domestic free television services providers to make their services available to all licensed network operators on a non-discriminatory basis.

Provision of Transcontrol

Transcontrol is the process by which control of the digitally encoded broadcast stream is transferred from one operator to another. Transcontrol allows an operator to identify and remove the conditional access from an incoming digital service and replace it with his own. This may include for example substitution of the EPG. Such an arrangement is used in the UK, for example, to enable digital free-to-air services to be received by a cable operator and rebroadcast over the cable network utilising the conditional access and EPG of the cable operator.

HKC believes that transcontrol should be included in the regulation of digital broadcast services in Hong Kong. The domestic free television programme service licensees should be required to co-operate with other delivery platforms, i.e. other than DTT, and provide them with the necessary assistance and information so that the other operators are able to transcontrol without incurring unnecessary or unreasonable expense.

Hong Kong Cable Television Limited
28 February 2001