

## **Statement of the Communications Authority**

### **Assignment of Spectrum to Television Broadcasts Limited for the Provision of Its Licensed Domestic Free Television Programme Services From 1 December 2015 to 30 November 2027**

**12 May 2015**

#### **PURPOSE**

Having regard to the recommendations of the Communications Authority (“CA”) submitted under section 11(3) of the Broadcasting Ordinance (Cap. 562) (“BO”), the Chief Executive in Council (“CE in C”) decided on 12 May 2015 that the domestic free television programme service (“free TV”) licence of Television Broadcasts Limited (“TVB”) should be renewed under section 11(5) of the BO for another 12 years from 1 December 2015 to 30 November 2027 (both dates inclusive).

2. Following the decision of the CE in C to renew the free TV licence of TVB, the CA intends to address the assignment of the spectrum currently held by TVB. This Statement promulgates the decision of the CA to adopt an administrative approach to assign to TVB the broadcasting spectrum it currently holds, comprising two sets of frequency channels, one digital multiplex of the single frequency network (“SFN”) coupled with half of the capacity of one digital multiplex of the multiple frequency network (“MFN”) in 470 – 806 MHz of the Ultra High Frequency (“UHF”) band, for the provision of its licensed analogue and digital terrestrial television (“DTT”) services during the validity of its renewed free TV licence. The spectrum assignment also lasts for a period of 12 years, from 1 December 2015 to 30 November 2027 (both dates inclusive), to dovetail with the term of TVB’s renewed free TV licence.

## **LEGISLATIVE AND POLICY FRAMEWORK**

3. Under section 11(2) of the BO, a free TV licensee shall submit to the CA an application for the extension or renewal of its licence not less than 24 months before the expiry of the period of validity of a licence. Under section 11(3) of the BO, the CA shall, not later than 12 months before the expiry of the period of validity of a free TV licence, submit recommendations to the CE in C in relation to the extension or non-extension or renewal or non-renewal of the licence and, where appropriate, the associated conditions. Under section 11(1) of the BO, the CE in C may, during the validity of a free TV licence, extend or renew the licence.

4. Under section 32G(1) of the Telecommunications Ordinance (Cap. 106) (“TO”), the CA has the statutory duty to promote the efficient allocation and use of the radio spectrum as a public resource of Hong Kong. Section 32H(2)(c) of the TO empowers the CA to assign radio frequencies. The TO does not stipulate any procedure or statutory timeline concerning application for the use of spectrum, or consideration thereof by the CA. As a standard condition in a free TV licence, the licensee shall apply to the CA for approval for any substantial change in the means of transmission or transmission arrangements.

5. According to the above legislative framework, while the CA is the spectrum assignment authority under the TO, the authority for granting free TV licences under the BO rests with the CE in C. This division, whereby the CE in C decides whether or not to grant free TV licences and the CA decides the spectrum assignment has meant that the process for broadcasting service licensing has always been broadcasting licence led, with spectrum assignment being an enabling and supplementary function. Since the introduction of free TV services in Hong Kong some 40 years ago, spectrum for the provision of broadcasting services (“broadcasting spectrum”) has consistently been administratively assigned by the former Telecommunications Authority (“TA”) to operators upon the grant of free TV licences by the CE in C. The former TA when exercising his statutory powers to assign broadcasting spectrum under the TO, sought to dovetail his decision on spectrum assignment with the CE in C’s licensing decisions under the BO,

in order to ensure the provision of uninterrupted free TV services as licensed by the CE in C to the viewing public in Hong Kong.

6. Currently, a total of 42 channels (viz. Channel 21 – 62 each with a bandwidth of 8 MHz) in 470 – 806 MHz of the UHF band have been allocated for the provision of television (“TV”) broadcasting services and mobile TV service. Among these 42 channels, the former TA has assigned 40<sup>1</sup> of them administratively for supporting the analogue TV and DTT services of the two incumbents, namely Asia Television Limited (“ATV”) and TVB. The current spectrum assignments to ATV and TVB took effect upon the renewal of their free TV licences by the CE in C in December 2003 and were due to expire at the end of November 2018. There are no more channels in the UHF band available for territory-wide TV broadcasting service.

7. Turning to the policy framework, in April 2007, the Government promulgated the Radio Spectrum Policy Framework (“SPF”) which identifies the Government’s policy considerations in relation to spectrum management. The SPF states that Hong Kong’s spectrum policy and management aims to, inter alia, facilitate the most economically and socially efficient use of spectrum with a view to attaining maximum benefit for the community. The SPF also sets out, as a guiding principle of spectrum management, that the Government’s policy inclination is to use a market-based approach wherever the CA (or the former TA before the establishment of the CA) considers that there are likely to be competing demands from providers of non-Government services, unless there are overriding public policy reasons to do otherwise, in which case the CA should publish such public policy reasons. Through a statement issued in April 2007, the former TA undertook that, in exercising his statutory powers under the TO, the TA would give due regard to the SPF to the extent that there were no inconsistencies with the objectives and provisions of the TO. The SPF was promulgated four years after the most recent assignment by the former TA of broadcasting spectrum to TVB and ATV in 2003. This is therefore the first occasion when the CA has to give due regard to the SPF when deciding the

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<sup>1</sup> The remaining two channels, Channel 47 and Channel 62, were assigned for the provision of mobile TV service under the TO through auction, and for the provision of DTT service of Radio Television Hong Kong (“RTHK”) respectively.

approach to be adopted in relation to assignment of broadcasting spectrum.

## **THE FREE TV LANDSCAPE**

8. The existing free TV licences held by ATV and TVB will expire on 30 November 2015. The CA has, in accordance with the BO and the established procedures, completed a comprehensive assessment of the performance of ATV and TVB, and has, in accordance with section 11(3) of the BO, submitted to the CE in C in November 2014 its recommendations on the licence renewal applications of ATV and TVB. In respect of TVB, the CA recommended to the CE in C renewal of its free TV licence for a term of another 12 years on the basis of inter-alia its existing channel line-up and the continued use of spectrum as its transmission mode. As to ATV, the CA recommended to the CE in C non-renewal of its free TV licence.

9. On 1 April 2015, having regard to inter-alia the recommendations of the CA, the CE in C decided not to renew ATV's free TV licence and, for the purpose of complying with the requirement under section 8(1)(a) of Schedule 4 to the BO, to extend the term of ATV's existing licence to 1 April 2016, i.e. 12 months after the notice of non-renewal of its licence was served on ATV.

10. On the same day, having regard to the recommendations of the CA which had been submitted to the CE in C in January 2015, the CE in C decided to grant a free TV licence to HK Television Entertainment Company Limited ("HKTVE") for a term of 12 years, on the basis of inter-alia the use of a fixed network to transmit its free TV service as per the proposal of HKTVE in its licence application. HKTVE is required to broadcast, within 12 months from licence grant, viz. by 31 March 2016, a 24-hour Chinese channel; and within 24 months from licence grant, i.e. by 31 March 2017, a 16-hour English channel. The fixed network of HKTVE is projected to have only a coverage of 65% to 80% of the

households<sup>2</sup> in the initial six years of its service rollout. Following the licence grant, HKTVE has applied to the CA under its licence for permission to use spectrum as an additional mode of transmission.

11. Other than the above three free TV licensees, there are three applications for free TV licences, from Fantastic Television Limited (“Fantastic TV”), Hong Kong Television Network Limited (“HKTV”)<sup>3</sup> and Forever Top (Asia) Limited (“Forever Top”) respectively, which are either pending formal licence grant by the CE in C or under processing by the CA.

12. For Fantastic TV, it has obtained the approval-in-principle by the CE in C for its application for a free TV licence in October 2013, on the basis of inter-alia the use of fixed network as its transmission mode to provide its free TV services. The CA has submitted to the CE in C in January 2015 its recommendations on whether a free TV licence should be formally granted to Fantastic TV, and the licence application is under consideration by the CE in C.

13. As to the free TV licence application submitted in

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<sup>2</sup> Measured by “premises ready for service within 28 days”, which mean premises (to be specified by the licensee and accepted by the CA) to which the TV programme service of the licensee is capable of being provided by the licensee within 28 days after receipt of a request for the licensee’s service in writing from:

- (a) the building management offices/incorporated owners/owners of the relevant building in which the premises so specified are situated; and
- (b) the residents of the premises so specified (where applicable),

in which an agreement for access to the relevant building and premises so specified to carry out any work necessary for the provision or reception of the licensee’s service is obtained from (a) and (b) (where applicable), and in which the equipment necessary for receiving the licensee’s service via delivery means designated by the licensee is made available by (a) or (b).

<sup>3</sup> This refers to the free TV licence application submitted by HKTV in April 2014, which was the second application submitted by the applicant.

On 31 December 2009, HKTV (formerly City Telecom (HK) Limited) submitted its first free TV licence application to the former Broadcasting Authority (“BA”). The former BA processed the application in accordance with the BO and established procedures, and submitted its recommendation to the CE in C on 13 July 2011. On 15 October 2013, the Government announced that the CE in C decided to refuse HKTV’s application. On 6 January 2014, HKTV applied for leave to apply for judicial review against the CE in C’s decision to refuse its application. On 24 April 2015, the Court of First Instance handed down its judgement in quashing the CE in C’s decision and remitting it back to the CE in C for re-consideration.

April 2014 by HKTV, it is premised inter-alia upon the use of a combination of fixed network and mobile TV platform as its transmission mode. The CA is processing the application in accordance with the BO and established procedures.

14. The free TV licence application submitted in mid-April 2015 by Forever Top is premised inter-alia upon the use of spectrum as its transmission mode for the provision of its proposed free TV services. The CA is processing the application in accordance with the BO and established procedures.

15. As at the date of this Statement therefore, three operators are licensed under the BO to provide free TV services in Hong Kong – ATV and TVB which use spectrum as their transmission mode, and HKTVE which relies on a fixed network to provide its services. By 2 April 2016, ATV will no longer have a free TV licence. That will then leave TVB as the only spectrum-based licensee providing its free TV services to the Hong Kong viewing public, with HKTVE, the other free TV licensee, operating a fixed network (although it has also applied to the CA for permission to use spectrum as an additional mode of transmission) to deliver its services, unless before then more free TV licences are granted to other applicants.

## **ASSIGNMENT ARRANGEMENTS FOR SPECTRUM IN 470 – 806 MHz OF THE UHF BAND**

16. In considering the assignment arrangements for the broadcasting spectrum in 470 – 806 MHz of the UHF band which is currently assigned to TVB, the CA must give due regard to all relevant factors including the objectives and provisions of the TO and its statutory duties, the prevailing free TV landscape, the guiding principles in the SPF and the policy concerns of the Commerce and Economic Development Bureau (“CEDB”) as set out in the **Appendix**.

17. Irrespective of which spectrum assignment approach the CA chooses to adopt, whether market-based or administratively-assigned, bearing in mind its statutory duty under section 32G(1) of the TO to

promote the efficient allocation and use of the radio spectrum as a public resource of Hong Kong, the CA considers that only free TV licence holders under the BO should be eligible for assignment of broadcasting spectrum as only they are in a ready position to effectively and efficiently use that spectrum for the benefit of the viewing public. Given that spectrum is a scarce public resource, this eligibility criterion is of fundamental importance as otherwise it could lead to idleness of broadcasting spectrum or its wasteful hoarding.

18. Although the existing assignment of spectrum to TVB is not due to expire until the end of November 2018, the CA considers that it is important for it to decide now whether spectrum should be re-assigned to TVB to coincide with the CE in C's decision in respect of TVB's free TV licence renewal. As explained in paragraph 5 above, the licence renewal regime for free TV services has always been licence led. The CE in C has the statutory power to grant or renew free TV licences under the BO. The CA assesses applications for grant or renewal of free TV licences and then submits its recommendations to the CE in C. The CA requires the applicant to demonstrate inter-alia commitment to invest sufficiently and the financial capability to do so and its ability to provide a satisfactory service. In its licence renewal application, TVB has made long term investment commitments up to 2021 which assume that it would continue to enjoy the same allocation of spectrum for that period. As TVB would continue to rely on spectrum for transmission of its services it could not give meaningful commitments unless it assumed that it would continue to enjoy a certain allocation of spectrum. If the CA's determination of spectrum assignment to TVB were now to be deferred, to reflect the fact that its current assignment of spectrum will continue in any event to November 2018, it would introduce considerable uncertainty for TVB as to whether it could meet the commitments which it made when it applied for licence renewal, which formed part of the basis for the CA's positive recommendation to the CE in C on its licence renewal application, and which were considered when the CE in C made its decision to renew TVB's free TV licence.

19. Having regard to the above, the CA proceeds now to consider the assignment of the spectrum currently held by TVB.

## **Existing Spectrum Assignment**

20. Under their fixed carrier licences (“FCLs”) issued under the TO, ATV and TVB are each assigned two sets of analogue TV channels in the UHF band for territory-wide broadcasting of their free analogue TV services; and one digital multiplex of the SFN, coupled with half of the capacity of one digital multiplex of the MFN<sup>4</sup> each for the territory-wide broadcasting of their free DTT services.

21. The existing free TV licence of TVB and the associated FCL will expire on 30 November 2015 and 30 November 2018 respectively. For ATV, following the CE in C’s decision on non-renewal of its free TV licence and the extension of the licence term up to 1 April 2016, the CA issued a notice to ATV on 20 April 2015 under section 32G(1) and 32H(3) of the TO to withdraw the two sets of analogue TV channels and 1.5 digital multiplexes assigned to ATV as from 2 April 2016. For TVB, the CE in C decided on 12 May 2015 to renew TVB’s free TV licence for another 12 years from 1 December 2015.

## **Spectrum Demand**

22. Applying the criterion set out in paragraph 17 above, only two free TV licensees (TVB and HKTVE) would currently be eligible to be assigned broadcasting spectrum –

- (a) In submitting its application to renew its free TV licence in November 2013, TVB requested additional spectrum on top of its existing assignment to enhance its high-definition DTT services and to cater for the introduction of new DTT services under its new licence term. Further in April 2015, TVB wrote to the CA requesting additional spectrum to broadcast its Jade and Pearl channels in higher picture quality.

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<sup>4</sup> ATV does not require 1.5 Mbps capacity in the MFN for broadcasting its two standard-definition programme channels. As a temporary measure up to 30 November 2015, and in the interest of efficient use of spectrum as a public resource, such 1.5 Mbps capacity in the MFN is re-assigned by the CA to TVB for broadcasting its two programme channels in high-definition format.



- (b) Following the grant by the CE in C of a free TV licence to HKTVE for it to provide a free TV service by the use of a fixed network as its transmission mode, HKTVE submitted an application in April 2015 in accordance with the relevant conditions in its free TV licence for the CA's approval to deploy spectrum as an additional means of transmission for the delivery of its free TV service.

23. The applicants for free TV licences have indicated a wish to be assigned spectrum. Whilst none of them can currently be treated as eligible for spectrum assignment, at least some of them may become eligible at some point in time in the future (between now and November 2018 when TVB's current spectrum assignment expires), depending upon the decisions of the CE in C on their applications for free TV licences –

- (a) Following the grant by the CE in C of approval in principle to the free TV licence application of Fantastic TV for it to provide a free TV service by the use of a fixed network as its transmission mode, Fantastic TV indicated its interest in January 2014 in the use of spectrum to transmit its proposed free TV service. It wrote to the CA in April 2015 to “apply for the right” to use spectrum to supplement its proposed transmission of free TV services using a fixed network;
- (b) During the CA's processing of HKTV's free TV licence application, which is premised upon the use of a transmission mode not involving spectrum, HKTV indicated to the CA in March 2015 its interest in the use of spectrum for the provision of its proposed free TV services; and
- (c) In its new licence application, Forever Top proposes to make use of spectrum to provide its proposed free TV services.

### **Supply of Spectrum for Analogue and Digital TV Services**

24. The UHF TV band is currently fully utilised. All the four digital multiplexes available for DTT services in Hong Kong have been assigned. TVB's existing spectrum assignments will not expire until 30

November 2018. In the nearer term, with the withdrawal of the spectrum assigned to ATV, by 2 April 2016, 1.5 digital multiplexes<sup>5</sup> would be available for re-assignment to other free TV licensees.

25. The arrangements for the assignment of the spectrum to be withdrawn from ATV will be the subject of a further Statement to be issued by the CA in due course. The current understanding of the CA is that the 1.5 digital multiplexes of spectrum to be withdrawn from ATV would be more than enough to meet the spectrum requirements of HKTVE, subject to the CA's approval of its application to use broadcasting spectrum as an additional mode of transmission, for the provision of its licensed free TV services. On present count, the surplus of one digital multiplex would be available for assignment to other free TV licensees.

26. The Government announced on 9 December 2014 that the working target for switching off analogue TV broadcasting ("ASO") would be deferred from end-2015 to end-2020, with a review of the target date to be conducted in 2017-18. There is therefore a possibility that after ASO, new broadcasting spectrum will become available for assignment to free TV licensees. In the meantime, it is the Government's intention to maintain analogue TV broadcasting to cater for the viewing public who do not have access to integrated digital televisions or DTT set-top boxes.

### **Competing Demands for Broadcasting Spectrum**

27. When applying the guiding principle in the SPF to the assignment of spectrum currently held by TVB, the CA needs to assess the likelihood of competing demands from providers of non-Government services at the date that this spectrum would become available (on 1 December 2018 following the expiry of the existing spectrum assignment). Having regard to the free TV landscape described in paragraphs 8 to 15 above and its analysis of potential spectrum demands in paragraphs 22 to 23, the CA is of the view that there are likely to be competing demands for the spectrum in the 470 – 806 MHz of the UHF

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<sup>5</sup> For the two sets of analogue frequencies to be withdrawn from ATV, the Government has indicated its intention to request RTHK to utilise the frequencies to provide analogue TV services.

band which is currently assigned to TVB for the provision of its licensed free TV services.

28. Where there are likely to be competing demands for the spectrum in 470 – 806 MHz of the UHF band which is currently assigned to TVB, the guiding principle in the SPF provides that the CA should adopt a market-based approach in the assignment of broadcasting spectrum, unless it considers there are overriding public policy reasons to do otherwise. As explained below, the CA considers that there are overriding public policy reasons to adopt an administrative approach to the assignment of the broadcasting spectrum currently assigned to TVB.

## **PUBLIC POLICY REASONS FOR NOT ADOPTING A MARKET-BASED APPROACH IN THE ASSIGNMENT OF SPECTRUM IN 470 – 806 MHz OF THE UHF BAND**

### **Unique Social Functions Performed by Free TV Services**

29. A “public trustee” model has been adopted in Hong Kong over the past 40 years by which nearly all the broadcasting spectrum available is entrusted to the free TV licensees to deliver their services by following an administratively-assigned approach, without the need for the free TV licensees to pay spectrum utilisation fee (“SUF”). Part of the reason for this is that they are required to perform unique social functions as compensation to the community. The CA notes from the CEDB’s policy concerns at the **Appendix** that it considers that the unique social functions performed by free TV services are –

- (a) they have been the most significant source of free entertainment, education and information for the general public;
- (b) they perform unparalleled social and public functions, catering for the needs of the masses and minorities. These include positive programming requirements specifying minimum broadcast hours for identified genres (e.g. programmes for children, elderly, youth, etc.), English

language channel requirement, subtitling, broadcast of announcements in public interest, carriage of RTHK programmes, etc.; and

- (c) they have been the most pervasive media in Hong Kong. A typical free TV programme with a rating of over 20 television rating (“TVR”) (1 TVR representing over 60 000 viewers) can reach over one million viewers simultaneously. Since free TV service providers are required under the BO and their licences to ensure territory-wide coverage of their free TV services to the satisfaction of the CA, and with their pervasiveness, they have also long been recognised as an essential platform to widely disseminate messages to the masses free of charge in case of emergency.

30. Hong Kong’s established practice of adopting an administrative approach in the assignment of broadcasting spectrum is in line with that of advanced overseas economies. This is evidenced by the findings of the research conducted by the Office of the Communications Authority into the practices of a number of overseas economies<sup>6</sup>, which show that they all adopt an administrative approach for the assignment of broadcasting spectrum to TV broadcasters without the levy of SUF or equivalent, and such TV broadcasters are required to fulfil social obligations including meeting the positive programming requirements as a return to the community for the use of frequency spectrum as a scarce public resource.

31. Taking into account CEDB’s policy concerns, and given the importance of those unique social functions, the CA considers that it would be in the public interest to maintain the on-going approach of administratively assigning broadcasting spectrum and not to charge SUF upon the renewal of TVB’s free TV licence. This approach is consistent with the views put forward by the Secretary for Commerce and Economic Development (“SCED”) and the former TA in their joint consultation paper issued in November 2010, which specified that administratively

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<sup>6</sup> The research covers the practices of inter-alia Australia, Canada, Japan, Singapore and the United States in their assignment of spectrum for free TV services.

assigned spectrum for the provision of terrestrial broadcasting services should not attract SUF. This proposition, which was not challenged in the consultation exercise, was premised on the unique social functions performed by broadcasting services and the significant public interest involved.

### **Potential Service Curtailment or Disruption**

32. The unique social functions performed by free TV licensees underline the importance of adopting an approach to spectrum assignment which avoids service curtailment or disruption and maintains the viewers' access to uninterrupted free TV services. This consideration is of paramount importance in the case of spectrum assignment to TVB as it could well be the only spectrum-based free TV licensee in Hong Kong with extensive coverage and penetration in the medium term.

33. It is the CA's assessment that the spectrum requirements of TVB and HKTVE<sup>7</sup>, the only two free TV licensees eligible for broadcasting spectrum assignment as at the date of this Statement, could likely be met from a combination of the spectrum currently allocated to TVB and ATV. Although the CA's assessment is that there are likely to be competing demands when TVB's current assignment of broadcasting spectrum expires in November 2018, it is currently not clear whether there would be other eligible free TV licensees by April 2016 who would be in a position to be assigned spectrum. In these circumstances, it would not be appropriate for the CA to delay making a decision as to re-assignment of the broadcasting spectrum currently assigned to TVB until November 2018 as this approach would risk service disruption and put in jeopardy the investment and programming plans of TVB.

34. The adoption of a market-based approach would present real practical difficulties. If an auction were to be conducted now, in relation to the spectrum currently assigned to TVB (which would not become available until after November 2018), only TVB and HKTVE<sup>8</sup> may take

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<sup>7</sup> Subject to the CA's approval of HKTVE's application to use broadcasting spectrum as an additional mode of transmission.

<sup>8</sup> See footnote 7.

part. If HKTVE were to successfully bid for some of this spectrum, TVB would face the prospect of a shortfall of spectrum after November 2018 and the risk of potential service disruption and uncertainty about its ability to meet its free TV licence commitments (unless it were assigned some of ATV's current allocation of spectrum). As to HKTVE, even if it ended up as the successful bidder for some of the spectrum currently assigned to TVB, it would have to wait until after November 2018, about 42 months from now, before it could use that spectrum, whereas ATV's allocation of broadcasting spectrum would become available much earlier for re-assignment to free TV licensees, including HKTVE, in less than 12 months from now, in April 2016.

35. A market-based approach which permitted "all comers" including say free TV licence applicants to bid for the spectrum currently assigned to TVB would not be consistent with the CA's duty to manage spectrum efficiently, as it could potentially lead to parties acquiring spectrum without the authority and ability to use it. This would be at the expense of depriving TVB of sufficient spectrum to broadcast the programming that it had committed and is licensed to provide.

36. To further elaborate, TVB would face an increased risk of service curtailment or disruption from the adoption of a market-based approach as it may not be able to secure sufficient spectrum through the bidding exercise to provide services for the new term in accordance with its free TV licence. This would have the effect of preventing TVB from providing some or all of its licensed services to the public, at least in the short if not also the medium term. Under such an eventuality, access to free TV services by millions of viewers could be adversely affected to different extents, depending on the amount of spectrum TVB could acquire through the competitive bidding exercise, and on whether it could switch to alternative or additional means of transmission such as fixed networks for delivery of its services, and if so, how long that would take.

37. Even if TVB has the ability to resort to the use of a fixed network as an alternative or additional transmission mode, the commercial negotiations involved could be protracted and service curtailment or disruption would be very likely, at least during the transitional period. In addition, the coverage of the fixed network would

be very likely to be inferior to TVB's existing broadcasting network that covers 99% of the households, rendering some existing viewers unable to receive a free TV service for an undetermined period of time even after the transition. Furthermore, it would be necessary for the tens of thousands of Communal Aerial Broadcast Distribution systems throughout Hong Kong to be enhanced and/or modified during the transition in order to distribute TVB's free TV signals via the fixed network. Residents in those buildings would need to bear enhancement and/or modification costs. In this respect, TVB is in a different position to HKTVE and Fantastic TV, which have both identified fixed networks as their primary transmission mode.

38. HKTVE and the other applicants' services can also be currently distinguished from those of TVB as TVB has been providing the most comprehensive free TV services in Hong Kong which are watched on a regular basis by a substantial audience. Even with HKTVE launching its first service on schedule within one year from licence grant, it would take a couple of years before its services are able to reach the same coverage as those of TVB, not to mention that the actual penetration rate of HKTVE's services would depend on the competition in the free TV services market. Similarly, if and when Fantastic TV is granted a free TV licence by the CE in C, which is also premised upon the use of a fixed network as its transmission mode, it would require one year to launch its services and the penetration rate of its services is also dependent upon market development. As to the remaining free TV licence applications, which are under processing by the CA, whether, and if so when the applicants would be granted licences is subject to the decision of the CE in C; and how soon upon licence grant, if any, the licensee(s) may launch the licensed services and reach a coverage and penetration on a par with those of TVB is subject to even greater uncertainty. With the above, the possible disruption to or curtailment of the free TV services of TVB, the only spectrum-based licensee providing free TV service with an extensive coverage and penetration for an undetermined length of time until the next spectrum-based free TV licensee begins operation and achieving full coverage, would severely affect the viewing public's access to information, education and entertainment, especially those who have no or limited access to other platforms for such purposes. Against this landscape, the CA considers it is in the public interest when considering

broadcasting spectrum assignment to ensure that a free TV licensee with an extensive coverage and penetration, which has invested in and is entirely dependent on spectrum as its means of broadcast, can continue to perform the unique social functions without service curtailment or interruption.

39. The significant differences between the licensing regimes for broadcasting and telecommunications and the approach adopted by the CA towards re-assignment of spectrum for the provision of third generation (“3G”) mobile services support the adoption of an administrative approach towards the assignment of broadcasting spectrum.

40. The regime for licensing of broadcasting services and how this relates to the assignment of spectrum is very different from that for telecommunications services in at least two important aspects. Firstly, for telecommunications services, the CA is conferred with the statutory power both to assign spectrum and to grant telecommunications service licences, which is why the process for telecommunications service licensing has always been spectrum assignment led, with the CA having the power to ensure telecommunications service licences reflect the spectrum assignments made.

41. In the context of broadcasting services however, although the CA has the statutory duty to assign spectrum, it is the CE in C which is vested with the statutory power to grant free TV licences under the BO. Given this decision making structure, there could be serious practical difficulties if a market-based approach to the assignment of broadcasting spectrum were now to be adopted as this would create uncertainty as to whether TVB would acquire the spectrum which it requires to meet the long term investment and operating proposals contained in its application for a renewal of its free TV licence. The CE in C has made a decision to renew TVB’s free TV licence having regard to the CA’s recommendations and based on the programming and investment proposals which will in turn be incorporated into its new free TV licence.

42. Secondly, a hybrid option between the administratively-assigned and market-based approach was adopted by the CA for 3G mobile services for reasons as set out in a joint statement it issued with



the SCED on 15 November 2013. The CA was satisfied that the approach of re-auctioning a part of the spectrum held by the mobile network operators (“MNOs”) would not lead to material service disruption as the MNOs could rely on their existing holdings of second generation (“2G”) and fourth generation spectrum in addition to 3G spectrum. MNOs could re-farm 2G spectrum to achieve a more efficient utilisation of spectrum which would maintain acceptable service levels even if they had to surrender a portion of their existing 3G spectrum. In contrast, on the broadcasting front, TVB cannot practically re-farm its broadcasting spectrum nor does it have the means of mitigating any service curtailment or disruption which are available in the case of MNOs. Against the landscape outlined above, a material reduction in the broadcasting spectrum assigned to TVB would cause service curtailment or disruption which runs counter to the public interest.

## **THE CA’S DECISIONS**

### **Spectrum Assignment Approach to TVB**

43. Having given due consideration to all the relevant factors, including the objectives and provisions of the TO and the CA’s statutory duties, the free TV landscape prevailing at the date of this Statement, the guiding principle in the SPF and the policy concerns of the CEDB, the CA is of the view that the unique social functions performed by TVB’s free TV services, in return for which TVB is not required to pay SUF, together with the need to avoid potential service curtailment or disruption, constitute overriding public policy reasons for not adopting a market-based approach to the re-assignment of broadcasting spectrum which is currently assigned to TVB. Accordingly, the CA has decided to adopt an administrative approach to the assignment of broadcasting spectrum to TVB, upon the grant of a renewed free TV licence to TVB by the CE in C.

### **Assignment of Broadcasting Spectrum to TVB**

44. The Government announced today that the free TV licence of TVB would be renewed for another 12 years from 1 December 2015 to 30 November 2027 (both dates inclusive). The CA has today informed

TVB that the CA has decided to re-assign to TVB the broadcasting spectrum it currently holds, comprising two sets of frequency channels, and one digital multiplex of SFN coupled with half of the capacity of one digital multiplex of MFN in 470 – 806 MHz of the UHF band, for the provision of its licensed free TV services until the expiry of its renewed free TV licence, i.e. 30 November 2027.

45. For the avoidance of doubt, nothing in this Statement will in any way fetter the CA's discretion to manage broadcasting spectrum and to decide how it should be assigned in the future. In exercising that discretion and making such decisions the CA will have regard to all relevant factors, including the TO, its statutory duties, the prevailing free TV landscape and the relevant policy considerations. The CA will consider future assignments or re-assignments of broadcasting spectrum on a case by case basis.

**Communications Authority**  
**12 May 2015**

**The Concerns of  
the Commerce and Economic Development Bureau (“CEDB”)  
on the Spectrum Arrangement for the Provision of  
Domestic Free Television Programme (“FTV”) Service  
in view of the Expiry of the Existing Assignment in November 2018  
(the “2018 Spectrum Arrangement”)**

## **PURPOSE**

In response to the request of the Office of the Communications Authority (“OFCA”), this document sets out policies, concerns and factors that may, subject to the Communications Authority (“CA”)’s views, be relevant in considering the 2018 Spectrum Arrangement. The relevant FTV spectrum currently held by the two free-to-air operators, namely Asia Television Limited (“ATV”) and Television Broadcasts Limited (“TVB”) (collectively the “Incumbents”), is hereinafter referred to as “FTV Spectrum”.

2. The concerns and factors set out in this document are subject to the CA’s technical assessment and provided as one of the possible considerations that the CA may take into account in discharging its spectrum assignment responsibilities under the Telecommunications Ordinance (Cap. 106) (“TO”). For the avoidance of doubt, this document is without prejudice to any provisions of the TO and nothing herein shall be construed as limiting or restricting in any way the independence of and the powers vested in the CA under the TO for the management of radio spectrum and under the Broadcasting Ordinance (Cap. 562) (“BO”) in formulating its recommendations on any new applications for FTV service licences (“New Applications”). It is also without prejudice to the Chief Executive (“CE”) in Council’s powers and discretion under the BO in deciding any New Applications (including the application of Fantastic Television Limited (“Fantastic TV”) with approval-in-principle (“AIP”) granted) or the pending application for renewal of the FTV service licence of TVB (“TVB’s FTV Licence”).

## **BACKGROUND**

3. Under the technology-neutral broadcasting regime, the licensing mechanisms for “provision” and “carriage” of the FTV services are governed

respectively by the BO and the TO. The CE in Council is the licensing authority under the BO for the FTV service licences whereas the CA is vested under the TO with the powers to allocate, assign and manage the radio spectrum, including the FTV Spectrum.

4. Pending any new supply of spectrum, there is no frequency other than the FTV Spectrum that can be made available for providing the FTV services. Currently, via the FTV Spectrum, the two Incumbents together are providing four domestic channels in analogue format and 11 domestic channels (including simulcasting the four analogue channels) in digital format.

5. On 1 April 2015, the CE in Council decided that ATV's FTV service licence ("ATV's FTV Licence") not be renewed under section 11(5) of the BO and the term of which be extended, under section 8(1)(a) of Schedule 4 to the BO, to 1 April 2016 for the purpose of complying with the statutory requirements as to the length of notice of a non-renewal decision. The CA on the same day advised ATV that the CA was minded to withdraw from ATV the frequencies identified in Schedules 2 and 3 of the Fixed Carrier Licence ("FCL") No. 045 and assigned on 1 December 2003 for 15 years for provision of the FTV service. The CA subsequently gave formal notice to ATV to withdraw all the frequencies assigned to it following expiry of ATV's FTV Licence as from 2 April 2016.

6. The existing assignment of the FTV Spectrum to TVB will expire on 30 November 2018 (the "Expiry Date") with its FCL issued by the CA under the TO. The CA's position on the 2018 Spectrum Arrangement may be potentially relevant to the consideration of and determination on TVB's Renewal Application seeking a term beyond the Expiry Date, in particular in relation to TVB's likely compliance of the technical requirements throughout the term to be renewed.

## **BROADCASTING POLICY OBJECTIVES**

7. The broadcasting policy objectives are to: -
- (a) widen programming choice to cater for the diversified tastes and interests of the community;

- (b) encourage investment, innovation and technology transfer in the broadcasting industry;
- (c) ensure fair and effective competition in the provision of broadcasting services;
- (d) ensure that broadcasting services provided are up to the expectations and do not offend the tastes and decency of the community; and
- (e) promote the development of Hong Kong as a regional broadcasting and communications hub.

## **RADIO SPECTRUM POLICY FRAMEWORK**

8. According to the Radio Spectrum Policy Framework (“RSPF”) promulgated by the Government in April 2007, the policy inclination is that a market-based approach will be adopted for the assignment of the spectrum wherever the CA (or the former Telecommunications Authority (“TA”) before the establishment of the CA) considers that there are likely to be competing demands, unless there are overriding public policy reasons not to do so. Following the promulgation of the RSPF, the former TA issued a statement in April 2007 indicating that in exercising its statutory powers under the TO, the TA should, in addition to all relevant considerations as required by law, give due regard to the RSPF to the extent that there were no inconsistencies with the objectives and provisions laid down in the TO.

## **CHARACTERISTICS OF FTV SERVICES AND MARKET LANDSCAPE**

9. FTV services have their unique social functions -
- (a) they have been the most significant source of free entertainment, education and information for the general public;
  - (b) they perform unparalleled social and public functions, catering for the needs of the masses and minorities. These include positive programming requirements specifying minimum

broadcast hours for identified genres (e.g. programmes for children, elderly, youth, etc.), English language channel requirement, subtitling, broadcast of announcements in public interest, carriage of Radio Television Hong Kong (“RTHK”) programmes, etc.; and

- (c) they have been the most pervasive media in Hong Kong. A typical FTV programme with a rating of over 20 television rating (“TVR”, 1 TVR representing over 60 000 viewers) can reach over 1 million viewers simultaneously. Since FTV service providers are required under the BO and their licences to ensure territory-wide coverage of their FTV services to the satisfaction of the CA, and with their pervasiveness, they have also long been recognised as an essential platform to widely disseminate messages to the mass free of charge in case of emergency.

10. Since the introduction of FTV services over 40 years ago, the FTV Spectrum has all along been assigned by way of administrative assignment to the Incumbents without the need for them to pay the Spectrum Utilisation Fee (“SUF”). The existing carrier licences of the Incumbents, which feature the use of the FTV Spectrum, were issued in 2003. The developments notwithstanding, the services of the Incumbents, at present, continue to perform the unique social functions set out in paragraph 9 above. In fact, as previously advised by the OFCA, in most overseas jurisdictions, in relation to broadcasting spectrum, the “public trustee” model has all along been adopted, i.e. broadcasting spectrum is administratively allocated to the broadcasters.

11. It should also be noted that the Incumbents have jointly developed and operated the television broadcasting networks in Hong Kong for decades. In this regard, the Incumbents have leased some Government sites (mostly in hilltops) to establish their transmission networks. The buildings, facilities and essential transmission equipment erected on these sites are owned by individual Incumbents who share the use of the facilities that they each own.

12. The landscape of the local FTV market has been undergoing changes. However, unlike many of the overseas jurisdictions, the FTV services in Hong Kong have hitherto been transmitted via spectrum only. The

pervasiveness of our FTV services is also unmatched by other television services (e.g. pay television/satellite television), which is expected to remain so for some years.

13. The Government in December 2014 announced that the working target for switching off analogue television services (“ASO”) would be adjusted to 2020, with a review of the target date to be conducted in 2017-18. From cessation of ATV’s FTV service after 1 April 2016 until ASO in 2020, it is uncertain whether full-fledged commercial FTV service in replacement of ATV’s on the two analogue channels to be ceased broadcasting could be introduced. Hence, during the transitional period, up to 20% (i.e. about 480 000) of the domestic households not yet equipped for receiving digital terrestrial television (“DTT”) services may only be able to watch the two spectrum-based analogue channels operated by TVB if TVB’s FTV Licence is to be renewed. Their choice may be reduced by 50%.

14. For certain domestic households already equipped for receiving DTT services, upon expiry of ATV’s FTV Licence, channel choices would be available at least in terms of the digital programme channels operated by TVB (if TVB’s FTV Licence is to be renewed) and HK Television Entertainment Limited (“HKTVE”), the latter being granted a new FTV service licence on 1 April 2015 and required to commence the broadcast of a 24-hour integrated Cantonese channels within 12 months after the licence grant and a 16-hour integrated English channel within 24 months. HKTVE’s service, under its FTV service licence lately granted, will be transmitted on a fixed network. Whilst HKTVE is expected to perform similar functions as the spectrum-based Incumbents (see paragraph 9 above), its initial coverage rate as against the total number of households in Hong Kong stands at only 65 percent. Territory-wide coverage of HKTVE’s FTV service on fixed network will unlikely be achieved at least for a few years.

15. At this point in time, the application for a new FTV service licence by Fantastic TV, which was approved-in-principle in October 2013, is under consideration by the CE in Council whereas the two New Applications (the new application of Hong Kong Television Network Limited and the application of Forever Top (Asia) Limited) received in April 2014 and April 2015 respectively are being processed by the CA. The timing of when the processing of these applications can be completed, whether FTV service

licences will eventually be granted to them and, if so, the roll-out progress of their services are all uncertain.

16. Separately, RTHK has been assigned with broadcasting spectrum to fulfill the role of the public service broadcaster (“PSB”) in Hong Kong and develop an all-round broadcasting service to the community, including the provision of dedicated DTT channels. As a PSB, RTHK provides comprehensive programming to satisfy the needs of the entire community, catering for both mass and minority interests and tastes. One of the key objectives of RTHK’s television services is to provide television services notably in areas not adequately provided by commercial television broadcasters. The RTHK’s DTT services therefore distinguish themselves from that of the commercial FTV service licensees in terms of the absence of any need for commercial consideration and RTHK’s role as a PSB. Furthermore, RTHK’s DTT services are only at an embryonic stage, currently run in a pilot mode and with its coverage still being incrementally developed. They, in terms of functions and household reach at this stage, also cannot serve as a satisfactory alternative to the spectrum-based commercial FTV services.

17. Coverage rate aside, attention should also be paid to the penetration/take-up rate, which is indicative of the percentage of households with full access to the relevant television services. Hence, whilst RTHK’s DTT services now cover 75% of Hong Kong’s population (i.e. coverage rate), the owners and/or the managers of the buildings within the signal coverage area are still required to install/upgrade appropriate DTT channel receiving equipment in the in-building communal aerial broadcast distribution (“CABD”) systems before the broadcasting signals can actually reach the individual households. This process, which requires co-operation of the CABD system owners and managers of the buildings all over Hong Kong, is bound to take time and publicity effort.

18. As mentioned in paragraph 13 above, some 20% of the households at present have yet to be equipped with the necessary receivers (e.g. DTT decoders, integrated digital television) to receive DTT services. With a view to enabling a choice to these 480 000 households which may then only be able to watch the two spectrum-based analogue channels operated by TVB upon the cessation of ATV’s FTV service, the Government is at present working with RTHK to map out a proposal to replicate, during the transitional



period until ASO, part of the programmes on RTHK's DTT channels for broadcast on the two analogue channels to be vacated by ATV. This interim arrangement, however, for the reason in paragraph 16 above, is not meant to be a complete replacement of a commercial FTV service.

## **CEDB'S CONCERNS AND POTENTIAL FACTORS TO BE CONSIDERED**

19. Having regard to the development of FTV services, their unique functions and the anticipated changes in the landscape of the FTV service market following ATV's exit therefrom after 1 April 2016, the CEDB considers that it may be advisable for the CA, before deciding the 2018 Spectrum Arrangement, to carefully evaluate the possible risks and consequences entailed, and how public interest will be affected, in considering how the RSPF should be applied in the 2018 Spectrum Arrangement. In particular, against the legacy arrangement in paragraph 11 above and in the run up to the full-fledged development of the new non-spectrum-based FTV services and introduction of any new spectrum-based FTV services, the following matters may, subject to the CA's views, warrant the CA's careful assessment in considering the 2018 Spectrum Arrangement: -

- (a) whether there is any possibility that the adoption of the market-based approach may lead to the risk of a loss of the spectrum-based FTV services to the public during a transitional period of uncertain length due to, for example, a mismatch between owners of the transmission network and the assignees of the FTV Spectrum, resulting in disruptions of the FTV services;
- (b) whether there is any viable mitigating alternatives to avoid discontinuation or minimise disruption of the spectrum-based FTV services to the public, if any, caused by the adoption of market-based approach as a result of TVB failing its bid for any FTV Spectrum, or obtaining frequency band or a portion of the bands that are different from the current one(s); and
- (c) how the market-based approach, if adopted, can be practically implemented in a way that can align with the spirit of the historical no-SUF arrangement as referred to in paragraph 10

above.

20. It should however be noted that “service” as referred to above means the FTV service to the public in general.

21. The CEDB is mindful that this is the first time when the CA needs to consider the re-assignment of the broadcasting spectrum after the introduction of the RSPF. Whether there is any public policy reason, as per RSPF, involves a delicate balancing exercise between policy and practical considerations.

22. The CEDB notes that in relation to the FTV services, the provision (requirements under the BO) and carriage (spectrum allocation under the TO) issues are intertwined. Where any of the FTV Spectrum will be released in due course, the CA may have to consider whether and how such spectrum can be put to efficient and productive use, including the method of allocating the vacated spectrum for provision of FTV service(s) by FTV service operator(s) and the question of eligibility threshold for such allocation as appropriate. For the latter, if commercial entities not in possession of a FTV service licence are also eligible for allocation of the FTV Spectrum, it may in effect allow commercial sub-letting of the FTV Spectrum to any third parties. CEDB notes that doing so may go against the policy spirit of assigning the FTV Spectrum without levying any SUF. For the purpose of ensuring the efficient use of FTV Spectrum, in the event that vacated spectrum are available, we note that the CA announced its intention at the meeting of the Legislative Council Panel on Information Technology and Broadcasting on 13 April 2015 that it would favorably consider, in deciding the allocation arrangement of such spectrum, applications from FTV operators with FTV service licences granted, as such licensees could put the FTV Spectrum into efficient use most expeditiously.

23. The CEDB trusts that the CA, in deciding the 2018 Spectrum Arrangement, would give due consideration to all relevant factors so as to ensure that the FTV Spectrum is assigned in a way that best serves the public interest, including but not limited to the social functions and the evolving landscape of the FTV service market as elucidated in paragraph 9-18 above

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