



Vision

Our vision is that Hong Kong has the world-class communications services to meet the challenges of the information age.



MISSION

- fostering an environment that supports a vibrant communications sector to enhance Hong Kong's position as a communications hub in the region;
- encouraging innovation and investment in the • communications market;
- promoting competition and adoption of best practices in the communications market for the benefit of the industry and consumers; and
- acting in a manner consistent with the provisions of the Hong • Kong Bill of Rights Ordinance (Cap. 383).



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The Communications Authority serves the people of Hong Kong in its capacity as an independent regulator of broadcasting and telecommunications services.



Chapter 2: Chairman's Message



It is a pleasure for me to present the fourth annual report of the Communications Authority (the Authority) covering the period from April 2015 to March 2016. The year under review was an eventful year for the Authority, with new developments in both the rapidly changing broadcasting and telecommunications sectors. This report presents the tasks undertaken by the Authority and the challenges that lie ahead.

A Thriving Broadcasting Market

Domestic Free Television Programme Services

The landscape of free television broadcasting has been undergoing changes during the period under review. On 1 April 2015, the Chief Executive in Council (CE in C) decided to formally grant a domestic free television programme service (free TV) licence to HK Television Entertainment Company Limited (HKTVE). The Authority approved in January 2016 HKTVE's application to use spectrum, on top of a fixed network, as an additional transmission means to deliver its free TV service. HKTVE started to provide its licensed free TV service by using a fixed network and spectrum from 31 March and 2 April 2016 respectively, offering more programme choices for viewers.

On 1 April 2015, the CE in C also decided not to renew Asia Television Limited (ATV)'s free TV licence and extended the term of its licence to 1 April 2016 in accordance with the requirement under the Broadcasting Ordinance (Cap. 562)(BO). This is the first time in Hong Kong's broadcasting history that an incumbent's broadcasting licence has not been renewed. Following the CE in C's decision, the Authority, as the regulator, continued to closely monitor ATV's compliance with the relevant statutory and licence requirements in the run up to the expiry of its licence. In parallel, the Authority handled the issues arising from the non-renewal of ATV's licence, many of which were unprecedented in Hong Kong's broadcasting history, including the withdrawal of broadcasting spectrum from ATV and the re-assignment of part of that spectrum to HKTVE and facilitation of a smooth changeover of free TV services and broadcasting spectrum upon the expiry of ATV's broadcasting licence at 00 hours on 2 April 2016.

Since the CE in C approved in principle the application for a free TV licence by Fantastic Television Limited (Fantastic TV) in October 2013, the Authority had proceeded with the follow-up work on the outstanding issues and submitted to the CE in C its recommendations on the application in January 2015. In response to the requests of the CE in C, the Authority submitted further recommendations on Fantastic TV's application to the CE in C in April 2016. On 31 May 2016, the CE in C decided to formally grant a 12-year free TV licence to Fantastic TV, under which Fantastic TV is required to launch a Chinese channel and an English channel by May 2017 and May 2018 respectively. With the launching of new free TV services, we hope that the television industry of Hong Kong will scale new heights and provide more diversified programmes for the audience.

In April 2014 and April 2015, Hong Kong Television Network Limited (HKTV) and Forever Top (Asia) Limited (Forever Top) submitted to the Authority applications for free TV licences. The Authority assessed HKTV's free TV licence application in accordance with the BO and established procedures and submitted its assessment of and recommendations on the application to the CE in C in January 2016. As for the licence application of Forever Top, the Authority has been processing the application in accordance with the statutory requirements and will submit its recommendations to the CE in C as soon as practicable.

Domestic Pay Television Programme Services

On the pay television front, Hong Kong viewers continued to enjoy a diversity of local and overseas programmes. The three domestic pay television programme service (pay TV) licensees provided a total of 401 pay TV channels, of which 107 were high definition television (HDTV) channels. At the same time, the aggregate number of subscribers of licensed pay TV services stood at over 2.3 million, representing a market penetration of over 94%.

During the period under review, the Authority conducted a licence renewal exercise in respect of the pay TV licence of Hong Kong Cable Television Limited (HKCTV). The Authority carried out a comprehensive assessment of the performance of HKCTV, and conducted a public consultation exercise to collect public views on its licence renewal application. The Authority submitted its recommendations on the licence renewal application of HKCTV to the CE in C in April 2016.

Analogue Sound Broadcasting Services

The analogue sound broadcasting licences of Hong Kong Commercial Broadcasting Company Limited (CRHK) and Metro Broadcast Corporation Limited (Metro) were due to expire after 25 August 2016. Having regard to the overall assessment of the performance of the two licensees and the public views received during the public consultation exercise, the Authority submitted its recommendations on the licence renewal applications to the CE in C in May 2015. The CE in C accepted the Authority's recommendations and renewed the analogue sound broadcasting licences of CRHK and Metro for a term of 12 years with effect from 26 August 2016.

Rapid Growth of the Telecommunications Market

Availability of Fourth Generation (4G) Services Has Given a Further Boost to Mobile Data Usage

Thanks to the sustained growth of 4G mobile services, Hong Kong's telecommunications market continued to flourish during the year under review. By March 2016, the number of mobile subscribers was 17 million, among which over 14.6 million were users of third generation (3G)/4G services. Mobile network operators and mobile virtual network operators were offering 4G services at affordable prices. Mobile data services were available at downlink speeds of up to 375 megabits per second (Mbps) using Long Term Evolution (LTE) technology. In March 2016, the monthly mobile data usage further surged to 20 557 Terabytes, representing 1.2 times and 1.6 times the monthly usage over the same period in 2015 and 2014 respectively. The average mobile data usage of each mobile user rose to 1 358 Megabytes per month in March 2016, compared with 1 327 Megabytes in March 2015 and 1 046 Megabytes in March 2014. The increasing popularity of 4G mobile services has further boosted mobile data usage. The Authority will continue to take the necessary measures timely to facilitate the robust development of the mobile services market.

Major Tasks and Challenges in the Coming Year

Looking ahead, on the broadcasting side, processing of free TV licence applications and monitoring of new licensees in rolling out their free TV services continue to be the Authority's major activities in 2016-2017. On the telecommunications side, the existing assignments of 49.8 MHz of spectrum in the 900 MHz band and 148.8 MHz of spectrum in the 1800 MHz band will expire within the period between November 2020 and September 2021. The first public consultation on the proposed arrangements for spectrum re-assignment and the related spectrum utilization fee was launched on 3 February 2016 and ended on 18 May 2016. A further round of public consultation will be conducted in early 2017 with a view to finalising the arrangements for spectrum re-assignment by end 2017.

Having considered the submissions from the industry and interested parties received in response to the public consultation conducted between October and December 2015 on more efficient utilisation of the 8-digit numbering plan, the Authority announced its decision in June 2016 on the measures to be adopted to meet the increasing demand for mobile numbers through better utilisation of the 8-digit numbering plan. The Authority will follow up with the operators in respect of the implementation of the necessary changes to their networks and systems to support the opening of the relevant number blocks for allocation to mobile services. The Authority will also closely monitor market developments and the effectiveness of the new measures as and when they are introduced.

Chapter 3: Members of the Communications Authority (April 2015 – March 2016)



Mr Ambrose HO Chairman, Communications Authority



Miss Susie HO Shuk-yee, JP Vice-Chairman, Communications Authority Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)¹



Dr AU Man-ho, SBS Member



Mr Felix FONG Wo, BBS, JP Member



Mrs Lucia LI LI Ka-lai, SBS Member



Mr Alan LUI Siu-lun Member



Mr Hubert NG Ching-wah Member





Dr Anthony William SEETO Yiu-wai Dr Carlye TSUI Wai-ling, BBS, MBE, JP Member Member



Mr Adrian WONG Koon-man, BBS, JP Member



Mr Raymond Roy WONG, SBS Member



Miss Eliza LEE Man-ching, JP Member Director-General of Communications

With effect from 20 November 2015, Permanent Secretary for Commerce and Economic Development (Communications and Technology) was renamed as Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries).

Chapter 4: Role and Functions of the Communications Authority

The Communications Authority

To meet the regulatory challenges brought about by rapid technological advancements and media convergence, the Authority was established on 1 April 2012 as an independent statutory body under the Communications Authority Ordinance (Cap. 616) (CAO), taking over fully the functions and powers of the former Telecommunications Authority (TA) and Broadcasting Authority (BA). Its role is to regulate the broadcasting and telecommunications industries in Hong Kong in accordance with the BO, the Telecommunications Ordinance (Cap. 106) (TO), the CAO, and the Broadcasting (Miscellaneous Provisions) Ordinance (Cap. 391) (B(MP)O). It shares concurrent jurisdiction respectively with the Customs and Excise Department (C&ED) in enforcing the fair trading sections of the Trade Descriptions Ordinance (Cap. 362) (TDO), and with the Competition Commission (Commission) in enforcing the Competition Ordinance (Cap. 619) (CO) in the telecommunications and broadcasting sectors. It also enforces the Unsolicited Electronic Messages Ordinance (Cap. 593) (UEMO).

The Authority has the following functions:

- to tender advice to the Secretary for Commerce and Economic Development (SCED) on any legislation, legislative proposals and regulatory policies relating to telecommunications, broadcasting, antispamming or activities connected with the telecommunications or broadcasting sectors;
- to make recommendations to the CE in C on applications for and renewal of free TV licences, pay TV licences and sound broadcasting licences;

- to grant and renew non-domestic television programme service (non-domestic TV) licences and other licensable television programme service (other licensable TV) licences;
- to grant and renew telecommunications licences;
- to prepare and revise codes of practice setting programme, advertising and technical standards for television and radio;
- to deal with complaints about broadcasting and telecommunications services and impose sanctions on the broadcasters and telecommunications operators for contravening the various provisions and requirements;
- to handle the licensing, financial monitoring and regulation of telecommunications and broadcasting licensees in Hong Kong;
- to manage and administer the radio frequency spectrum and the telecommunications numbers;
- to develop technical standards and conduct equipment testing in line with international best practices, and ensure satisfactory performance of the certification bodies in carrying out certification and test against the prescribed technical standards;
- to facilitate fixed network operators to access buildings to install in-building telecommunications facilities for the conveyance of telecommunications and broadcasting services;

- to conduct examination and issue certificates for the operating personnel of radiocommunications systems;
- to enforce the CO in respect of the conduct of undertakings operating in the telecommunications and broadcasting sectors;
- to enforce the fair trading sections of the TDO in relation to the commercial practices of licensees for the provision of telecommunications or broadcasting services under the TO or BO; and
- to enforce the UEMO.

Organisation

Members of the Authority (except the Director-General of Communications (DG Com) who is an ex-officio member) are appointed by the Chief Executive of the Hong Kong Special Administrative Region. During the period from April 2015 to March 2016, there were a total of 12 members comprising 10 non-official members, including the Chairman, and two public officers, viz. the Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)² and the DG Com. The Authority has appointed three committees to assist it in discharging part of its major duties:

- the Broadcast Complaints Committee;
- the Broadcast Codes of Practice Committee; and
- the Telecommunications Affairs Committee.

The **Broadcast Complaints Committee (BCC)** is responsible for considering complaints about broadcasting issues and making recommendations to the Authority regarding such complaints. It comprises four Authority members and four coopted non-official members.

The Broadcast Codes of Practice Committee

(BCPC) is responsible for keeping the television and radio broadcasting standards under regular review and amending the codes of practice when necessary. It comprises three Authority members and three co-opted members.

The **Telecommunications Affairs Committee** (**TAC**) is responsible for offering advice and reporting to the Authority on telecommunications matters. It comprises five Authority members.

The **Office of the Communications Authority (OFCA)** serves as the executive arm and secretariat of the Authority.

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With effect from 20 November 2015, Permanent Secretary for Commerce and Economic Development (Communications and Technology) was renamed as Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries).

Organisation Chart

The Communications Authority

ВСС	ВСРС	ТАС		
Chairman	Chairman	Chairman		
Mr Adrian WONG Koon-man, BBS, JP	Mr Raymond Roy WONG, SBS	Dr AU Man-ho, SBS		
Members	Members	Members		
Mrs Lucia LI LI Ka-lai, SBS	Mr Alan LUI Siu-lun	Mr Felix FONG Wo, BBS, JP		
Mr Hubert NG Ching-wah	Dr Carlye TSUI Wai-ling, BBS, MBE, JP	Mr Hubert NG Ching-wah		
Mr Raymond Roy WONG, SBS		Dr Anthony William SEETO Yiu-wai		
		Dr Carlye TSUI Wai-ling, BBS, MBE, JP		
Co-opted Members	Co-opted Members			
Mr William CHAN Chun-ho	Mr Daniel CHAM Ka-hung, BBS, JP			
Ms Christina CHEUNG Wai-yee	Miss Emba LEUNG Wun-man			
Ms Amy FUNG Dun-mi, MH	Mr Terence WONG Pui-tat			
Dr Clement SO York-kee				

Chapter 5: Overview of Major Developments in the Communications Market

Broadcasting

5.1 An Overview of Developments in the Broadcasting Market

5.1.1 Number of Licensees and Channels

Television Programme Services

As at March 2016, the total number of free TV, pay TV and non-domestic TV licensees was 24. They provided 693 television channels,³ of which 462 were receivable in Hong Kong, representing an increase of 2.7% since March 2015. An overview of the channels provided by the television programme service licensees is shown in Figure 1.

As at March 2016, there were three **free TV licensees**, viz. ATV,⁴ Television Broadcasts Limited (TVB) and HKTVE. ATV and TVB provided a total of 15 channels. Four channels ("ATV Home", "ATV World", "TVB Jade"⁵ and "TVB Pearl"⁵) were simulcast in both analogue and digital formats and seven were digital channels. ATV's digital channels comprised one HDTV channel "Asia" and three standard definition television (SDTV) channels, namely, "ATV Classic", "CCTV 1" and "Shenzhen Satellite". TVB's digital channels comprised three HDTV channels, namely, "J2", "iNews" and "J5". HKTVE launched its HDTV channel "ViuTV" through a fixed network on 31 March 2016.

As at March 2016, there were three **pay TV licensees**, viz. HKCTV, PCCW Media Limited (PCCW Media) and TVB Network Vision Limited (TVBNV), providing a total of 401 pay television channels, offering a diversity of local and overseas productions. There has been an increase (29%) in the total number of HDTV channels (from 83 to 107) offered by the licensees within the same period.

As at March 2016, the number of **non-domestic TV licensees** remained at 18, providing a total of 276 television channels, 45 channels of which were available to Hong Kong viewers, representing an increase of 4.2% since March 2015.

During the period under review, the number of **other licensable TV licensees** providing television programme services in hotels in Hong Kong decreased by two to 24. Together they provided services to 81 hotels.



3 Some channels were provided by more than one licensee at the same time.

- In light of the CE in C's decision not to renew its free TV licence, ATV ceased to provide broadcasting service from 00 hours of 2 April 2016.
- ⁵ The digital simulcast of TVB "Jade" and "Pearl" channels are broadcast in HDTV format.



<u>Figure 1</u>: Television Channels Provided by Television Programme Service Licensees in Hong Kong

* The four simulcast channels of ATV and TVB are counted for both the analogue and digital platforms.

In addition to the television channels provided by television programme service licensees, Hong Kong viewers can receive free unencrypted satellite television programme channels uplinked from Hong Kong and elsewhere. As at March 2016, there were more than 400 such free-to-air satellite television channels available for reception via the Satellite Master Antenna Television (SMATV) systems in Hong Kong. The list of channels currently available can be downloaded at http://www.ofca.gov.hk/ filemanager/ofca/en/content_295/st_smatv.pdf.

Sound Broadcasting Services

The number of **sound broadcasting licensees** decreased by one⁶ to three during the period

under review, namely, CRHK, Digital Broadcasting Corporation Hong Kong Limited (DBC)⁷ and Metro.⁸ Radio Television Hong Kong (RTHK) is the public service broadcaster in Hong Kong.

As at March 2016, the number of analogue radio channels remained at 13 (three by CRHK, three by Metro and seven by RTHK). On digital audio broadcasting (DAB) services, as at March 2016, the two DAB licensees (DBC and Metro) and RTHK provided a total of 15 DAB channels (seven by DBC, three by Metro and five by RTHK). All analogue and DAB channels provided by the commercial licensees and RTHK were broadcast round-the-clock.

⁶ The CE in C approved the termination of the sound broadcasting licence of Phoenix U Radio Limited with effect from 7 November 2015.

⁷ The CE in C approved the termination of the sound broadcasting licence of DBC with effect from 15 October 2016.

⁸ Metro held two sound broadcasting licences, one for providing AM and FM services and one for providing DAB service. Metro applied on 12 September 2016 for the approval of the CE in C for the termination of its DAB licence.

5.1.2 Transmission Modes

Television

The regulatory regime for television programme services in Hong Kong as enshrined in the BO is technology-neutral.⁹ Licensees are free to choose their transmission arrangements for delivery of television services. Broadcasters can build their own transmission networks to deliver their services and, in such cases, they need to apply for a carrier licence from the Authority to cover the transmission network. Alternatively, they can engage any of the existing carrier licensees to provide the transmission service. Licensees can also provide their television programme services via multiple transmission platforms so as to maximise the coverage.

The transmission modes employed by the television programme service licensees are set out in Figure 2.

Licensee	Transmission Mode	Network Coverage as at March 2016
Free TV		
ATV and TVB	Terrestrial UHF, ¹⁰ including (a) Analogue PAL-I format; and (b) Digital National Standard format	99% of population
HKTVE	(a) Fixed broadband network (from 31 March 2016)(b) Terrestrial UHF (from 2 April 2016)	(a) Around 99% of total households(b) 99% of population
Pay TV		
НКСТV	HFC, ¹¹ MMDS ¹² and satellite (Digital)	Around 96% of total households
PCCW Media	PON and DSL ¹³ Broadband network (Digital)	Around 99% of total households
TVBNV	HFC, satellite and broadband network (Digital)	Around 99% of total households
Non-domestic TV		
All the 18 licensees	Satellite (Digital)	36% of total households (895 963 households)

<u>Figure 2</u>: Transmission Modes Employed by the Television Programme Service Licensees

10 Terrestrial Ultra High Frequency.

12 Microwave Multipoint Distribution System

13 Passive Optical Network and Digital Subscriber Line

⁹ An exception is that a service consists only of a service provided on the Internet is exempted from the regulatory regime under the BO.

¹¹ Hybrid Fibre Coaxial Cable

Penetration of Different Broadcasting Services

In March 2016, out of a total of 2.48 million households in Hong Kong,¹⁴ 2.46 million television households¹⁵ or 6.49 million viewers (aged 4 or above)¹⁶ could receive analogue broadcasting of free-to-air television, representing a penetration rate of about 99%. As regards digital terrestrial television (DTT) services, the take-up rate was close to 85% of all the households in December 2015.¹⁷

The penetration of licensed pay TV services was over 94%¹⁸ of the total households as at end of March 2016. The total number of subscribers to licensed pay TV services stood at over 2 300 000 in March 2016.¹⁹ The changes in total number of subscribers from 2007 to 2016 are shown in Figure 3.

Sound Broadcasting

During the period under review, the analogue radio broadcasters provided their services in FM and AM modes. Seven FM programme channels were provided through seven hilltop sites and supplemented by two low-power FM gap-fillers. In addition, six AM programme channels were broadcast from two island and hilltop sites, supplemented by six low-power AM/FM gapfillers to improve the AM programme services. The services practically covered the whole territory of Hong Kong.

The DAB broadcasters adopted DAB+ standard for transmission of DAB services. The DAB transmission network comprising seven principal transmitting



Figure 3: Subscribers to Licensed Pay TV Services in Hong Kong

Sources: Licensees

14 Source: Census and Statistics Department.

- 15 "Television households" means households with at least one television set currently in working order; or with one not in working order but will repair or renew in near future. Data Source: The Nielsen Company (Hong Kong) Limited.
- 16 Data Source: The Nielsen Company (Hong Kong) Limited.
- 17 According to a public survey conducted in December 2015, close to 85% of households in Hong Kong were receiving DTT services.
- Penetration of licensed pay TV services is calculated by dividing the total number of subscribers to licensed pay TV services by the total number of households. Some subscribers were counted more than once if they subscribed to more than one pay TV service.
- 19 Some subscribers were counted more than once if they subscribed to more than one service.

stations²⁰ was officially launched in June 2012. Three new DAB gap-fillers were completed in 2015. As at March 2016, the coverage of the DAB service was about 86%.

5.1.3 Broadcasting Revenues and Investment

Licensed broadcasting services contributed an estimated \$7.6 billion²¹ to the Hong Kong economy, which represented about 0.32% of the gross domestic product in 2015. There are two main sources of revenues for the provision of broadcasting services, viz. advertising and subscription. The income of free TV licensees and sound broadcasting licensees mainly come from sales of advertising spots within programme breaks. Pay TV licensees, on the other hand, derive their incomes mainly from subscription fees while sales of advertising spots remains a secondary income source.

Advertising Revenue

According to the report of AdmanGo Limited, the advertising expenditures on television and radio accounted for 31% (about \$14.26 billion) and 4% (about \$1.84 billion) respectively of the accumulated \$46 billion advertising expenditures in the media in 2015.²²

In 2015, the actual advertising revenue of TVB was around \$3.06 billion.²³ The actual advertising revenues of the other licensees were not publicly available.

Subscription Revenue

According to the annual report of i-Cable Communications Limited (i-Cable), the parent company of HKCTV, HKCTV's turnover (including mainly subscription revenue and also some advertising revenue) was \$1.13 billion in 2015, representing a decrease of 11% over the figure in 2014. The decrease was mainly due to lower subscription and advertising revenue.

According to the annual report of PCCW Limited (PCCW), the holding company of PCCW Media, the turnover of its pay TV service and related services provided in Hong Kong under the "now" brand was \$2.94 billion in 2015, representing an increase of 1% over the figure in 2014.

The subscription revenue of TVBNV is not publicly available.



²⁰ Beacon Hill, Castle Peak, Cloudy Hill, Golden Hill, Kowloon Peak, Lamma Island and Mount Gough.

²¹ Source: Company reports of major broadcasting licensees.

²² Source: Adspend Report for 2015 of AdmanGo Limited. All the advertising expenditures presented in the report have taken into consideration the discount factor based on an assumption of 60% off rate card rate.

According to TVB's annual report 2015, the turnover from the Hong Kong television broadcasting business segment was \$3,062 million, which comprised advertising revenue from the Group's free and pay television channels.

Investment in Broadcasting Industry

Key investment projects in the television industry in recent years include digitisation of the terrestrial broadcasting network, HDTV content and production technology, interactive television services, and regular network maintenance and upgrades that are required to maintain or expand the ever-advancing scope of services. In addition, with the increasingly competitive television industry, the exclusive rights to broadcast premium contents such as sports events have been a major attraction to viewers.

HKTVE and TVB have committed to investing a total of \$1.5 billion for the six-year period from 2015 to 2020 and \$6.3 billion for the six-year period from 2016 to 2021 respectively for the provision of free TV services. HKTVE's investment commitment comprises capital expenditures and programming expenditures. TVB's investment commitment mainly covers the maintenance of its infrastructure and transmission facilities. TVB has also committed to a progressive increase in the amount of independent local productions in programming. As at March 2016, ATV and TVB provided a total of 71²⁴ and 792 hours of HDTV programmes per week respectively.

As regards the pay TV market, i-Cable, the parent company of HKCTV, reported in its 2015 Final Results Announcement that the capital expenditure of the group for the year had increased from \$188 million in 2014 to \$207 million in 2015. Its major items of investment included television production and broadcast facilities. According to the 2015 Annual Results of PCCW, the parent company of PCCW Media, the capital expenditure for the year on its media business was \$234 million, representing an increase of 46% over the figure in the previous year. Its major items of investment included acquisition of premium programming and content production.

TVBNV has committed to investing a total of \$2.003 billion for the six-year period from 2013 to 2019. The investment commitment of TVBNV covers HDTV programming, set-top-boxes and broadcast facilities upgrading for employing the fixed hybrid optical fibre network provided by Hutchison Global Communications Limited to deliver its pay TV service.

CRHK and Metro have committed to investing a total of \$827 million and \$677 million respectively for the period from 2010 to 2016 for the provision of analogue sound broadcasting services. The investment commitment of CRHK and Metro covers staff development, facilities upgrading, programming improvement and other development brought by technological advancement to further enhance their service quality. The two DAB licensees, namely, DBC and Metro, have committed to investing a total of \$391 million and \$96.1 million respectively for the period from 2011 to 2017. Their investment commitment mainly covers construction of DAB network and studio facilities and production of DAB programmes.



²⁴ Updated information from ATV as at March 2016 is not available. It is an estimated figure based on ATV's submission for March 2015.

Programme Variety and Positive 5.1.4 **Programme Requirements**

(a) Programme Variety and Diversity

Number of Broadcast Hours and Hours of Station Productions

As at March 2016, the licensees broadcast about 69 822 hours of television programmes a week.²⁵ Among them, ATV and TVB provided a total of 671 broadcast hours per week on the four analogue channels and 1 845 broadcast hours per week on the eleven digital channels, while the 401 channels of the three pay TV licensees provided a total of 59 746 broadcast hours per week. As at March 2016, the 45 channels of non-domestic TV licensees receivable in Hong Kong provided a total of 7 560 broadcast hours per week.

The weekly number of broadcast hours for analogue and DAB sound broadcasting services (including RTHK) as at March 2016 was 4 704. The 13 analogue channels of sound broadcasting operators provided a total of 2 184 broadcast hours per week while the 15 digital channels provided a total of 2 520 broadcast hours per week.

For the period under review, there were a total of 68 785²⁶ hours of station productions broadcast on ATV and TVB, of which 19 229 hours were on analogue channels and 49 556 on digital channels. Of the 401 channels provided by the pay TV licensees, 83 channels (21%) were produced by the licensees themselves.

As for sound broadcasting services, with the exception of RTHK's relay of BBC World Service on Radio 6 and its digital radio services, and programmes of "China National Radio" on its digital radio services, the other 12 analogue radio channels and 13 digital radio channels (89% of all relevant channels) were mainly produced by the broadcasters themselves.



Figure 4: Proportion of Station Production in March 2016²⁷

Sources: Licensees

25 Updated information from ATV as at March 2016 is not available. The weekly total number is estimated on the basis of the latest submissions of TVB, pay TV licensees and the available information in respect of non-domestic TV licensees as well as ATV's submission for March 2015.

27 Updated information from ATV as at March 2016 is not available. Figures are estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

²⁶ Updated information from ATV as at March 2016 is not available. The figure is estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

Free TV Services

Analogue Channels and Digital Simulcast Channels

During the period under review, drama series and magazine/talk shows were the dominating programme genres during prime time on the Cantonese channels. Drama series on TVB were mostly in-house productions. Both licensees broadcast Mainland, Korean and Japanese drama series. Apart from drama series and magazine/talk shows, business/financial programmes, feature films and variety shows, etc. were also broadcast during prime time on the Cantonese channels.

The English channels broadcast a wide range of programmes, including business/financial programmes, music programmes/variety shows, children's animations, imported popular drama series, documentaries, sports programmes, feature films and current affairs programmes.

Figure 5: Weekly Hours of Different Programme Types Broadcast on ATV Home and TVB Jade as at March 2016²⁸



<u>Figure 6</u>: Weekly Hours of Different Programme Types Broadcast on ATV World and TVB Pearl as at March 2016²⁹



²⁸ Updated information from ATV as at March 2016 is not available. The figure is estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

²⁹ Updated information from ATV as at March 2016 is not available. The figure is estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

Digital Channels

Since the launch of DTT services, ATV and TVB have been providing more service channels to viewers. As at March 2016, ATV provided HDTV "Asia" channel, "ATV Classic", "CCTV 1" and "Shenzhen Satellite", all of which were general entertainment channels. TVB provided dramas, variety shows, news, talk shows and game shows, etc. via "J2", "i-News" and "J5".

On 31 March 2016, HKTVE started to provide one general entertainment channel, "ViuTV".

Figure 7: Nature of Pay TV Channels as at March 2016



Pay TV Services

During the period under review, a wide variety of channels were offered on pay TV services, including entertainment/infotainment channels (33.9%), news/information channels (18.2%), sports channels (15.2%), movie channels (9.7%), and documentaries/learning channels (8.0%).

As at March 2016, HKCTV offered a basic package consisting of 74 basic channels and 36 other premium channels (including 14 HDTV channels). PCCW Media's "now TV" service offered 178 channels (including 70 HDTV channels) and 48 video-on-demand services, while TVBNV's service comprised 65 channels (including 23 HDTV channels), of which 17 were also carried on PCCW Media's platform.

Sound Broadcasting

Analogue Channels

As at March 2016, CRHK operated two FM Cantonese language services, viz. "CR1" and "CR2", and one AM English language service, "AM 864". "CR1" provided mainly news, current affairs, financial and personal view programmes. "CR2" was mainly an entertainment channel featuring pop culture and music targeting young listeners. "AM864" was primarily a music channel.

Metro operated two FM Cantonese language services, viz. "Metro Finance" and "Metro Info", and one AM English language service, viz. "Metro Plus". "Metro Finance" provided real-time, marketmoving news and information about financial markets around the world. "Metro Info" provided music and entertainment programmes as well as programmes on lifestyle, health, market news and other information of interest to the public. "Metro Plus" was a music channel which also provided programmes for ethnic groups including the Filipino, Indian, Indonesian, Pakistani and Thai communities in Hong Kong. RTHK operated seven radio channels, providing Cantonese, English and Putonghua services. It offered a variety of thematic channels ranging from information to general entertainment and culture.



Digital Channels

As at end March 2016, DBC operated seven channels comprising "Radio Prime", "me2", "Radio Business", "Chinese Music Channel", "Radio Smiles", "International Music Channel" and "Chinese Opera Channel". The seven channels offered programmes of different varieties, including current affairs and commentary, news, talk shows, financial information, entertainment, education, art and culture, music and programmes for ethnic minorities in different languages including Filipino, Hindi, Indonesian, Thai and Urdu.

As at end March 2016, Metro operated three DAB channels, namely, "Metro Finance Digital", "Metro Music Digital" and "Metro Life Digital". The channels primarily offered finance programmes, talk shows, music shows and lifestyle programmes mainly in Cantonese. As at end March 2016, RTHK operated five channels, four of which principally simulcast existing AM channels and the remaining one was a dedicated channel produced by "China National Radio" for RTHK.

(b) Positive Programme Requirements

During the period under review, free TV licensees were required to broadcast at least 41.5 hours of positive programmes³⁰ per week. While TVB met the requirements,³¹ ATV ceased to provide two comprehensive news bulletins on its Cantonese and English Channels as per the requirement under its free TV licence in February and March 2016.³² HKTVE broadcast a weekly average of 22 hours of positive programmes on its Cantonese channel starting from 2 April 2016.

The reports submitted by the licensees to the Authority on four types of positive programmes, viz. children's programmes, programmes for young persons, programmes for senior citizens and arts and culture programmes, are available at http:// www.ofca.gov.hk/en/pub_report/compliance_ reports/index.html.

Free TV licensees were required to provide Chinese subtitles for all news, current affairs, weather reports and emergency announcements as well as programmes broadcast during prime time (7:00 p.m. to 11:00 p.m.) on Cantonese channels, and English subtitles for all news, current affairs, weather programmes, emergency announcements and educational programmes for teenagers (two hours per week) on English channels. The licensees

³⁰ The positive programmes that ATV and TVB were required to broadcast included news, current affairs programmes, documentary, art and culture programmes, children's programmes and programmes for senior citizens and young persons.

³¹ TVB was required to broadcast at least 45.5 hours of positive programmes per week, including an additional 4 hours on its thematic digital channels (i.e. "J2", "J5" and "iNews") when its renewed free TV licence took effect on 1 December 2015.

³² ATV failed to broadcast comprehensive news bulletins on its "Home Channel" from 6 February 2016 to 19 February 2016, and on its "World Channel" from 6 February 2016 up to 1 April 2016, the last day on which ATV provided its licensed free TV service. Details are set out in Chapter 6.16.

were also required to provide Chinese subtitling for all drama programmes on Cantonese channels and English subtitling for all programmes broadcast on English channels between 8:00 p.m. and 11:30 p.m. Overall, both ATV and TVB complied with the requirements on provision of subtitles. Since 2 April 2016, HKTVE has been subject to the same subtitling requirements.

Pursuant to licence requirements, ATV and TVB were required to broadcast one minute of Announcements in Public Interest (APIs) in each hour for each channel. Also, they are required to broadcast, on a weekly basis, not more than five minutes in aggregate of publicity material for the Authority for each analogue/simulcast digital channel.³⁴ During the period under review, ATV and TVB broadcast a total of 1 804 hours of the two

types of materials.³⁵ Since 31 March 2016, HKTVE has been subject to the same requirements on broadcast of APIs and publicity materials.

As regards sound broadcasting services, analogue sound broadcasting licensees were required to broadcast at least 28.5 hours of positive programmes³⁶ per week. CRHK and Metro reported that they had complied with the licence conditions on broadcast of positive programmes.

All sound broadcasting licensees (including DAB licensees) were required to broadcast one minute of APIs in each hour and not more than five minutes of publicity material for the Authority each week in each service channel. All licensees reported that they had complied with the requirements.



Figure 8: Broadcast of Positive Programmes on Cantonese Channels of ATV and TVB as at March 2016³³

Sources: ATV & TVB

³³ Updated information from ATV as at March 2016 is not available. Figures are estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

³⁴ Both licensees are also required to broadcast two minutes of publicity material for the Authority on other digital channels per week.

³⁵ Updated information from ATV as at March 2016 is not available. Figures are estimated on the basis of TVB's latest submission and ATV's submission for March 2015.

³⁶ The positive programmes that CRHK and Metro were required to broadcast included news and weather programmes, current affairs programmes, art and culture programmes and advisory programmes, viz. programmes for young persons, senior citizens and children.

Figure 9: Broadcast of Positive Programmes on Sound Broadcasting Services as at March 2016



5.1.5 Hong Kong as a Regional Broadcasting Hub

Hong Kong is a broadcasting hub in the Asia-Pacific region with 18 non-domestic TV licensees operating in and broadcasting from Hong Kong. Altogether they offered a total of 276 satellite television channels serving over 300 million viewers in the Asia-Pacific region, Europe and Africa, of which 45 channels were receivable in Hong Kong. A summary of non-domestic TV services as at March 2016 is at **Annex 1**.





Telecommunications

5.2 An Overview of the Telecommunications Market

Hong Kong has one of the most sophisticated and successful telecommunications market in the world. This has been an important factor in Hong Kong's development as a leading business and financial centre. In 2014, the gross output of the telecommunications sector amounted to \$89 billion and it employed around 18 700 persons.

All sectors of Hong Kong's telecommunications market have been liberalised with no foreign ownership restrictions. The Authority's objectives are to maintain a level playing field in the open and competitive telecommunications market and ensure that consumers get the best services available in terms of capacity, quality and price.

5.2.1 The Telecommunications Regulatory Regime

Carrier Licences

The Authority issues carrier licences to facilitybased operators, authorising them to establish and maintain telecommunications networks and facilities which may cross unleased Government land and public streets, for the provision of public telecommunications services.

The unified carrier licensing regime has been implemented since 1 August 2008 as the single licensing vehicle for the provision of facility-based fixed, mobile and/or converged telecommunications services in Hong Kong.



A Unified Carrier Licence (UCL) for the provision of local fixed service authorises the licensee to establish and maintain fixed network, wireline-based or wireless-based or a combination of both where applicable, to provide local telecommunications services between fixed points within Hong Kong. A UCL for the provision of external fixed service authorises the licensee to provide external facilities as well as external services operated over external facilities. A UCL for the provision of mobile service enables the licensee to provide two-way communications between moving locations or between a moving location and a fixed location in Hong Kong. The issue of new UCL for the provision of mobile service is subject to the availability of radio spectrum for assignment. An operator may apply for a single UCL to provide all the above services.

Fixed Carrier Licences (FCLs) and Mobile Carrier Licences (MCLs) which were issued before the introduction of the UCL remain valid until their expiry dates. The holders of FCL and MCL may apply to the Authority for UCL to replace their licences before or upon expiry.

As at March 2016, there were a total of 60 carrier licensees, providing local fixed services, cable-based external fixed services, non cable-based external fixed services and/or mobile services.

Public Radiocommunications Service Licences

Services which may be authorised under the Public Radiocommunications Service (PRS) Licence include radio paging, community repeater (trunked radio) services, vehicle location information services, one-way data message services and public mobile radio data services.

As the provision of radiocommunications services requires the assignment of suitable operating frequencies, PRS Licences are granted only when the required radio spectrum is available.

As at March 2016, there were a total of nine PRS licensees.



Services-based Operator Licences

Services-based Operators (SBO) are not authorised to establish or maintain any telecommunications means which cross public streets or unleased Government lands, and therefore have to make use of the networks and facilities of other licensed facility-based operators for the provision of public telecommunications services.

SBO licence covers three types of services, namely, Class 1 and Class 2 local voice telephony services, and Class 3 services which may include external telecommunications service, Internet access service, international value-added network service, mobile virtual network operator service, private payphone service, public radio communications relay service, security and fire alarm signals transmission service, teleconferencing service and mobile communications service on board an aircraft.

As at March 2016, there were a total of 537 SBO licensees.

Class Licences

The class licensing regime does not require any licence application. Parties meeting the specified eligibility criteria and conditions would automatically become the class licensees, and are required to comply with the conditions set out in the relevant Class Licence as well as the TO. Currently there are seven types of Class Licences:

Class Licence for Citizens Band Radio Station

- Class Licence for In-building Telecommunications Systems
- Class Licence for Medical Implant Communication
 System Device
- Class Licence for Short Range Device
- Class Licence for Taxi Mobile Station
- Class Licence for Offer of Telecommunications
 Services
- Class Licence for Provision of Public Wireless
 Local Area Network Services

Other Licences

Apart from the licences mentioned above, there are a number of miscellaneous licences under the purview of the Authority.

A breakdown of the types and numbers of all telecommunications licences are at **Annex 2**.

5.2.2 Developments in the Telecommunications Market and Technology Trends

Mobile Communications Services

Competition in public mobile services is keen. As at March 2016, four mobile network operators, namely, China Mobile Hong Kong Company Limited (CMHK), Hong Kong Telecommunications (HKT) Limited (HKT), Hutchison Telephone Company Limited (HTCL) and SmarTone Mobile Communications Limited (SmarTone), were providing a wide range of public mobile services. The availability of mobile number portability since March 1999 has contributed to promoting effective competition among the mobile network operators as it enables customers to retain their telephone numbers when they switch to another mobile network operator. The four mobile network operators provide second generation (2G), 3G and 4G services in Hong Kong at very affordable prices. As at March 2016, there were about 17 million subscribers to mobile communications services. This represents a population penetration of 228.3%, one of the highest in the world. The number of 3G/4G users reached 14.69 million in March 2016, representing a population penetration of 200.6%. Through spectrum refarming, more spectrum is now used for provision of 4G services with a downlink speed up to 375 Mbps.

With the increasing popularity of smart phones, particularly 4G mobile handsets which were readily available in the market, the monthly mobile data usage surged to 20 557 Terabytes in March 2016, representing 1.2 times and 1.6 times the monthly usage over the same period in 2015 and 2014 respectively. On average, each mobile user used 1 358 Megabytes per month, compared with 1 327 Megabytes in March 2015 and 1 046 Megabytes in March 2014. The continued development of 4G mobile services is expected to further boost the mobile data usage in the future.



Figure 10: Number of Mobile Subscribers (2006 to 2015)



Figure 11: Mobile Customers using Postpaid and Prepaid SIM (2006 to 2015)



Figure 12: Mobile Data Usage (2006 to 2015)

Fixed Communications Services

The local fixed communications services market has been fully liberalised since 2003. There is no preset limit on the number of licences to be issued for fixed services, or any deadline for the submission of licence applications. Furthermore, there is no specific requirement on network rollout and investment and licensees may provide their services according to their proposals.

As of March 2016, there were 25 local fixed carriers, providing around 95 fixed lines per 100 households, one of the highest in the world. They are, in alphabetical order:

- 21 ViaNet Group Limited
- China Mobile Hong Kong Company Limited
- China Telecom Global Limited
- China Unicom (Hong Kong) Operations Limited
- ComNet Telecom (HK) Limited
- Equinix Hong Kong Limited
- HKC Network Limited

- Hong Kong Broadband Network Limited
- Hong Kong Cable Television Limited
- Hong Kong Telecommunications (HKT) Limited
- Hutchison Global Communications Limited
- New World Telecommunications Limited
- NTT Com Asia Limited
- PCCW Global (HK) Limited
- PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited
- Reach Networks Hong Kong Limited and Reach Cable Networks Limited
- SmarTone Communications Limited
- Superloop (Hong Kong) Limited
- Telstra International HK Limited and Telstra
 International Limited
- Towngas Telecommunications Fixed Network
 Limited
- TraxComm Limited
- TVB Network Vision Limited
- Verizon Hong Kong Limited
- Vodafone Enterprise Global Network HK Limited
- Wharf T&T Limited

As a result of the active network rollout by fixed carriers and the former Telecommunications Authority's initiative to encourage further network rollout by the withdrawal of mandatory Type II interconnection policy in mid-2008, 87.1% and 78.9% of households were able to enjoy a choice of at least two and three self-built customer access networks respectively as at March 2016. It is expected that the figures will keep growing as the carriers continue to roll out their networks.

Local fixed carriers are required to facilitate fixed number portability which enables consumers to switch to another fixed carrier without having to change their telephone numbers.

Fixed Broadband Services

As at March 2016, 25 facility-based operators and 190 SBOs were authorised to provide broadband Internet access services in Hong Kong. With the continuous network rollout of facility-based operators, the Hong Kong community is able to enjoy the nearly ubiquitous coverage of broadband networks through the deployment of various technologies including asymmetric digital subscriber line, hybrid fibre coaxial cable, fibre-to-the-building, fibre-to-the-home, etc. Broadband access to various applications and content services has become an integral part of the life of people in Hong Kong. As at March 2016, there were around 2.3 million residential and commercial fixed broadband subscribers, with a household penetration rate of 84%. Broadband services are available at speeds up to 10 gigabit per second (Gbps). Around 86% of the broadband subscribers are using service plans with speeds at 10Mbps or above. The statistics of fixed broadband subscribers as at March 2016 and the statistics for the past 10 years are shown in Figure 13 and Figure 14 respectively.

	No. of subscribers	% share
Total No. of broadband subscribers	2 347 833	
Broadband speed of 10Mbps or above	2 018 073	86.0%
Broadband speed below 10Mbps	329 760	14.0%
Residential	2 093 750	89.2%
Commercial	254 083	10.8%

Figure 13: Statistics of Fixed Broadband Subscribers as at March 2016



Figure 14: Fixed Broadband Subscribers (2006 to 2015)

Next Generation Networks

Traditional telecommunications networks are built based on circuit-switched technologies and are primarily designed for the conveyance and provision of dedicated telecommunications services. With the advent of new technologies, it is now possible to build a single network for the conveyance and provision of a variety of services, including fixed voice telephony service, data service, mobile service and television service. Such new networks, commonly referred to as next generation networks (NGNs), serve as an open platform through which services and applications, and establish direct relationship with their customers.

In Hong Kong, the development of NGNs has always been driven by technical and commercial considerations of carriers. The major network operators have already launched their NGNs. With the advent of NGN, the Authority will remain vigilant about the challenges to be brought about by NGN and ensure that the regulatory framework remains updated and appropriate in the NGN era. After the completion of a consultancy study commissioned to examine the implication of NGN development on the regulatory framework in Hong Kong, the NGN working group set up under OFCA, with members coming from the industry as well as various professional associations, has been deliberating on various issues pertinent to NGN, including network security, emergency call services, standardisation and interoperability, interconnection regime and quality of services, universal service obligation, numbering, naming and addressing, numbering portability, interconnection charging and NGN development indicators.

Public Wi-Fi Services

Operators have been actively rolling out Wi-Fi networks. Six network operators and 53 class licensees are providing public Wi-Fi services. As at March 2016, there were 41 002 public Wi-Fi hotspots in the city and the number continued to grow. Free Wi-Fi services were available to the public in 603 government premises.

External Telecommunications Services

The external telecommunications facilities market has been fully liberalised since 2000. As of March 2016, 42 fixed carriers were authorised to provide cable-based and/or non-cable-based external telecommunications facilities.

As at March 2016, Hong Kong had a total of seven cable landing stations: two in Tong Fuk, two in Tseung Kwan O and one each in Deep Water Bay, Chung Hom Kok and Cape D'Aguilar, making it a major telecommunications and Internet hub in the region. In March 2016, Hong Kong was connected to nine regional and trans-Pacific submarine cable systems. They are Asia-America Gateway Cable System (AAG), Asia Pacific Cable Network 2 (APCN-2), Asia Submarine-Cable Express (ASE), EAC-C2C, FLAG Europe Asia (FEA), FLAG North Asia Loop (FNAL)/ REACH North Asia Loop (RNAL), Sea-Me-We 3 (SMW3), South-East Asia Japan Cable System (SJC) and TGN-Intra Asia Cable System (TGN-IA). As at March 2016, the total equipped external capacity exceeded 35 167 Gbps. Total external telephone traffic was 9.9 billion minutes for the period from 1 April 2015 to 31 March 2016. Landing of two additional submarine cable systems are in the pipeline and they are expected to be ready for service in late 2016 or mid 2017.



Figure 15: Submarine Cables between Hong Kong and Other Countries

Satellite Services

Hong Kong adopts an open sky policy in regulating the provision of satellite services. Satellite-based telecommunications and television broadcasting services are provided via a multitude of satellites in the region with more than 200 satellite earth station antennas operated by a number of fixed carriers and broadcasters.

Licences are required for the operation of satellites and associated facilities. As at March 2016, two Hong Kong companies were licensed to operate and provide satellite communication services, namely, Asia Satellite Telecommunications Company Limited (AsiaSat) and APT Satellite Company Limited (APT). AsiaSat and APT were established in 1988 and 1992 respectively.

The two companies have entered a new investment cycle of launching new satellites for replacement and provision of new business. A new satellite was launched in the second half of 2015, making a total of 10 satellites currently operated by AsiaSat and APT. Another new satellite is scheduled to be launched in the first half of 2017.



Chapter 6: Review of the Authority's Major Tasks

Broadcasting

6.1 Grant and Renewal of Free TV and Pay TV Licences

Non-renewal of the Free TV Licence of ATV

The CE in C, having regard to, inter alia, the recommendations of the Authority, decided on 1 April 2015 not to renew ATV's free TV licence and to extend the term of its licence to 1 April 2016 to comply with the requirement under the BO. This is the first time in Hong Kong's broadcasting history that an incumbent's broadcasting licence has not been renewed. As a licensee, ATV had the obligation to provide services in compliance with the relevant statutory and licence requirements in the run up to the expiry of its licence. The Authority had been monitoring ATV's compliance with the BO and licence conditions. Where there were contraventions, the Authority did not hesitate to impose on ATV sanctions which were commensurate with the nature and severity of its breaches. For details, please refer to paragraph 6.16 of this report. In parallel, the Authority had handled the issues arising from the non-renewal of ATV's licence, many of which were unprecedented in Hong Kong's broadcasting history, including the re-assignment of part of the broadcasting spectrum

withdrawn from ATV to HKTVE and facilitation of a smooth changeover of free TV services after the cessation of ATV's free TV service at 00 hours on 2 April 2016.

Grant of the Free TV Licence of HKTVE

Having regard to the Authority's recommendations on HKTVE's application, the CE in C decided on 1 April 2015 to formally grant HKTVE a free TV licence by using a fixed network as its transmission mode. In view of the agreement of HKTVE to comply with all the additional conditions the Authority imposed, the Authority approved in January 2016 HKTVE's application for using spectrum, on top of a fixed network, as an additional transmission means, and re-assigned to HKTVE half of the transmission capacity of a Multiple Frequency Network multiplex withdrawn from ATV for the provision of its licensed free TV service with effect from 2 April 2016. HKTVE started to provide its Chinese channel by using spectrum as an additional transmission means from 2 April 2016. HKTVE was required to broadcast an English channel within 24 months from licence grant, i.e. by 31 March 2017.

Renewal of the Pay TV Licence of HKCTV

The pay TV licence of HKCTV will expire in May



2017. In processing the licence renewal application of HKCTV received in May 2015, the Authority carried out a comprehensive assessment of its performance and conducted a public consultation exercise in 2015 to collect public views on the services provided by HKCTV. The Authority submitted its recommendations on the licence renewal application of HKCTV to the CE in C in April 2016.

6.2 Applications for Free TV Licences

Licence Application of Fantastic TV

Since the CE in C approved in principle the application for a free TV licence by Fantastic TV in October 2013, the Authority had proceeded with the follow-up work and discussed with Fantastic TV on outstanding issues including its compliance with the statutory requirements under the BO, programming requirements and proposed licence conditions. Upon Fantastic TV's request, the CE in C gave it additional time to resolve all outstanding issues and satisfactorily address the concerns of the Authority in relation to its application, including, among others, the proposed corporate restructuring to ensure its compliance with the non-subsidiary requirement under the BO. On the basis of the supplementary information provided by Fantastic TV including that on its corporate status, the Authority made a further recommendation to the CE in C in April 2016.

Having regard to the Authority's recommendations on Fantastic TV's application, the CE in C formally granted a 12-year licence to Fantastic TV for the provision of free TV service in May 2016. Fantastic TV is required to provide a Chinese channel and an English channel within 12 months and 24 months from licence grant respectively, viz. by 30 May 2017 and 30 May 2018.

Licence Application of HKTV

The Authority received an application for a free TV licence from HKTV in April 2014. The Authority assessed HKTV's application in accordance with the BO and established procedures, and submitted its assessment of and recommendations on the application to the CE in C in January 2016.

Licence Application of Forever Top

The Authority was processing the application for a free TV licence submitted by Forever Top in April 2015 in accordance with the BO and established procedures, including examining the views received during the public consultation exercise on the application and seeking further information from Forever Top as required. Moreover, the Authority had commissioned an independent consultant to conduct a market analysis and prepare a consultancy report for assessing the possible impacts of the entry of Forever Top, if its application was approved by the CE in C, on the local television market and overall broadcasting landscape. The Authority will assess the application properly and prudently with a view to submitting its recommendations to the CE in C as soon as practicable.







6.3 Renewal of Analogue Sound Broadcasting Licences

The analogue sound broadcasting licences of CRHK and Metro granted under the TO were due to expire after 25 August 2016. Having regard to the overall assessment of the performance of the two licensees and the public views received during the public consultation exercise, the Authority submitted its recommendations on the licence renewal applications to the CE in C in May 2015. The CE in C accepted the Authority's recommendations and decided on 22 March 2016 to renew the analogue sound broadcasting licences of CRHK and Metro for a term of 12 years with effect from 26 August 2016. As part of the licensees' proposals in the renewed licences, CRHK and Metro have committed to reviewing and revising their written guidelines to strengthen guidance to their staff on the impartiality

and personal view programme rules in the Radio Code of Practice on Programme Standards, and to providing specific guidelines to their staff on their no call screening policy for phone-in programmes.

6.4 Processing Complaints relating to Broadcasting Services

Overview of the Complaints Processed

During the period from April 2015 to March 2016, the Authority processed a total of 1 999 cases (14 992 complaints)³⁷ about the materials broadcast by broadcasters, which represented a decline of 26% in the number of cases and a decline of 64% in the number of complaints processed,³⁸ as compared with the numbers recorded during the same period in the previous year (2 694 cases, 41 449 complaints). Breakdown of all the complaint cases by broadcasting service and broadcaster processed during the period is shown in Figure 16 and Figure 17 respectively.



³⁷ To ensure operational efficiency, complaints with similar allegations against the same issue or broadcast material are handled together and counted as a single case.

The significant decline in the number of complaints processed in 2015/16 was attributed to a complaint case against a television programme broadcast on TVB and TVBNV which gave rise to over 27 000 complaints in 2014/15.



Figure 16: Distribution of All Complaint Cases by Broadcasting Service Processed in 2015-2016

Figure 17: Distribution of All Complaint Cases by Broadcaster Processed in 2015-2016

Broadcasters Involved	No. of Complaint Cases	No. of Complaints Involved
ATV	218	312
TVB	1 010	2 215
НКСТV	64	84
PCCW Media	45	110
TVBNV	10	15
СRНК	127	157
Metro	39	45
DBC	5	5
RTHK (TV)	131	352
RTHK (Radio)	232	282
China Satellite TV Group Company Limited	1	1
Multiple Broadcasters	117	11 414
Total	1 999	14 992

Among all the complaint cases processed, the DG Com handled 1 984 cases (5 618 complaints) under delegated power of the Authority. These complaints were related to breaches of a minor nature, or allegations which did not constitute any breach or were outside the remit of section 11(1) of the

B(MP)O, i.e. the substance of the complaint did not constitute a contravention of the legislation, licence conditions or codes of practice. The Authority dealt with 15 cases (9 374 complaints). Details of the outcomes of all the complaints processed during this period are at Figure 18.

Figure 18: Outcomes of all the Complaints Dealt With by the Authority and DG Com

	Within Section (11)1 of B(MP)O				Outside Section (11)1 of B(MP)O	
	Substantiated		Unsubstantiated			
	The Authority	DG Com	The Authority	DG Com	DG Com	Total
No. of Cases	13	121	2	1 433	430	1 999
No. of Complaints	1 084	139	8 290	4 685	794	14 992

Complaints Dealt with by the Authority

Among the 15 complaint cases dealt with by the Authority, 53% were related to free TV

services. Breakdown of these complaint cases by broadcasting service is at Figure 19.

Figure 19: Breakdown of Complaint Cases Dealt With by the Authority by Broadcasting Service



Regarding the nature of the broadcast materials under complaint, 13 out of the 15 complaint cases dealt with by the Authority were related to programmes and two about advertisements. 13 complaint cases were substantiated. Among the substantiated cases, the main substance of complaints of six cases was related to inaccurate factual contents, and/or misleading and partial presentations in news programmes or documentaries. Three cases were related to the mingling of programme and advertising material or the embedding of advertising material within programme contents. Two cases were related to unfairness to individuals or organisations featured in factual programmes. One case was related to use of foul language in a programme. The remaining one was related to misleading claim in an advertisement.

The Authority imposed a financial penalty of \$300,000 on, and issued three warnings, seven pieces of strong advice and four pieces of advice to the broadcasters concerned. A breakdown of the decisions of the Authority on the complaints dealt with in 2015-2016 is at Figure 20.

Decision of the Authority	ATV	тув	TVBNV	CRHK	Total
No Further Action	0	2	2	0	4 note 1, 2
Advice	0	3	0	1	4
Strong Advice	1	4	1	1	7 note 2, 3
Warning	0	1	1	1	3 note 4
Financial Penalty	1	0	0	0	1
Total	2	10	4	3	19 notes 1, 2, 3 & 4

Figure 20: Decision of the Authority on Complaint Cases during 2015-2016

Note 1: One unsubstantiated complaint case involved broadcasts by two licensees and no further action was taken against them.

Note 2: One substantiated complaint case involved broadcasts by two licensees. A strong advice was issued to one of the concerned licensees, while no further action was taken against the other licensee.

Note 3: One substantiated complaint case involved broadcasts by two licensees and a strong advice was issued to each of the concerned licensees.

Note 4: One substantiated complaint case involved broadcasts by two licensees and a warning was issued to each of the concerned licensees.
Telecommunications

6.5 Re-assignment of Frequency Spectrum in the 1.9 – 2.2 GHz Band

In November 2013, the Authority announced its decision to adopt the hybrid administrativelyassigned cum market-based approach to re-assign 118.4 MHz of spectrum in the 1.9 – 2.2 GHz band (3G Spectrum) upon expiry of the existing assignments on 21 October 2016. Under the hybrid approach, the three incumbent 3G operators have been re-assigned 69.2 MHz of the 3G Spectrum through exercise of right of first refusal offered to them, and the remaining 49.2 MHz was put to auction in December 2014. Two incumbent 3G operators and the existing mobile network operator not assigned with any 3G Spectrum successfully bid for the spectrum. All the concerned spectrum will be assigned for a new term of 15 years, starting from 22 October 2016 to 21 October 2031.

In sum, 29.6 MHz out of the 118.4 MHz of the 3G Spectrum will change hands with effect from October 2016. In order to facilitate a smooth handover of the above-mentioned spectrum among the mobile network operators, OFCA set up a technical working group in March 2015 comprising representatives of all the mobile network operators to coordinate the technical matters and to discuss the possible technical arrangements in relation



to the 3G Spectrum re-assignment exercise. The implementation of the technical arrangements has been progressing smoothly in a coordinated manner. OFCA will continue to work with the operators so as to minimise any impact on services to mobile customers during the handover of spectrum in October 2016.

6.6 Re-assignment of Frequency Spectrum in the 900 MHz and 1800 MHz Bands

Among the 572 MHz of spectrum currently assigned for the provision of mobile telecommunications services, the existing assignments for 49.8 MHz of spectrum in the 900 MHz band and 148.8 MHz of spectrum in the 1800 MHz band will expire within the period between November 2020 and September 2021. In order to allow sufficient time for the industry to prepare for the spectrum reassignment, the Authority and the SCED kickstarted the re-assignment exercise by launching a joint public consultation on the proposed arrangements for spectrum re-assignment and the related spectrum utilization fee on 3 February 2016. Three options had been proposed for the spectrum re-assignment, namely (a) a full-fledged administratively-assigned approach; (b) a fullfledged market-based approach; and (c) a hybrid administratively-assigned cum market-based approach. Upon the close of the consultation on 18 May 2016, 325 submissions were received from the industry, business organisations and members of the public. Separately, the Authority has engaged an external consultant to carry out a technical study regarding any impact on service quality arising from the spectrum re-assignment. After considering the views and comments received from the first round consultation as well as the results of the consultancy study, the Authority plans to conduct a further round of public consultation in early 2017 with a view to announcing its decision on the arrangements for spectrum re-assignment by end 2017.

6.7 Frequency Swap between Two Mobile Carrier Licensees in the 2600 MHz Band

In July 2014, CMHK and HKT submitted a joint application seeking the Authority's permission to swap 2 x 5 MHz of frequency blocks of their assigned spectrum in the 2600 MHz band. As this was a swap of an equal amount of spectrum, it would not result in any change in the total amount of spectrum assigned to the two mobile carrier licensees. Considering that the proposed frequency swap would result in more efficient use of spectrum as a scarce public resource and that consumers would benefit from improved service quality and choice of another competitive 4G network operator, the Authority decided to approve the proposed frequency swap in January 2016 subject to a number of conditions imposed, including the confirmation and undertaking by the two mobile carrier licensees that there was no monetary exchange between them in effecting the frequency swap.

6.8 Measures to More Efficiently Utilise the 8-digit Numbering Plan

In Hong Kong, the 8-digit telecommunications numbering plan has been adopted since 1995. With the continuous development of the telecommunications industry and the popularity of mobile communications services over the last two decades, numbers available for allocation to mobile services will be exhausted as early as late 2018. The Authority proposed to make available more number blocks for mobile services through maximising utilisation of the existing 8-digit numbering plan. A public consultation was launched in October 2015 to solicit public views on five proposed measures to ensure better utilisation of the 8-digit numbering plan and to meet the increasing demand for mobile numbers. By the close of the consultation on 29 December 2015, 20 submissions were received. Taking into account the views and comments

received from the industry and interested parties, the Authority was set to decide on the measures to be adopted and the implementation plan for these measures some time in 2016.

6.9 Regulation of Broadcast-type Mobile Television Services (Mobile TV Service)

Since the launch of Mobile TV Service in February 2012, the China Mobile Multimedia Broadcasting (CMMB) standard has been used as the transmission standard. In January 2014, Hong Kong Mobile Television Network Limited (HKMTV), the licensee holding the UCL which authorised it to provide Mobile TV Service (the Mobile TV Licence), indicated to OFCA its proposal to switch from the original CMMB standard to the Digital Terrestrial Multimedia Broadcast (DTMB) standard for the transmission of its Mobile TV Service.

Given that DTMB standard was the transmission standard adopted for the provision of free-toair DTT services in Hong Kong, the Authority considered that if HKMTV switched to the DTMB standard without implementation of effective technical measures, its Mobile TV Service would be available for reception by an audience of more than 5 000 specified premises in Hong Kong and would thereby trigger the licensing requirement under the BO in relation to a free TV licence and/ or pay TV licence. Furthermore, the provision by



HKMTV of Mobile TV Service for reception by household television sets via fixed installations, such as in-building coaxial cable distribution systems and rooftop antennas, would constitute the provision of a fixed service, rendering HKMTV in breach of Schedule 1 to the Mobile TV Licence, which stipulated that nothing in the licence authorised the licensee to provide any fixed services using the frequencies specified in the Mobile TV Licence, or to provide any service subject to licensing under any other ordinance.

HKTV and HKMTV disagreed that Mobile TV Service using the DTMB standard should be subject to the regulation by the BO and filed an application to the court for leave to apply for judicial review (JR) against the view expressed by OFCA. After the substantive hearing conducted on 26 and 27 November 2014, the Court handed down its judgment in September 2015 in favour of OFCA and dismissed the JR. Subsequently, HKTV requested OFCA to process HKMTV's proposal of using the Digital Video Broadcasting – Terrestrial 2 standard for the provision of its Mobile TV Service (the DVB-T2 proposal). Since then, OFCA has been diligently following up with HKTV in respect of the DVB-T2 proposal. The Authority will continue to facilitate HKMTV to provide its Mobile TV Service that complies with the requirements of the relevant legislation and its Mobile TV Licence.

6.10 Reduction of Telecommunications Licence Fees

In November 2012, the Authority and SCED issued a joint statement to promulgate their decision to reduce the customer connection fee level of UCLs from \$800 to \$700 for each 100 customer connections, and to reduce the mobile station fee level of PRS Licences (Paging) and SBO Licences (Class 3) from \$800 to \$700 for each 100 mobile stations. Following completion of the legislative procedure, the new licence fees took effect on 1 March 2013. In February 2013, PCCW-HKT Telephone Limited and HKT (PCCW and HKT) applied for leave to lodge a JR application against the Authority and SCED on their decisions on the licence fees reduction. The Court of First Instance granted leave to PCCW and HKT's application for the JR in July 2013. The substantive hearing was conducted from 17 to 19 June 2015. The Court of First Instance handed down its judgment on 11 August 2015 dismissing the JR application. PCCW and HKT lodged an appeal to the Court of Appeal on 4 September 2015 and the Court fixed the dates of hearing on 19 to 20 April 2016.39



39 The Court of Appeal dismissed the appeal application on 17 May 2016. PCCW and HKT lodged an application for leave to appeal to the Court of Final Appeal on 13 June 2016.

6.11 Processing Complaints relating to Telecommunications Services

As the telecommunications market is fully liberalised and highly competitive, the Authority has adopted a light-handed regulatory approach. The Authority investigates consumer complaints against telecommunications operators if there is sufficient evidence to establish a prima facie case on possible breaches of any provisions under the TO, licence conditions or other relevant legislation which the Authority has jurisdiction to enforce, namely, TDO and CO. For other consumer complaints not involving any breach of the TO, licence conditions or other relevant legislation, it is the responsibility of the telecommunications operators to resolve the matters under complaint with their customers. The Authority will take note of and monitor all consumer complaints received. Appropriate actions would be taken if any systemic issues are identified.

During the year under review, the Authority received a total of 2 466 consumer complaints relating to telecommunications services, representing a reduction of 18.7% compared to 3 034 complaints in the previous year. Among them, 1 408 cases (57.1%) were related to mobile services, 598 cases (24.2%) were related to Internet services, 381 cases (15.5%) were related to fixed-line services, 47 cases (1.9%) were related to external telecommunications and 32 cases (1.3%) were related to other services. On the nature of complaint, the Authority received the largest number of complaints relating to customer service quality (517 cases or 21%), while complaints about billing disputes (510 cases or 20.7%) and service quality (385 cases or 15.6%) ranked second and third respectively.

Breakdown of complaint cases by types of telecommunications services and nature of complaints received by the Authority during the period are shown in Figure 21 and Figure 22 respectively.



Figure 21: Distribution of Complaint Cases by Types of Telecommunications Services Received by the Authority in 2015 – 2016



Figure 22: Distribution of Complaint Cases by Nature of Complaints Received by the Authority in 2015-2016

Among the 2 466 complaint cases received, 2 429 (98.5%) were found to be outside the Authority's jurisdiction. For the remaining 37 cases (1.5%), they might involve possible breach of the TO or licence conditions. The majority of these cases were related to difficulties in accessing buildings to provide services, sales conduct, suspected anti-competitive behaviour and abuse of market power. Regulatory actions will be taken against the telecommunications operators concerned if

the complaints are found to be substantiated after investigations.

Breakdown of complaint cases that might involve possible breach of the TO or licence conditions by types of telecommunications services and nature of complaints received by the Authority during the year under review are at Figure 23 and Figure 24 respectively.



Figure 23: Distribution of Complaint Cases by Types of Telecommunications Services Received by the Authority in 2015-2016





In the past few years, the Authority noted that consumer complaints were mainly on telecommunications service contractual disputes, mobile bill shock, chargeable mobile content services and Fair Usage Policy. In collaboration with the telecommunications industry and the Communications Association of Hong Kong (CAHK), various measures have already been implemented to address these complaints. These include the issue of an industry code of practice for voluntary compliance by telecommunications licensees on service contracts, implementation of mobile bill shock preventive measures, promulgation of a set of mandatory guidelines governing the implementation of Fair Usage Policy by telecommunications services providers, and setting up of an Administrative Agency under the CAHK to govern the service delivery by mobile content services providers. The numbers of complaint cases of the types mentioned above received during the year under review is at Figure 25.

Figure 25: Number of Consumer Complaint Cases Received by the Authority in 2015-2016

Types of Consumer Complaint	No. of Complaint Cases
Contractual disputes	459
Mobile bill shock	275
Fair Usage Policy	6
Chargeable mobile content services	3

6.12 Long Term Implementation of Customer Complaint Settlement Scheme (CCSS)

In November 2012, OFCA worked with the CAHK to launch the CCSS for a trial period of two years. The CCSS is an alternative dispute resolution scheme which aims at resolving billing disputes in deadlock between telecommunications service providers and their residential/personal customers by means of mediation. The mediation service is provided by an independent mediation service centre (CCSS Centre) set up under the CAHK with voluntary participation of all major telecommunications service providers in Hong Kong. OFCA supported the CCSS by contributing the necessary funding, screening the CCSS applications against the acceptance criteria, and monitoring the performance and the governance of the scheme.

Following completion of the trial scheme on 31 October 2014, OFCA conducted a review of the effectiveness of the CCSS and its usage by the public. Having regard to the encouraging outcome of the CCSS trial, the proven demand from customers and the positive feedback from the industry, OFCA decided to support the long term implementation of the CCSS on the basis of the framework adopted in the trial scheme. The long term implementation of the CCSS as administered by CAHK commenced on 1 May 2015.

Between 1 May 2015 and 31 March 2016, there were 145 eligible applications, 73 cases of which were satisfactorily settled before referral to the CCSS Centre, 64 cases were satisfactorily settled through mediation by the CCSS Centre, four cases were not settled and the remaining four cases were being processed by the CCSS Centre.

6.13 Enforcement of the Fair Trading Sections of the Trade Descriptions Ordinance

The fair trading sections of the TDO prohibit

certain specified unfair trade practices by traders in the provision of goods and services to consumers. The Authority is conferred concurrent jurisdiction with the C&ED to enforce the fair trading sections of the TDO in relation to the commercial practices of licensees under the TO and the BO directly connected with the provision of telecommunications and broadcasting services. The two enforcement agencies have entered into a memorandum of understanding (MoU) to coordinate the performance of their functions under the fair trading sections of the TDO and have issued a set of enforcement guidelines to provide guidance for traders and consumers as to the operation of the fair trading sections.

From 1 April 2015 to 31 March 2016, the Authority handled a total of 899 complaint cases under the TDO. Among these cases, 820 were closed for there being insufficient evidence to suspect/ establish a contravention or falling outside the scope of the TDO, 19 cases were closed after advisory letters were issued to the licensees concerned to draw their attention to the need to improve the relevant commercial practices in relation to the sale, supply or promotion of telecommunications or broadcasting services to consumers, one case was successfully prosecuted with conviction by the court on 14 April 2016 and the remaining 59 cases were being handled at various stages.

6.14 Full Commencement of the Competition Ordinance

On 14 December 2015, the CO, a cross-sectoral competition law prohibiting anti-competitive conduct in all sectors, commenced full operation. Under the CO, the Authority is conferred concurrent jurisdiction with the Commission to enforce the CO in respect of the conduct of undertakings operating in the telecommunications and broadcasting sectors, including merger and acquisition activities involving carrier licensees in the telecommunications sector. The competition provisions in the TO and BO were repealed simultaneously subject to transitional

arrangements.

Upon full commencement of the CO, the Authority and the Commission signed a MoU to co-ordinate the performance of functions in which they have concurrent jurisdiction. In accordance with the principles agreed by the Authority and the Commission under the MoU, the Authority would ordinarily take the role of the lead authority for matters falling within the concurrent jurisdiction. For matters involving issues that are partly within and partly outside the concurrent jurisdiction, the Authority and the Commission would discuss and agree on how best to take forward the matter on a case-by-case basis.

To assist the businesses and the public to understand the CO, the Authority and the Commission jointly issued under the CO six sets of guidelines on 27 July 2015 setting out how they would interpret and give effect to the three competition rules, and explaining the procedures for handling complaints, conducting investigations and considering applications for exclusions and exemptions.

In relation to handling leniency applications in respect of the telecommunications and broadcasting sectors under the CO, the Authority, having considered the views received from the telecommunications and broadcasting sectors, and taking into account its experiences in enforcing the competition provisions under the TO and the BO since 2000, announced on 19 November 2015 that it would not adopt a leniency policy for its enforcement of the CO, either on its own or jointly with the Commission, for the time being. The Authority may, in accordance with the relevant provisions of the CO and the actual circumstances of the cases in which it has concurrent jurisdiction with the Commission, consider making leniency agreements with the telecommunications and broadcasting licensees on a case-by-case basis.

Since the full commencement of the CO on 14 December 2015 to 31 March 2016, a total of 45 complaints and/or enquiries were received, with 40 cases closed without the need for further actions and five cases being processed. During the period, the Authority also reviewed two transactions under the merger rule and considered that no follow-up action was required.

6.15 Enforcement of the Unsolicited Electronic Messages Ordinance

The UEMO sets out the rules about sending commercial electronic messages (CEMs), including the requirements to provide accurate sender information and honour unsubscribe requests. Under the UEMO, the Authority has established three Do-Not-Call (DNC) registers to allow members of the public to register their numbers to indicate their choice of not receiving commercial facsimile messages, short messages and/or pre-recorded telephone messages. By the end of March 2016, more than 2.8 million numbers had been registered under these DNC registers.

In October 2015, the Authority served an enforcement notice on a commercial facsimile sender pursuant to section 38 of the UEMO, requiring him to stop sending further commercial facsimile messages in contravention of the UEMO. Despite the enforcement notice, OFCA continued



to receive reports on the sending of unsolicited facsimile messages by the sender, suggesting possible contravention against the enforcement notice. OFCA therefore conducted a raid operation on 22 January 2016 against the sender, during which three computers were seized for further analysis and investigation in connection with possible prosecution actions.⁴⁰ Under section 39 of the UEMO, any person who contravenes an enforcement notice served on him commits an offence.

The Authority will continue to monitor the compliance with the UEMO by CEM senders and streamline the procedures for more effective enforcement.

Major Regulatory Actions

6.16 Sanctions against Broadcasting Licensees

Breach of Statutory and Regulatory Requirements by ATV

During the period under review, the Authority had handled a number of breaches of the statutory and licence requirements by ATV. In particular, the Authority was satisfied that ATV's failure to –

- (a) comply with the relevant licence requirements to broadcast comprehensive news bulletins on its Home Channel from 6 February 2016 to 19 February 2016, and on its World Channel from 6 February 2016 to 1 April 2016;
- (b) comply with the residence requirement under the BO in respect of its directors;
- (c) comply with the direction issued by the Authority, requiring it to pay the first instalment of the outstanding licence fee of its free TV licence by the deadline stipulated by the Authority; and

(d) pay two sets of financial penalties by the deadline stipulated by the Authority,

constituted grounds for licence suspension under section 31 of the BO. The Authority, having considered the full circumstances of the cases, the representations of ATV and the statutory requirements under the BO, decided on 22 February 2016 to invoke the procedures under the BO to suspend the free TV licence of ATV for a period of 30 days. The Authority further advised ATV in March 2016, that its failure to (a) pay the provisional variable fee of its free TV licence by the statutory deadline; and (b) comply with the direction issued by the Authority, requiring it to pay the outstanding provisional variable fee of its free TV licence by the deadline stipulated by the Authority, constituted additional grounds for licence suspension under section 31 of the BO, and served on ATV a notice and invited ATV to make representations. The Authority was conscious that the procedures for suspension of licence would take time and that the procedures could not be completed in time for any licence suspension to take effect before the expiry of ATV's licence on 1 April 2016. However, as a regulator, the Authority was duty-bound to perform its statutory functions, including imposing on licensees sanctions which were commensurate with the nature and severity of the breaches. In order to uphold the integrity of the regulatory regime and to send a correct message to the broadcasting industry, the Authority considered that invoking the licence suspension procedures against ATV was a proper sanction which was commensurate with the nature and severity of its breaches.

Subsequently, the Authority decided on 24 March 2016 not to proceed further with the procedures to suspend ATV's licence. In making this decision, the Authority had taken into account the procedural requirements under the BO pertaining to licence suspension and the overall timeline. Pragmatically speaking, there were real practical constraints for the Authority to complete all the licence suspension procedures before the expiry of ATV's free TV

⁴⁰ Charges were laid against the sender in May and July 2016.

licence. In addition, the Authority considered that as ATV would soon cease its service, even if the Authority did make a decision to suspend ATV's licence, ATV would no longer had any valid licence to be suspended post 1 April 2016. Notwithstanding the above, the Authority had put ATV on clear notice that the severity and repeated nature of the breaches of statutory and licence requirements by ATV would form part of the business record of ATV and the persons exercising control of it at the time the breaches occurred. The Authority would consider the aforesaid business record on future occasions when the need arises for assessing the fitness and properness of ATV and the persons exercising control of it.

Revocation of Other Licensable TV Licence of NXTV Asia, Limited (NXTV)

In July 2015, the Authority decided, pursuant to section 32(4)(a) of the BO, to revoke the other licensable TV licence of NXTV (the Licence) for its failure to pay a financial penalty and variable fee of the Licence for the licence year 2014-2015 by the stipulated deadline. Despite repeated demands and reminders, NXTV failed to pay the above financial penalty and the variable fee. The revocation of the Licence took effect on 31 July 2015.

6.17 Sanctions against Telecommunications Licensees

Network Outage of China Unicom (Hong Kong) Operations Limited (China Unicom)

On 3 April and 5 April 2015, there were two incidents of network outage of the mobile services of China Unicom, causing disruption to its voice services, short message services and data services. After considering the assessment of OFCA, the Authority concluded that China Unicom had failed to comply with General Condition 5.1 of its SBO licence which required it to operate, maintain and provide a good, efficient and continuous service in a manner satisfactory to the Authority. Having considered carefully the circumstances of the case and taken all factors into account, the Authority imposed a financial penalty of \$100,000 on China Unicom.

Illegal Bypass of Local Access Charge by External Telecommunications Services Licensees

The Authority completed an investigation into a case regarding illegal bypass of local access charge, and imposed a financial penalty of \$65,000 on Red-Asterisk Technology Limited for breaching the conditions of its external telecommunications services licence.

6.18 Sanctions against Senders of Commercial Electronic Messages

From April 2015 to March 2016, the Authority received 1 725 reports on suspected contraventions of the UEMO, representing a decrease of about 16% compared to the 2 068 reports of the previous year. In dealing with these reports, OFCA would, depending on the circumstances, issue advisory letters to first time offenders explaining the requirements of the UEMO or issue warning letters to other CEM senders in more serious cases. During the period under review, 128 advisory or warning letters were issued. In the event of repeated contraventions by a particular sender, the Authority would issue an enforcement notice pursuant to the UEMO directing the concerned sender to take steps to remedy the offences. Any person who fails to comply with the enforcement notice may be liable to a fine of up to \$100,000 on the first conviction. In 2015-2016, two enforcement notices were issued.

Chapter 7: Acknowledgement

The Communications Authority would like to express its appreciation for the cooperation and support given by the following organisations in preparing the Report:

Asia Television Limited

Television Broadcasts Limited

HK Television Entertainment Company Limited

Hong Kong Cable Television Limited

PCCW Media Limited

TVB Network Vision Limited

Fox Networks Group Asia Pacific Limited

APT Satellite TV Development Limited

Starbucks (HK) Limited

China Entertainment Television Broadcast Limited

Turner International Asia Pacific Limited

Sun Television Cybernetworks Enterprise Limited

GLOBECAST HONG KONG LIMITED

Auspicious Colour Limited

Phoenix Satellite Television Company Limited

Times International Media Group Limited

China Satellite TV Group Company Limited

Power Star Limited

Hong Kong TV International Media Group Limited

Health TV Company Limited

One TV Media Global Limited

Star China Media Limited

Hong Kong Commercial Broadcasting Company Limited

Metro Broadcast Corporation Limited

Digital Broadcasting Corporation Hong Kong Limited

AdmanGo Limited

TeleGeography

Commerce and Economic Development Bureau

(Communications and Creative Industries Branch)⁴¹

Office of the Communications Authority

Information Services Department

Radio Television Hong Kong

41 With effect from 20 November 2015, the Commerce and Economic Development Bureau (Communications and Technology Branch) was renamed as the Commerce and Economic Development Bureau (Communications and Creative Industries Branch).

Annex 1: Summary of Non-Domestic Television Programme Services

Summary of Non-Domestic Television Programme Services

Licen	see	Date of Launch of Service	No. of Channels (no. receivable in HK)	Nature of Channels	Target Markets	Satellite
1.	Fox Networks Group Asia Pacific Limited (formerly known as Fox International Channels Asia Pacific Limited which was formerly known as Starvision Hong Kong Limited)	4.1991	41 (0)	General entertainment, movie, music, sports & news etc.	Asian region including the Mainland, India & Middle East	AsiaSat 5 AsiaSat 7 Measat 3
2.	TVB Network Vision Limited	8.1998	21 (1)	Drama, general entertainment, movie & news etc.	Asian region, Australia & North America	AsiaSat 7 Intelsat 19
3.	APT Satellite TV Development Limited	8.2000	59 (1)	General entertainment, news, movies & sports	Asia-Pacific region & Africa	Apstar V Apstar VI Apstar VII
4.	Starbucks (HK) Limited	6.2000	1 (0)	Weather, sports, music and finance etc.	Asia-Pacific region	Apstar VII
5.	China Entertainment Television Broadcast Limited	3.1995	1 (1)	General entertainment	Mainland, Southeast Asia & Asia-Pacific region	AsiaSat 7
6.	Turner International Asia Pacific Limited	1989	15 (12)	News, finance, movie, children & family programmes	Asia-Pacific region & South Asia	AsiaSat 7 Intelsat 19 Intelsat 20 Measat 3A
7.	Sun Television Cybernetworks Enterprise Limited	8.2000	1 (1)	History & culture-related documentaries	Asia-Pacific region	AsiaSat 7
8.	GLOBECAST HONG KONG LIMITED	11.2001	34 (11)	General entertainment, sports, finance & news	Asia-Pacific region	AsiaSat 5 AsiaSat 7 MeaSat 3
9.	Asia Television Limited Note	1.2005	1 (0)	General entertainment & infotainment	Mainland	Apstar V
10.	Auspicious Colour Limited	1.2006	18 (10)	General entertainment, infotainment & music	Asia-Pacific region	AsiaSat 4 AsiaSat 5 AsiaSat 7

Note: The non-domestic TV licence of Asia Television Limited expired on 31 May 2016.

Licens	see	Date of Launch of Service	No. of Channels (no. receivable in HK)	Nature of Channels	Target Markets	Satellite
11.	Phoenix Satellite Television Company Limited	5.2006	4 (3)	General entertainment, news & movie	Asia-Pacific region	AsiaSat 7
12.	Times International Media Group Limited	6.2014	1 (1)	News, sports, travel & infotainment	Asia-Pacific region	Chinasat 10
13.	China Satellite TV Group Company Limited	11.2009	1 (1)	Infotainment	Asia-Pacific region	Apstar VII
14.	Power Star Limited	6.2010	71 (0)	News, movie, infotainment & children's programmes	Taiwan, Macau and South China	AsiaSat 4
15.	Hong Kong TV International Media Group Limited	3.2011	2 (2)	Infotainment	Asia-Pacific region	Apstar VI
16.	Health TV Company Limited	2.2013	1 (0)	Health information programmes, documentaries & general entertainment	Asia-Pacific region	Apstar V
17.	One TV Media Global Limited	5.2013	1 (1)	News, finance, entertainment & sports	Asia-Pacific region	Apstar V
18.	Star China Media Limited	1.2014	3 (0)	Music programmes, entertainment news & general entertainment	Asia-Pacific region	AsiaSat 7

Annex 2: Types and Numbers of Telecommunications Licences

As at 31 March 2016

Type of Licences	No. of Licences
Academic Institution Self-provided Telecommunications Installation	2
Aeronautical VHF Fixed Station	34
Aircraft Station	326
Amateur Station	2 627
Broadcast Radio Relay Station & Broadcast Relay Station	15
Experimental Station	90
Fixed Carrier	9
Hotel Television (Transmission)	151
Industrial, Scientific & Medical Electronic Machine	923
Maritime Radio (Local Vessel)	894
Mobile Carrier	1
Mobile Carrier (Restricted)	1
Mobile Radio System Fixed Station	19
Mobile Radio System Mobile Station	2 148
Private Mobile Radio System	2 144
Private Radio Paging System	12
Public Radiocommunications Service	9
Radio Dealers (Unrestricted)	3 298
Radiocommunications School	7
Radiodetermination and Conveyance of Commands, Status and Data	187
Satellite Master Antenna Television	73
Self-Provided External Telecommunications System	9
Services-Based Operator of Class 1 Service, Class 2 Service and Services Other Than Class 1, Class 2 or Class 3 Service Note A	18
Services-Based Operator of Class 3 Service	530

Note A: This figure includes 13 licences which are also authorised for the provision of SBO Class 3 services.

Type of Licences	No. of Licences
Ship Station	2 380
Space Station Carrier	12
Taxi Radiocommunications Service	26
Unified Carrier – Mobile Services Note B	9
Unified Carrier – Local/External Fixed Services Note B and C	44
Wide Band Link & Relay Station	56

Total

16 054

Note B: This figure includes four licences which are authorised to provide both fixed and mobile services.

Note C: This figure includes the two licences authorising the transmission of domestic television programme services.