



通訊事務管理局
COMMUNICATIONS
AUTHORITY



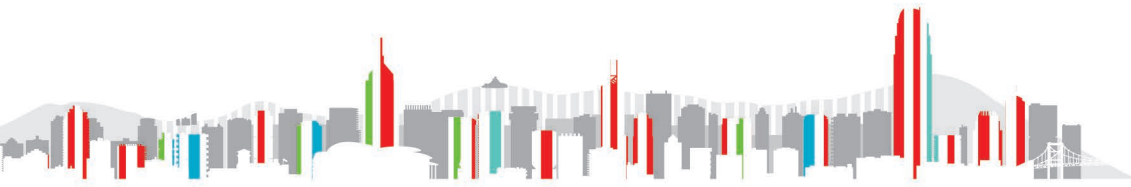
年 報

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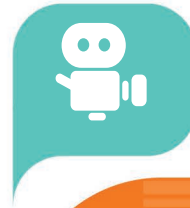
CHAPTER

1

Vision and Mission



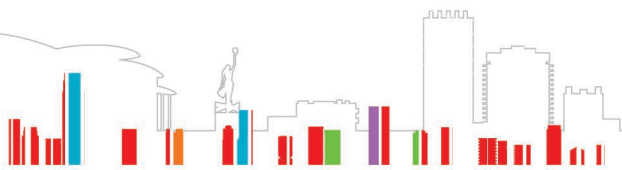
Our vision is that
Hong Kong has the world-class
communications services to meet
the challenges of the information age.



Encouraging innovation
and investment in the
communications market;
and

Fostering an environment
that supports a vibrant
communications sector
to enhance Hong Kong's
position as
a communications
hub in the region;

Promoting competition and
adoption of best practices in
the communications market
for the benefit of the industry
and consumers.



3



MISSION

CHAPTER

2

Chairman's Message

It is a great pleasure for me to present this report of the Communications Authority (the Authority), which provides a detailed account of the tasks undertaken by the Authority for the year ending 31 March 2022 and the challenges ahead.



A VIBRANT BROADCASTING MARKET

The broadcasting sector in Hong Kong continues to be vibrant and versatile, with 13 free-to-air digital television channels and 13 radio channels provided by various commercial broadcasters and the public service broadcaster, Radio Television Hong Kong (RTHK), as well as about 900 local and non-local television channels in various languages available through free-to-air terrestrial and satellite reception or pay television services. Hong Kong is also situated at a strategic location for uplinking satellite television services to the Asia Pacific region, currently with nine non-domestic television programme service (non-domestic TV) licensees providing over 170 satellite television channels for audience in the Asia Pacific region.

The Authority embarked on a mid-term review of the domestic free television programme service (free TV) licences of HK Television Entertainment Company Limited (HKTVE), Television Broadcasts Limited (TVB) and Fantastic Television Limited (Fantastic TV), and the sound broadcasting licences of Hong Kong Commercial Broadcasting Company Limited (CRHK) and Metro Broadcast Corporation Limited (Metro) in 2021/22. The Authority reviewed the past performance and proposed future commitments of the five licensees, and views collected from the industry as well as the public through a public consultation exercise. After taking into account public opinion and views from the industry, the Authority has made recommendations regarding licence conditions for the remaining period of the licences to the Commerce and Economic Development Bureau for preparation of submission to the Chief Executive in Council (CE in C) for consideration.

During the year, the Authority processed an application by Fantastic TV for the assignment of spectrum to deliver its free TV service. Assigning the requested spectrum would enable Fantastic TV to expand its service coverage and provide a new television channel. The new channel of Fantastic TV has been launched since 21 November 2022.



Chairman's Message

RAPID GROWTH OF THE TELECOMMUNICATIONS MARKET

Amidst the COVID-19 pandemic during the year under review, Hong Kong's telecommunications market continued to flourish. By March 2022, the number of mobile subscriptions reached 26.1 million and over 99% of them were subscriptions of the third generation (3G), fourth generation (4G) and fifth generation (5G) mobile services. Further to the commercial launch of 5G services since April 2020, 5G mobile subscriptions reached 3.3 million in March 2022, representing a mobile subscriber penetration rate¹ of 44.2%. Mobile network operators (MNOs) and mobile virtual network operators (MVNOs) were offering 4G and 5G services at affordable prices. In March 2022, the monthly mobile data usage further surged to 124 885.7 Terabytes, representing 1.3 times and 1.7 times of the monthly usage over the same period in 2021 and 2020 respectively. The monthly mobile data usage per capita rose to 16 811.4 Megabytes in March 2022, compared with 12 628.5 Megabytes in March 2021 and 10 054.9 Megabytes in March 2020. We expect that the 5G mobile services will further boost mobile data usage with the new range of innovative services and applications empowered by 5G. The Authority will continue to introduce necessary measures to facilitate the robust development of the mobile services market.



MAJOR TASKS AND CHALLENGES IN THE COMING YEAR

The broadcasting industry faces significant challenges from competition from the increasingly popular Internet-based media services. There have been changes in the way in which people receive broadcasting contents from both traditional broadcasting services as well as online and on-demand services. We will continue to keep pace with advancements of infotainment media services as well as changes in audience behaviour, and strike a right balance between providing a more conducive business environment to the industry and protecting the interests of the audience.

¹ Calculation of mobile subscriber penetration rate does not include machine type connections.

On the telecommunications front, the current assignment of 20 MHz of spectrum in the 850/900 MHz bands and 90 MHz of spectrum in the 2.3 GHz band will expire in May 2026 and March 2027 respectively. The Authority and the Secretary for Commerce and Economic Development (SCED) will launch a joint public consultation in the fourth quarter of 2022 on the arrangements for re-assignment of spectrum in the 850/900 MHz and 2.3 GHz bands as well as setting of the related spectrum utilisation fee (SUF) upon the expiry of their existing assignment term. Looking ahead, we will continue our work to facilitate the further development of 5G in Hong Kong, identify and supply additional spectrum for supporting new radiocommunications services and applications, and review our telecommunications regulatory framework from time to time to ensure that it dovetails with the advancement of telecommunications technologies and market development.

TENTH ANNIVERSARY OF THE COMMUNICATIONS AUTHORITY

The year 2022 marks the tenth Anniversary of the Authority. In the past decade, the communications market has undergone rapid developments and changes, with the advancement of mobile technology from 4G to 5G. With the support of the Office of the Communications Authority (OFCA), the Authority has been working hard to ensure sufficient spectrum in different frequency bands are released for the provision of 5G services. Following the launch of 5G commercial services in April 2020, consumers can now have wider choices of high-speed data services. On the broadcasting front, we supported the Government in granting licences to HKTVE in April 2015 and Fantastic TV in May 2016 to provide free TV services in Hong Kong². The new free TV services had brought in additional investment in TV content production, increased competition, enhanced programme variety and widened viewers' choices. We also entered the era of full digital television broadcasting on 1 December 2020, which enables the public to enjoy premium TV viewing experience with more choices of programme channels.

The work that lies ahead is expected to be as diverse and challenging as before. The Authority will continue to do its utmost to foster a conducive environment to support the communications sector.

To conclude, may I extend my gratitude to members of the Authority for their commitment and insightful contribution during the year, and to former members and my predecessors for the invaluable achievements they made over the years. In addition, I would like to thank colleagues of OFCA for their dedication and professionalism in supporting the work of the Authority.

A thematic website (<https://www.coms-auth.hk/ca10>) has been established to commemorate the tenth Anniversary of the Authority. It provides more details of the significant developments of the communications sector and the work that has been done by the Authority, as well as the future plans of the Authority to embrace the tremendous opportunities and challenges of the next decade. I hope you find the content of the website informative.

2 HKTVE's licence is valid for 12 years from 1 April 2015 to 31 March 2027. Fantastic TV's licence is valid for 12 years from 31 May 2016 to 30 May 2028.

CHAPTER

3

Members of the Communications Authority

(April 2021 – March 2022)



Vice-Chairman

Mr Clement LEUNG Cheuk-man, JP

*Permanent Secretary for Commerce and Economic
Development (Communications and Creative
Industries)*



Chairman

Ms Winnie TAM Wan-chi, SBS, SC, JP

Communications Authority

Members

Mr Stephen HUNG
Wan-shun



Mr Benjamin TANG
Kwok-bun, GBS



Prof Karen CHAN
Ka-yin, JP



Prof Vincent LAU
Kin-nang



Mr Simon WONG
Kwong-yeung, MH



Dr Hubert CHAN
Chung-yee, JP



Ms Amy FUNG
Dun-mi, MH, JP



Mr Patrick LAW
Fu-yuen



Prof LEUNG
Siu-fai, MH



Mr Chaucer LEUNG
Chung-yin, JP
*Director-General of
Communications*

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 under the Communications Authority Ordinance (Cap. 616) (CAO) as an independent statutory body and took over fully the functions and powers of the former Telecommunications Authority and Broadcasting Authority. Its role is to regulate the broadcasting and telecommunications industries in Hong Kong in accordance with the CAO, the Broadcasting Ordinance (Cap. 562) (BO), the Telecommunications Ordinance (Cap. 106) (TO), and the Broadcasting (Miscellaneous Provisions) Ordinance (Cap. 391) (B(MP)O). It shares concurrent jurisdiction 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 has a role to regulate the sending of commercial electronic messages (CEMs) in accordance with the Unsolicited Electronic Messages Ordinance (Cap. 593) (UEMO).



The Authority performs the following functions:

(a) Advisory function to SCED and the CE in C

- tendering advice to SCED on any legislation, legislative proposals and regulatory policies relating to telecommunications, broadcasting, anti-spamming or activities connected with the telecommunications or broadcasting sectors;
- making recommendations to the CE in C on applications for and renewal of free TV licences, domestic pay television programme service (pay TV) licences and sound broadcasting licences;

Role and Functions of the Communications Authority

(b) Unified Regulator of the Communications Sector

- granting and renewing non-domestic TV licences and other licensable television programme service (other licensable TV) licences;
- preparing and revising codes of practice setting programme, advertising and technical standards for television and radio;
- dealing with complaints about broadcasting issues and imposing sanctions on the broadcasting operators for contravening the various provisions and requirements;
- handling the licensing, financial monitoring and regulation of broadcasting licensees in Hong Kong;
- granting and renewing telecommunications licences;
- managing and administering the radio frequency spectrum and the telecommunications numbers;
- developing technical standards and conducting broadcasting/telecommunications equipment testing in line with international best practices, and ensuring satisfactory performance of the certification bodies in carrying out certification and testing against the prescribed technical standards;
- facilitating fixed network operators (FNOs) to access buildings to install in-building telecommunications facilities for the conveyance of telecommunications and broadcasting services;
- dealing with complaints about telecommunications services and imposing sanctions on telecommunications operators for contravening the various provisions and requirements;
- handling the licensing, financial monitoring and regulation of telecommunications licensees in Hong Kong;

(c) Competition Authority of the Communications Sector

- enforcing the CO in respect of the conduct of undertakings operating in the telecommunications and broadcasting sectors;

(d) Unfair Trade Practices in the Communications Sector

- enforcing 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

(e) UEMO

- enforcing the UEMO on the sending of CEMs.

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 2021 to March 2022, 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) and 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*.

Role and Functions of the Communications Authority



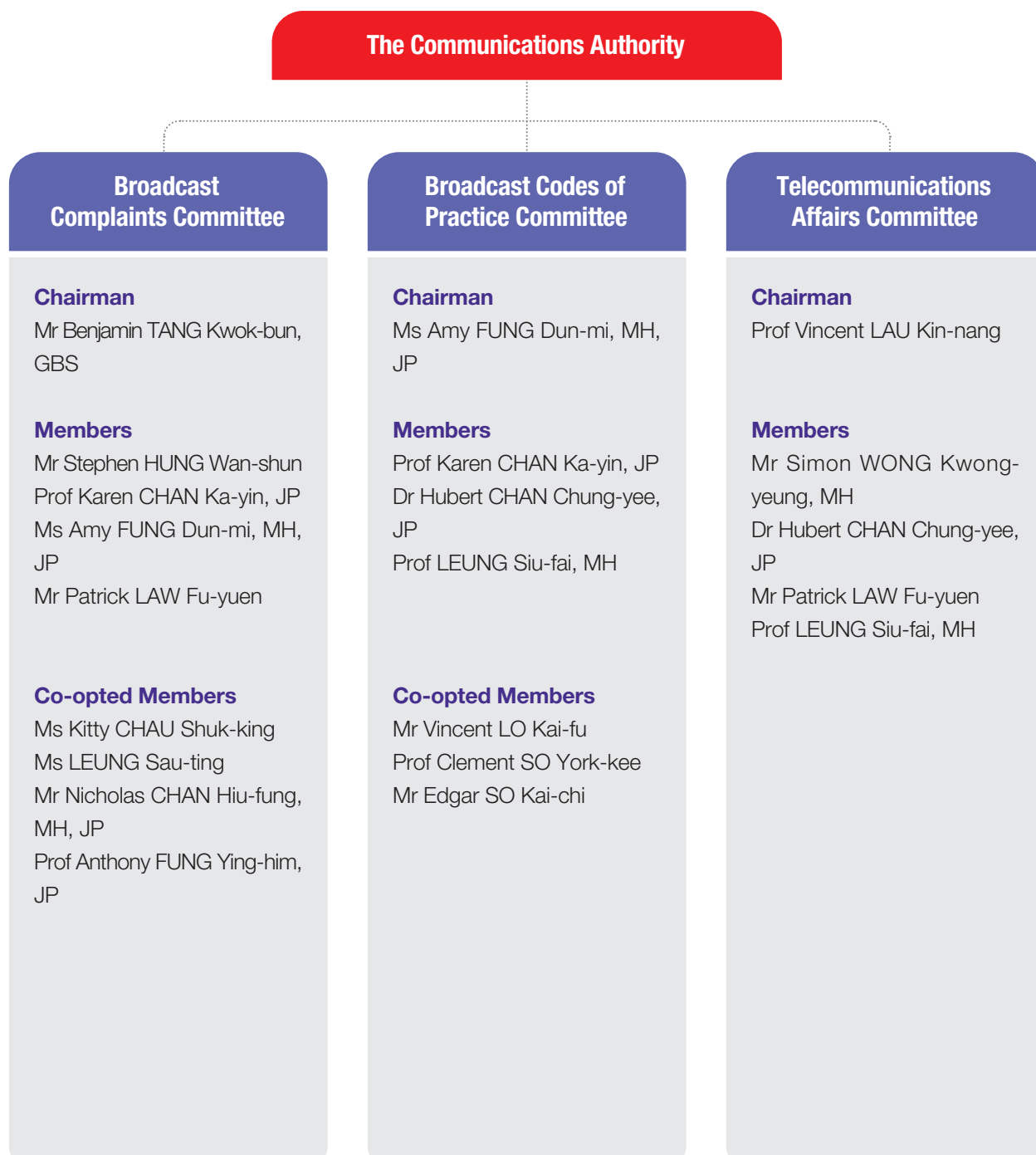
The ***Broadcast Complaints Committee*** is responsible for considering complaints about broadcasting issues and making recommendations to the Authority regarding such complaints. During the period from April 2021 to March 2022, it comprised five Authority members and four co-opted non-official members.

The ***Broadcast Codes of Practice Committee*** is responsible for keeping the television and radio broadcasting standards under regular review and amending the codes of practice when necessary. During the period from April 2021 to March 2022, it comprised four Authority members and three co-opted members.

The ***Telecommunications Affairs Committee*** is responsible for offering advice and reporting to the Authority on telecommunications matters. During the period from April 2021 to March 2022, it comprised five Authority members.

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

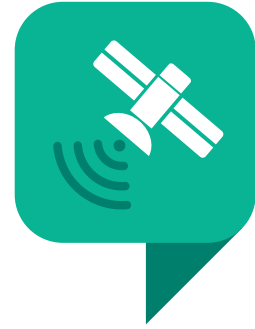
Organisation Chart



CHAPTER

5

Overview of Major Developments in the Communications Market





BROADCASTING

5.1 An Overview of the Developments in the Broadcasting Market

5.1.1 Number of Licensees and Channels

Television Programme Services

As at March 2022, there were a total of 14 TV licensees, including three free TV licensees, two pay TV licensees and nine non-domestic TV licensees. They provided 550 television channels³, of which about 80 non-domestic TV channels were receivable in Hong Kong. An overview of the television channels provided by the commercial licensees and RTHK, the public service broadcaster, is shown in **Figure 1**.

Hong Kong implemented full digital TV broadcast on 1 December 2020. As at March 2022, the three **free TV licensees**, viz. Fantastic TV, HKTVE and TVB, provided a total of nine digital channels in high definition television (HDTV) format, viz. “Hong Kong Open TV” and “Hong Kong International Business Channel” (by Fantastic TV), “ViuTV” and “ViuTVsix” (by HKTVE), “Jade”, “Pearl”, “J2”, “TVB News Channel” and “TVB Finance & Information Channel” (by TVB). RTHK, the public service broadcaster in Hong Kong, provided three digital channels.

As at March 2022, the two **pay TV licensees**, viz. Hong Kong Cable Television Limited (HKCTV) and PCCW Media Limited (PCCW Media) provided a total of 335 pay television channels and were offering a diverse range of local and non-local productions. Among those channels, over 120 were HDTV channels.

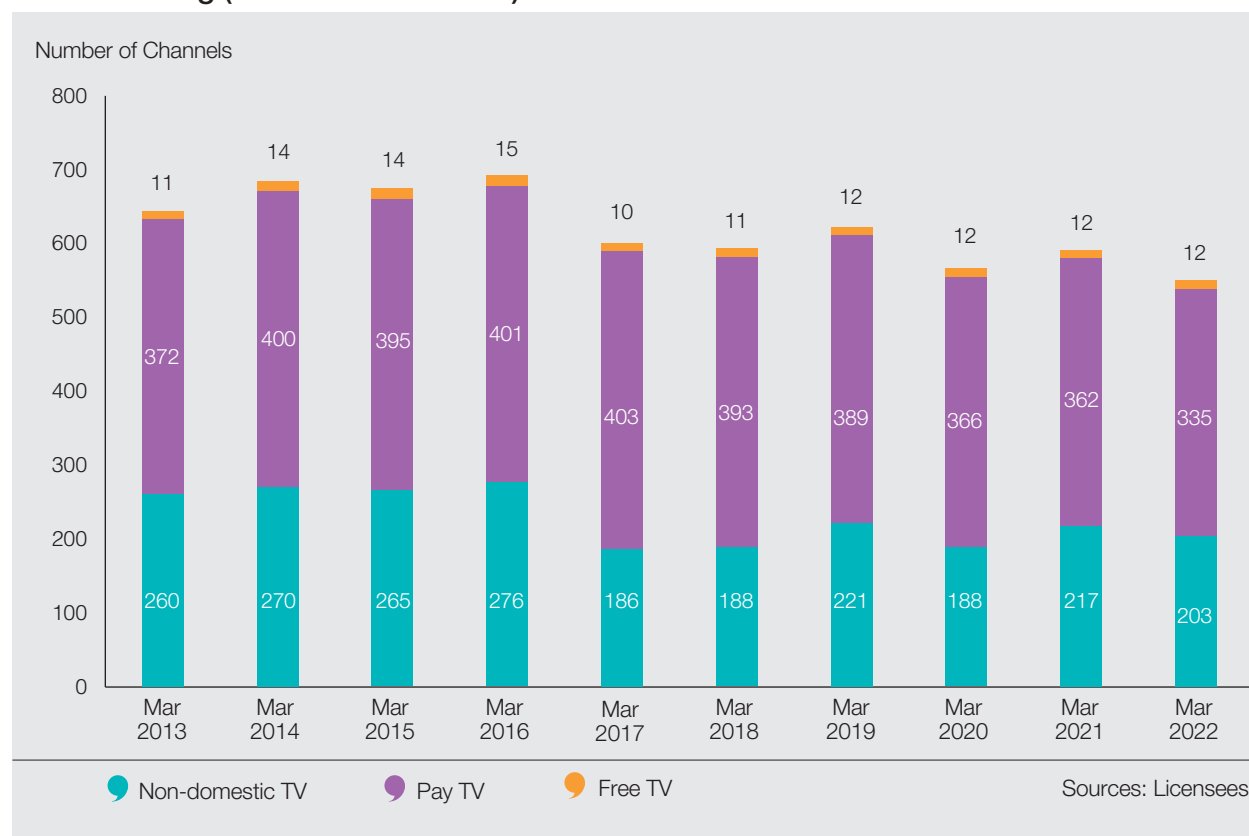
As at March 2022, there were nine **non-domestic TV licensees** providing over 200 television channels. Hong Kong viewers could receive about 80 of those channels.

During the period under review, there were 20 **other licensable TV licensees** providing television programme services in about 60 hotels in Hong Kong.

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

Overview of Major Developments in the Communications Market

Figure 1: Television Channels Provided by Commercial Licensees and RTHK in Hong Kong (as at 31 March 2022)



* While some free TV channels were simulcast in both analogue and digital formats during the period of 2013 to 2020, the total number of free TV channels is calculated by reference to the channels broadcast in digital format only.



In addition to satellite television channels provided by non-domestic TV licensees, Hong Kong viewers can also receive free unencrypted satellite television programme channels uplinked from outside Hong Kong. As at March 2022, there were around 600 free-to-air satellite television channels available for reception via the Satellite Master Antenna Television Systems in Hong Kong. A list of these channels is available at http://www.ofca.gov.hk/filemanager/ofca/en/content_295/st_smatv.pdf.



Sound Broadcasting Services

During the period under review, there were two **sound broadcasting licensees**, viz. CRHK and Metro. RTHK, the public service broadcaster in Hong Kong, also provided sound broadcasting service.

As at March 2022, there were a total of 13 radio channels (three by CRHK, three by Metro and seven by RTHK) providing round-the-clock sound broadcasting services to the public.

5.1.2 Transmission Modes

Television

The regulatory framework for television programme services in Hong Kong as enshrined in the BO is technology-neutral⁴. Licensees are free to choose their transmission arrangements for delivery of television services. Broadcasters may build their own transmission networks to deliver their services and apply for a carrier licence from the Authority to cover the transmission network. Alternatively, they may engage any of the existing carrier licensees to provide the transmission service. Licensees may also provide their television programme services via multiple transmission platforms so as to extend their coverage.

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

4 An exception is that a service provided on the Internet is exempted from the regulatory framework under the BO.

Overview of Major Developments in the Communications Market

Figure 2: Transmission Modes Employed by Television Programme Service Licensees

Licensee	Transmission Mode	Network Coverage (as at March 2022)
Free TV		
TVB	Terrestrial UHF ⁵	99% of population
HKTVE	Terrestrial UHF and Fixed broadband network	
Fantastic TV	HFC ⁶ and MMDS ⁷	Around 95% of total households ⁸
Pay TV		
HKCTV	HFC, MMDS and satellite (Digital)	Around 96% of total households
PCCW Media	PON and DSL ⁹ Broadband network (Digital)	Around 98% of total households
Non-domestic TV		
8 licensees ¹⁰	Satellite (Digital)	Around 28% of total households ¹³
1 licensee ¹¹	IPLC ¹² and Satellite (Digital)	

Penetration of Different Broadcasting Services

The penetration rate of free TV services stood at about 95% of the total households as at end of March 2022¹⁴.

The penetration of licensed pay TV services was about 78%¹⁵ of the total households as at end of March 2022. The total number of subscribers to licensed pay TV services stood at about 2.1 million in March 2022¹⁶. The changes in total number of subscribers from 2013 to 2022 are set out in **Figure 3**.

5 Terrestrial Ultra High Frequency

6 Hybrid Fibre Coaxial Cable

7 Microwave Multipoint Distribution System

8 From April 2022, Fantastic TV started using spectrum, on top of fixed network, for transmission of its free TV services. At the initial stage, the spectrum-based service covered 75% of the population. Fantastic TV would expand its service coverage to at least 99% of the population by 24 May 2023.

9 Passive Optical Network and Digital Subscriber Line

10 The licensees concerned are APT Satellite TV Development Limited, Auspicious Colour Limited, Hong Kong TV International Media Group Limited, One TV Media Global Limited, Phoenix Satellite Television Company Limited, Star China Media Limited, Sun Television Cybernetworks Enterprise Limited and WarnerMedia Asia Pacific (HK) Limited.

11 The licensee concerned is Starbucks (HK) Limited.

12 International Private Lease Circuit.

13 The non-domestic TV services mainly serve viewers in the Asia-Pacific region, Europe and Africa and do not target Hong Kong, but some Hong Kong households (around 747 000) can receive the unencrypted channels.

14 Source: HKTAM Establishment Survey, CSM Media Research

15 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 services.

16 Some subscribers were counted more than once if they subscribed to more than one services.

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

Radio broadcasters in Hong Kong use frequency modulation (FM) and amplitude modulation (AM) to provide their sound broadcasting services. As at 31 March 2022, seven FM programme channels were provided through seven principal transmitting stations, supplemented by two low-power FM fill-in stations, while six AM programme channels were broadcast from two principal transmitting stations, supplemented by five low-power AM/FM fill-in stations. The services practically covered the whole area of Hong Kong.

5.1.3 Broadcasting Revenues and Investment

Licensed broadcasting services contributed an estimated \$6.7 billion¹⁷ to the Hong Kong economy, which represented about 0.2% of the gross domestic product in 2021. There are two main sources of revenues for the provision of broadcasting services, viz. advertising and subscription. The incomes of free TV licensees and sound broadcasting licensees mainly come from advertising sales¹⁸. Pay TV licensees, on the other hand, derive their incomes mainly from subscription fees with advertising sales as a secondary income source.

¹⁷ Source: Company reports of major broadcasting licensees providing television programme services in Hong Kong

¹⁸ These include sales of advertising spots within programme breaks, programme/event sponsorship, product placement as well as related production fees of advertisements and tailor-made content.

Overview of Major Developments in the Communications Market

Advertising Revenue

According to the research of PricewaterhouseCoopers (PwC)¹⁹, television and radio accounted for 11% (about \$2.7 billion) and 4% (about \$1 billion) respectively of the accumulated \$23.4 billion advertising revenues in the entertainment and media industry of Hong Kong in 2021²⁰.

In 2021, the actual advertising revenues of HKTVE and TVB were around \$615 million and \$1,024 million respectively. The actual advertising revenues of other licensees were not publicly available.

Subscription Revenue

According to the annual report of HKT Trust and HKT Limited (HKT), the holding company of PCCW Media, the turnover of its pay TV services and related services provided in Hong Kong under the “Now TV” brand was \$2.5 billion in 2021.

The subscription revenue of HKCTV was not publicly available.

Investment in Broadcasting Industry



Key investment projects in the television industry in recent years include the digital 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.

Fantastic TV, HKTVE and TVB have respectively committed to investing a total of \$1.3 billion for the six-year period from 2016 to 2022, \$1.5 billion for the six-year period from 2015 to 2021 and \$6.3 billion for the six-year period from 2016 to 2021 for the provision of free TV services. Investment commitments of Fantastic TV, HKTVE and TVB comprise capital expenditures and programming expenditures. As at March 2022, Fantastic TV, HKTVE and TVB provided 336, 289 and 821 hours of HDTV programmes per week respectively. Fantastic TV and TVB also provided 116 and 1 101 hours of independent local productions in their programming respectively in 2021 according to their commitments.

¹⁹ PwC is a network of firms delivering assurance, advisory and tax services. Its research provides consumer and advertiser spending data including television, radio, print, digital, mobile and social media, etc.

²⁰ Source: PwC Global Entertainment and Media Outlook: 2022-2026, www.pwc.com/outlook. All advertising revenues are net spending excluding agency commissions, production costs and discounts.



items of investment included property, plant and equipment, and interests in leasehold land.

On the sound broadcasting side, CRHK and Metro have committed in accordance with the Authority's approval made in October 2020 and April 2021 to investing a total of \$703 million and \$617 million²¹ respectively for the six-year period from 2016 to 2022 covering programming improvement and upgrading of infrastructure and facilities and other developments brought about by technological advancement to further enhance their service quality.



5.1.4 Programme Variety and Positive Programme Requirements

(a) Programme Variety and Diversity

Number of Broadcast Hours and Hours of Station Productions

As at March 2022, the licensees broadcast about 67 489 hours of television programmes a week. The nine digital channels of Fantastic TV, HKTVE and TVB provided a total of 1 463 broadcast hours per week, while the 335 channels of the two pay TV licensees provided a total of 52 586 broadcast hours per week. As a public service broadcaster, RTHK provided 504 hours on its three digital channels per week. About 80 channels of non-domestic TV licensees receivable in Hong Kong provided about 13 400 broadcast hours per week.

The total broadcast hours per week provided by CRHK, Metro and RTHK as at March 2022 were 2 184.

21 The Authority approved in October 2020 and April 2021 respectively that the investment commitment of CRHK be adjusted from \$909 million to \$703 million and the investment commitment of Metro be adjusted from \$685 million to \$617 million.

Overview of Major Developments in the Communications Market

For the period under review, there were a total of 34 048 hours of station productions broadcast on Fantastic TV, HKTVE and TVB. Of the 335 channels provided by pay TV licensees, 69 channels (20.6%) were produced by the licensees themselves.



Free TV Services

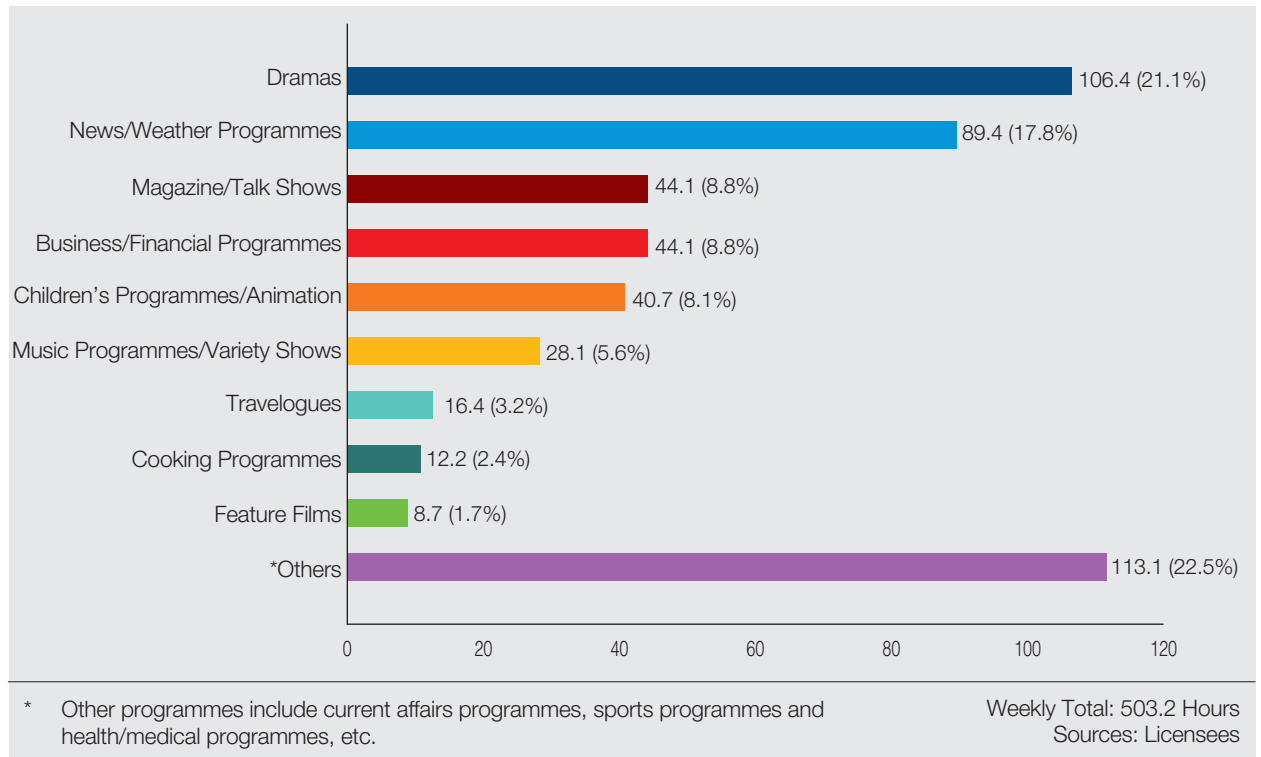
Chinese and English Channels



During the period under review, drama series and news/weather programmes continued to be the dominating programme genres during prime time on the Chinese channels (viz. “Hong Kong Open TV”, “Jade” and “ViuTV”). Drama series on “Jade” were mostly in-house productions; while “Hong Kong Open TV”, “Jade” and “ViuTV” broadcast Mainland, Korean and Japanese drama series. In addition,

business/financial programmes, children’s programmes/animation, magazine/talk shows, music programmes/variety shows, travelogues and feature films, etc. were also broadcast during prime time on the Chinese channels. The three channels provided by RTHK presented a variety of programmes to serve a broad spectrum of audiences and cater for the needs of minority interest groups.

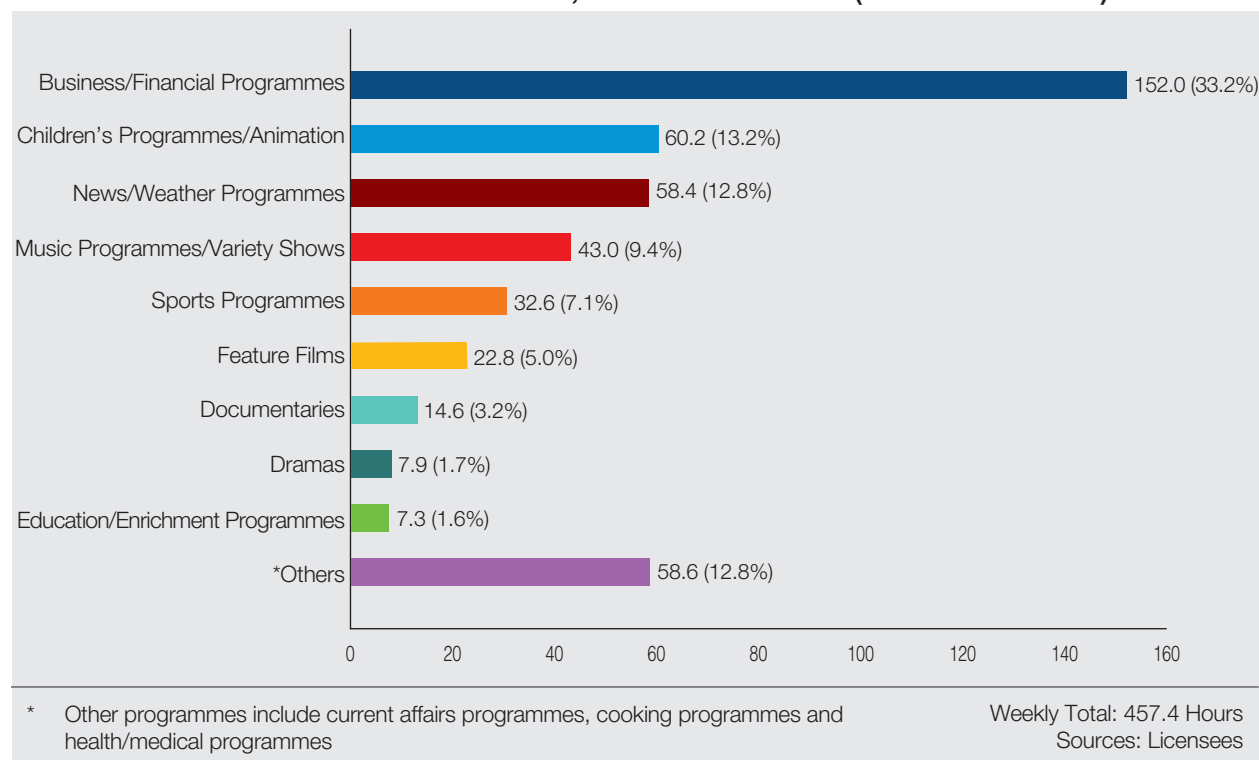
Figure 4: Weekly Hours of Different Types of Programmes Broadcast on Hong Kong Open TV, Jade and ViuTV (as at March 2022)



The English channels (viz. “Hong Kong International Business Channel”, “Pearl” and “ViuTVsix”) broadcast a wide range of programmes, including business/financial programmes, children’s programmes/animation, news/weather programmes, music programmes/variety shows, sports programmes, feature films, documentaries, imported popular drama series and education/enrichment programmes.

Overview of Major Developments in the Communications Market

Figure 5: Weekly Hours of Different Types of Programmes Broadcast on Hong Kong International Business Channel, Pearl and ViuTVsix (as at March 2022)



Thematic Channels

During the period under review, TVB provided acquired dramas, documentaries, variety shows, news, finance information programmes, etc. on “J2”, “TVB News Channel” and “TVB Finance & Information Channel”.

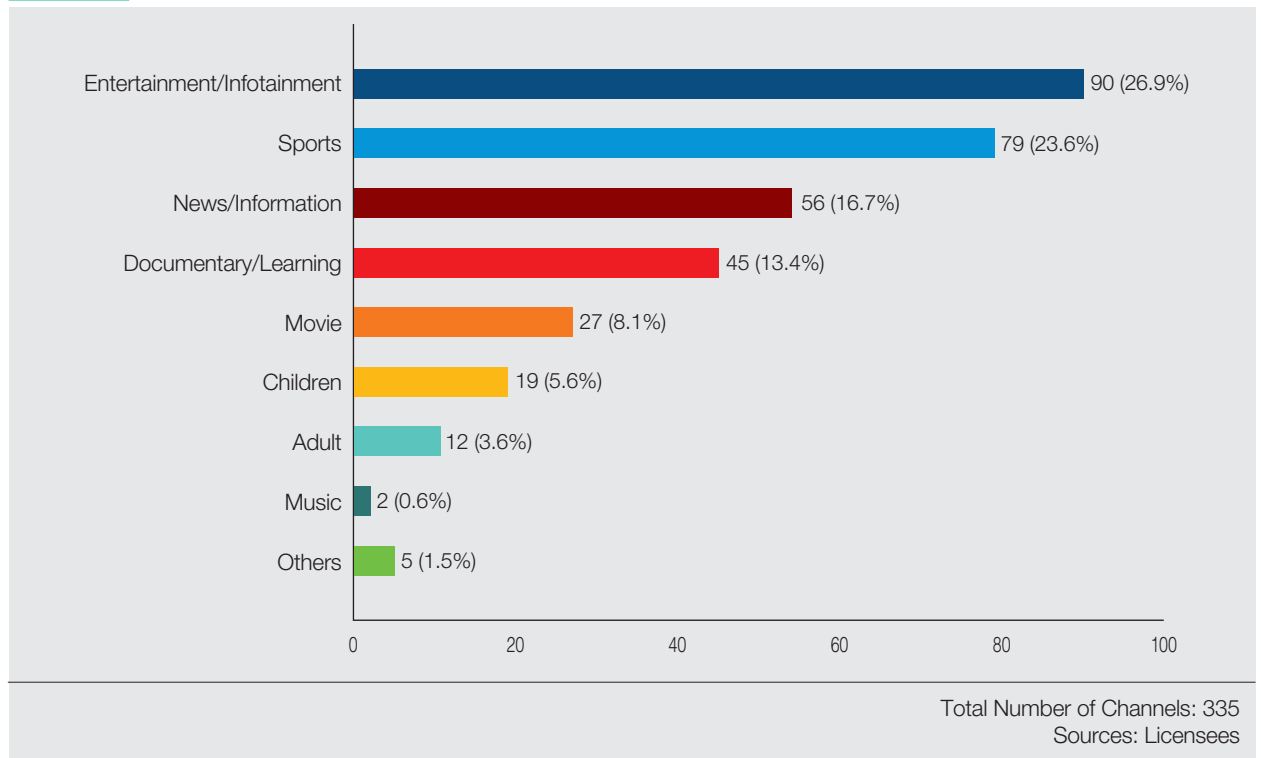


Pay TV Services

During the period under review, a great variety of channels were offered on pay TV services, including entertainment/infotainment channels (26.9%), sports channels (23.6%), news/information channels (16.7%), documentary/learning channels (13.4%), and movie channels (8.1%).



Figure 6: Nature of Pay TV Channels (as at March 2022)



As at March 2022, HKCTV offered 124 channels (including 42 HDTV channels). PCCW Media's "Now TV" service offered 144 channels (including 80 HDTV channels) and 67 video-on-demand services.

Overview of Major Developments in the Communications Market

Sound Broadcasting

As at March 2022, CRHK operated two FM Cantonese channels, viz. “CR1” and “CR2”, and one AM English channel, viz. “AM 864”. “CR1” mainly provided news, current affairs, financial and personal view programmes. “CR2”, targeting younger listeners, featured pop culture and music programmes. “AM864” was primarily a music channel.

Metro operated two FM Cantonese channels, viz. “Metro Finance” and “Metro Info”, and one AM English channel, viz. “Metro Plus”. “Metro Finance” provided real-time, market-moving news and information on financial markets around the world. “Metro Info” provided music and programmes on lifestyle, health, market news and other information of interest to the public. “Metro Plus” was primarily a music channel which also provided some programmes for ethnic groups including the Filipino, Indian 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.

(b) Positive Programme Requirements

Free TV Services

During the period under review, free TV licensees (viz. Fantastic TV, HKTVE and TVB) were respectively required to broadcast at least 27.5, 41.5 and 45.5 hours of positive programmes²² per week. They all met the requirements²³.



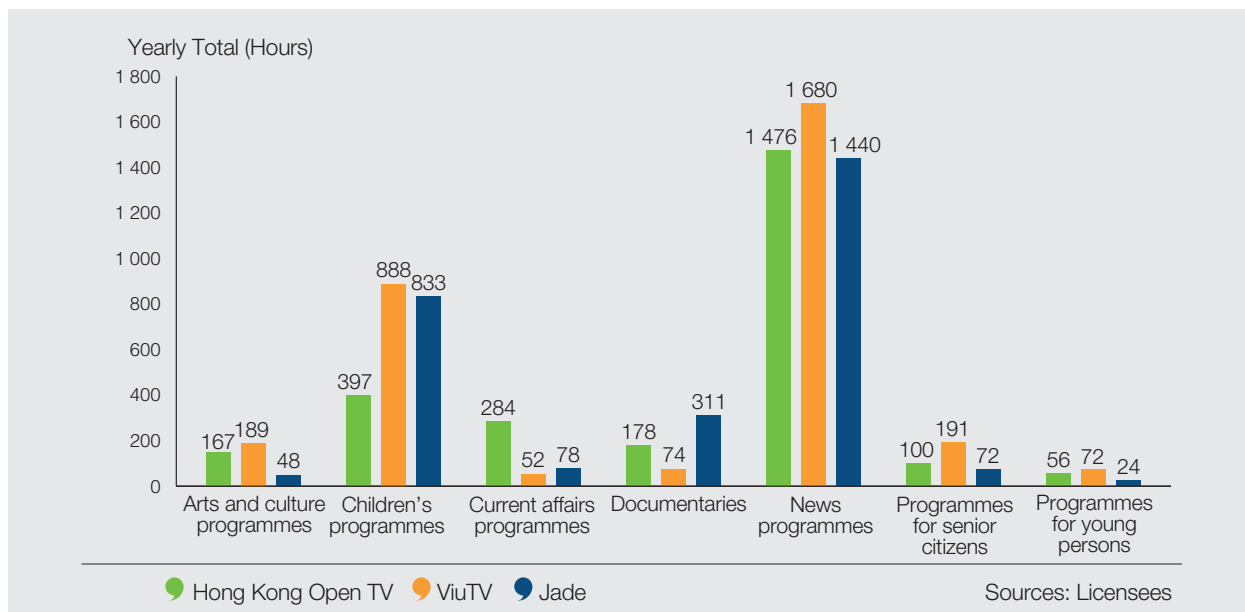
The reports submitted by the licensees to the Authority on six types of positive programmes, viz. current affairs programmes, documentaries, children’s programmes, programmes for young persons, programmes for senior citizens, and arts and culture programmes, are available at https://www.coms-auth.hk/en/licensing/broadcasting/compliance_reports/index.html.

²² The positive programmes that Fantastic TV, HKTVE and TVB were required to broadcast comprised news, current affairs programmes, documentaries, arts and culture programmes, children’s programmes and programmes for senior citizens and young persons.

²³ TVB was required to broadcast at least 45.5 hours of positive programmes per week, including four hours of positive programmes per week on its thematic channels (viz. “J2”, “TVB Finance & Information Channel” and “TVB News Channel”). HKTVE was required to broadcast at least 41.5 hours of positive programmes per week.

During the period under review, Fantastic TV used a fixed network as its sole transmission means to deliver free TV service, the programme requirements of Fantastic TV were less stringent than those applicable to other spectrum-based free TV licensees (viz. HKTVE and TVB). It was required to broadcast at least 27.5 hours of positive programmes per week. Following its use of spectrum as an additional means of transmission on 1 April 2022, Fantastic TV would be subject to largely the same set of programme requirements that apply to HKTVE and TVB.

Figure 7: Broadcast of Positive Programmes on the Chinese Channels of Fantastic TV, HKTVE and TVB (as at March 2022)



Free TV licensees were required to provide Chinese subtitles for all news, current affairs programmes, weather programmes and emergency announcements, as well as programmes broadcast during prime time (7:00 p.m. to 11:00 p.m.) on the Chinese channels²⁴. They were also required to provide English subtitles for all news, current affairs programmes, weather programmes, emergency announcements and educational programmes for teenagers (two hours per week) on the English channels. HKTVE and TVB were required to provide Chinese subtitling for all drama programmes on the Chinese channels and English subtitling for all programmes broadcast on the English channels between 8:00 p.m. and 11:30 p.m.²⁵. On the whole, Fantastic TV, HKTVE and TVB complied with the requirements on the provision of subtitles.

To meet public demand for easier access to information by persons with hearing impairment, the Authority issued a direction requiring TVB²⁶ to provide sign language interpretation, in addition to subtitles, for a Cantonese news programme broadcast on its “Pearl” channel each day with effect from July 2018. TVB met the requirement.

Pursuant to licence requirements, Fantastic TV, HKTVE and TVB were required to broadcast two minutes of Announcements in the Public Interest (APIs) in every two clock hours on each channel. Also, they were required to broadcast, on a weekly basis, not more than five minutes in aggregate of publicity material for the Authority on each of the Chinese and English integrated channels²⁷. During the period under review, Fantastic TV, HKTVE and TVB broadcast a total of 1 304 hours of the two types of materials.

24 TVB was also required to provide, on its thematic channels, Chinese subtitles for all news, current affairs programmes, weather programmes and emergency announcements as well as programmes broadcast during prime time.

25 Following its use of spectrum as an additional means of transmission since 1 April 2022, Fantastic TV would be subject to the same set of subtitling requirements that apply to HKTVE and TVB.

26 In the context of the licence renewal exercise of TVB in 2015, the Authority took note of the increasing demand from persons with hearing impairment for sign language interpretation for news programmes and agreed to facilitate the provision of sign language interpretation for news programmes as a new initiative. The CE in C accepted the Authority’s recommendation and included an enabling provision in TVB’s renewed licence to require it to provide sign language for its free TV services as directed by the Authority.

27 For the three thematic channels of TVB, they were required to broadcast two minutes of publicity material for the Authority per week.

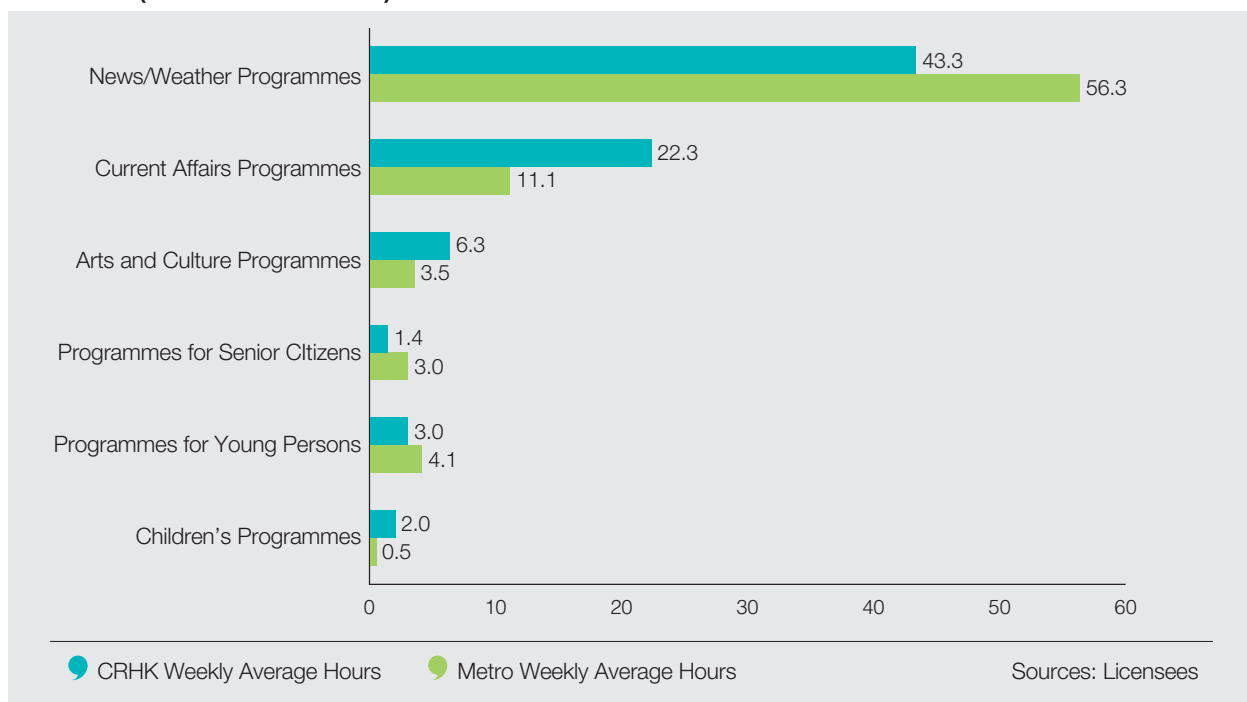
Overview of Major Developments in the Communications Market

Sound Broadcasting

CRHK and Metro were each required to broadcast at least 28.5 hours of positive programmes²⁸ per week under their respective licences. During the period under review, CRHK and Metro broadcast the required amount of positive programmes.

CRHK and Metro also fulfilled the requirements on the broadcast of one minute of APIs in each hour and not more than five minutes of publicity material for the Authority each week on each service channel. The reports submitted by the licensees to the Authority on positive programmes are available at https://www.coms-auth.hk/en/licensing/broadcasting/compliance_reports/index.html.

Figure 8: Broadcast of Positive Programmes on Sound Broadcasting Services (as at March 2022)



5.1.5 Hong Kong as a Regional Broadcasting Hub

Hong Kong is a broadcasting hub in the Asia-Pacific region. As at March 2022, there were nine non-domestic TV licensees operating in and broadcasting from Hong Kong. Altogether, they offered over 200 satellite television channels serving viewers in the Asia-Pacific region, Europe and Africa, with about 80 channels receivable in Hong Kong. A summary of the non-domestic TV services as at March 2022 is at **Annex 1**.

²⁸ CRHK and Metro were required to broadcast news and weather programmes, current affairs programmes, arts and culture programmes, programmes for young persons, senior citizens and children, in their respective sound broadcasting service.

TELECOMMUNICATIONS

5.2 An Overview of the Telecommunications Market

Hong Kong has one of the most sophisticated and advanced telecommunications markets in the world. This has been an important factor in Hong Kong's development as a leading business and financial centre. The telecommunications sector employed around 20 000 persons in 2021, whilst its gross output amounted to \$104 billion in 2020.

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

5.2.1 The Telecommunications Regulatory Framework

Carrier Licences

The Authority issues carrier licences to facility-based 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 framework 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 transmissions and services operated over external facilities such as submarine cable and satellite communications systems. 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.

As at March 2022, there were a total of 60 holders of UCL, providing local fixed services, cable-based external fixed services, non-cable-based external fixed services and/or mobile services.

Overview of Major Developments in the Communications Market

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, public mobile radio data services and railway signaling 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 2022, there were a total of seven PRS licensees.

Services-based Operator Licences

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

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, MVNO 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 2022, there were a total of 522 SBO licensees.

Class Licences

The class licensing framework does not require any licence applications. Parties meeting the specified eligibility criteria and conditions (including any registration requirement) 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 ten types of Class Licences:

- Class Licence for 6 GHz Device
- Class Licence for 60 GHz Device
- Class Licence for 79 GHz Automotive Radar
- 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

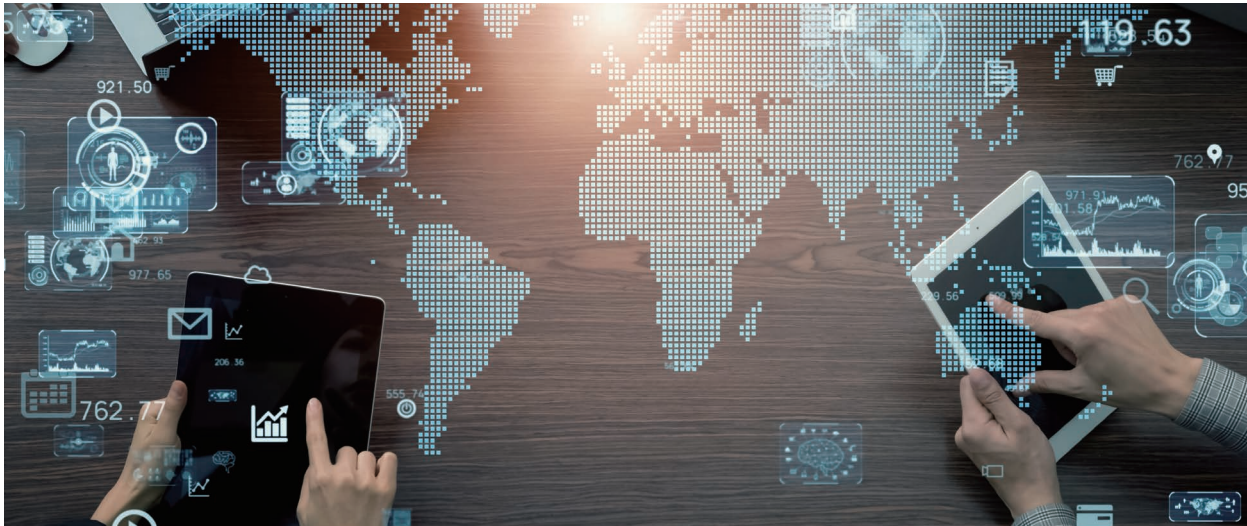
Other Licences

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 is at **Annex 2**.

Overview of Major Developments in the Communications Market

5.2.2 Developments in the Telecommunications Market and Technology Trends



Mobile Communications Services

Competition in public mobile services has always been keen. As at March 2022, four major MNOs, namely, China Mobile Hong Kong Company Limited, Hong Kong Telecommunications (HKT) Limited, Hutchison Telephone Company Limited (Hutchison) and SmarTone Mobile Communications Limited, were providing a wide range of public mobile services.

MNOs provide second generation (2G), 3G, 4G and 5G mobile services in Hong Kong at very affordable prices. As at March 2022, there were about 26.1 million subscriptions to mobile communications services. The mobile subscriber penetration rate reached 341.7%, one of the highest in the world, with over 99% of them being subscriptions of 3G, 4G and 5G mobile services. Further to the commercial launch of 5G services since April 2020, 5G mobile subscriptions reached 3.3 million in March 2022, representing a mobile subscriber penetration rate of 44.2%. With the continued development of 5G services, increasingly higher speed of mobile communications will be supported.

With an ever growing demand for mobile data services, the monthly mobile data usage surged to 124 885.7 Terabytes in March 2022, representing 1.3 times and 1.7 times of the monthly usage over the same period in 2021 and 2020 respectively. The monthly mobile data usage per capita reached 16 811.4 Megabytes in March 2022, compared with 12 628.5 Megabytes in March 2021 and 10 054.9 Megabytes in March 2020. The launch of 5G services and development of innovative applications enabled by 5G will further boost mobile data usage in the future.

Figure 9: Number of Mobile Subscriptions (2012 to 2021)

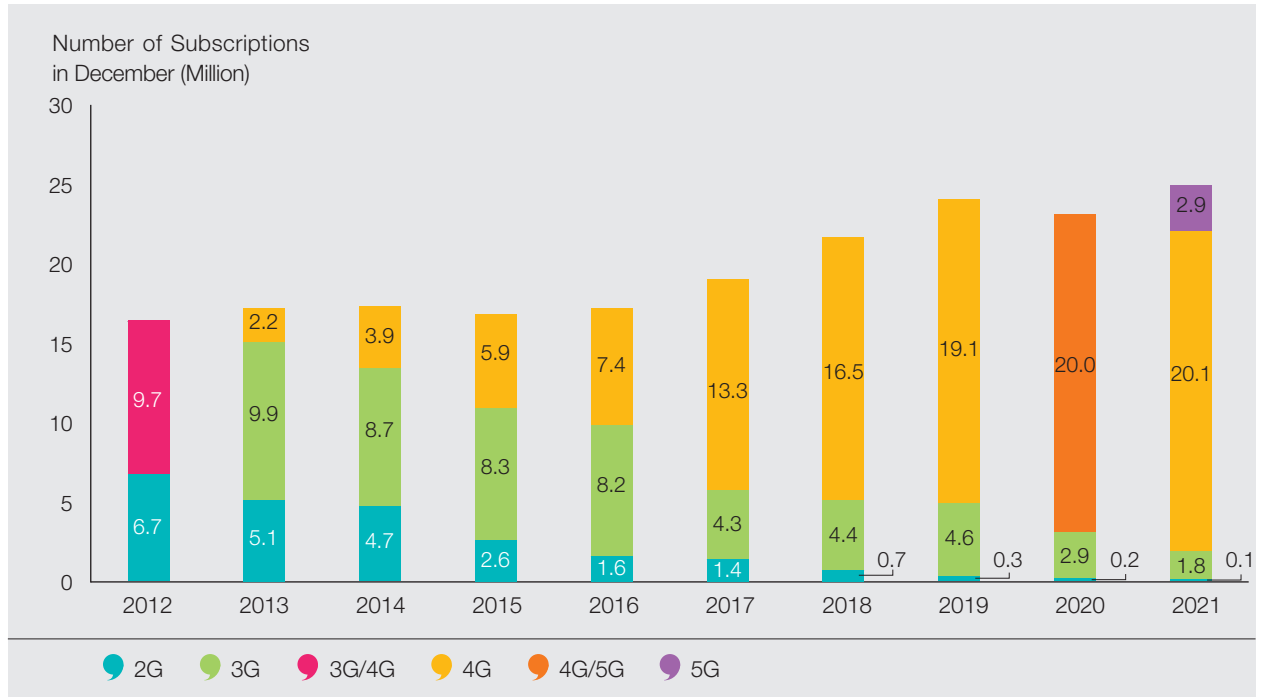
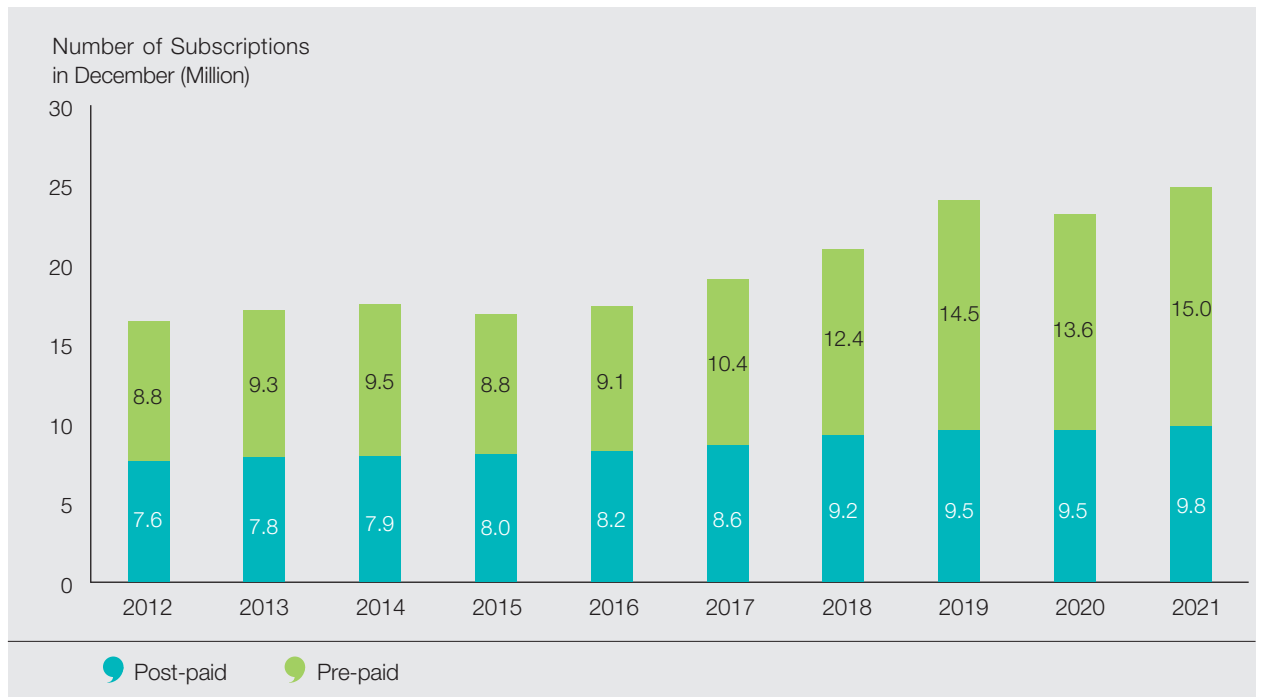
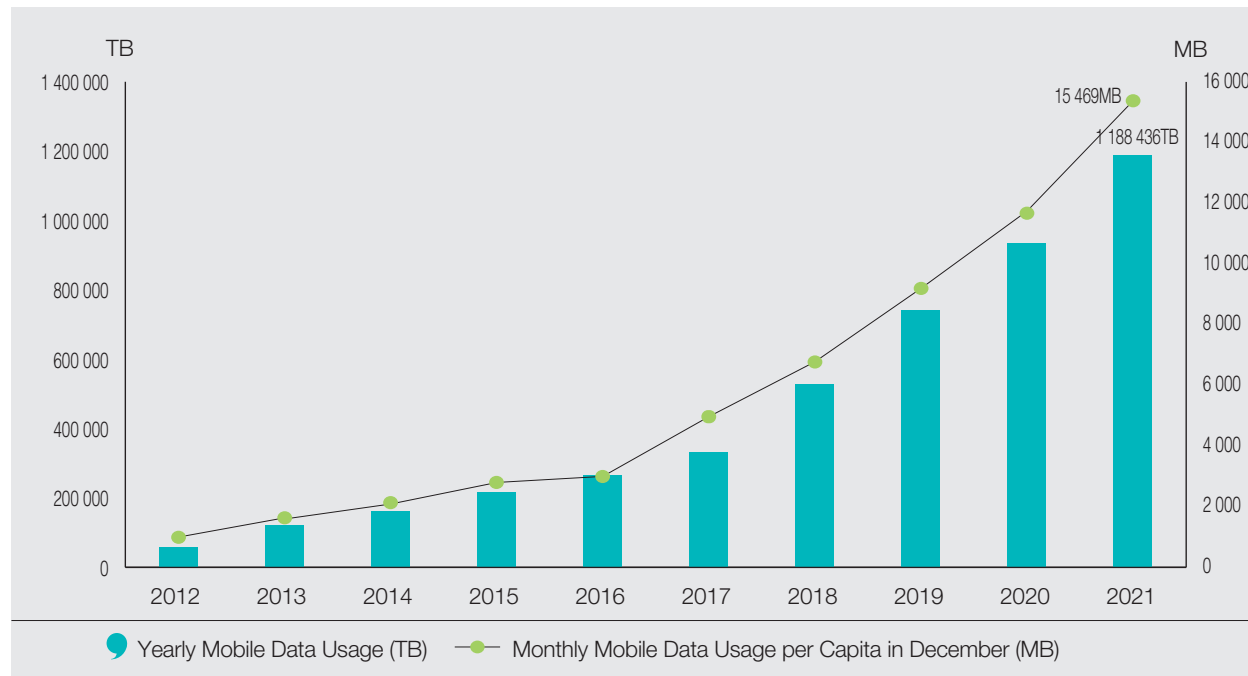


Figure 10: Mobile Subscriptions of Postpaid and Prepaid SIM (2012 to 2021)



Overview of Major Developments in the Communications Market

Figure 11: Mobile Data Usage (2012 to 2021)



Fixed Communications Services

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

As at March 2022, there were 27 local FNOs holding UCLs for the provision of local fixed services, providing around 78 fixed lines per 100 households, one of the highest in the world. They were, in alphabetical order:

- China Mobile Hong Kong Company Limited
- China Mobile International Limited
- China Telecom Global Limited
- China Unicom (Hong Kong) Operations Limited
- ComNet Telecom (HK) Limited
- Easy Tone Network Limited
- Equinix Hong Kong Limited

- HGC Global Communications Limited
- HKBN Enterprise Solutions HK Limited
- HKBN Enterprise Solutions Limited
- HKC Network Limited
- Hong Kong Broadband Network Limited
- Hong Kong Cable Television Limited
- Hong Kong Telecommunications (HKT) 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 Limited
- Towngas Telecommunications Fixed Network Limited
- TraxComm Limited
- Verizon Hong Kong Limited
- Village Telephone Limited
- VNET Group Limited (formerly known as 21 ViaNet Group Limited)
- Vodafone Enterprise Hong Kong Limited

As at March 2022, 91.4% and 80.3% of households were able to enjoy a choice of at least two and three self-built customer access networks respectively. It is expected that the figures will keep growing as the carriers continue to roll out their networks.

Overview of Major Developments in the Communications Market

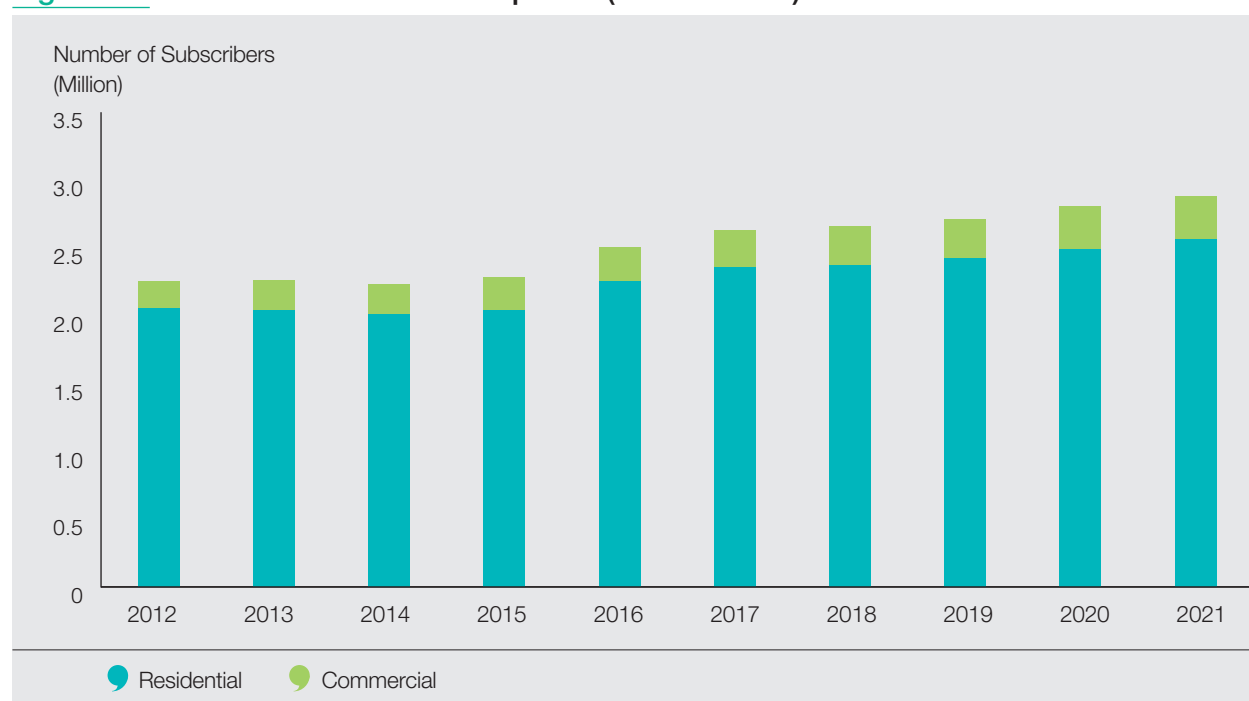
Fixed Broadband Services

As at March 2022, 27 FNOs and 267 SBOs were authorised to provide broadband Internet access services in Hong Kong. With the continuous network rollout of FNOs, the Hong Kong community can enjoy 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 2022, there were around 2.9 million residential and commercial fixed broadband subscriptions, with a household penetration rate of 98%. Broadband services are available at speeds up to 10 gigabits per second (Gbps). Around 86% of the fixed broadband subscriptions are supported by broadband services with speeds of 100 megabits per second (Mbps) or above. The statistics of fixed broadband subscriptions as at March 2022 and the statistics for the past 10 years are shown in **Figure 12** and **Figure 13** respectively.

Figure 12: Statistics of Fixed Broadband Subscriptions (as at March 2022)

	No. of subscriptions	% share
Total no. of broadband subscriptions	2 935 378	100%
Broadband speed of 100 Mbps or above	2 530 259	86.2%
Broadband speed below 100 Mbps	405 119	13.8%
Residential	2 611 138	89.0%
Commercial	324 240	11.0%

Figure 13: Fixed Broadband Subscriptions (2012 to 2021)





Internet of Things Services

Internet of Things (IoT) is a technology which enables the provision of communications platforms and services for interconnected devices to generate, exchange and consume data with minimal human intervention. Currently, Wireless Internet of Things (WIoT) licensees, MNOs and MVNOs are authorised to provide WIoT services. Since the creation of the WIoT licence in December 2017, three WIoT licences have been issued. With the development of new wireless technologies such as 5G mobile technologies and smart city applications, it is expected that an increasing number of WIoT devices connecting to the public telecommunications networks will be available in future.

Public Wi-Fi Services

Operators have been actively rolling out Wi-Fi networks. Eight network operators and 234 class licensees are providing public Wi-Fi services in various locations of the territory. As at March 2022, there were 83 095 public Wi-Fi hotspots in the city and the number will continue to grow.

External Telecommunications Services

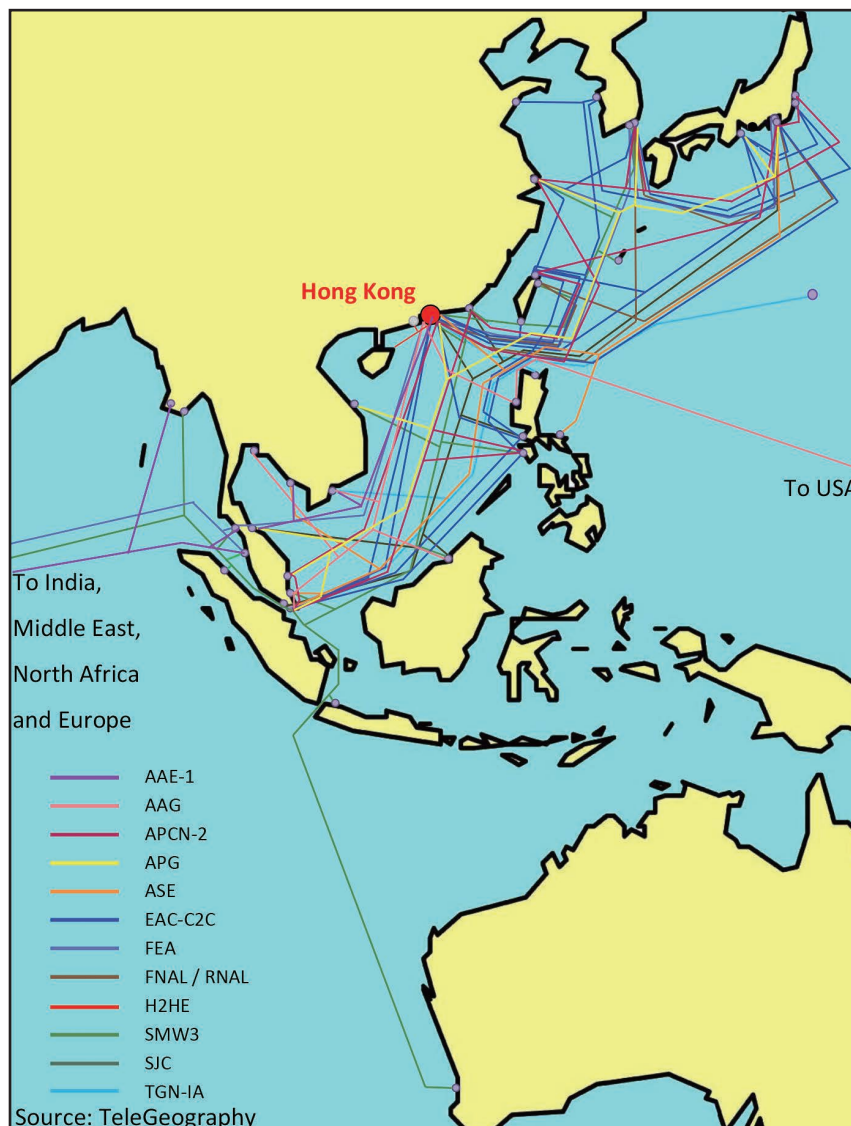
The external telecommunications facilities market has been fully liberalised. As at March 2022, 41 FNOs were authorised to provide cable-based and/or non-cable-based external telecommunications facilities.

As at March 2022, there were eight cable landing stations in Hong Kong: two in Tong Fuk, three in Tseung Kwan O and the other three in Deep Water Bay, Chung Hom Kok and Cape D'Aguilar respectively, making it a major telecommunications and Internet hub in the region.

Overview of Major Developments in the Communications Market

In March 2022, Hong Kong was connected to 12 regional and transcontinental submarine cable systems. They are Asia Africa Europe-1 (AAE-1), Asia-America Gateway Cable System (AAG), Asia Pacific Cable Network 2 (APCN-2), Asia Pacific Gateway (APG), Asia Submarine-Cable Express (ASE), EAC – C2C, FLAG Europe Asia (FEA), FLAG North Asia Loop (FNAL)/REACH North Asia Loop (RNAL), Hainan to Hong Kong Express (H2HE), Sea-Me-We 3 (SMW3), South-East Asia Japan Cable System (SJC) and TGN-Intra Asia Cable System (TGN-IA). As at March 2022, the total equipped external capacity exceeded 158 259 Gbps. Total external telephone traffic was 1.6 billion minutes for the period from January to December 2021. Landing of some new submarine cable systems is in the pipeline and they are expected to be ready for service between 2023 and 2024.

Figure 14: Submarine Cables between Hong Kong and Other Economies



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 180 transmitting/receiving satellite antennae in earth stations operated by a number of FNOs.

Licences are required for the operation of satellites and associated facilities. As at March 2022, two Hong Kong companies were licensed to operate satellites for providing communications services, namely Asia Satellite Telecommunications Company Limited and APT Satellite Company Limited, operating a total of nine in-orbit satellites.

CHAPTER

6

Review of the Communications Authority's Major Tasks



BROADCASTING

6.1 Mid-term Review of Free TV and Sound Broadcasting Licences

In 2021/22, the Authority embarked on the mid-term review of the free TV licences of HKTVE, TVB and Fantastic TV and the sound broadcasting licences of CRHK and Metro to examine their performance during the first six years of their respective licences, including the licensees' compliance with the statutory requirements, licence conditions and codes of practice as well as their investment commitments in the past six years and the coming six years. To gauge public views, the Authority conducted a public consultation exercise in the second half of 2021, including public opinion survey²⁹, online consultation session³⁰ and focus group discussion³¹. Based on the assessment results of the licensees' performance and the views of the public and the industry, the Authority will make recommendations regarding licence conditions and service requirements for the remaining period of the licences to the CE in C.

6.2 Migration of Six Digital Television Programme Channels to New Transmitting Frequencies

On 1 December 2021, six digital television programme channels operating in the 600/700 MHz bands were migrated to the 500 MHz band. These six television programme channels were Jade 81 of TVB, ViuTVsix 96 and ViuTV 99 of HKTVE, and RTHK TV 31, RTHK TV 32 and RTHK TV 33 of RTHK. In the course of preparation for the migration, OFCA launched a series of publicity programmes, including issuing circular letters to building management offices, incorporated owners of buildings and other parties maintaining/operating common antenna broadcast distribution systems; putting up posters and distributing flyers to residents of public and private housing estates; as well as launching TV and radio API in order to enhance public understanding of the migration and the necessary preparatory work. With the concerted effort of the stakeholders, the migration was successfully completed on 1 December 2021. The vacated spectrum in the 600/700 MHz bands has been assigned/reserved for the provision of high value-added mobile telecommunications services, including 5G services.

29 The opinion survey commissioned by the Authority covered about 1 600 respondents. The objectives of the opinion survey are to identify any changing viewing and listening habits of the public and to gauge public views on the existing regulatory controls imposed on the licensees.

30 For the first time in the Authority's public consultation exercise, an online public consultation session was held on 25 September 2021 to collect views from the public, with 54 members of the public giving their views via online conferencing or by phone. To promote transparency, the session was livecast on a dedicated webpage and RTHK TV 32.

31 A focus group discussion session with members of the Television and Radio Consultative Group was conducted in October 2021 to obtain more in-depth views on the licensees' services.

Review of the Communications Authority's Major Tasks

6.3 Formal Approval for Fantastic TV's Application for Using Spectrum as an Additional Transmission Means

In February 2022, the Authority formally approved Fantastic TV's application to use spectrum, on top of fixed network, for transmission of its free TV service. This approval was given following Fantastic TV had satisfied all the requirements set out in the Authority's approval-in-principle that was issued to Fantastic TV in April 2021.

The Authority noted that assigning spectrum to Fantastic TV for transmission of its free TV service would enable Fantastic TV to increase its service coverage and ultimately provide additional programme choices to more households. Starting from 1 April 2022, the spectrum-based service covered 75% of the Hong Kong population. Fantastic TV will expand its service coverage³² and target to launch a new television programme channel by 24 November 2022.

6.4 Renewal of Other Licensable TV Licences

During the period under review, the Authority approved two applications for renewal of other licensable TV licences for the provision of television programme services in hotel rooms in Hong Kong by Guest Tek Asia Pacific Limited and MVI Systems Limited.

6.5 Processing Complaints Relating to Broadcasting Services

Overview of the Complaints Processed

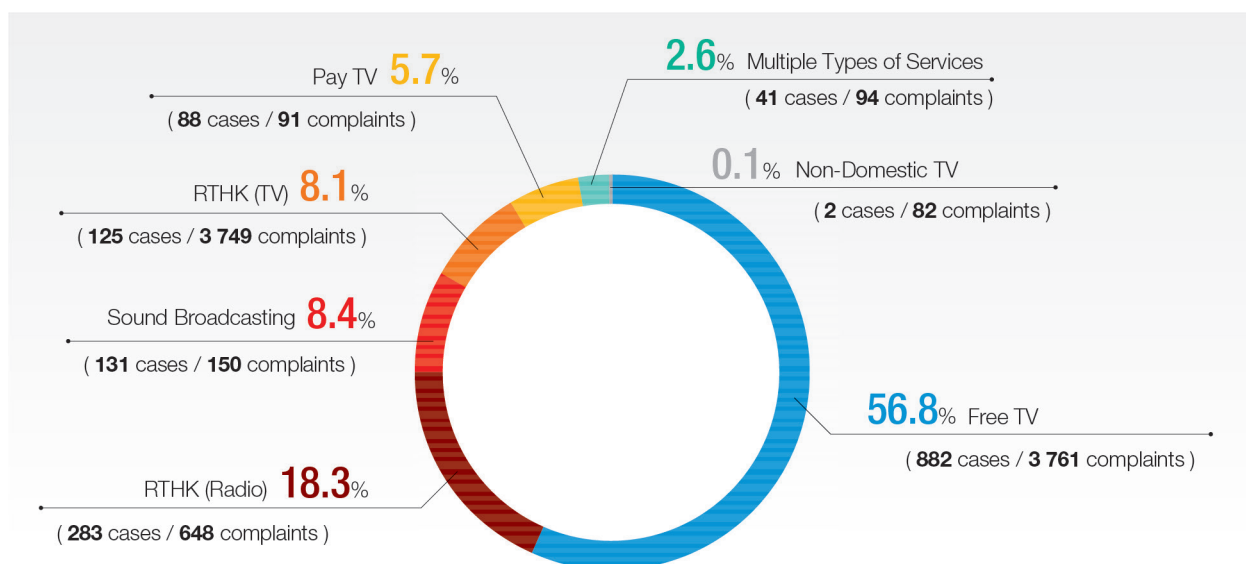
During the period from April 2021 to March 2022, the Authority processed a total of 1 552 cases (8 575 complaints)³³ relating to the materials broadcast by broadcasters, representing a reduction of 21% in the number of cases³⁴ and a reduction of 57% in the number of complaints processed³⁵, as compared with the figures during the same period in the previous year (1 964 cases, 19 980 complaints). Breakdown of all the complaint cases by broadcasting service and broadcaster processed during the period is shown in **Figure 15** and **Figure 16** respectively.

³² Please refer to footnote 8.

³³ To ensure operational efficiency, complaints with similar allegations relating to the same issue or broadcast material are handled together and counted as a single case.

³⁴ The decrease in the number of complaint cases processed in 2021/22 was mainly due to the fact that a substantial number of complaint cases (over 600) concerning social unrest had been processed in 2020/21.

³⁵ The decrease in the number of complaints processed in 2021/22 was mainly due to the fact that in 2020/21, there were two complaint cases concerning social unrest and three complaint cases concerning programmes broadcast respectively on TVB and RTHK, which gave rise to a substantial number of complaints (over 9 000 complaints in total).

Figure 15: Distribution of All Complaint Cases by Broadcasting Service Processed in 2021/22**Figure 16: Distribution of All Complaint Cases by Broadcaster Processed in 2021/22**

Broadcasters Involved	No. of Complaint Cases	No. of Complaints Involved
TVB	793	3 478
HKTVE	50	232
Fantastic TV	33	38
HKCTV	62	63
PCCW Media	26	28
CRHK	108	124
Metro	23	26
RTHK (TV)	125	3 749
RTHK (Radio)	283	648
Phoenix Satellite Television Company Limited	2	82
Multiple Broadcasters	47	107
Total	1 552	8 575

Review of the Communications Authority's Major Tasks

Among all the complaint cases processed by the Authority, DG Com handled 1 543 cases (8 284 complaints) under the powers delegated by the Authority. These complaints involved breaches of a minor nature, or contained allegations which did not constitute any breach or were outside the remit of section 11(1) of the B(MP)O (i.e. the allegations concerned matters not regulated under the relevant legislation, licence conditions or codes of practice). The Authority dealt with nine cases (291 complaints). Outcomes of all the complaints processed by the Authority during this period are listed in **Figure 17**.

Figure 17: 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	Total
	Substantiated		Unsubstantiated			
	The Authority	DG Com	The Authority	DG Com	DG Com	
No. of Cases	8	112	1	1 069	362	1 552
No. of Complaints	81	129	210	7 685	470	8 575

Complaints Dealt with by the Authority

Among the nine complaint cases dealt with by the Authority, two concerned free TV services (involving 72 complaints, which accounted for 24.7% of the total number of complaints dealt with by the Authority). A breakdown of these complaint cases by broadcasting service is shown in **Figure 18**.

Figure 18: Breakdown of Complaint Cases Dealt With by the Authority by Broadcasting Service

Types of Broadcasting Service	No. of Complaint Cases	No. of Complaints Involved
Free TV	2	72
Sound Broadcasting	3	4
RTHK (TV)	1	210
RTHK (Radio)	2	3
Multiple Types of Services	1	2

Regarding the nature of the broadcast materials involved in the nine complaint cases dealt with by the Authority, eight of them were related to programmes while one was on advertisement. Eight of them were substantiated, among which three cases were related to the use of foul language or objectionable term; one case concerned the failure to indicate the source and date of the relevant assessment or research in the advertisement; one case concerned accuracy in news programme; one case concerned broadcast of advertising material in news programme; one case concerned the failure to schedule the programme with sensitivity, decency and treatment/depiction of sex; and the remaining one was related to denigrating remarks. The Authority issued one warning, three pieces of strong advice and five pieces of advice to the broadcasters concerned. A breakdown of the decisions of the Authority on the complaints dealt with in 2021/22 is shown in **Figure 19**.



Figure 19: Decision of the Authority on Complaint Cases in 2021/22

Decision of the Authority	TVB	HKTVE	PCCW MEDIA	CRHK	RTHK	Total
No Further Action	0	0	0	0	1	1
Advice	1	1	1	2	0	5 <small>Note 1</small>
Strong Advice	0	1	0	1	1	3
Warning	0	0	0	0	1	1
Serious Warning	0	0	0	0	0	0
Financial Penalty	0	0	0	0	0	0
Total	1	2	1	3	3	10

Note 1: There was one substantiated complaint case involving two broadcasters (viz. HKTVE and PCCW Media) and an advice was issued to each of them.

Review of the Communications Authority's Major Tasks

TELECOMMUNICATIONS

6.6 Making Spectrum Available in Multiple Frequency Bands for 5G Services

In 2019, the Authority assigned a total of 1 980 MHz of radio spectrum in the 3.3 GHz, 3.5 GHz, 4.9 GHz, and 26 GHz and 28 GHz bands (26/28 GHz bands) in a timely manner for public mobile telecommunications use, including the provision of 5G services. Separately, 400 MHz of shared spectrum in the 26/28 GHz bands was assigned to the Airport Authority for innovative 5G applications in support of smart airport development in October 2019 and would be available for assignment to other parties for use on a sharing basis for the provision of local wireless broadband services. Starting from April 2020, MNOs have launched their commercial 5G services in Hong Kong. As at March 2022, 5G coverage in Hong Kong reached over 90% of the population, and even up to 99% in core business districts, covering major locations in the urban areas and all Mass Transit Railway lines.

Making Available Additional 5G Spectrum to Meet the Demand of Operators

In order to meet the growing demands of various 5G applications in terms of speed, capacity and coverage, the Authority released more spectrum in different frequency bands to the market. Following the promulgation of the decisions of the Authority and SCED by way of joint statements on 30 March 2021 on the arrangements for frequency allocation and assignment of additional spectrum for 5G services, and the related SUF, OFCA conducted a spectrum auction in October 2021 and the Authority assigned 80 MHz of spectrum in the 4.9 GHz band in December 2021, and 70 MHz of spectrum in the 700 MHz band in June 2022 according to the auction results.

With the sustained enhancement of 5G services and the growing availability of 5G equipment and consumer products, 5G services are revolutionising mobile users' experience with empowerment by its excellent technical capabilities of high speed, high capacity, high reliability, massive connectivity and low latency communications. 5G technology is widely expected to continue to open up vast potential for various commercial and smart city applications.



Amendments of Network and Service Rollout Obligations for Spectrum Assigned in the 26 GHz and 28 GHz Bands

Three incumbent MNOs were each assigned 400 MHz of spectrum in the 26/28 GHz bands for the provision of large scale public mobile services in April 2019. They were each under a network and service obligation to install and put into use a total of 2 500 radio units in three phases, by April 2022, April 2023 and April 2024 respectively. In April 2021, the three MNOs made a joint request to the Authority on postponement of deadlines to fulfil the network and service rollout milestones by two years, due to the later-than-expected availability of the relevant network equipment and handsets supporting the 26/28 GHz bands. Taking into account the MNOs' submission and OFCA's assessment, the Authority decided in November 2021 to amend the network and service rollout obligations imposed on them by postponing each of the three network and service rollout milestones by two years from 2022–24 to 2024–26. Notwithstanding the postponement of the milestones, the total minimum number of 2 500 radio units required to be installed and put into use remains unchanged.

6.7 Facilitating the Rollout of 5G Networks

For the deployment of 5G services in Hong Kong, MNOs are required to establish a larger number of radio base stations (RBSs) as compared with previous generations of mobile services. To facilitate the expedient and effective rollout of 5G networks, the Authority supported the Government in launching a pilot scheme in March 2019 to open up more than 1 000 suitable government premises for MNOs to install RBSs with a streamlined approval process and at a nominal rent of \$1 per year. OFCA has set up a dedicated team to coordinate with MNOs and relevant government departments on the matters concerned, and issued the “Guidance Notes for Submission of Applications under the Pilot Scheme for Installation of Radio Base Stations at Selected Government Venues” to set out the principles, requirements and streamlined procedures in respect of the applications under the scheme. The scheme has been well received by the industry³⁶. In January 2022, OFCA launched the second phase of the Pilot Scheme by further opening up about 500 government premises under a “demand-led” model for MNOs.

OFCA has also been working closely with the industry to identify suitable street level furniture and public facilities for the installation of RBSs, such as public payphone kiosks, sheltered bus stops, smart lampposts, etc. In respect of public payphone kiosks and sheltered bus stops, the Authority issued the “Guidelines on the Use of Public Payphone Kiosks for the Installation of Radio Base Stations for Provision of Public Mobile Services” and the “Guidelines on the Use of Sheltered Bus Stops for the Installation of Radio Base Stations for Provision of Public Mobile Services” in April and November 2020 respectively. OFCA will continue to work with the industry and the relevant government departments in identifying other suitable street furniture and public facilities for installation of RBSs.

³⁶ As at October 2022, 179 applications had been received under the scheme, of which 107 were approved.

Review of the Communications Authority's Major Tasks

6.8 Conduct of a Technical Study on Non-Ionising Radiation Safety of Radio Base Stations

The Authority acting through OFCA commissioned a consultancy study on non-ionising radiation (NIR) safety of RBSs, including 5G RBSs. The study examined technical matters in relation to NIR, in particular those for 5G RBSs employing new technology like massive multiple-input-multiple-output antennas, reviewed the methodology for assessment of NIR for different RBS deployment scenarios and the existing regulatory measures, and made recommendations on practical measures to control the radiation safety of various types of RBSs so as to facilitate the on-going development of public mobile services. The study was commenced in April 2021 and completed in June 2022.

6.9 Facilitating Development of WIoT Services and Localised Wireless Broadband Services/Systems

Since the creation of a new licensing regime in December 2017 for the provision of WIoT platforms and services using the shared frequency band of 920 – 925 MHz by the Authority, three WIoT licences were issued as at March 2022. Meanwhile, the existing MNOs may also make use of the frequency spectrum assigned to them under their UCLs to provide WIoT services by adopting mobile technologies such as Narrowband Internet of Things and 5G technologies that enable massive IoT connections. The Authority will continue to facilitate the development and competitive supply of WIoT services in Hong Kong.

The 5G technologies support the development of new telecommunications infrastructure to cater for a wide variety of innovative services and applications. The Authority created a new Localised Wireless Broadband Service Licence (LWBS Licence) in July 2019 to enable the use of 400 MHz of spectrum in the frequency range of 27.95 – 28.35 GHz on a geographically shared basis (Shared Spectrum) for the provision of innovative wireless broadband services. The Authority issued the first LWBS Licence to the Airport Authority in October 2019 for implementation of smart airport initiatives.

In order to facilitate the use of the Shared Spectrum for the establishment of 5G systems for private use by different entities in the community, the Authority created the Localised Wireless Broadband System (Private) Licence (LWBS (Private) Licence) in December 2021. The LWBS (Private) Licence is subject to a more light-handed regulation and lower level of licence fee compared with LWBS Licence, given that its scope of operation is limited to private use and is of a smaller scale.

OFCA will process any new applications for LWBS Licence and LWBS (Private) Licence with a view to facilitating the development of innovative 5G and smart city applications at different locations, such as university campuses, industrial estates and technology parks.

6.10 Re-assignment of Frequency Spectrum in the 850 MHz, 1800 MHz and 2.5/2.6 GHz Bands

On 30 September 2021, a new 15-year term of assignment commenced for 150 MHz of spectrum in the 1 800 MHz band upon expiry of the previous term. As some of the frequency assignments in the 1 800 MHz band changed hands upon commencement of the new 15-year term of assignments, OFCA had coordinated with the MNOs to ensure a smooth change-over of the spectrum in September 2021.

The current assignment of 90 MHz of spectrum in the 2.5/2.6 GHz band will expire in March 2024. Separately, 15 MHz of spectrum in the 850 MHz band, with the previous assignment originally due to expire in November 2023, was returned by the spectrum assignee in June 2021 upon approval granted by the Authority. Following the issue of the joint statements by the Authority and SCED on 30 March 2021 announcing the arrangements for re-assignment of the spectrum in the 850 MHz and 2.5/2.6 GHz bands and the related SUF upon expiry of the existing assignments, OFCA assisted the Authority in implementing the decisions to re-assign a total amount of 105 MHz of spectrum in the 850 MHz and 2.5/2.6 GHz bands, together with 150 MHz of new spectrum in the 700 MHz and 4.9 GHz bands as mentioned earlier, by way of a single auction held and concluded in October 2021. Pursuant to the auction results, the Authority re-assigned 15 MHz of spectrum in the 850 MHz band in December 2021, and will re-assign 90 MHz of spectrum in the 2.5/2.6 GHz band upon the expiry of the existing assignments in March 2024.

6.11 Consent Granted to Hutchison Telephone Company Limited to Phase Out 2G Services

OFCA received an application from Hutchison to seek the Authority's approval to cease its provision of 2G services in September 2021. Under the relevant licence condition, MNOs are required to make proper and appropriate arrangements for the affected customers to the satisfaction of the Authority before ceasing to provide a generation of mobile service. The Authority granted consent in July 2021 to Hutchison to cease the provision of all its 2G services starting from 30 September 2021, having taken into account relevant considerations including the extremely low percentage of customers to be affected by the 2G service cessation; incentive offers provided by Hutchison to the affected customers to migrate to higher generations of mobile services; favourable termination arrangements for those who chose not to continue the subscription, as well as sufficient time of notification and customer support to the affected customers. Hutchison ceased its 2G services as scheduled.

The Authority will consider applications from other MNOs and carefully examine the proposed arrangements for the affected customers before approval.

Review of the Communications Authority's Major Tasks

6.12 Implementation of Real-name Registration Programme for SIM Cards

The Telecommunications (Registration of SIM Cards) Regulation (Registration Regulation) took effect on 1 September 2021 to implement the Real-name Registration Programme for SIM cards (Real-name Registration Programme).

Pursuant to section 14 of the Registration Regulation, the Authority issued the “Guidelines on Implementation of Real-name Registration for SIM Cards” (SIM Guidelines) on 20 August 2021 to provide practical and administrative guidance to licensees for implementation of the Real-name Registration Programme in compliance with the Registration Regulation.

In accordance with the Registration Regulation and the SIM Guidelines, all relevant licensees were required to put in place an electronic registration platform before 1 March 2022. OFCA has been closely monitoring the implementation of the Real-name Registration Programme. Five Licensees failed to establish the electronic registration system by the statutory deadline. Having considered OFCA’s assessment and the licensees’ representations, the Authority issued directions to the five licensees on 8 March 2022 to do so no later than 29 March 2022. Of the five licensees, four of them have complied with the directions to the satisfaction of the Authority. The remaining licensee, viz. Ultra Data Technology Limited (Ultra Data), failed to comply with the direction. After considering its representations, the Authority decided to suspend Ultra Data’s offer of local mobile service through SIM cards for a period of 12 months with effect from 7 June 2022.

The Authority will, with the support from OFCA, ensure that all relevant licensees are compliant with the Registration Regulation and the SIM Guidelines. In particular, the Authority will closely monitor the registration situation and work with the Government to step up publicity and assistance measures to ensure that all relevant users can complete real-name registration by the statutory deadline, i.e. 23 February 2023.

6.13 Implementation of the Protection of Underground Telecommunications Infrastructure

The Telecommunications (Amendment) Bill 2021 that sought to amend relevant provisions of the TO to, among others, enhance the protection of underground telecommunications lines was passed by the Legislative Council on 21 October 2021, and the new TO provisions came into operation on 24 June 2022.

Under the new section 18A of the TO, it is a criminal offence for any person who does not take reasonable steps to protect or fails to prevent damage to an underground telecommunications line when carrying out any work below ground level near the line. In this regard, after consultation with industry stakeholders, the Authority issued the “Guidelines on Work near Underground Telecommunications Lines” (UTL Guidelines) on 25 February 2022 to provide relevant stakeholders with practical guidance for compliance with section 18A. According to the UTL Guidelines, the working party shall appoint a competent person to carry out the detection work for the underground telecommunications lines. In this connection, OFCA has liaised with two training course providers, namely the Hong Kong Institute of Construction and the Hong Kong Institute of Vocational Education, to offer relevant training courses since March 2022. Applicants who have completed the training and met the relevant qualification requirements may apply to OFCA to become competent persons. The list of competent persons is published on OFCA’s website for public information.

6.14 Enhancement of the Registration System for Class Licence for Offer of Telecommunications Services

The Class Licence for Offer of Telecommunications Services (CLOTS) regulates persons who offer telecommunications services to the general public without the establishment of any means of telecommunications. Under the previous version of the “Guidelines for Administration of CLOTS” (CLOTS Guidelines), only CLOTS licensees with a customer base of 10 000 subscriptions or more were required to register their business information with the Authority. To tie in with the implementation of the Real-name Registration Programme, the Authority updated the CLOTS Guidelines to require all CLOTS licensees intending to offer SIM services during the course of business, irrespective of the size of their customer base, to register their information with the Authority before commencing the offer of SIM services. To facilitate CLOTS licensees to register with the Authority under the updated requirements, an automated electronic platform was launched to allow the licensees to submit and update their business information online. As of 31 March 2022, 56 CLOTS licensees had been registered.

6.15 Creation of a Class Licence for Regulating the Use of and Trade in 6 GHz Devices for Wireless Local Area Network

With the advent of technology, there are emerging new Wireless Local Area Network (WLAN) devices operating in the 5 925 – 6 425 MHz band (such as the commonly known Wi-Fi 6E devices and collectively referred to as the “6 GHz devices”) which support communications of faster data rates and lower latency, and hence better performance. To enable the introduction of 6 GHz devices into Hong Kong, with the support of OFCA, the Authority conducted a public consultation during November and December 2021 to solicit views of the industry and interested parties on the creation of a class licence for regulating the use of and trade in 6 GHz devices for WLAN and variation to the existing class licence for provision of public WLAN services to allow the use of 6 GHz devices for provision of public WLAN services. Taking into account the feedback received in response to the public consultation, the Authority promulgated the decisions on the creation and variation of class licences for 6 GHz devices in April 2022.

Review of the Communications Authority's Major Tasks

6.16 Review of the Number of Public Payphones under the Universal Service Obligation

Public payphone is a basic telephone service which the universal service provider (USP) is required to provide under its universal service obligation (USO). The cost of providing a public payphone service subject to the USO is shared by the fixed and mobile services providers. In view of the diminishing demand for public payphone service in recent years, the Authority announced in June 2017 to embark on a review to determine the reasonable number of public payphones that should be subject to the USO.

The review was completed in 2019 in accordance with the guiding principles laid down by the Authority. For in-building type public payphones, the Authority decided to exclude 515 in-building type public payphones (about 35% of the total number of in-building type public payphones) from the USO. All the excluded in-building type public payphones have been removed by the USP.

For kiosk type public payphones, the Authority decided to exclude 765 kiosk type public payphones (about 50% of the total number of kiosk type public payphones) from the USO. As at March 2022, the USP has removed 740 excluded payphones from various locations. Meanwhile, the USP decided to retain a small number of excluded payphones at its own cost.

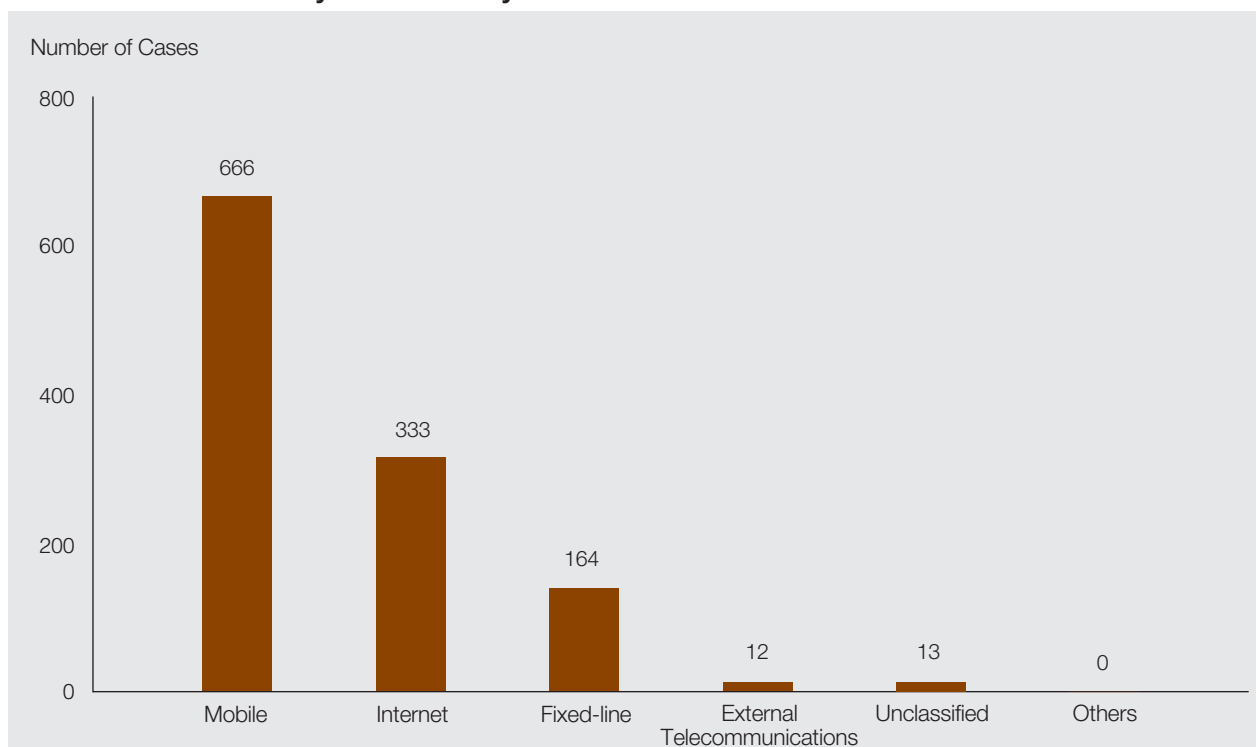
6.17 Processing Complaints Relating to Telecommunications Services

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 their handling of the consumer complaints received and take necessary actions if any systemic issue is identified.

During the year under review, the Authority received a total of 1 188 consumer complaints relating to telecommunications services, representing a reduction of 1.8% compared to 1 210 complaints in the previous year. Among them, 666 cases (56.1%) were related to mobile services, 333 cases (28%) were related to Internet services, 164 cases (13.8%) were related to fixed-line services and 12 cases (1%) were related to external telecommunications. On the nature of complaints, the Authority received the largest number of complaints relating to customer service quality (326 cases or 27.4%), while complaints about service quality (275 cases or 23.1%) and disputes on contract terms (152 cases or 12.8%) ranked second and third respectively.

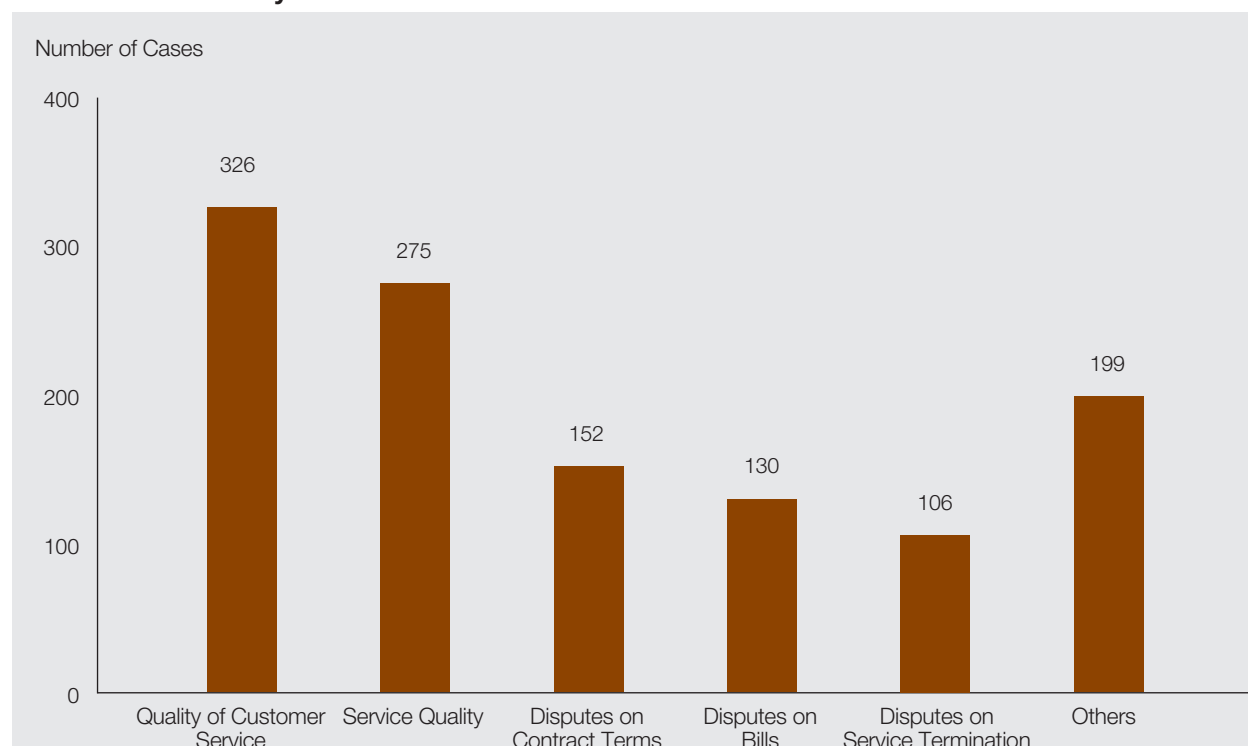
Breakdown of complaint cases by types of telecommunications services and nature of complaints received by the Authority during the period are shown in **Figure 20** and **Figure 21** respectively.

Figure 20: Distribution of Complaint Cases by Types of Telecommunications Services Received by the Authority in 2021/22



Review of the Communications Authority's Major Tasks

Figure 21: Distribution of Complaint Cases by Nature of Complaints Received by the Authority in 2021/22



Note: Types of complaint cases grouped under “others” include cases involving collection of overdue payment, porting of telecommunications numbers, application or suspension of telecommunications services, etc.

All the 1 188 complaint cases received were outside the Authority’s jurisdiction. No case was found to be in breach of TO or licence conditions after investigation.

6.18 Strengthening Consumer Protection in the Use of Telecommunications Services

Consumer Protection Measures Adopted in the Telecommunications Industry

In order to safeguard consumer interests in the use of telecommunications services, OFCA has taken proactive actions to implement various consumer protection measures and works with the industry to draw up and implement self-regulatory measures for addressing new consumer issues that may arise from time to time.

These measures include the voluntary Customer Complaint Settlement Scheme (CCSS) administered by the Communications Association of Hong Kong representing the industry. The CCSS aims to help resolve billing disputes in deadlock between telecommunications service providers and their customers through mediation.

Other self-regulatory measures voluntarily implemented by the industry include the promulgation of the Code of Practice for Telecommunications Service Contracts to improve the clarity of provisions in the telecommunications service contracts as well as the Code for the Provision of Chargeable Mobile Content Services to govern the practices of third-party content service providers.

Other measures include the implementation of mobile bill shock preventive measures by mobile service providers as well as publication of details of the arrangements adopted by major residential broadband service providers to handle service termination requests from consumers on OFCA's website.

OFCA will continue to monitor the implementation and effectiveness of the various consumer protection measures adopted and where necessary engage the industry to seek further improvement of the existing measures or introduce new measures.

Broadband Performance Test System

Since December 2010, OFCA has been providing a broadband performance test system enabling users of fixed and mobile broadband service to measure the performance of their broadband connections, including download and upload speeds, network latency, packet loss and jitter. Apart from users of desktop and notebook computers, users of smart phones and tablets running iOS and Android operating systems may also make use of the test system.

From time to time, OFCA reviews and upgrades the test system to further enhance its capability and performance. From April 2021 onwards, it supports speed tests of up to 10 Gbps for desktop and notebook computers and up to 3 Gbps for iOS-based and Android-based mobile devices. As at March 2022, more than 112 million tests were performed.

Consumer Education Programmes

During the year, the Authority continued to arrange publicity activities and disseminate consumer messages through different media channels. Apart from the well-established Facebook fan page "Communications Master · OFCA", a new social media channel on Instagram was launched in February 2021 primarily for the younger generation. Various consumer information and tips were conveyed to the public through these two social media platforms to enable better understanding on smart use of communications services.

Review of the Communications Authority's Major Tasks

6.19 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 2021 to 31 March 2022, the Authority handled a total of 317 complaints under the TDO, of which 257 were closed for insufficient evidence to suspect/establish a contravention or falling outside the scope of the TDO; one was closed with the issue of a warning letter to the licensee concerned that the misconduct must be ceased/discontinued immediately and not be repeated; eight were closed after the issue of advisory letters 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, and the remaining 51 were under processing.

6.20 Enforcement of the Competition Ordinance

The CO provides for a cross-sectoral competition law prohibiting anti-competitive conduct in all sectors. 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.

Pursuant to the MoU signed by the Authority and the Commission, the Authority will ordinarily assume 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 will discuss and agree on how best to process the matter on a case-by-case basis.

From 1 April 2021 to 31 March 2022, a total of 20 complaints and/or enquiries were received under the CO, with 19 cases closed without the need for further action and one case is under processing. During the year, three transactions were reviewed under the merger rule of the CO. No further action was considered necessary in respect of the transactions.

6.21 Enforcement of the Unsolicited Electronic Messages Ordinance

The UEMO sets out the rules about sending CEMs, including the requirements to provide accurate sender information and honour unsubscribe requests. Under the UEMO, the Authority has established three Do-Not-Call Registers (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. As of March 2022, more than 2.6 million numbers were registered under these DNC Registers.

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

MAJOR REGULATORY ACTIONS

6.22 Sanctions against Broadcasting Licensees

There was no major sanction against broadcasting licensees during the reporting period.

6.23 Sanctions against Telecommunications Licensees

Illegal Bypass of Local Access Charge by Skycall Telecom International Limited

OFCA completed an investigation into a suspected breach by Skycall Telecom International Limited (Skycall), an SBO licensee authorised for the provision of external telecommunications services (ETS), regarding illegal bypass of local access charge (LAC). Taking into account OFCA's investigation, the Authority imposed a financial penalty of \$65,000 on Skycall on 31 May 2021 for its failure to comply with the requirement of Regulatory Guide for Calling Line Identification Format, HKCA 3101 issued by the Authority on the delivery of ETS traffic from overseas to Hong Kong and pay LAC to the relevant local network operator in respect of the ETS traffic, in breach of Special Conditions 7.1 and 8.1 of its SBO licence.

Review of the Communications Authority's Major Tasks

Breach by IDD1628 Limited for Failure to Provide Satisfactory Customer Service and Other Licence Obligations

Between December 2020 and June 2021, OFCA received 11 consumer complaints alleging that IDD1628 Limited (IDD1628), an SBO licensee authorised for the provision of ETS, could not be reached through its customer service channels and failed to handle customers' requests for termination of its International Direct Dialling services. Taking into account OFCA's investigation, the Authority concluded on 24 February 2022 that IDD1628 was in breach of General Condition 5.1 of its SBO licence, which required it to provide a good, efficient and continuous service in a manner satisfactory to the Authority, and imposed a financial penalty of \$70,000 on IDD1628.

IDD1628 failed to pay the financial penalty and continued failing to respond to OFCA's requests made subsequently for information relating to its business under various licence conditions. Taking into account OFCA's further investigation, the Authority concluded on 14 June 2022 that IDD1628 had been in continuous breach of General Condition 5.1 and in breach of the Special Conditions 3.1 and 13.2 of its SBO licence, and decided that its licence should be suspended with immediate effect until expiry on 30 November 2022.

Breach by Hong Kong uCloudlink Network Technology Limited, Neware Info Technology Limited, Truphone (Hong Kong) Limited, Uhuibao International Business Co., Limited, and Ultra Data (collectively the Five Licensees) for Failure to Comply with the SIM Guidelines

As a result of OFCA's close monitoring of the implementation of the Real-name Registration Programme by the relevant licensees since September 2021, OFCA noted that the Five Licensees failed to put in place in a timely manner an electronic registration platform in accordance with the SIM Guidelines. Taking into account OFCA's investigation, the Authority concluded on 8 March 2022 that they had breached the SIM Guidelines and the relevant condition of their licences and issued directions pursuant to section 36B(1)(a) of the TO to the Five Licensees, requiring them to rectify their breach of the SIM Guidelines and the relevant condition of their licences.

Whilst four of the Five Licensees adopted rectification measures to comply with the aforesaid directions, the SIM Guidelines and the relevant condition under their respective licences, Ultra Data failed to do so. Taking into account OFCA's further investigation, the Authority decided on 7 April 2022 to suspend part of Ultra Data's CLOTS in respect of offering local mobile service through SIM cards subject to the real-name registration requirements for a period of 12 months with effect from 7 June 2022.



6.24 Sanctions against Senders of Commercial Electronic Messages

From April 2021 to March 2022, the Authority received 520 reports on suspected contraventions of the UEMO, representing a decrease of about 8% as compared to the 565 reports received in the previous year. The majority of these 520 reports was related to short messages, pre-recorded telephone messages and email messages. In dealing with these reports, the Authority would, depending on the circumstances, issue advisory letters to senders of CEMs requesting them to observe the requirements of the UEMO or issue warning letters to those involved in more serious cases. During the period under review, 69 advisory letters and 17 warning letters were issued. In the event of repeated contraventions by a particular sender, the Authority may issue enforcement notices pursuant to the UEMO directing the sender to take steps to remedy the contraventions. Any person who fails to comply with an enforcement notice may be liable to a fine of up to \$100,000 on the first conviction. In 2021/22, no enforcement notice was 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:

Television Broadcasts Limited

HK Television Entertainment Company Limited

Fantastic Television Limited

Hong Kong Cable Television Limited

PCCW Media Limited

APT Satellite TV Development Limited

Starbucks (HK) Limited

WarnerMedia Asia Pacific (HK) Limited

Sun Television Cybernetworks Enterprise Limited

Auspicious Colour Limited

Phoenix Satellite Television Company Limited

Hong Kong TV International Media Group Limited

One TV Media Global Limited

Star China Media Limited

Hong Kong Commercial Broadcasting Company Limited

Metro Broadcast Corporation Limited

PwC Hong Kong

CSM Media Research

TeleGeography

Commerce and Economic Development Bureau

Office of the Communications Authority

Information Services Department

Radio Television Hong Kong

ANNEX

1

SUMMARY OF NON-DOMESTIC TELEVISION PROGRAMME SERVICES

Licensee	Date of Launch of Service	No. of Channels (No. receivable in HK)	Nature of Channels	Target Markets	Satellite
1. APT Satellite TV Development Limited	8.2000	77 (0)	General entertainment, news, movies & sports	Asia-Pacific region, Africa and Europe	Apstar 5C Apstar 6C Apstar 7 Apstar 9
2. Starbucks (HK) Limited	6.2000	1 (0)	Weather, sports, music and finance etc.	The Mainland	Apstar 6C
3. WarnerMedia Asia Pacific (HK) Limited (formerly known as Turner International Asia Pacific Limited)	10.1989	8 (0)	News, finance, movie, children & family programmes	Asia-Pacific region & South Asia	AsiaSat 7 Intelsat 20
4. Sun Television Cybernetworks Enterprise Limited	8.2000	1 (1)	History & culture-related documentaries	Asia-Pacific region	AsiaSat 7
5. Auspicious Colour Limited	1.2006	101 (66)	General entertainment, infotainment & music	Asia-Pacific region	AsiaSat 5 AsiaSat 7 AsiaSat 9
6. Phoenix Satellite Television Company Limited	5.2006	4 (3)	General entertainment, news & movie	Asia-Pacific region	AsiaSat 7
7. Hong Kong TV International Media Group Limited	3.2011	6 (6)	Infotainment	Asia-Pacific Region	Apstar 6C
8. One TV Media Global Limited	5.2013	2 (2)	News, finance & entertainment	Asia-Pacific Region	Apstar 5C
9. Star China Media Limited	1.2014	3 (2)	Music programmes, entertainment news & general entertainment	Asia-Pacific Region	AsiaSat 7

ANNEX 2

TYPES AND NUMBERS OF TELECOMMUNICATIONS LICENCES (AS AT 31 MARCH 2022)

Type of Licences	Number of Licences
Academic Institution Self-provided Telecommunications Installation	2
Aeronautical VHF Fixed Station	33
Aircraft Station	318
Amateur Station	2 599
Broadcast Radio Relay Station & Broadcast Relay Station	12
Experimental Station	71
Hotel Television (Transmission)	168
Industrial, Scientific & Medical Electronic Machine	1 893
Localised Wireless Broadband Service	1
Maritime Radio (Local Vessel)	2 447
Mobile Radio System Fixed Station	16
Mobile Radio System Mobile Station	1 594
Private Mobile Radio System	1 961
Private Radio Paging System	4
Public Radiocommunications Service	7
Radio Dealers (Unrestricted)	3 976
Radiocommunications School	7
Radiodetermination and Conveyance of Commands, Status and Data	160
Satellite Master Antenna Television	67
Self-Provided External Telecommunications System	5
Services-Based Operator of Class 1 Service and Class 2 Service ^{Note A}	20
Services-Based Operator of Class 3 Service	502
Ship Station	2 376
Space Station Carrier	9
Taxi Radiocommunications Service	16
Unified Carrier – Mobile Services ^{Note B}	13
Unified Carrier – Local/External Fixed Services ^{Note B and Note C}	54
Wide Band Link & Relay Station	52
Wireless Internet of Things	3
Total	18 386

Note A: This figure includes 17 licences which are also authorised for the provision of SBO Class 3 services.

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

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

ANNEX 3

GLOSSARY

In Alphabetical Order	Abbreviation
Amplitude Modulation	AM
Announcement in the Public Interest	API
Broadcasting (Miscellaneous Provisions) Ordinance (Cap. 391)	B(MP)O
Broadcasting Ordinance (Cap. 562)	BO
Chief Executive in Council	CE in C
Class Licence for Offer of Telecommunications Services	CLOTS
Commercial Electronic Message	CEM
Communications Authority	The Authority
Communications Authority Ordinance (Cap. 616)	CAO
Competition Commission	Commission
Competition Ordinance (Cap. 619)	CO
Customer Complaint Settlement Scheme	CCSS
Customs and Excise Department	C&ED
Director-General of Communications	DG Com
Domestic Free Television Programme Service	Free TV
Domestic Pay Television Programme Service	Pay TV
Do-Not-Call Registers	DNC Registers
External Telecommunications Services	ETS
Fantastic Television Limited	Fantastic TV
Fifth Generation	5G
Fixed Network Operators	FNOs
Fourth Generation	4G
Frequency Modulation	FM
Gigabits per second	Gbps
Guidelines for Administration of CLOTS	CLOTS Guidelines
Guidelines on Implementation of Real-name Registration for SIM Cards	SIM Guidelines
Guidelines on Work near Underground Telecommunications Lines	UTL Guidelines
High Definition Television	HDTV
HK Television Entertainment Company Limited	HKTVE
HKT Trust and HKT Limited	HKT
Hong Kong Cable Television Limited	HKCTV
Hong Kong Commercial Broadcasting Company Limited	CRHK
Hutchison Telephone Company Limited	Hutchison
IDD1628 Limited	IDD1628
Internet of Things	IoT
Local Access Charge	LAC

In Alphabetical Order	Abbreviation
Localised Wireless Broadband Service Licence	LWBS Licence
Localised Wireless Broadband System (Private) Licence	LWBS (Private) Licence
Megabits per second	Mbps
Memorandum of Understanding	MoU
Metro Broadcast Corporation Limited	Metro
Mobile Network Operator	MNO
Mobile Virtual Network Operator	MVNO
Non-domestic Television Programme Service	Non-domestic TV
Non-ionising Radiation	NIR
Office of the Communications Authority	OFCA
Other Licensable Television Programme Service	Other Licensable TV
PCCW Media Limited	PCCW Media
Public Radiocommunications Service	PRS
Radio Base Stations	RBSs
Radio Television Hong Kong	RTHK
Real-name Registration Programme for SIM Cards	Real-name Registration Programme
Second Generation (Mobile Services/Subscriptions)	2G (Mobile Services/ Subscriptions)
Secretary for Commerce and Economic Development	SCED
Services-based Operator	SBO
Skycall Telecom International Limited	Skycall
Spectrum Utilisation Fee	SUF
Telecommunications Ordinance (Cap. 106)	TO
Telecommunications (Registration of SIM Cards) Regulation	Registration Regulation
Television Broadcasts Limited	TVB
Third Generation	3G
Trade Descriptions Ordinance (Cap. 362)	TDO
Ultra Data Technology Limited	Ultra Data
Unified Carrier Licence	UCL
Universal Service Obligation	USO
Universal Service Provider	USP
Unsolicited Electronic Messages Ordinance (Cap. 593)	UEMO
Wireless Internet of Things	WIoT
Wireless Local Area Network	WLAN



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