

Overview of the Development of Broadcasting & Telecommunications Sectors in 2016/17

Communications Authority

9 February 2017

Overview of the Development of the Broadcasting Market in 2016 *TV Programme Services (up to December 2016)*

- The two domestic free TV programme service licensees provided:
 - 8 free TV channels
 - The coverage rate reached 99%
- The three domestic pay TV programme service licensees provided:
 - Over 400 pay TV programme channels
 - The penetration rate was over 90%
- In January 2014, Radio Television Hong Kong ("RTHK") commenced a trial run of its digital channels

Sound Broadcasting Services (up to December 2016)

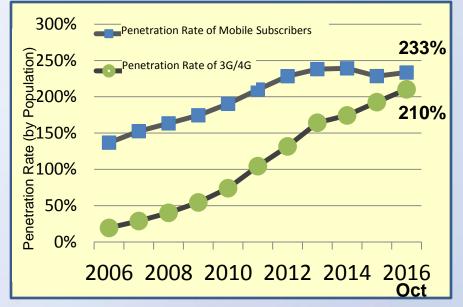
- The two broadcasting licensees and RTHK provided 13 analogue channels and 5 digital channels
- The coverage rate of digital sound broadcasting services reached about 83%

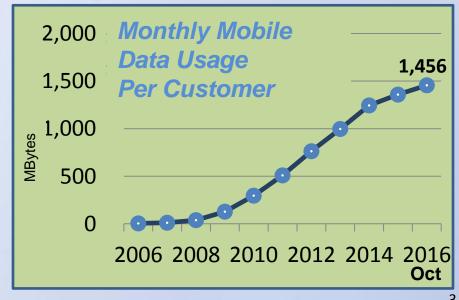


Overview of the Development of the Telecommunications Market in 2016

Mobile Services

- The number of mobile subscribers has reached 17.15 million, representing a penetration rate of 233%
- The number of 3G and 4G mobile subscribers has reached 15.45 million, representing a penetration rate of 210%
- All the four mobile network operators offer 4G services, with certain networks supporting a download speed up to 450 Mbps
- Monthly mobile data usage per subscriber has reached 1.456 GBytes





Wi-Fi Services

- 55 class licensees for public wireless local area network services (public Wi-Fi services)
 - are allowed to provide public Wi-Fi services on leased Government lands without applying for an individual licence, but they are required to register relevant information with the CA

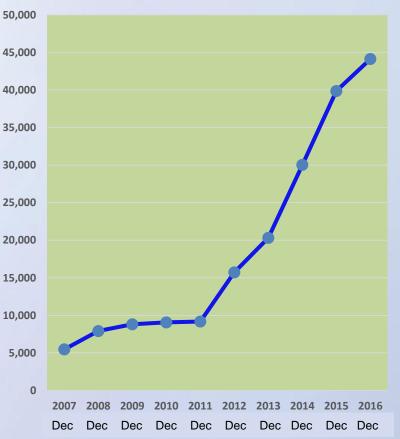
7 unified carrier licence operators

- are allowed to provide public Wi-Fi services on unleased Government lands/public streets and leased Government lands
- 44 124 access points for public Wi-Fi services

Fixed Locations	43 291
Vehicles/Vessels/Aircrafts	833

Vehicles/Vesse

Number of registered Wi-Fi access points

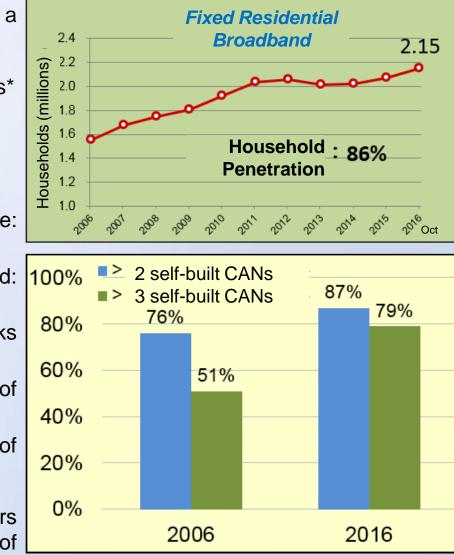


Local Fixed Services

- Coverage : 98% of households enjoy broadband speed of at least 1.5 Mbps
- Average peak connection speed of 116.2 Mbps* is one of the highest in the world
- Facilities-based competition:
 - 25 local fixed network operators
 - Penetration rate of residential fixed line: 94%
 - Penetration rate of residential broadband: 100% 86%
 - 7 self-built customer access networks ("CANs")
 - 79% of households have a choice of at least 3 CANs
 - 87% of households have a choice of at least 2 CANs
- 89% of residential broadband subscribers subscribe to service plans with a speed of 10 Mbps or above



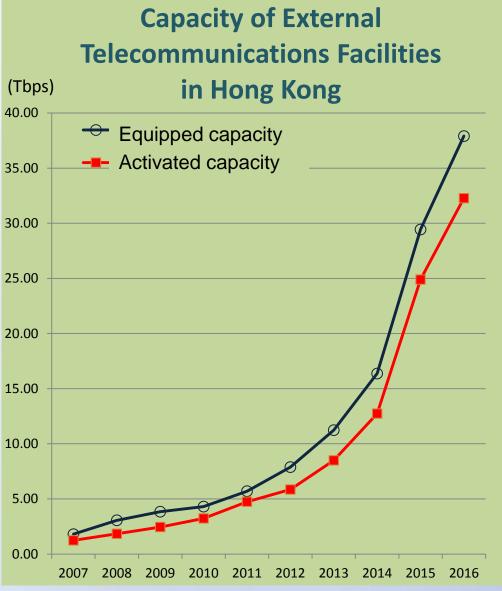
* According to the State of the Internet 3rd Quarter, 2016 Report published by Akamai, an Internet content delivery provider



External Fixed Services

- External telecommunications services
 - 42 external facilities-based fixed network operators
 - 221 external services-based operators
- External infrastructure:
 - 10 submarine cable systems
 - 8 submarine cable landing stations
 - 20 overland cable systems
 - 10 satellite earth stations
- Capacity of external telecommunications facilities (as of September 2016)
 - 37.91 Tbps (equipped capacity)
 - 32.28 Tbps (activated capacity)

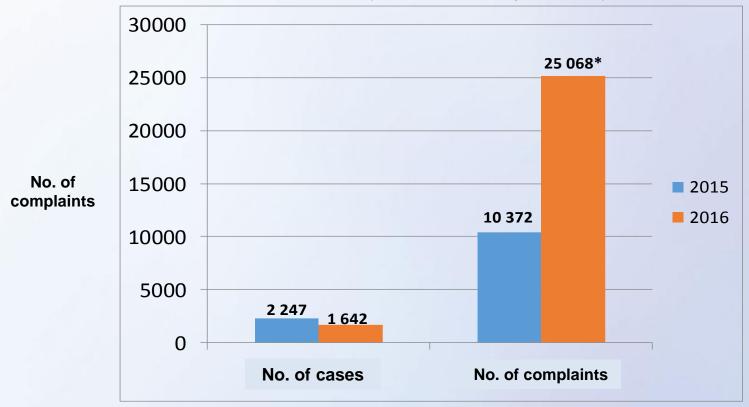




Complaints Against Broadcasters in 2016

(January to December 2016)

- 2015 : 2 247 cases (10 372 complaints)
- 2016 : 1 642 cases (25 068 complaints*)

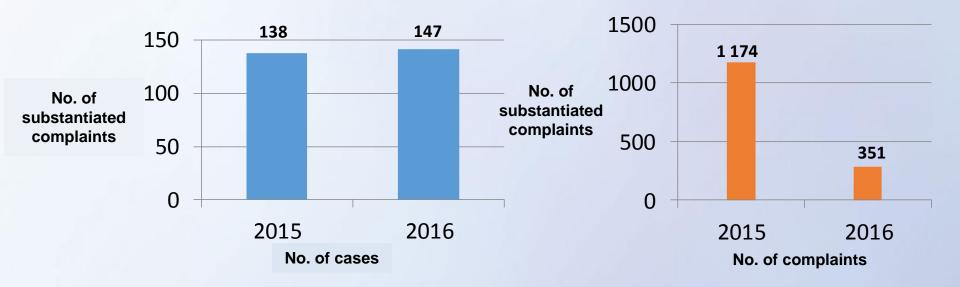


* Including over 13 000 complaints about the provision of simplified Chinese subtitles only and/or the use of Putonghua in some news programmes broadcast on the J5 Channel, and over 8 000 complaints against the news reports concerning the five missing booksellers.



Complaints against Broadcasters (January to December 2016)

Substantiated cases: 147 cases (351 complaints) which were about 9% of the complaint cases handled in 2016





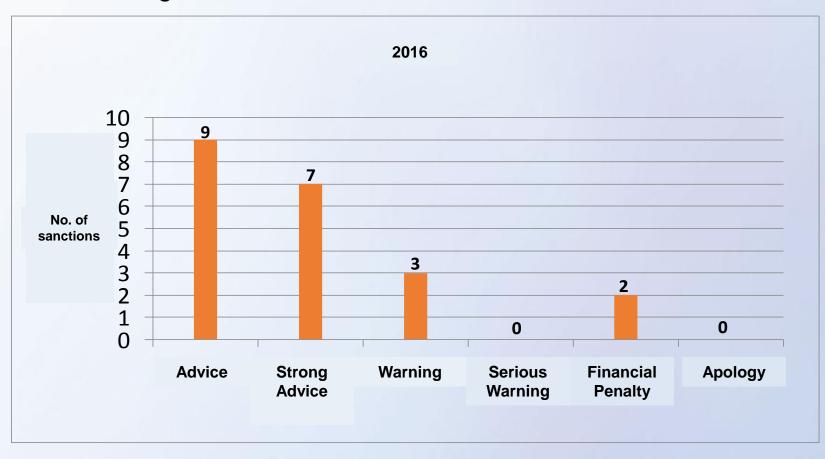
Complaints against Broadcasters (January to December 2016)

- Among the 147 substantiated cases (351 complaints), 24 cases (179 complaints) were considered by the Broadcast Complaints Committee. The main areas of complaint include:
 - programme contents amounting to indirect advertising; or
 - programme contents being inaccurate or misleading
- The remaining 123 substantiated cases (172 complaints) were classified as minor breaches. Most of them involve minor inaccurate programme contents, such as:
 - minor inaccuracies in information or incorrect subtitles in news programmes; or
 - minor errors in weather reports



Complaints against Broadcasters (January to December 2016)

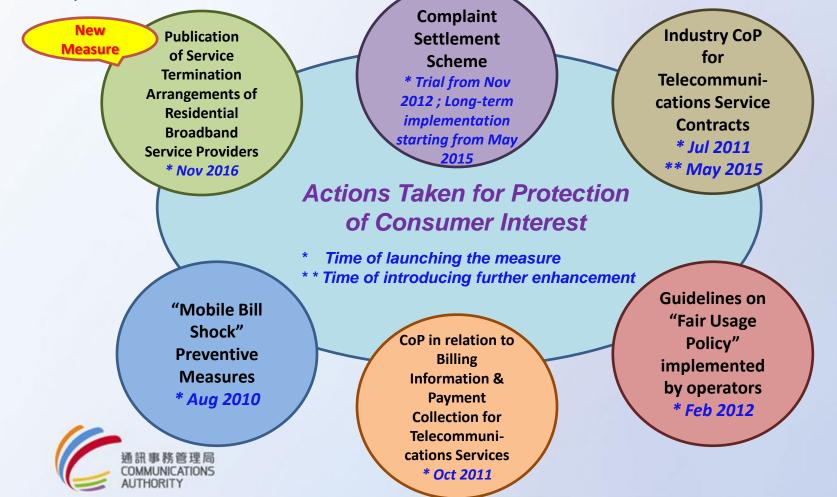
Sanctions imposed on broadcasters for breaches relating to broadcasting contents:





Complaints concerning Telecommunications Services in 2016

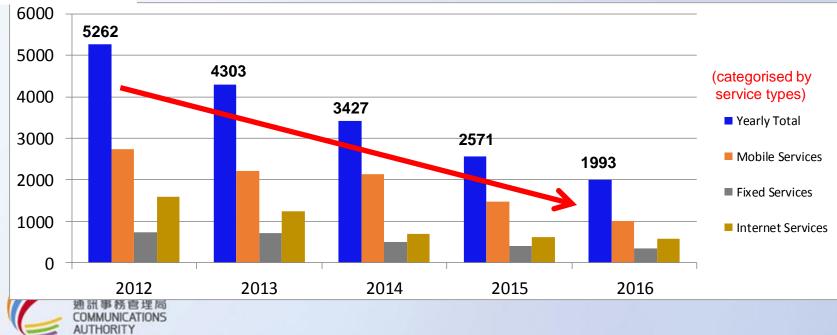
Notwithstanding that the Telecommunications Ordinance does not confer statutory power on the CA to intervene in individual billing or contractual disputes between telecommunications operators and their customers, we have been monitoring the number and trend of consumer complaints closely, and would formulate feasible solutions expeditiously if systemic problems are found



Complaints on Telecommunications Services

(Categorised by service types)	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Total No. of Consumer Complaints	3 427	2 571	1 993	(-22%)
Mobile Services	2 140	1 479	1 006	(-32%)
Fixed Services	498	402	350	(-13%)
Internet Services	695	610	574	(-6%)

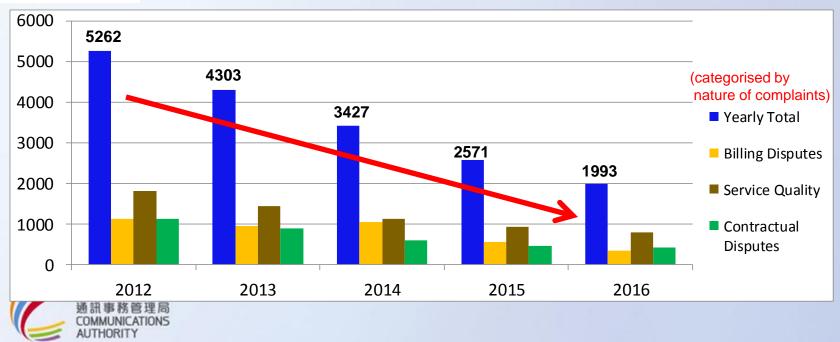
No. of Complaints



Complaints on Telecommunications Services

	Categorised by ature of complaints)	<u>2014</u>	<u>2015</u>	<u>2016</u>	
	tal No. of onsumer Complaints	3 427	2 571	1 993	(-22%)
•	Billing disputes	1 049	548	335	(-39%)
•	Service quality	1 127	929	801	(-14%)
•	Contractual disputes	588	458	425	(-7%)

No. of Complaints



Major Tasks in 2016/17 – Broadcasting

- 1. Research and Survey on the Regulation of Indirect Advertising and Sponsorship in Domestic Free TV Programme ("Free TV ") Services
- 2. Progress of HK Television Entertainment Company Limited ("HKTVE") and Fantastic Television Limited ("Fantastic TV") in Rolling Out Their Free TV Services
- 3. Applications for Free TV Licence



1. Research and Survey on the Regulation of Indirect Advertising and Sponsorship in Free TV Services

- The Communications Authority ("CA") respects the creative expression and editorial independence of licensees. In exercising its regulatory function, the CA has always strived to strike a balance between protection of viewers' interests and provision of a more conducive business environment for the licensees
- The key principles underlying the regulatory regime in respect of indirect advertising and sponsorship in free TV services in Hong Kong are generally in line with those in major overseas jurisdictions. For example, in Hong Kong, as in many other places, advertisements are required to be recognisably separate from programmes and product/service sponsorship is subject to regulation so as to preserve programme integrity and viewing pleasure
- Owing to differences in culture, social values and broadcasting landscape, it is not appropriate to directly compare the regulatory regime of Hong Kong with that of other places. Moreover, rules governing indirect advertising and sponsorship should not be considered in isolation, but should be formulated in a holistic manner in tandem with those governing advertising. For example, in the Mainland and Korea, since advertising breaks within certain types of programmes (such as dramas) are not allowed, product/service sponsorship is commonly found in TV programmes



- 1. Research and Survey on the Regulation of Indirect Advertising and Sponsorship in Free TV Services
 - In view of the discussions about indirect advertising and product sponsorship in free TV programmes in the community and the media, and having regard to the changing landscape of the local TV market with the entry of new licensees, the CA indicated in mid-2016 that it would expedite the research on the regulation of indirect advertising and sponsorship in free TV services in overseas jurisdictions, and make preparations for a survey to gauge the public's attitude and views towards the issue concerned
 - The research on the regulation of indirect advertising and sponsorship in free TV services in overseas jurisdictions is about to be completed while the survey for gauging the public's attitude and views on the issue concerned will commence this month
 - Outcome of the research and survey will facilitate the CA's consideration of the way forward with respect to the regulatory regime governing indirect advertising and sponsorship



2. Progress of HKTVE and Fantastic TV in Rolling Out Their Free TV Services

> HKTVE

- HKTVE started to provide its ViuTV Channel 99 by using spectrum from 2 April 2016.
- HKTVE is required to launch its English channel by 31 March 2017



2. Progress of HKTVE and Fantastic TV in Rolling Out Their Free TV Services

Fantastic TV

- The Chief Executive in Council ("CE in Council") formally granted a free TV licence to Fantastic TV on 31 May 2016 for a validity period of 12 years until 30 May 2028
- Fantastic TV is required to provide, by using a fixed network, a Chinese channel by 30 May 2017 and an English channel within 24 months (viz. by 30 May 2018) from licence grant
- In June 2016, Fantastic TV submitted an application to the CA for the use of spectrum as an additional means, on top of its fixed network, to transmit its free TV service
- In line with the programme requirements imposed on and the investment commitments made by the spectrum-based free TV licensee, the CA advised Fantastic TV of such **similar requirements** with which it should comply. After rounds of exchanges, the CA has put on hold the processing of Fantastic TV's application as per its request. Fantastic TV indicated that it would resurrect the discussion with the CA on the additional conditions until after its service launch in May this year
- Fantastic TV will use fixed network to deliver its free TV service



3. Applications for Free TV Licence

Hong Kong Television Network Limited ("HKTV")

- On 27 September 2016, the CE in Council, having regard to the CA's recommendations, agreed with the CA that HKTV should be given more time to submit the information as required under the Broadcasting Ordinance ("BO") for applying for a free TV licence to the CA
- The CE in Council invited the CA, on receipt of the required information from HKTV, to re-submit to the CE in Council its recommendations on the application
- On the day following the CE in Council's decision, the CA reminded HKTV again to submit the required information to the CA as soon as practicable. In response, HKTV submitted some of the supplementary information to the CA in November 2016. Having considered the supplementary information, the CA asked HKTV in December to submit the outstanding information required by the CA as soon as practicable. The CA is awaiting HKTV's submission of the required information
- The CA will, on receipt of the required information from HKTV, further submit to the CE in Council its recommendations on HKTV's application



3. Applications for Free TV Licence

Forever Top (Asia) Limited ("Forever Top")

- The CA received Forever Top's free TV licence application and supplementary information in April and July 2015 respectively. The CA completed a six-week public consultation on Forever Top's application in October 2015, and commissioned an independent consultant to conduct market analysis and prepare a consultancy report for assessing the possible impacts of the application on the local television market and broadcasting landscape
- Since September 2016, the processing of Forever Top's free TV licence application has been put on hold at the applicant's request until further notice



3. Applications for Free TV Licence

Phoenix Hong Kong Television Limited ("Phoenix HK")

- The CA received Phoenix HK's free TV licence application on 6 May 2016 and supplementary information from June to September 2016
- The CA completed a six-week public consultation on Phoenix HK's application in November 2016, and commissioned an independent consultant to assess the possible impacts of the application on the local television market and broadcasting landscape
- The CA will examine Phoenix HK's application carefully in accordance with the BO and established procedures, and submit its recommendations to the CE in Council as soon as practicable



Major Tasks in 2016/17: Telecommunications

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

Spectrum Due for Re-assignment in 2020/21

	Overall Spectrum in Total (MHz)	Share in Total	900 <u>MHz</u> (MHz)	1800 <u>MHz</u> (MHz)	Total (MHz)	Share in MNO's Total
HKT	194	35%	16.6	72.8	89.4	46%
Hutchison	129.4	23%	16.6	23.2	39.8	31%
China Mobile	HK 116	21%		26.4	26.4	23%
Smartone	112.6	20%	16.6	26.4	43	38%
Total	552	100%	49.8	148.8	198.6	36%

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

- About 200 MHz of spectrum which accounts for 36% of the total spectrum assigned for the provision of public mobile services has to be re-assigned upon the expiry of the existing terms of assignments between November 2020 and September 2021
- On 3 February 2016, the CA and the Secretary for Commerce and Economic Development ("SCED") jointly issued the first consultation paper to launch the first round of public consultation on the arrangements for the re-assignment of spectrum and the spectrum utilisation fee
- The consultation paper put forward three spectrum re-assignment options:
 - Option 1: a full-fledged administratively-assigned approach
 - Option 2: a full-fledged market-based approach
 - Option 3: a hybrid approach
- Objectives of spectrum re-assignment:
 - Ensuring customer service continuity, efficient spectrum utilisation, promotion of effective competition, and encouragement of investment and promotion of innovative services



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

- The first public consultation which lasted for three and a half months closed on 18 May last year. A total of 325 submissions were received from the four MNOs, one mobile virtual network operator, other companies in the industry, Legislative Council member, organisations in the tourism industry and 299 members of the public
- Having carefully considered the comments received from the first public consultation, the assessment and recommendation of an independent consultant, and OFCA's analysis on the pros and cons of each option, the CA and the SCED will jointly issue the second consultation paper soon



Major Tasks in 2016/17: Other Broadcasting and Telecom Issues

- 1. Application for Renewal of Domestic Pay TV Programme Service ("Pay TV") Licence
- 2. Publication of Service Termination Arrangements of Residential Broadband Service Providers
- 3. Customer Complaint Settlement Scheme ("CCSS")
- 4. Consumer Education
- 5. Spectrum Assignment for Telecommunications Services
- 6. Hong Kong Telecommunications Numbering Plan
- 7. Landing of Submarine Cables in Hong Kong
- 8. Creation of Class Licences for the Use of and Trade in 60 GHz Devices and 79 GHz Automotive Radars
- 9. Full Commencement of Competition Ordinance

10 Regulatory Actions against Breach of Statutory Requirements 通訊事務管理局

1. Application for Renewal of Pay TV Licence

- Pay TV licence of Hong Kong Cable Television Limited ("HKCTV")
 - On 13 December 2016, the CE in Council accepted the recommendations submitted by the CA and approved the application for renewal of HKCTV's licence for a validity period of 12 years from 1 June 2017 to 31 May 2029



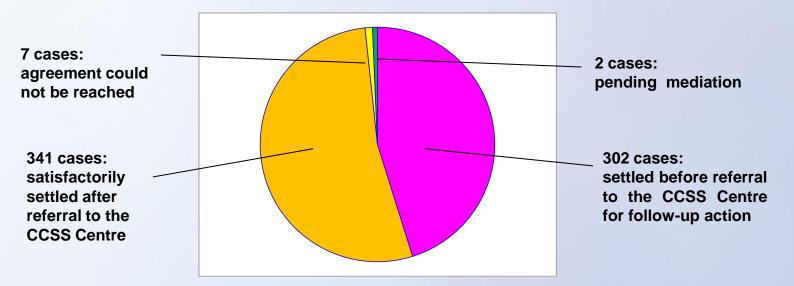
2. Publication of Service Termination Arrangements of Residential Broadband Service Providers

- On 29 November 2016, OFCA published on its website details of the service termination arrangements of major residential broadband service providers. The information includes:
 - advance notice requirement for service termination
 - channels for accepting service termination requests and their relevant formats
 - arrangements to acknowledge and to confirm receipt of service termination requests and details
 - channels for the return of customer equipment to service providers
- Enabling consumers to better understand and compare the existing service termination arrangements of different service providers so as to reduce disputes over service termination matters, and facilitating consumers in making more informed decisions on service plans that best suit their needs
- OFCA encourages residential broadband service providers to keep reviewing and enhancing their service termination arrangements so as to meet consumers' needs and aspirations, and will update relevant information on OFCA's website from time to time



3. Customer Complaint Settlement Scheme ("CCSS")

- The CCSS, which is sponsored and monitored by OFCA and operated by the Communications Association of Hong Kong ("CAHK"), helps resolve billing disputes in deadlock between consumers and their telecommunications operators by means of mediation
- Following a two-year trial operation and a review thereafter, the CCSS has been implemented on a long-term basis from May 2015
- From the commencement of the trial in November 2012 to December 2016, a total of 652 eligible applications were received:



Of the 650 cases handled, 643 cases were satisfactorily settled. The successful rate was close to 100%



4. Consumer Education

- Consumer education: smart and safe use of communication services
- Activities include:
 - Launch of Facebook Fan Page
 - TV and radio APIs
 - Roving exhibitions
 - Public seminars and community talks
 - Roving drama for schools and exhibitions
 - Publication of consumer information on the use of communications services in newspapers and magazines





5. Spectrum Assignment for Telecommunications Services

> 3G Spectrum Re-assignment

- The term of assignment of a total of 118.4 MHz of 3G Spectrum expired on 21 October 2016. The CA announced in November 2013 the decision to adopt a "hybrid approach" to re-assign the spectrum concerned
- In order to facilitate a smooth handover of the spectrum among the mobile network operators ("MNOs") and minimise service impact on service users, OFCA set up a Technical Working Group in March 2015 with the participation of all the MNOs for the purpose of coordinating the technical issues and arrangements in relation to the 3G Spectrum reassignment
- The handover of a total of 29.6 MHz of spectrum was successfully completed at midnight on 21 October 2016, and members of the public can continue to enjoy smooth and uninterrupted mobile services
- New assignment term: from 22 October 2016 to 21 October 2031

(15 years)



6. Hong Kong Telecommunications Numbering Plan

- To deal with the problem of mobile number shortage, the CA launched a public consultation in October 2015 to solicit public views on five proposed measures and their implementation schedules with a view to making available additional telecommunications number resources for mobile services through more efficient utilisation of the existing 8-digit numbering plan
- Having carefully considered the views and comments received from the industry and interested parties, the CA decided in June 2016 to adopt all the five proposed measures for implementation in three phases
- Following full implementation of all measures, a total of 15.72 million additional numbers will become available for allocation to mobile services. The life span of the existing 8-digit numbering plan will be extended by around 10 years to 2029
- The CA will closely monitor the development of telecommunications market and the demand for telecommunications numbers. Before the anticipated life span of the existing 8-digit numbering plan comes to an end, the CA will commission in time a consultancy study on the matter



7. Landing of Submarine Cables in Hong Kong

Single-Point-of-Contact Service

Since April 2010, OFCA has been providing a single-point-of-contact service to assist operators to lay and land new submarine cable systems in Hong Kong

- 4 operators have made use of the service to apply for the laying and landing of 5 new regional and trans-Pacific submarine cable systems in Hong Kong, among which 3 systems have been brought into services and the other 2 systems are expected to land in Hong Kong in the following one to two years
- 2 operators have made use of the service to apply for the laying of 2 submarine cables connecting Tseung Kwan O Industrial Estate and Siu Sai Wan of Hong Kong Island. The cables are currently under construction or planning respectively

Streamlining Application Procedures and Requirements

Operators are required to obtain necessary statutory approvals from relevant Government departments to carry out installation works and emergency repairs of submarine cable systems in Hong Kong waters

- In 2016, OFCA discussed with other relevant Government departments on ways to streamline application procedures and requirements so as to speed up the processing of the applications
- Information Note about the streamlined application procedures and requirements has been uploaded to OFCA's website for the industry's information



8. Creation of Class Licences for the Use of and Trade in 60 GHz Devices and 79 GHz Automotive Radars

- To dovetail with the latest developments of 60 GHz radio devices and 79 GHz automotive radars in recent years, the CA conducted public consultations last year which proposed to create two class licences to cover the use and sale of these two categories of radio equipment in order to benefit the public and the industry
- Applications :
 - 60 GHz Band: fast data transfer over short distance, such as wireless connection for audio-visual equipment and wireless broadband Internet access similar to the existing Wi-Fi
 - 79 GHz Band: automotive radars operating in this band are being developed by the industry with a view to further improving vehicles and road safety
- According to the outcome of the consultations, the CA has decided to create (i) Class Licence for 60 GHz Devices; and (ii) Class Licence for 79 GHz Automotive Radars with effect from 6 January 2017
 - The class licences permit a person to use and sell the above radio equipment in accordance with the licence conditions without the need to apply for an individual licence, and no licence fee is involved
 - Holders of 79 GHz Automotive Radars Class Licence are required to comply with any requirements, if applicable, from the Transport Department for the installation of such



9. Full Commencement of the Competition Ordinance

- The Competition Ordinance ("CO") commenced full operation on 14 December 2015. The CA is conferred concurrent jurisdiction with the Competition Commission ("Commission") to enforce the CO in respect of anti-competitive conduct in the telecommunications and broadcasting sectors
- For cases involving the telecommunications or broadcasting sectors and falling within the concurrent jurisdiction, the CA will ordinarily take the role of the lead authority, which will assume responsibility for exercising the relevant powers and functions conferred upon it under the CO
- Enquiries / Complaints: As of 31 December 2016, the CA received a total of 108 enquiries or complaints, with 100 cases closed without the need for further actions and the remaining 8 cases under processing. During the period, the CA also reviewed 3 transactions under the Merger Rule, and considered that no further action was necessary



10. Regulatory Actions against Breach of Statutory Requirements

Unfair Trade Practices

Trade Descriptions Ordinance ("TDO")

 As of December 2016, a total of 2 463 complaints were received in relation to licensees' suspected contravention of TDO in providing telecommunications and/or broadcasting services:

	<u>2013</u>	<u>2014</u>	<u>2015</u>	2016
Total No. of Complaints	188	1 135	722	418
- Complaints related to telecommunications services	154	1 089	668	338
 Complaints related to broadcasting services 	29	40	47	76
- Complaints related to bundled telecommunications				
& broadcasting services	5	6	7	4

- The handling status of the above complaints: (as of 31 December 2016)
 - Convicted by court after prosecution:
 Under review or investigation:
 Advisory letters issued:
 No action required:
 1 complaint
 53 complaints
 2 271 complaints

10. Regulatory Actions against Breach of Statutory Requirements

- Contravention of Telecommunications Licence Requirements
 - Involving: suspension of service and failure to provide customers with information as required under the licence after the resumption of service
 - breach of the requirement to conform to the Hong Kong Numbering Plan
 - No. of substantiated cases in 2016 : 2 cases
 - Involving 3 telecommunications service licensees
 - Penalty: issued advisory or warning letters



10. Regulatory Actions against Breach of Statutory Requirements

- Sending of Unsolicited Commercial Electronic Messages
 Non-compliance with Unsolicited Electronic Messages Ordinance
 In 2016 (Jan to Dec):
 - No. of reports received: 791 (down 62% as compared with 2015)
 - Issued: 175 advisory letters

26 warning letters

- One successful prosecution, with the defendant convicted by the court in January 2017
- Low recidivism rate: 0% in 2015



Major Tasks and Challenges in the Coming Year Broadcasting Regulatory Work

- To conduct a survey to gauge the public's attitude and views towards indirect advertising and sponsorship over free TV services
- To monitor the progress of HKTVE and Fantastic TV in rolling out their free TV services
- To process free TV licence applications from HKTV, Forever Top and Phoenix HK



Major Tasks and Challenges in the Coming Year

Telecommunications Regulatory Work

- Regarding the re-assignment of spectrum in the 900 MHz and 1800 MHz Bands, the CA and SCED will complete the second round of public consultation within this year, and will carefully consider and analyse the public views received with a view to announcing the decisions on the arrangements for re-assignment of spectrum and the related spectrum utilisation fee by the end of this year so as to allow incumbent spectrum assignees sufficient time to make transitional arrangements for possible variation to their assignments
- Regarding Hong Kong Mobile Television Network Limited's application for changing the transmission standard for the provision of its broadcast-type mobile television service, OFCA is actively processing the application. The CA will continue to facilitate the company to provide its broadcast-type mobile television service in compliance with the requirements of the relevant legislations and its licence



Major Tasks and Challenges in the Coming Year Telecommunications Regulatory Work

- Regarding the measures for more efficient utilisation of the existing 8-digit numbering plan, such as releasing numbers with the prefixes "4", "7" and "8" for mobile services, OFCA will implement the measures in phases according to their respective implementation schedules
- To coordinate and plan for making available more spectrum, including changing the use of 700 MHz (digital dividend) and 3.5 GHz frequency bands, and making available spectrum in 24.25 - 86 GHz, etc. to dovetail with the development of mobile services



Thank you!

