

Office of the Communications Authority
Major Tasks and Projects for 2017-18

The major tasks and projects are categorised into “priority” and “normal” ones to indicate their relative importance.

(I) Priority Tasks/Projects

(1) Support to the CA

1. We will continue to provide the necessary support to the CA to enable it to assume the full spectrum of its regulatory functions.

(2) Review of Legislation

2. The Government is reviewing the existing BO and TO and devising a plan on the areas to be reviewed and the review timetable. It will consult the CA in the review exercise. We will support the Government and the CA in this exercise.

(3) Regulation of Telecommunications Services and Equipment

3. In February 2012, the licensee holding the UCL authorising it to provide broadcast-type mobile television service (Mobile TV Service) launched its service using the transmission standard of China Mobile Multimedia Broadcasting (CMMB). In December 2013, Hong Kong Television Network Limited (HKTV) acquired the UCL holder and changed its name to Hong Kong Mobile Television Network Limited (HKMTV). In January 2014, HKMTV indicated to us that it proposed to change the transmission standard from the original CMMB to Digital Terrestrial Multimedia Broadcast (DTMB) for the provision of its Mobile TV Service. As the executive arm of the CA, we consider that the objective effect of HKMTV’s proposed change of transmission standard to DTMB would render its Mobile TV Service available for reception by an audience of more than 5 000 specified premises in Hong Kong and hence licensable under the BO. On 11 April 2014, HKMTV and HKTV applied for leave to commence judicial review proceedings against us concerning the interpretation of the BO and the Mobile TV policy. Leave was granted on 20 May 2014. The substantive hearing was held on 26 and 27 November 2014. On 29 September 2015, the Court of First Instance handed down its judgment

in favour of OFCA and dismissed all the grounds of judicial review brought by HKTV and HKMTV. We have been processing the proposal from HKMTV to facilitate its provision of a Mobile TV Service that complies with the requirements of the relevant legislation and its UCL. Upon the finalisation of the technical proposal by HKMTV, we will submit our assessment and recommendation for the CA's consideration.

4. We appointed a consultant in 2011 to study the implications of the deployment of Next Generation Network (NGN) in Hong Kong on our regulatory regime. The consultant completed its study and put forward a number of recommendations. We reconvened the NGN working group between 2012 and 2016 to follow up the relevant recommendations made by the consultant and other issues pertaining to the development of NGN in Hong Kong. With the support of the Telecommunications Regulatory Affairs Advisory Committee in June 2016, a new Technical Regulatory Working Group (TRWG) has been established to continue with the work of the NGN Working Group which has since been disbanded, and to study the various technical regulatory issues related to telecommunications networks, systems and services in Hong Kong. We will work closely with the industry to address various technical regulatory issues including NGN issues to ensure the smooth development and deployment of new telecommunications services and technologies in Hong Kong.

5. Following our issue of the guidelines on mitigating the risk of gas explosion in telecommunications manholes in June 2010, fixed operators with manholes installed in public streets are required to follow the guidelines in conducting regular inspection and have been implementing mitigation measures and conducting sample inspections on their manholes in public streets. The mitigation measures set out in the guidelines are found to be effective in preventing gas explosion in telecommunications manholes. In order to further reduce the risk of gas explosion in telecommunications manholes, the guidelines were revised in July 2016 to require the operators to implement the mitigation measures for all the telecommunications manholes, irrespective of their internal volumes, in accordance with the schedules specified in the guidelines. We will continue to monitor the preventive work of the operators in accordance with the requirements set out in the guidelines.

6. Assignments of frequency spectrum of 198.6 MHz in the 900 MHz and 1800 MHz bands will expire during the period from November 2020 to September 2021. According to the Radio Spectrum Policy Framework promulgated by the Government and the Statement on

Minimum Notice Periods for Variation or Withdrawal of Spectrum Assignments issued by the former Telecommunications Authority, the CA should endeavour to notify the incumbent spectrum assignees its decision on the arrangements for spectrum re-assignment three years in advance of the expiry of the existing term of assignments, i.e. by around end of 2017 in relation to the 900 MHz and 1800 MHz spectrum. The CA and the SCED jointly conducted the first round of public consultation on the arrangements for the re-assignment of the spectrum in the 900 MHz and 1800 MHz bands and the method for determining the spectrum utilisation fee (SUF) during February - May 2016. Having carefully considered the views and comments received in the first consultation and the results of a study by an independent consultant, the CA and the SCED jointly launched the second round of public consultation on 14 February 2017. The CA and the SCED aim to announce their respective decisions on the arrangements for spectrum re-assignments and methods for determining the SUF by around the end of 2017.

7. To cope with the problem of shortage of numbers for mobile services, the CA following a public consultation decided on 24 June 2016 to implement five measures in three phases with a view to achieving a more efficient use of the existing 8-digit numbering plan and making available additional number resources for mobile services. Following the full implementation of all the measures, a total of 15.72 million numbers will become available for allocation to mobile services and a considerable amount of numbers to other telecommunications services, and the life span of the existing 8-digit numbering plan will be extended by around 10 years to 2029. The first phase of the measures has been implemented since 1 January 2017 while the second and the third phases of the measures will be implemented on 1 July 2017 and 1 July 2021 respectively. We will continue to follow up with the operators in respect of the implementation of the necessary changes to their networks and systems to support the opening of the relevant number blocks. For the longer term development of the numbering plan, we will continue to monitor the development of telecommunications market and the demand for telecommunications numbers. A consultancy study on the matter will be commissioned well before the anticipated life span of the existing 8-digit numbering plan comes to an end.

8. In order to safeguard the provision of a good, efficient and continuous service to the general public by mobile virtual network operators (MVNOs) under their services-based operator (SBO) licences, we have tightened the financial assessment of applications for SBO licences. In

addition, any MVNO seeking annual renewal of its SBO licence is required to duly submit the relevant supporting documents in order to prove its securing of hosting service provided by mobile network operators and its capability to continue to provide a satisfactory MVNO service. In view of the service suspension of two MNVOs in March 2016 and January 2017, we will further strengthen the licensing regime with a view to enhancing protection of mobile service customers.

9. The development of Internet of Things (IoT) services and applications is becoming popular worldwide. According to the International Telecommunication Union (ITU), the IoT is a global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies. We are reviewing the licensing regime to facilitate the provision of IoT as a public telecommunications service in Hong Kong.

10. Public payphone service, on the other hand, is a form of basic telephone service which the universal service provider (USP) is required under its universal service obligation (USO) to provide. The cost of providing public payphone service subject to the USO is shared by the fixed and mobile services operators. In view of the diminishing demand for public payphone service in recent years, we will embark on a public engagement exercise with the relevant stakeholders, including site owners for in-building type public payphones and District Councils for kiosk type public payphones, with a view to determining the reasonable number of public payphones that should be subject to the USO.

(4) Facilitating Infrastructure Rollout

11. Since 2010, we have been offering a single point-of-contact service to prospective applicants to assist them in applying for the necessary statutory approvals for landing new submarine cables in Hong Kong. The overall response of the industry is positive. Three new regional and trans-Pacific submarine cable systems have already come into operation in Hong Kong since 2013. Two other new systems are under planning or construction and will land in Hong Kong between 2017 and 2018. In addition, two new domestic submarine cables that will link up Tseung Kwan O and Siu Sai Wan are also under planning or construction. We will continue to provide the service to facilitate the landing of new submarine cables in Hong Kong.

12. We have coordinated with the operators and liaised with the relevant Government departments and the Mainland authorities on the operators' proposals of utilising new cross-boundary infrastructures, such as the Hong Kong-Zhuhai-Macao Bridge for installation of cross-boundary optical fibre cables to increase the capacity and enhance the diversity of their cross-boundary facilities. We will continue to coordinate the matter with the parties concerned.

13. To help sustain Hong Kong's position as an advanced wireless city, we strive to assist mobile and fixed operators in deploying Government facilities, in particular lamp posts, for installing radio base stations and Wi-Fi systems respectively. We will work with the operators and relevant Government departments to streamline and fast track the application process. In tandem, we will continue to facilitate mobile operators to roll out their mobile broadband services by deployment of the hill-top sites and Government buildings in remote areas.

(5) Facilitating Access

14. We will continue to facilitate access to buildings by fixed operators for the installation of in-building telecommunications facilities for the conveyance of telecommunications and broadcasting services.

15. The CE in C formally granted a free TV licence to Fantastic TV in May 2016. We will render support and assistance to Fantastic TV to facilitate its access to buildings for the installation of in-building telecommunications facilities for the conveyance of its services.

(6) Consumer Protection

16. A voluntary Customer Complaint Settlement Scheme (CCSS), which was set up and put on trial for two years by the telecommunications industry, has been implemented on a long-term basis starting from 1 May 2015. The CCSS aims to help resolve billing disputes in deadlock between telecommunications service providers and their customers by means of mediation. We will continue to support the CCSS by contributing the necessary funding, screening the applications against prescribed criteria for referral to the CCSS for conducting mediation, and monitoring the performance and the governance of the scheme.

17. In order to protect consumer interest and enhance transparency in the process of contract conclusion, we worked closely with the industry

to draw up and implement self-regulatory measures in relation to telecommunications service contracts. After active discussions between OFCA and the industry, the Industry Code of Practice for Telecommunications Service Contracts, drawn up by the Communications Association of Hong Kong (CAHK), an industry association, and the major service providers, has come into operation in July 2011. Since then, the number of complaint cases in relation to disputes over telecommunications service contracts received by OFCA has reduced significantly. In May 2013, we commenced discussions with CAHK regarding suggestions for improving the Industry Code. After several rounds of discussion, CAHK promulgated the revised Industry Code in October 2014 and service providers have fully implemented the revised Industry Code by May 2015. We will continue to monitor the implementation and effectiveness of the revised Industry Code. Also, to enhance service information transparency and to better inform consumers, we published in November 2016 on our website the details of the arrangements adopted by major residential broadband service providers to handle service termination requests from service users. Such information will be updated periodically to facilitate consumers in making informed choices in obtaining/renewing service contracts.

18. The fair trading sections of the TDO have commenced operation since 19 July 2013. The CA is conferred concurrent jurisdiction to enforce the fair trading sections in respect of the commercial practices of the telecommunications and broadcasting licensees which are directly connected with the provision of a telecommunications or broadcasting service under the TO or the BO. We have been working closely with the Customs & Excise Department, the principal enforcement agency of the TDO, to ensure a coordinated approach to tackle unfair trade practices under the concurrent jurisdiction arrangement. We will continue to closely monitor developments in the telecommunications and broadcasting markets, investigate cases involving unfair trade practices, and where circumstances warrant, take enforcement actions in accordance with the powers conferred on the CA under the TDO.

(7) Spectrum Management

19. A statement on “Spectrum Utilisation Fee for Spectrum Assigned Administratively” was jointly issued by the SCED and the former Telecommunications Authority in September 2011. To promote the efficient use of spectrum, we plan to implement the charging scheme for SUF for the use of spectrum assigned administratively at congested

frequency bands in 2017-18. To implement the scheme, the Government will make the necessary legislative amendment pursuant to the relevant provisions under the TO.

20. The World Radiocommunication Conference (WRC) of the ITU was held in November 2015. We assisted the CA in implementing the decisions of the WRC in consultation with the Radio Spectrum and Technical Standards Advisory Committee. We have revised the frequency allocation of six frequency bands in Hong Kong accordingly, effective from 1 January 2017.

21. Spectrum to be used by or on behalf of the Government is managed administratively by OFCA. We completed in early 2017 the third review of the efficiency of the spectrum used by the Government and posted our findings on our website. In that round, we have reviewed the Guidelines for Spectrum Assignment for Land Mobile Systems and Fixed Links Deployed by Government Users in Hong Kong last revised in 2013 and concluded that no further revision was warranted for the time being. We also concluded that the existing frequency bands reserved for government use only should continue to be maintained. The next review will be conducted in 2019-20. In the meantime, we will continue to promote adherence with the abovementioned Guidelines by users of government spectrum.

22. We installed a radio monitoring and direction finding system for our Radio Monitoring Unit back in 2001 to assist us in performing the radio monitoring and radio frequency interference investigations in Hong Kong. As the system has reached the end of its serviceable life, there is a need to procure a replacement system. We plan to conduct the tendering exercise for a new system in 2017.

(8) Regulation of Broadcasting Services and Equipment

23. In May 2016, the CE in C formally granted a 12-year free TV licence to Fantastic TV to provide free TV services by a fixed network, under which Fantastic TV is required to launch an integrated Chinese channel and an integrated English channel by 30 May 2017 and 30 May 2018 respectively. In June 2016, Fantastic TV submitted an application to the CA for employing broadcasting spectrum, on top of a fixed network, as an additional transmission means for the delivery of its licenced free TV service. In February 2017, the CA, at the request of Fantastic TV, put on hold the processing of Fantastic TV's application until such time when

Fantastic TV is ready to resume its discussion with the CA following the launch of its free TV service. Accordingly, Fantastic TV launched free TV service on 14 May 2017 by means of a fixed network. We will closely monitor the service provided by Fantastic TV to ensure its compliance with various milestones as stipulated in its free TV licence.

24. In April 2014, HKTV submitted an application for a free TV licence. We supported the CA in conducting a comprehensive assessment of HKTV's application in accordance with the BO and established procedures. The CA submitted its assessment of and recommendations on the licence application to the CE in C in January 2016. In response to the request of the CE in C, the CA made supplemental recommendations on the licence application to the CE in C in July 2016. In September 2016, the CE in C, having regard to the CA's recommendations, decided to give HKTV more time to submit the information required by the CA to complete its assessment of HKTV's application, and invited the CA, on receipt of the required information from HKTV, to submit further recommendations to the CE in C on HKTV's application. In December 2016, the CA, having considered the supplementary information submitted by HKTV in November 2016, requested HKTV to submit the outstanding information required by the CA as soon as practicable. We will continue to assist the CA in processing the application of HKTV.

25. In April 2015, Forever Top (Asia) Limited (Forever Top) submitted an application for a free TV licence. We supported the CA in processing the application of Forever Top in accordance with the BO and established procedures. In April 2017, Forever Top informed the CA that it had entered into a binding agreement with i-Cable Communications Limited (i-Cable) with an undertaking from the latter's controlling shareholder, Wharf (Holdings) Limited (Wharf), concerning an equity injection plan to provide financial support to i-Cable to enable Hong Kong Cable Television Limited (HKCTV) to take up the renewed pay TV licence granted by the CE in C in December 2016. In view of the above, Forever Top requested the CA to put on hold the processing of its free TV licence application until further notice.

26. In May 2016, Phoenix Hong Kong Television Limited (Phoenix HK) submitted an application for a free TV licence. We will continue to support the CA in processing the application of Phoenix HK in accordance with the BO and established procedures.

27. In view of the discussions about indirect advertising and

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 was about to be completed in early 2017 while the survey has commenced in February 2017. We will continue to support the CA in conducting the research and the survey.

28. Since the launch of DTT services in late 2007, TVB and ATV have constructed in phases a total of 29 transmitting stations, bringing the overall DTT coverage to at least 99% of the population in 2014. With the expiry of ATV's free TV licence on 1 April 2016, and the assignment of broadcasting spectrum to HKTVE as an additional means of transmission, on top of its fixed network, to provide DTT services from 2 April 2016, we will continue to work with the TVB and HKTVE to improve the reception in the few areas in Hong Kong where problems are identified.

29. In view of the current DTT penetration rate and the arrangement for realisation of digital dividend in Hong Kong, the Government announced in December 2014 that the working target for switching off analogue terrestrial television (ASO) would be adjusted from end 2015 to end 2020, with a review of the target date to be conducted in 2017-18. We set up an expert group with the Mainland authorities in August 2012 for frequency coordination after ASO and will continue to explore whether the vacated radio spectrum can be allocated for new services. We will also provide technical support to CEDB in reviewing the working target for ASO and preparing for ASO implementation.

(9) Competition Affairs

30. In September 2013, the CA announced the findings of its investigation into the complaints against the violation of the competition provisions of the BO by TVB and the sanction on TVB. The CA found TVB in breach of sections 13(1) and 14(1) of the BO, imposed on TVB a financial penalty of HK\$900,000, and directed TVB to end the concerned anti-competitive practices and to take a number of remedial actions. TVB lodged a statutory appeal with the CE in C in October 2013 against the CA's decision and applied in December 2013 for judicial review, inter alia, of the appeal mechanism to the CE in C under the BO as well as the CA's decision on the investigation.

31. The Court handed down its judgement on 29 January 2016. Of the seven grounds submitted by TVB, the Court ruled in favour of TVB on two grounds: (i) the appeal structure under section 34 of the BO (Appeal to CE in C) is in contravention of Article 10 of the Hong Kong Bill of Rights; and (ii) paragraph 277 of the CA's Decision, which required TVB to abandon all contractual clauses and policies in question and imposed other ancillary orders, went beyond what was necessary to redress the anti-competitive act of TVB. The Court concluded that the CA's Decision should be quashed. On 26 February 2016, the CE in C and the CA filed their Notices of Appeal to the Court of Appeal. We will continue to support the CA in handling the legal proceedings relating to the appeal.

32. On 2 May 2014, the CA announced its consent under the merger provision of the TO (namely section 7P) to the proposed acquisition of CSL New World Mobility Limited, a carrier licensee under the TO, by HKT Limited. The consent was subject to conditions imposed on the carrier licensees concerned. We will continue to monitor the compliance by the licensees concerned with these conditions.

33. The CO commenced full operation on 14 December 2015. The CA is conferred concurrent jurisdiction with the Competition Commission (the Commission) to enforce the CO in respect of the conduct of undertakings in the telecommunications and broadcasting sectors, whilst the competition provisions in the BO and the TO have been repealed subject to transitional arrangements. The CA and the Commission have signed a Memorandum of Understanding to coordinate the performance of their functions on which they have concurrent jurisdiction under the CO. We will continue to assist the CA in enforcing the CO in the telecommunications and broadcasting sectors.

(II) Normal Tasks/Projects

(1) Regulation of Telecommunications Services and Equipment

34. In 2016, one replacement UCL was issued to an existing licensee for the provision of external fixed telecommunications services and one new UCL was issued to a broadcaster for the transmission of domestic free television programme services. We will continue to provide support to the CA on handling UCL applications.

35. In 2011, two incumbent mobile operators successfully bid for the radio spectrum in the 850 MHz and 900 MHz bands. Both have already fulfilled the rollout obligation. We will continue to coordinate with the successful bidder of the 900 MHz band, the railway operator for operating the GSM-R system of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong-Express Rail link and mobile operators providing radio coverage in the country parks and remote areas, for the shared use of the overlapping frequencies in order to avoid mutual interference.

36. In February 2012, we conducted an auction for assigning 90 MHz of radio spectrum in the 2.3 GHz band. Two incumbent mobile operators and one new entrant have successfully bid for the radio spectrum at a total sum of SUF of HK\$470 million. Two of the successful bidders have fulfilled the rollout obligation using the radio spectrum assigned through the auction. We will continue to monitor the rollout progress of the remaining successful bidder.

37. The CA approved in August 2015 the application by a fixed network operator to amend the network and service rollout requirement and the associated performance bond as incorporated into its UCL to facilitate its deployment of the 30 MHz of radio spectrum in the 2.3 GHz band that it had acquired through an auction in March 2012 for the provision of wireless fixed broadband services to village houses in the rural and remote areas. The operator committed to providing network and service coverage to 3 000 village houses by March 2017 and cumulatively 4 000 village houses by March 2018. We will monitor its progress in network and service rollout to the village house areas according to the committed milestones.

38. In March 2013, we conducted an auction for assigning 50 MHz of radio spectrum in the 2.5/2.6 GHz band for the provision of wireless broadband services. Four incumbent mobile operators have successfully bid for the radio spectrum at a total sum of SUF of HK\$1.54 billion. Three successful bidders have fulfilled the rollout obligation using the radio spectrum assigned through the auction. We will continue to monitor the rollout progress of the remaining successful bidder.

39. The procedures for licensees to file interconnection agreements with OFCA and the arrangements for their publication were updated in March 2012. A database has been developed for safekeeping the interconnection agreements received by OFCA. All the interconnection agreements received (including Type I and II interconnection, blockwiring and LAC, etc.) have been published at OFCA's website. We will continue

to handle any new interconnection agreements received from interconnecting parties accordingly.

40. Mobile operators are required to pay royalties for the use of radio spectrum in the 900/1800 MHz bands and 1.9 - 2.1 GHz band for provision of telecommunications services. We will continue to monitor their regulatory accounting reports to ensure compliance with the accounting manual that specifies the accounting practices for separation accounting and reporting of network turnover.

41. Mandatory Type II Interconnection at exchange level and at buildings with more than one self-built customer access networks was withdrawn in full on 30 June 2008. We will continue to monitor the network rollout of the alternative self-built customer access networks of fixed operators.

42. To stimulate and promote further development of our broadband infrastructure, we launched a voluntary registration scheme for residential buildings connected with fibre-based access networks in November 2010. The scheme was extended to cover non-residential buildings in April 2013. Under the scheme, fibre-connected buildings are categorised into two classes, i.e. the fibre-to-the-home (FTTH) buildings and the fibre-to-the-building (FTTB) buildings. As of January 2017, 15 300 residential buildings were registered with the scheme, representing about 84% of the total number of households in Hong Kong. 1 500 non-residential buildings were also registered with the scheme. We will continue to encourage participation of industry players.

43. We will continue to combat unauthorised telecommunications activities, including the sale, establish, maintain, possess and/or use of unauthorised telecommunications systems and devices, which are in breach of the TO, the relevant regulations and the conditions of the various telecommunications licences.

44. By end January 2017, a total of 28 base stations serving country parks and the Hong Kong Geopark have been set up by mobile operators. We will continue to facilitate the installation of more base stations by these operators for improving mobile network coverage in country parks, the Hong Kong Geopark and rural areas.

45. In order to provide hikers with the necessary information on mobile network coverage in country parks and the Hong Kong Geopark, we

have prepared 171 digital maps which show such coverage in those areas and posted them on our website for public information. We will continue to update the maps when new base stations are installed.

46. As of 31 December 2016, a net amount of 7.49 million numbers had been returned by the operators since the implementation of the number fee regime in August 2008. We will continue to facilitate the operators' return of numbers and review the usage of the numbering resources in a timely manner to promote the effective and efficient use of telecommunications numbers and codes.

47. We will continue to discuss and exchange views with MIIT on further opening up and lowering of the entry barrier to the telecommunications market in the Mainland to Hong Kong Service Suppliers under CEPA.

48. With the implementation of the new regulatory framework for the USO with effect from 1 July 2007, we have calculated the Universal Service Contribution (USC) based on an updated costing model. The last review of the level of USC for the year 2014 has been completed with the results promulgated in September 2016. We will continue to liaise with the USP for a fair and reasonable calculation of the USC on a regular basis and promulgate the results to the USC contributing parties. Separately, with the implementation of the new funding arrangement under the USO from 1 May 2009, we have requested the contributing parties to report the quantity of telephone numbers held by them on a quarterly basis and to certify such information on an annual basis. We will continue to follow up and liaise with the contributing parties based on this reporting requirement.

49. Following the implementation of a new computerised system for processing applications for and renewals of private mobile radio systems licences (the Electronic Licensing System), we will extend the system to cover other private telecommunications licences in 2017.

50. We commissioned an independent third party to design, establish, operate and support a broadband speed test system in Hong Kong which enables and facilitates end users of fixed and mobile broadband services to test the performance of their broadband services. This test system sets a dedicated reference for local measurement and demonstration purposes. The system was launched in December 2010. In December 2013, we enhanced the system to support IPv6 and modified the iOS and Android apps to record location information in the test result logs. The system was

further upgraded in December 2014, January 2015 and December 2016 respectively to support measurement of fixed broadband connections up to 1 000 Mbps and mobile broadband connections up to 450 Mbps. As of 15 January 2017, an accumulated total of more than 70 million tests were performed with an average daily hit rate of 31 842. We will continue to monitor the system performance and improve it taking into account market developments.

(2) Spectrum Management

51. To ensure the orderly development of new services and to minimise interference, we will continue to coordinate the use of radio spectrum for broadcasting and telecommunications services with neighbouring authorities.

(3) Regulation of Broadcasting Services and Equipment

52. We will continue to monitor the performance of the broadcasting licensees and ensure their compliance with the relevant legislation and licence conditions.

53. All broadcasting licensees are required to observe the relevant codes of practice issued by the CA. By virtue of the Charter of Radio Television Hong Kong promulgated in August 2010, RTHK should also ensure that all its TV and radio services are in compliance with the relevant codes of practices of the CA. In particular, the programme codes set out the standards to be generally observed in programmes, covering issues such as taste and decency, the portrayal of sex and nudity, the use of language, impartiality and fairness. The advertising codes deal with standards for the presentation and content of advertisements and sponsored programmes. The technical codes set out the technical standards of television and sound broadcasting services.

54. We review and revise the codes of practice for compliance by broadcasting licensees from time to time to ensure that they reflect changing community attitudes and standards and new broadcasting developments. In addition, to ensure the compliance with these codes by the licensees, we will continue to act on complaints lodged by the public in a rigorous and transparent manner.

55. To allow consumers to make an informed choice in purchasing DTT receiving equipment compliant with the local DTT

standard, we will continue to operate the labelling scheme for DTT receivers.

56. We will continue to regulate the technical performance of the licensed broadcasters.

57. We will continue to improve the reception of the existing free terrestrial television and sound broadcasting in the territory, especially in areas where reception is not satisfactory.

58. We will continue to combat the import, export, trading and commercial use / possession of unauthorised television decoders.

(4) Regulation of Unsolicited Commercial Electronic Messages

59. The UEMO has been in operation since December 2007. Based on our operational experience, we have made substantial revisions to the operational procedures. In September 2012, we computerised the complaint report management system to enhance the propriety and security control for our enforcement under the UEMO. The relevant code of practice (CoP) has also been updated and came into effect on 30 November 2013. The proposed amendments to the UEMO to allow service of notices issued by the CA by hand or by ordinary post, in addition to registered mail, were passed by the LegCo and came into effect on 5 December 2014. We will continue to review and enhance the effectiveness of enforcing the UEMO.

60. We will continue to handle and investigate reports of suspected contravention of the UEMO and take appropriate actions following the technology neutral principle. We will continue to review the report handling procedures. We will also provide support and advisory services to CEDB on spam-related issues.

61. We will continue to maintain three Do-not-call Registers (DNCs) for use by the general public, and for businesses/organisations as senders of commercial electronic messages.

62. We will continue to publicise the regulations under the UEMO and the operation of the three DNCs to ensure that businesses and the public are aware of their obligations and rights under the UEMO.

63. We will continue to liaise with local, Mainland and overseas anti-spam organisations and enforcement agencies to facilitate cooperation

in spam control and sharing of experience and intelligence of anti-spam issues.

(5) Advisory and Support Services

64. We will continue to provide support to the communications satellite operators registered in Hong Kong by attending satellite co-ordination meetings and issuing licences for the launching and operation of new or replacement satellites.

65. We will continue our coordination with local, Mainland and overseas satellite operators and administrations on satellite launching, coordination and interference matters.

66. We will continue to strengthen Hong Kong's participation, by both the Government and the private sectors, in international and regional telecommunications fora, and to provide support to regional/international telecommunications projects.

67. We will continue to provide support to CEDB and TID on the implementation and further expansion of the CEPA and the closer co-ordination with Guangdong with respect to the cross-border provision of telecommunications services in the Mainland by Hong Kong service suppliers.

68. We will continue to support CEDB and TID in establishing free trade agreements with other economies with a view to facilitating market access and the provision of telecommunications services.

(6) Technical Standards

69. We will continue to monitor the development of telecommunications standards and formulate and update the local standards where necessary.

70. We will continue to monitor the process and performance of LCBs in the provision of testing and certification services under the accreditation scheme administered by the OFCA.

71. We will continue to implement the Mutual Recognition Arrangement for conformity assessment of telecommunications equipment led by the Asia Pacific Economic Cooperation Telecommunications and

Information Working Group.

72. We will continue to monitor the electrical safety and the radiation exposure limit of uncertified mobile phones placed on the market. In 2016, we commissioned a laboratory to conduct measurement of the Specific Absorption Rate (SAR) for 20 uncertified mobile phones. The test indicated that the SAR values of all the 20 mobile phones were below the 2W/kg limit as recommended by the International Commission on Non-Ionizing Radiation Protection.

(7) Corporate Affairs and Handling of Consumer Complaints

73. In line with the OFCA's role in promoting Information and Communications Technology (ICT) applications over telecommunications networks, we will sponsor and fund special seminars, projects and campaigns for promoting the safe use of ICT for improving quality of life, operating efficiency and learning.

74. We will continue to promote the smart use of communications services, especially new services of which consumers may not have sufficient knowledge, through the launch of the annual consumer education campaign, which offers various activities and programmes for public participation such as public seminars, roving exhibitions etc., communications through the mass media, the OFCA's website, the "Communications Master – OFCA" Facebook Fan Page and joint efforts with various user groups and industry organisations.

75. On the handling of consumer complaints, we will ensure that complaints involving possible contraventions of the provisions of the TO, the BO, the UEMO, the TDO and the CO or licence conditions are attended to promptly. For complaints that fall outside the scope of the legislative provisions and relevant licence conditions, we will ensure that they are promptly referred to the concerned operators in order that they may be dealt with swiftly and effectively.

76. To help the industry, the media and the public understand the new developments in the communications market and the OFCA's new initiatives, we will organise industry and media activities as necessary for effective communication.

77. We will continue to enhance the public complaint register such that we may keep track of the public complaints and generate complaint

statistics in a more efficient manner.

(8) Consumer Protection

78. To safeguard consumer interests and increase the transparency of the pricing information related to mobile content services (MCS), the CAHK in January 2010 issued a voluntary code for the provision of chargeable mobile content services to govern the practices of third party content service providers (CSP). Established by the CAHK in March 2010, the Administrative Agency (AA) implements an industry self-regulatory scheme in accordance with the code. The OFCATF sponsors the operation of the AA and monitors the effectiveness and the governance of the scheme. Since 2011, the number of complaints in relation to MCS has reduced, and remained low at a total of 3 cases in 2015/16 and only 1 case for 2016/2017 (up till December 2016, the full year figures will be reported later), reflecting the effectiveness of the scheme through collaboration with CAHK to address consumers' concerns. In the light of the falling demand for MCS and low level of related complaints in the recent years, we have reviewed the operation of the industry self-regulatory scheme with CAHK and target to implement a more streamlined arrangement in 2017/2018.

79. Fixed and mobile broadband service providers may implement Fair Usage Policies (FUP) to ensure their customers will be given a fair opportunity to access their broadband services. In order to provide guidance to broadband service providers on how they may implement FUP and to enhance the transparency of service information to facilitate better informed consumer choices, the CA promulgated a set of mandatory guidelines in November 2011, setting out the relevant guiding principles for compliance by service providers. The guidelines took effect from February 2012 and the number of complaints related to FUP has been decreasing since then. While many of the mobile operators have ceased to offer unlimited plans, we will continue to monitor the market developments and the compliance status of broadband service providers as applicable.

80. To tackle the problem of mobile bill shock, we promulgated in May 2010 a series of preventive measures for the industry to adopt, which include allowing customers to opt out of individual services; setting a charge ceiling; setting a usage cap for all kinds of usage-based mobile services; and alerting customers through short messages when their predetermined usage threshold is reached, or when their roaming data usage is triggered. To increase the transparency of the relevant service information, we have published the measures implemented by individual

operators on our website and have been providing regular updates since August 2010. While the number of related complaints has been decreasing, we will continue to monitor the situation.

81. In order to enhance the transparency of the service level of the mobile broadband service market, mobile operators have published the performance pledges and the actual performance statistics of their mobile broadband services since September 2010 and January 2011 respectively. The performance pledges and statistics serve to inform the public of the standards of services that can be expected from the mobile operators, such as network availability, service restoration, customer complaint handling and technical performance. The performance pledges and statistics are updated quarterly, and are available on the respective websites of the mobile operators and via hyperlinks on our website. We will continue to monitor the performance of mobile operators.

82. With a view to enhancing the transparency of the pricing of chargeable items in the provision of telecommunications services by local fixed and mobile operators, we issued in October 2011 a voluntary Code of Practice in Relation to Billing Information and Payment Collection for Telecommunications Services. The Code of Practice requires telecommunications service providers to provide customers with itemised billing information for verification of charges, take reasonable steps to ensure accuracy of billing and collection of payment, and report to the OFCA in a timely manner in the event of any incident involving systematic errors in these aspects. As of January 2017, seven local fixed and four mobile operators have pledged compliance with the Code of Practice. We have published on our website a consumer alert and will continue to monitor the compliance situation.

(9) Human Resources Management

83. A Training and Development Committee has been established to oversee the implementation of OFCA's training and development policies for non-directorate officers of departmental grades so as to make holistic plans to meet the training needs of staff and to strengthen arrangements for grooming officers with strong potentials. We will continue to promote a learning culture in the office and provide training opportunities for staff at all levels to enhance their professional and managerial competencies and keep pace with the advent of new technologies. We will also arrange overseas management programmes and explore opportunities for staff attachment to policy bureaux, overseas regulatory authorities and the

relevant authorities in the Mainland to broaden the horizon of our staff and prepare them for greater challenges.