Telecommunications Users and Consumers Advisory Committee (TUCAC)

Minutes of the 18th Meeting held at 3:00 p.m.

on 23 May 2019 (Thursday) in Conference Room,

Office of the Communications Authority ("OFCA"),

29/F Wu Chung House, Wan Chai

Present:

Mr. Chaucer LEUNG (Chairman)	Deputy Director-General, OFCA
Mr. Keith LI	Representative of Hong Kong Wireless Technology Industry Association
Mr. W S IP	Member appointed on an ad personam basis
Mr. K K LAU, MH, JP	Member appointed on an ad personam basis
Dr. Jonathan TANG	Representative of the aged community services
Mr. C M CHUNG	Representative of the disabled
Ms. P Y CHAN	Representative as a member of the public
Dr. K W LAU	Representative as a member of the public
Ms. Katy LAU	Representative as a member of the public
Dr. Mary LEE	Representative as a member of the public
Mr. W C CHENG	Representative of Education Bureau
Ms. Jamay WONG (Secretary)	OFCA

In attendance:

Mr. Wilson LEE	OFCA
Ms. Stacy LAM	OFCA
Ms. Venus CHEUNG	OFCA
Miss Edith YAU	OFCA

Absent with apologies:

Ms. June IP	Representative of Consumer Council
Mr. Ricky CHONG	Representative of Communications Association of Hong Kong
Ms. Edith HUI	Representative of the Hong Kong General Chamber of Commerce
Mr. Eric YEUNG	Representative of small and medium enterprises
Mr. William TANG	Representative of the disabled
Mr. W T CHAN	Representative as a member of the public
Ms. W K CHENG	Representative as a member of the public
Mr. H C HUNG	Representative as a member of the public
Mr. Y M KUNG	Representative as a member of the public
Ms. Eva LAU	Representative as a member of the public
Mr. Richard TSANG	Representative as a member of the public

I. Minutes of the 17th Meeting of the Telecommunications Users and Consumers Advisory Committee ("TUCAC")

1. The Secretary had not received any proposed amendment to the draft minutes of the 17th meeting from the members and no amendment was proposed by the members in the meeting. The Chairman announced that the minutes of the 17th meeting were confirmed.

II. Provision of Location Information of Callers Making Calls to 999 Emergency Centre

2. Mr. Wilson LEE briefed the members on matters concerning the provision of location information of callers making calls to 999 Emergency Centre ("location information of callers"), including regulatory requirements of emergency service, existing arrangements of operators, need and importance for provision of location information of callers making emergency calls, overseas developments and suitable amendments to be introduced to relevant licence condition of telecommunications operators. Related information was set out in TUCAC Paper No. 1/2019.

3. Mr. C M CHUNG noticed that OFCA reminded members of the public in its promotional materials that they could dial 999 or 112 to seek emergency help while hiking as long as their locations were covered by any local mobile network. Mr. CHUNG asked whether the 999 Emergency Centre would know the locations of the callers in the aforementioned situation. Mr. K K LAU supported the arrangements on the provision of location information of callers. He said that members of the public usually would be in panic when an accident occurred and want to receive assistance as soon as possible. In face of unusual circumstances such as traffic accidents or barricades on roads, members of the public might not be able to provide their location information calmly and accurately when they called 999 for help. Therefore, the proposed amendments could enable emergency personnel to obtain the location information of callers and provide assistance promptly.

4. Mr. Wilson LEE said that OFCA was discussing with emergency service agencies and operators to work out the detailed technical arrangements for the provision of location information of callers. As to the situations mentioned by Mr. CHUNG, given that "inter-network" calls would be involved and 112 could be dialled from mobile phones

without SIM cards, the technical arrangements required would be relatively complicated. OFCA thus needed to discuss further with the emergency service agencies and operators concerned.

5. Dr. Jonathan TANG noticed that, among the overseas examples mentioned in the presentation, only Australia required its mobile network operators to provide accurate location information of callers. He enquired whether Hong Kong operators would likewise be required to provide accurate location information, and whether the location information of callers would be provided to departments and organisations other than the Police and Fire Services Department ("FSD").

6. Mr. Wilson LEE said that although Australia laid down requirements in this respect, it did not set any requirements on the accuracy of location information of callers as the United States did. In preparing the amendments to the relevant licence condition, OFCA, apart from making reference to overseas examples, had taken into account factors such as the accuracy of location information, and the technology and cost involved, and had discussed with the emergency service agencies and operators concerned for a technically-feasible solution. Mr. LEE pointed out that the purpose of providing location information of callers was to enable emergency service agencies to offer emergency rescue/assistance to people in need. The information involved was not open information, and thus would not be provided to other departments or organisations.

7. Dr. Mary LEE asked whether location information of callers was provided automatically to emergency service centres at present, and whether it was due to technical constraints only or due to other reasons that operators currently adopted different ways in providing location information of callers. Mr. W S IP enquired whether operators were required to provide location information of callers on a real-time basis. As operators would be mandated to provide location information of callers after the amendments of the relevant licence condition, he wondered if operators would be granted exemptions if they failed to comply with the mandatory requirement for providing such information due to technical constraints.

8. Mr. Wilson LEE replied that, if callers used the services of the PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited, their location information would be provided to emergency service centres automatically. However, it should be

noted that callers were not necessarily the ones in need of rescue/assistance. The staff of emergency service centres would still need to communicate with the callers to ask for more information in order to provide appropriate assistance to people in need. Mr. LEE pointed out that given that the scales, operation modes and network facilities varied among operators, the resources and cost incurred to them for adopting the same approach in providing location information of callers would be different. As such, it was necessary to balance the technology aspect with other aspects properly. As for the requirement on real-timeness, currently, all fixed and mobile network operators except HKT provided location information of callers to emergency service centres on a voluntary and non-real-time basis. In other words, emergency service centres had to seek location information of callers from individual fixed and mobile network operators on a case-by-case basis. The amendments currently proposed by OFCA did not include any mandatory requirements on real-timeness or accuracy. Instead, a more flexible approach was adopted to allow operators to provide the location information concerned through technically-feasible means. Operational arrangements, including requirements on real-timeness and acceptable level of accuracy, would be left to emergency service agencies and operators to discuss between themselves.

9. Mr. Keith LI said that mobile network operators, in general, would determine subscribers' locations according to the locations of their transmitting stations. Given that each transmitting station covered a specified area and each mobile phone generally would connect to reception signals emitted from more than one transmitting stations at a time, the transmitting stations connecting with the mobile phones of subscribers would change with the movements of the subscribers. As such, operators could determine subscribers' locations by checking which transmitting station was emitting the strongest reception signals among all the transmitting stations connecting with the subscribers' mobile phones. However, the accuracy of mobile network operators in determining the precise locations of subscribers might be undermined by geographical locations. For instance, when subscribers were in vicinity to high-rise buildings, the signals received by their mobile phones might be blocked by the buildings. Discrepancies between the location information provided by operators and the precise locations of subscribers would arise as a result. For provision of more accurate location information, the Global Positioning System ("GPS") would generally be used. However, mobile phone users usually would not turn that function on all the time due to battery consumption. The technically-feasible means specified in the proposed amendments could be regarded as enabling the provision of location information which was considered by operators as closest to the precise one.

However, such information would not be as accurate as that obtained through the GPS.

10. The Chairman thanked Mr. Keith LI for his explanation and added that the intensity of transmitting stations would also affect the accuracy of the locations of subscribers determined by operators. For instance, as fewer transmitting stations were installed in rural areas, the coverage of each station would be wider. It would be more difficult for operators to provide location information of their subscribers and the accuracy would be lower.

11. Dr. K W LAU pointed out that, as far as he could understand, many mobile applications for services such as food delivery and carriage enabled service providers to locate their users. He suggested that mobile network operators should pre-install those mobile applications in mobile phones sold through them to enable users to send location information to emergency service centres or their mobile service operators in the event of emergency, thereby resolving the aforementioned constraints in locating users with transmitting stations.

12. The Chairman said that the service concerned was available in some mobile applications. Mobile operators had to upgrade their systems if they were to provide such a service.

13. Mr. Wilson LEE said that OFCA had discussed with emergency service agencies on the provision of location information by users of mobile applications. However, the emergency service agencies opined that not all the citizens, for example the elderly, were knowledgeable to those applications and that third-party technology providers might be involved if mobile applications were used. After consideration, they preferred to obtain location information of callers from operators.

14. Dr. Jonathan TANG shared that the Senior Citizen Home Safety Association ("SCHSA") was in collaboration with telecommunications operators to offer similar services to the elderly. In addition, the Police and FSD would sometimes make enquires with the Association to check the locations of the elderly who had pressed the buttons of their safety bells or safety phones. Based on his experience, information provided by operators was not very accurate. He hoped that OFCA could request operators to make improvements technology-wise so as to enhance the accuracy of location information.

15. Ms. P Y CHAN said that there was a built-in feature in iPhones which provided users with the option of seeking positioning SOS service when they held onto the power button. After the users selected that option, their phones would be connected to emergency service hotlines directly. She suggested that discussions could be made with mobile phone manufacturers to add similar features to other mobile phones. Mr. C M CHUNG pointed out that he also noticed that there were mobile gadgets with features similar to the mobile function mentioned by Ms. CHAN. For example, some smart watches could sense the responses of users. When a user's smart watch could not sense any response from the user after an accidental fall, it would automatically connect to the emergency service centre concerned. He was of the view that emergency service agencies could make reference to the aforementioned and explore whether such products and features were suitable for use in Hong Kong.

16. Mr. Wilson LEE thanked Ms. P Y CHAN and Mr. C M CHUNG for their suggestions. Mr. LEE pointed out that the technology mentioned by Ms. CHAN and Mr. CHUNG could primarily be categorised as applications for mobile phones or mobile settings. The provision of such features would require upgrades and changes of the systems of mobile phone manufacturers and mobile network operators and thus was different from the amendments currently proposed to the relevant licence condition which focused on operators' networks. However, emergency service agencies would make reference to the latest applications in the market and take into account the technical aspect as well as other aspects before determining the technical solution to be deployed. According to his understanding, emergency service agencies did not want to be over-dependent on third-party technology and equipment.

17. Mr. Keith LI added that according to his understanding, the present consideration of the CA was mainly about introducing amendments to the relevant licence condition which required telecommunications operators to provide location information of callers free of charge to the Police, FSD and other emergency service agencies. What other members just mentioned were features and applications of certain devices which did not involve telecommunications operators. If the Police and FSD wanted to obtain location information of callers through the features of certain devices, their systems would need to be compatible with those devices or be upgraded for such a purpose.

18. The Chairman welcomed members' support of the proposed amendments to the relevant licence condition. He pointed out that the current amendments to the licence condition aimed at requiring operators to provide, to the extent feasible and practicable, location information of callers free of charge while the accuracy of location information provided by operators, a concern of the members, would depend on the equipment currently used by the operators. As for issues such as ways to refine the location information, the technical solution and its feasibility and the detailed implementation arrangements, OFCA would continue its discussions with the Police, FSD and operators.

III. Facilitating the Development of 5G Services in Hong Kong

19. Ms. Stacy LAM briefed the members on how the CA facilitated the development of 5G services in Hong Kong, including the release of about 4 500 MHz spectrum for 5G services in 2019, the assignment arrangement of the spectrum, technical measures for allowing radio base stations operating in the 3.5 GHz band for provision of public mobile services to coexist with the existing Telemetry, Tracking and Control Stations and Satellite Master Antenna Television System, further supply of new spectrum, and facilitating measures implemented by the Government for rollout of 5G networks. Related information was set out in TUCAC Paper No. 2/2019.

20. Mr. C M CHUNG enquired whether customers of a mobile network operator not assigned with spectrum in the 26/28 GHz bands could use the 5G services provided by that operator .

21. The Chairman clarified that spectrum in the 26/28 GHz bands was administratively assigned by the CA. Operators who did not apply to the CA for using those bands could acquire other 5G spectrum through auction for rollout of 5G networks and provision of 5G services to their subscribers.

22. Mr. C M CHUNG noticed that the use of spectrum in the 3.5 GHz band in areas around Tai Po and Stanley was subject to restrictions. He enquired whether members of the public could use 5G services in the areas concerned.

23. Ms. Stacy LAM explained that in addition to spectrum in the 3.5 GHz band, there was other spectrum available for the provision of 5G services, including spectrum in the 26/28

GHz bands, the 3.3 GHz band and the 4.9 GHz band. Operators could also re-farm their existing assigned spectrum for the provision of 5G services in the restriction zones in Tai Po and Stanley.

24. The Chairman added that as the auction and assignment of spectrum available for 5G services were still in progress, the amount of spectrum eventually assigned to each operator remained unclear. Operators might also consider deploying part of their 2G, 3G or 4G spectrum to provide 5G services so as to cater for their customers' needs for different services.

25. Mr. C M CHUNG asked for further details of the use of the spectrum vacated after the switching off of analogue television services ("ASO").

26. The Chairman responded that analogue television services and digital television services were currently co-existent, with the quality of the latter better than that of the former. The ASO had been scheduled for end-November 2020. The CA planned to make available a total of 160 MHz spectrum in the 600/700 MHz bands primarily for the provision of indoor mobile telecommunications services (including 5G services) after the ASO. Since the frequency bands concerned were also used by the Mainland, the CA was liaising with the relevant Mainland authorities for frequency coordination in order to implement the plan.

27. Dr. Jonathan TANG said that as 5G networks required more radio base stations, he suggested that the CA should specify the number of base stations to be installed by operators during spectrum assignment so as to ensure efficient use of spectrum. He also said that the higher the frequencies were, the greater the effect of radiation would be on people's health. He therefore suggested that the CA should consider restricting the locations for installation of base stations by operators. In addition, he noted that part of the spectrum in the 26/28 GHz bands was assigned on a geographical basis. He enquired whether the CA would consider assigning spectrum on a functional basis, such as assigning a certain part of spectrum for emergency services.

28. Ms. Stacy LAM thanked Dr. Jonathan TANG for his suggestions. To ensure efficient use of spectrum by operators, the CA would require operators to comply with relevant network and service rollout obligations specified by the CA and to submit

performance bonds as guarantees of compliance with the obligations when assigning spectrum in different bands to them. As regards the non-shared spectrum in the 26/28 GHz bands for the provision of large scale public mobile services, each mobile network operator would be required to install 2 500 base stations within five years. Assignees of spectrum in the 3.5 GHz and 4.9 GHz bands would be required to provide networks and services with population coverage of 45% and 50% respectively. Since the 3.3 GHz band could only be used for the provision of indoor mobile services, the CA required operators to provide at least 400 indoor base stations. As for concern over radiofrequency radiation, the CA, in vetting base station applications, would examine whether the total radiation level of base stations met the radiation safety standards. 5G base stations would be subject to the same requirement. Regarding the assignment of spectrum in the 26/28 GHz bands, to encourage the development of innovative 5G services, the CA also provided shared spectrum in the 26/28 GHz bands to operators interested in the provision of innovative 5G applications and services, thus enabling them to provide functional services in specified areas.

29. The Chairman added that apart from specified areas where coverage was relatively intensive, such as university campuses and the airport, the CA would consider applications from any organisations for the provision of certain services at multiple locations. For example, an application from an educational institution for providing intelligent learning systems at various schools. However, operators should note that the total coverage achieved by deploying the relevant spectrum should not exceed 50 square kilometres within a specified area.

30. Mr. K K LAU said that with the advancement in technology, autonomous buses had already been in use in the Mainland. To avoid lagging behind other advanced cities in technology development, Hong Kong would need to develop 5G services. He hoped that operators assigned with 5G spectrum could make commitments on network and service rollout obligations in order to provide 5G services to the public within the earliest reasonable time. On the other hand, OFCA should closely monitor operators assigned with 5G spectrum to ensure their compliance with the network and service rollout obligations. Mr. K K LAU believed that OFCA as the gatekeeper on radiation safety would safeguard public health against radiation hazards.

31. Dr. Mary LEE said that certain people were psychologically or physically more sensitive to radiation. She enquired whether members of the public had the right to know

the districts where 5G base stations were more densely distributed so that they could choose to move away.

32. The Chairman understood the public concern over radiation safety. He explained that one of the attributes of radio was that its strength was inversely proportional to distance, i.e. the shorter the distance was, the stronger the radio was. A slight increase in distance would substantially weaken the radio. Furthermore, radio was emitted from the antenna of a base station in one direction rather than in all directions uniformly. Therefore, a mere calculation of the number of base stations at a certain location could not truly reflect the radiation level of that location. The most proper way would be to conduct an on-site measurement on radiation level, which was also a service of OFCA. If members of the public were concerned about the radiation safety of base stations, they could contact OFCA. OFCA would deploy its staff to conduct on-site measurements on radiation level using specialised instruments and follow up with the operators concerned when necessary.

33. Dr. Mary LEE said that specialised instruments might not be affordable to the general public, and they might also be concerned about the radiation safety of locations other than their homes. Dr. Mary LEE reiterated that some individuals were more sensitive to radiation than ordinary people. General standards might not suit those individuals. She expressed concern over the public's right to know on matters such as the locations of base stations and places with a denser distribution of base stations. The provision of such information would enable members of the public to make choices suitable to their needs, such as staying away from those districts.

34. Mr. Keith LI said that members of the public needed not over-worry about the radiation of base stations. In fact, the use of mobile phones, Wi-Fi services, etc. already exposed members of the public to background radiation daily in a closer and more frequent fashion as compared to base stations. As pointed out by the Chairman, the radio emitted from base stations would weaken substantially for a slight increase in distance.

35. The Secretary said that she understood and appreciated the psychological or physiological impacts caused to some members of the public. OFCA had already briefed the members on the radiation safety of mobile base stations in the previous TUCAC meeting. Operators must obtain the CA's approval before putting their base stations into operation. OFCA would conduct measurements on the radiation level of the mobile base stations

through proactive sample checks. If the radiation level was found to have exceeded the safety standards as recommended by the International Commission on Non-Ionizing Radiation and as adopted by OFCA, OFCA would take follow-up actions instead of waiting until a complaint was lodged.

36. Ms. P Y CHAN agreed that members of the public should enjoy the right to know, however, she was more concerned about the education work. Ms. P Y CHAN opined that as some members of the public were living in remote areas where base stations had been installed, OFCA should step up its efforts in public education to enable those people to better understand the attributes of radio and radiation safety, thereby lessening their worry. In addition, since certain news reports would arouse social concern easily, it was incumbent upon the media to provide accurate information concerning radiation safety when reporting the development and the launch of 5G services so as to allay public apprehension on radiation. Ms. P Y CHAN said that radiation safety was an issue of public concern because radiation caused health impacts. Nevertheless, members of the public should not only focus on the locations of base stations when considering the health impacts of radiation. They should also take into account their habits and practices in using the relevant devices and services in daily lives.

37. The Chairman thanked Ms. P Y CHAN for her opinions.

38. Mr. W S IP said that from a seminar on radiation safety he attended before, he found that there was still misunderstanding among the public on the radiation safety of base stations. He suggested that OFCA should arrange more public seminars to provide more members of the public with accurate information. Mr. W S IP agreed with Ms. P Y CHAN that media reports were influential to the public. To avoid unnecessary misunderstanding among the public on 5G services and radiation, it was necessary to step up the education efforts.

39. The Chairman replied that OFCA conducted various publicity and education programmes annually, including newspaper advertorials, TV and radio announcements in the public interests ("API"), regional roving exhibitions, public seminars, roving school drama tour cum mini exhibitions, etc. OFCA could arrange briefings for the members at future meetings, and welcomed the members to share their views on the publicity and education

work of OFCA. OFCA would be glad to listen to various suggestions so as to improve the publicity and education work.

40. Mr. C M CHUNG said that he had listened to OFCA's API on the radio before. He suggested that OFCA should consider producing publicity materials related to 5G services (such as what is 5G, the applications of 5G and the radiation safety of 5G base stations) to give the public an overview on 5G.

41. The Chairman thanked the members for their opinions on 5G services and the publicity and education work. Currently, OFCA was making preparations for its publicity and education work on 5G services, and was producing short videos to introduce 5G. OFCA hoped that an introduction in audio-visual means could enable the public to better understand and grasp the related information.

42. Dr. Mary LEE made further comments on concern over radiation safety. She agreed that the health of some people was affected by psychological factors. However, it was also undeniable that there were people whose health was affected due to the radiosensitive nature of the human body. She hoped that those people would not be neglected.

43. The Chairman appreciated Dr. Mary LEE's concern. He said that operators might not remove or relocate their base stations for a complaint or a piece of feedback since such an arrangement would affect the coverage of mobile services. However, he believed that operators would take follow-up actions properly, such as adjusting the power of the base stations or the direction of the antenna, in light of the actual circumstances of individual cases.

44. Mr. W C CHENG appreciated that OFCA had carried out a lot of publicity and education work, including school talks and roving dramas. He hoped that OFCA could share the publicity materials concerning 5G with schools or send its staff to schools to share the materials with the teachers so that more students could learn about the information.

45. The Chairman welcomed Mr. W C CHENG's request and said that follow-up actions would be taken after the meeting.

[Post-meeting note: Officers of the relevant section of OFCA contacted Mr. W C CHENG

and would send him the related links together with the details of the consumer publicity and education campaign after the launch of the 5G promotional short video and website.]

IV. Revamp of the Websites of the Communications Authority and the Office of the Communications Authority

46. Ms. Venus CHEUNG briefed the members on the changes of the CA's and OFCA's websites, including the information and functions provided at the current websites, the objectives of the website revamp and the proposed changes. Related information was set out in TUCAC Paper No. 3/2019.

47. Mr. Keith LI enquired whether there was any access to information policy for the revamped websites.

48. Ms. Venus CHEUNG responded that there were relevant policies for the existing OFCA's website. Members of the public could visit OFCA's website, select "DATA & STATISTICS" and then click the column "Annual Open Data Plans" which set out datasets currently released or to be released in the coming three years on the Public Sector Information ("PSI") Portal, and those which had been published.

49. The Chairman said that the members could reflect their comments on OFCA's and the CA's websites to the Secretary. OFCA would collect and consider those comments in order to enhance and refine the websites.

V. Any Other Business

Report on Consumer Complaints

50. The Secretary reported that the CA had received 370 and 310 cases of consumer complaints in the 4th Quarter of 2018 and the 1st Quarter of 2019 respectively. All cases (100%) in the two Quarters were outside the CA's jurisdiction. These complaints primarily involved dissatisfaction with customer services, disputes over contracts/service termination, disputes over billing and dissatisfaction with the quality of mobile communications/fixed network/Internet services. In addition, one substantiated case was confirmed to be in

breach of the Telecommunications Ordinance/licence conditions in the 4th Quarter of 2018. OFCA imposed a financial penalty of HK$160,000 on the operators concerned. More details could be found at the CA's website. The latest consumer complaint statistics are in Annex 1.

VI. Date of Next Meeting

51. The Secretary informed the members that the next meeting would be held in October. The Secretary would notify the members of the details later.

[Post-meeting note: OFCA had notified the members by e-mail that the date of the next meeting would be changed to 5 December 2019.]

52. There being no other business, the meeting was adjourned at 5:10 p.m.

Annex 1

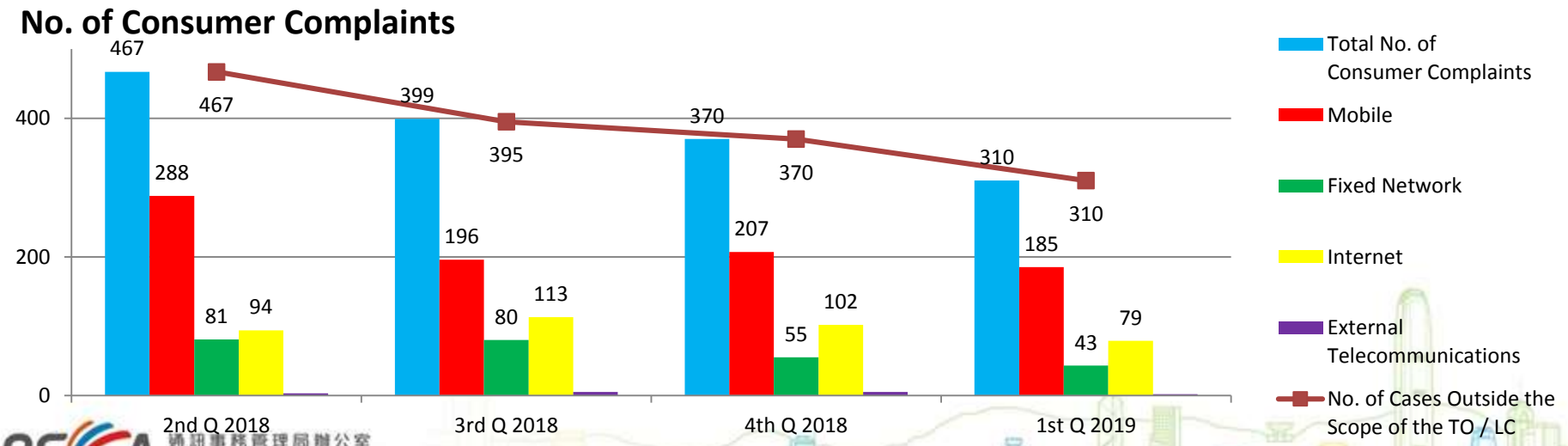
Report on Consumer Complaints on Telecom Services

The Telecommunications Users and Consumers Advisory Committee
The 18th Meeting
23 May 2019

通訊事務管理局辦公室
OFFICE OF THE COMMUNICATIONS AUTHORITY

Overview (4th Quarter of 2018 and 1st Quarter of 2019)

(Categorised by service types)	2nd Q 2018	3rd Q 2018	4th Q 2018	1st Q 2019	4th Q 2018	1st Q 2019	
Total No. of Consumer Complaints	**467**	**399**	**370**	**310**	**370**	**310**	**No. of Cases Outside the Scope of the Telecommunications Ordinance ("TO") / Licence Conditions ("LC")**
Mobile	288	196	207	185	207	185	
Fixed Network	81	80	55	43	55	43	
Internet	94	113	102	79	102	79	
External Telecommunications	3	5	5	2	5	2	



OFCA 通訊事務管理局辦公室 OFFICE OF THE COMMUNICATIONS AUTHORITY

No. of Complaints (4th Quarter of 2018 and 1st Quarter of 2019)

Number of complaint cases decrease slightly

In the 4th Quarter of 2018, the Communications Authority ("CA") received 370 cases of consumer complaints, representing a slight decrease of 7.3% from the 399 cases received in the 3rd Quarter of 2018. In the 1st Quarter of 2019, the number of CA received consumer complaints decreased (16.2%) to 310 cases.

No. of cases not involving any breach of the TO or LC : **370** and **310** cases in the 2 Quarters respectively

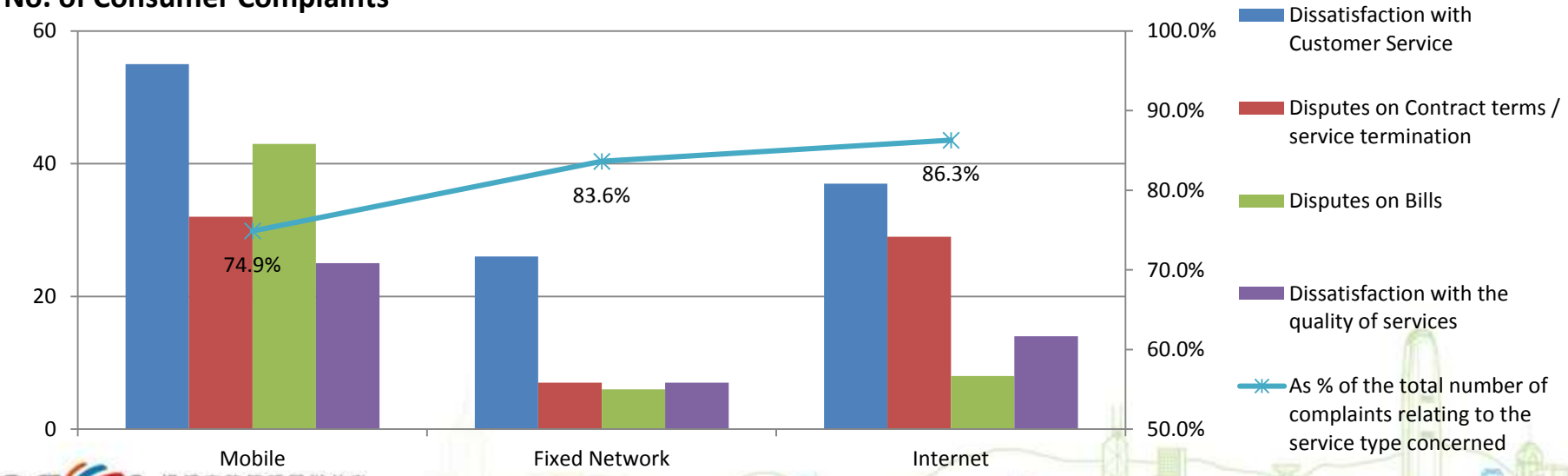
The cases mainly involved :	4th Q 2018	1st Q 2019
➢ Dissatisfaction with customer service :	120 cases	88 cases
➢ Disputes on contract terms / service termination :	68 cases	68 cases
➢ Disputes on bills :	60 cases	57 cases
➢ Dissatisfaction with the quality of mobile/ fixed network/Internet services :	46 cases	44 cases

No. of cases involving possible breach of the TO or LC : **0** case in the 2 Quarters

No. of Complaints (4th Quarter of 2018)

(Categorised by major service types)	Dissatisfaction with customer service	Disputes on contract terms / service termination	Disputes on bills	Dissatisfaction with the quality of services	As percentage of the total number of complaints relating to the service type concerned
Mobile	55	32	43	25	74.9%
Fixed Network	26	7	6	7	83.6%
Internet	37	29	8	14	86.3%

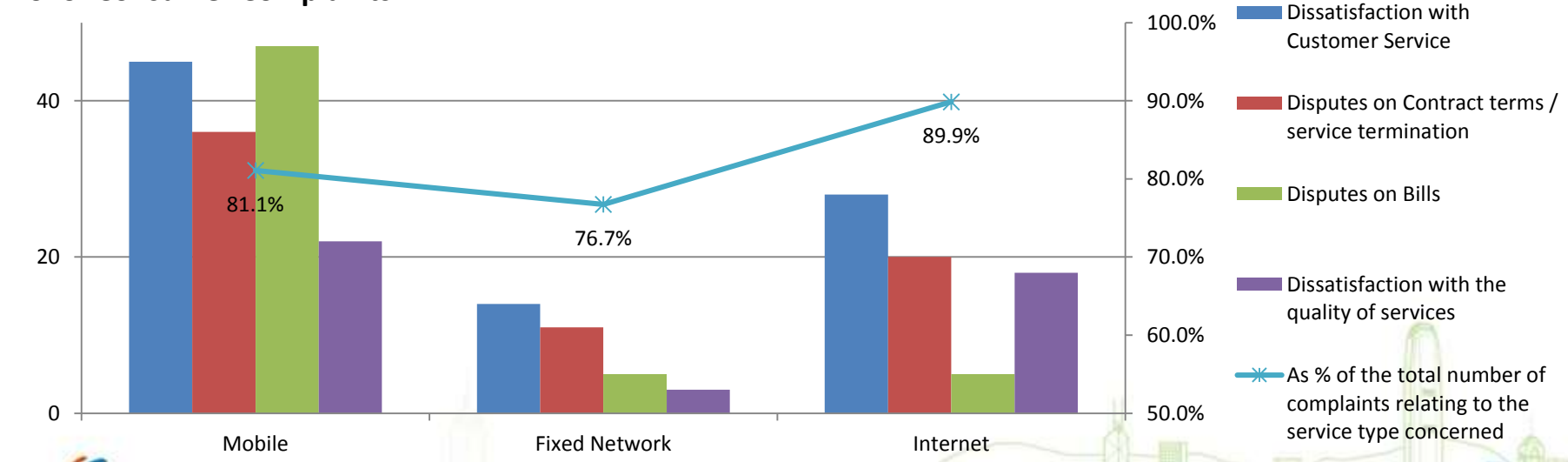
No. of Consumer Complaints



No. of Complaints (1st Quarter of 2019)

(Categorised by major service types)	Dissatisfaction with customer service	Disputes on contract terms / service termination	Disputes on bills	Dissatisfaction with the quality of services	As percentage of the total number of complaints relating to the service type concerned
Mobile	45	36	47	22	81.1%
Fixed Network	14	11	5	3	76.7%
Internet	28	20	5	18	89.9%

No. of Consumer Complaints



OFCA 通訊事務管理局辦公室 OFFICE OF THE COMMUNICATIONS AUTHORITY

No. of Complaints (4th Quarter of 2018 and 1st Quarter of 2019)

Case Analysis of Breach of the TO / LC

In the 4th Quarter of 2018, there was 1 case of breach which was related to a mobile service provider's two incidents of network outage in February and March 2018 respectively causing disruptions to its telecommunications services including mobile voice services, short message services and mobile data services. Each incident affected about 138,150 customers. The mobile service provider was found to have contravened Licence Conditions. The CA had imposed a financial penalty of $160,000 on the mobile service provider.

In the 1st Quarter of 2019, there was no substantiated case of breach of the TO/LC.

Thank You

通訊事務管理局辦公室
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COMMUNICATIONS AUTHORITY