

Telecommunications Users and Consumers Advisory Committee (TUCAC)
Minutes of the 4th Meeting held at 3:00 p.m.
on 25 July 2013 (Thursday) in Conference Room,
Office of the Communications Authority (“OFCA”),
29/F Wu Chung House, Wan Chai

Present:

Mr. Danny LAU (Chairman)	Deputy Director-General (Telecommunications), OFCA
Mr. Alfred FUNG	Representative of Consumer Council
Ms. Edith HUI	Representative of Hong Kong General Chamber of Commerce
Ms. Enid LOW	Representative of Hong Kong Information Technology Federation (HKITF)
Ms. Leona WONG	Representative of Hong Kong Wireless Technology Industry Association (HKWTIA)
Mr. Ben YU	Representative of the disabled
Mr. Kenny CHIU	Member appointed on an ad personam basis
Mr. Tony WONG	Representative of Office of the Government Chief Information Officer
Mr. Michael LUI	Representative of Education Bureau
Mr. Thomas SUN	Member of the public
Ms. Florence MAN	Member of the public
Mr. C B WONG	Member of the public
Ms. Elsa CHENG	Member of the public
Mr. Francis NGAI	Member of the public
Ms. Eva WONG	Member of the public
Ms. Cindy CHAN	Member of the public
Ms. Martha LEUNG	Member of the public
Ms. Agnes CHAN	Member of the public
Ms. Jamay WONG (Secretary)	OFCA

In attendance:

Mr. Sammy LI	OFCA
Mr. Eric YUNG	OFCA
Mr. W K LUK	OFCA
Miss Edith YAU	OFCA

Absent with apologies:

Mr. Ricky CHONG	Representative of Communications Association of Hong Kong (CAHK)
Mr. Eric YEUNG	Representative of small and medium enterprises
Ms. Irene LEUNG	Representative of the aged community
Mr. H F YUEN	Representative of the disabled
Mr. K W MA	Member appointed on an ad personam basis
Ms. Pauline YUNG	Member of the public

I. Opening Remarks

1. The Chairman welcomed members to the meeting, and said that due to the retirement of Mr. Y K HA, he would take over from Mr. Y K HA as Chairman of the Committee starting from this meeting. The Chairman informed members that Mr. Francis NGAI was unable to continue serving as a member of the Committee due to his busy schedule. The Chairman thanked Mr. Francis NGAI for his participation and opinions in the past. In addition, the Hong Kong Information Technology Federation (HKITF) had appointed Ms. Enid LOW to take over from Mr. Francis FONG as a member of the Committee.

II. Confirmation of the Minutes of the 3rd Meeting

2. The Secretary had not received any proposed amendment to the draft minutes of the 3rd meeting from the members and no amendment was proposed by the members in the meeting. The Chairman announced that the minutes of the 3rd meeting were confirmed.

III. Radiation Safety of Mobile Phone Radio Base Stations

3. Mr. Sammy LI explained to members the radiation safety of mobile phone transmission base stations, including the classification of electromagnetic radiation, the electromagnetic radiation of base stations, the radiation safety standard and its limits as well as the regulation concerning radiation safety of mobile phone base stations. He also introduced the various channels through which OFCA addressed public concerns over the radiation of base stations. Related information is in Annex 1 (TUCAC Paper No. 3/2013).

4. The Chairman understood the public concerns about the radiation safety of mobile phone transmission base stations, and reiterated that according to the assessment by the Department of Health and the World Health Organisation, at present there was no convincing scientific evidence to suggest that non-ionising radiation levels below the limits of radiation safety standard would cause adverse health effects. Although occasionally there were individual reports alleging that the radiation of base stations would affect human health, those were individual reports which had not been accepted by the World Health Organisation.

5. Apart from the radiation issue, Mr. C B WONG was also concerned about the problem of radio wave interference. Mr. C B WONG noticed that transmission base stations were densely located in certain districts such as the Kowloon City District. He enquired whether OFCA had issued guidelines and introduced regulatory measures regarding radio wave. He had the experience that when his car was passing by Kowloon City, its alarm system sounded. He was told by the car manufacturer that due to the high density of base stations in Kowloon City, vehicles passing by the district would be interfered, thus leading to such situation.

6. The Chairman responded that OFCA had already formulated measures and specifications in the planning and management of radio spectrum to ensure the mutual compatibility and operation of all types of radio equipment as far as possible. As to the problem encountered by Mr. C B WONG, the Chairman suggested that he contact OFCA to follow this up.

7. Mr. Francis NGAI would like to know whether 31 000 base stations was considered a large or small number as the public did not have any concept on such figures. He enquired whether OFCA would consider providing the public with more information for reference, such as comparing the number of base stations with that of other cities and the per capita consumption or growth rate, etc. so as to make those figures comparatively more comprehensible to the public.

8. Mr. Sammy LI said at present OFCA did not have such comparison figures. Due to the high usage of mobile phone services in Hong Kong, operators had to set up more base stations in a district to meet service needs.

9. Ms. Enid LOW said radiation safety was not necessarily directly proportional to the number of base stations. The crux of the issue would be base stations' total amount of radiofrequency radiation being below the limits recommended by the International Commission on Non-ionising Radiation Protection (ICNIRP), i.e. the radiation safety standard.

10. Mr. Francis NGAI suggested that OFCA could consider providing a benchmark to allay public concerns. When announcing the limits recommended by the ICNIRP, such information from other countries could also be provided to the public for

reference.

11. The Chairman thanked Mr. Francis NGAI for his suggestion.
12. Mr. Ben YU enquired whether transmission stations would have an adverse effect on artificial cochlears.
13. The Chairman responded that according to his understanding, there were no reports published by the World Health Organisation which indicated transmission stations would pose adverse effects on artificial cochlears. OFCA had not received any notification from the Department of Health on such kind of reports either.
14. Ms. Agnes CHAN would like to know what triggered the public to request OFCA to measure radiation at their residences, and if there were any criteria for OFCA to decide whether or not to measure radiation for the public upon their requests.
15. The Chairman said at present OFCA entertained all requests for radiation measurement in order to allay public concerns on this matter.
16. Mr. Sammy LI indicated that many cases of requests for radiation measurement were due to the fact that the public had found out the base stations built near their homes, so they were more concerned about the problem of radiation.
17. Mr. Kenny CHIU enquired whether OFCA had assessed the maximum number of base stations that Hong Kong could sustain. He said in future there might be operators providing new services and building more base stations, therefore he was concerned whether additional base stations could be built unendingly.
18. The Chairman responded that the primary reason for operators to build more base stations was to cater for the ever increasing data usage by the public. However, there were many factors to be considered when building additional base stations, and due to cost considerations, it was believed that operators would not build unnecessary base stations. In addition, technology kept advancing. At present there was already technology which could split the base stations to allow effective use of capacity. Therefore, if we could make effective use of the technology, it would not be necessary for future base stations to over-concentrate in one location, and the radiation level

would be relatively lower.

19. Apart from the problem of radiation, Mr. Kenny CHIU was also concerned about issues related to social resources. Nowadays mobile phone services were market-oriented; operators might keep applying for the installation of base stations to increase their competitiveness, but there was limited space for the installation of base stations. If we did not set a maximum number of base stations and operators committed the said behaviour, the land resources would be exhausted.

20. Ms. Enid LOW agreed that operators would not build additional base stations unendingly because they had to meet the requirements of various Government departments in addition to bearing rental pressure when building base stations. To cope with the increasing usage, operators would look into ways to improve the technology of base stations in order to make effective use of the capacity. Besides, operators would also cooperate in the use of base stations in an effort to provide better services to consumers.

IV. OFCA Broadband Performance Test System

21. Mr. Eric YUNG introduced to members the OFCA broadband performance test system (“the system”), including the purpose of launching the system and the services provided, and elaborated on the utilisation of the system. Related information is in Annex 2 (TUCAC Paper No. 4/2013)

22. The Chairman said that the telecommunications market of Hong Kong had been fully liberalised. At present the Communications Authority (“CA”) had not set any standards and specifications for broadband service quality. It was our regulatory principle to rely on market forces and competition as far as possible. Due to fierce competition in the local broadband service market, operators had to improve service quality to attract more customers. It was hoped that consumers could test and compare the broadband service performance of different operators by making use of the system, which would help increase the transparency of broadband service performance. In this way, consumers could better understand the performance of the broadband service to which they subscribe in every aspect, and make informed choices when selecting broadband service providers.

23. Ms. Florence MAN enquired where consumers could consult the test reports. She was concerned whether consumers could consult those test reports before choosing to use the service of a particular operator.

24. The Chairman responded that in order to maintain neutrality, OFCA currently did not carry out tests and provide reports on the services provided by the operators. To his understanding, there were various independent organisations, such as the industry, newspapers, magazines, etc., which used the system to test the operators' services regularly, and then provided such information for consumers' reference.

25. Ms. Enid LOW believed the purpose of setting up the system by OFCA was to provide a relatively more objective indicator for consumers to measure the broadband service performance of operators. However, consumers should note that the test results would be affected by different factors, such as the time at which the test was conducted, the number of people using the broadband service at the time, the configuration of user terminal, etc. The test results were control samples and for reference only. As mentioned by the Chairman, there were now different organisations which carried out tests on the operators' services, and such information was also available on some consumer websites. Consumers could browse the relevant information for reference before purchasing a service.

26. Ms. Florence MAN said as OFCA had already provided a test system on measuring broadband service performance, she would suggest that OFCA increase publicity to inform consumers that they were advised to make use of the system to test and compare the broadband service performance, just like what the Government did in encouraging the public to consult energy labels when purchasing electrical appliances.

27. The Chairman said that the setting up of the system by OFCA was primarily aimed at providing a platform/application for use by consumers. As a regulator, it was not appropriate for OFCA to make such a promotion.

28. Ms. Enid LOW explained that energy labels contained absolute values, such figures would remain unchanged no matter when and where consumers used the same electrical appliances. However, as broadband network would be affected by different

factors, the performances of the same service could vary when it was used at a different time and space. Therefore, the situation would not remain unchanged. Consumers should pay attention to the fact that such information was reference values when reading any test reports.

29. Mr. Tony WONG enquired whether the CA would consider adding an option to the system so that consumers could directly send the information to the relevant operators for follow-up when problems with their broadband services were found during the tests; or operators could provide their own interface for connection to the system so that consumers could carry out tests and lodge complaints when they encountered problems.

30. The Chairman said that consumers could already obtain the test results while using the system, and they could pass the results to the operators for reference and follow-up if necessary. The Chairman continued that operators now had their own monitoring system to measure and improve their network performance. As to whether operators would provide an interface to be connected to the system, the Chairman believed that such an arrangement would depend on its necessity since the provision of such services would incur costs and might in turn pose pressure on the operators' operations.

31. Ms. Enid LOW said at present some operators had already offered online interactive customer services, users could contact the operators immediately and provide relevant information through such channels to follow up on problems with broadband service speed.

32. Ms. Enid LOW made two suggestions on the system. She suggested adding two types of information to the system: 1) the meaning of broadband speed values, i.e. what data speed we would require when using the data for different purposes, for example, the broadband service speeds required for browsing websites, sending and receiving emails or live streaming videos were not the same; 2) the data consumed in using the system. It was because data would be consumed when users were using the system, and if the service plan of a user only covered limited free data usage, the user might need to pay an extra data fee for using the system.

33. The Chairman thanked Ms. Enid LOW for her suggestions. Regarding the first

one, the CA would actively consider providing such information to consumers; as for the second suggestion, we had already provided such reminder on the relevant webpage.

[Post-meeting note: OFCA added such information under the option “About” in the system on 11 November so that users would know the “required data speeds of different applications”.]

34. Mr. Ben YU noted that the system provided two options of broadband test. He enquired how to choose between the two.

35. Mr. Eric YUNG responded that users should choose according to the speed of their broadband service plan. For example, if the speed of the plan was low, a test option with lower speed should be chosen, otherwise a test option with higher speed should be chosen.

36. Mr. Ben YU asked whether it was possible to combine the two options.

37. Mr. Eric YUNG explained that we had considered providing one single test when we designed the system; however as it involved different technical configurations, providing different options would make test results more accurate.

V. Any Other Business

Report on Consumer Complaints

38. The Secretary reported that the CA had received 1 040 cases of consumer complaints in the 1st Quarter of 2013, which was significantly lower than the number of cases received in the previous three quarters respectively. Among these complaints, 1 003 cases (96.4%) were outside the CA’s jurisdiction. Most of these complaints involved disputes over billing/contracts/service termination, dissatisfaction with customer services and dissatisfaction with the quality of mobile communications/fixed network/broadband services. The remaining 37 cases (3.6%) were related to the possible breach of the Telecommunications Ordinance or licence conditions, including complaints about alleged anti-competitive practices of service operators, alleged misleading or deceptive sales conduct, and access by operators to

public areas of buildings for the installation of telecommunications/broadcasting equipment and networks, etc. No case was confirmed to be in breach of the Telecommunications Ordinance/licence conditions in the 1st Quarter of 2013. The latest consumer complaint statistics are in Annex 3.

VI. Date of Next Meeting

39. The Secretary informed the members that the next meeting would be held on 21 November 2013 at the same time and venue.

40. There being no other business, the meeting was adjourned at 5:00 p.m.

Radiation Safety of Mobile Phone Radio Base Stations

Telecommunications Users and
Consumers Advisory Committee (TUCAC)

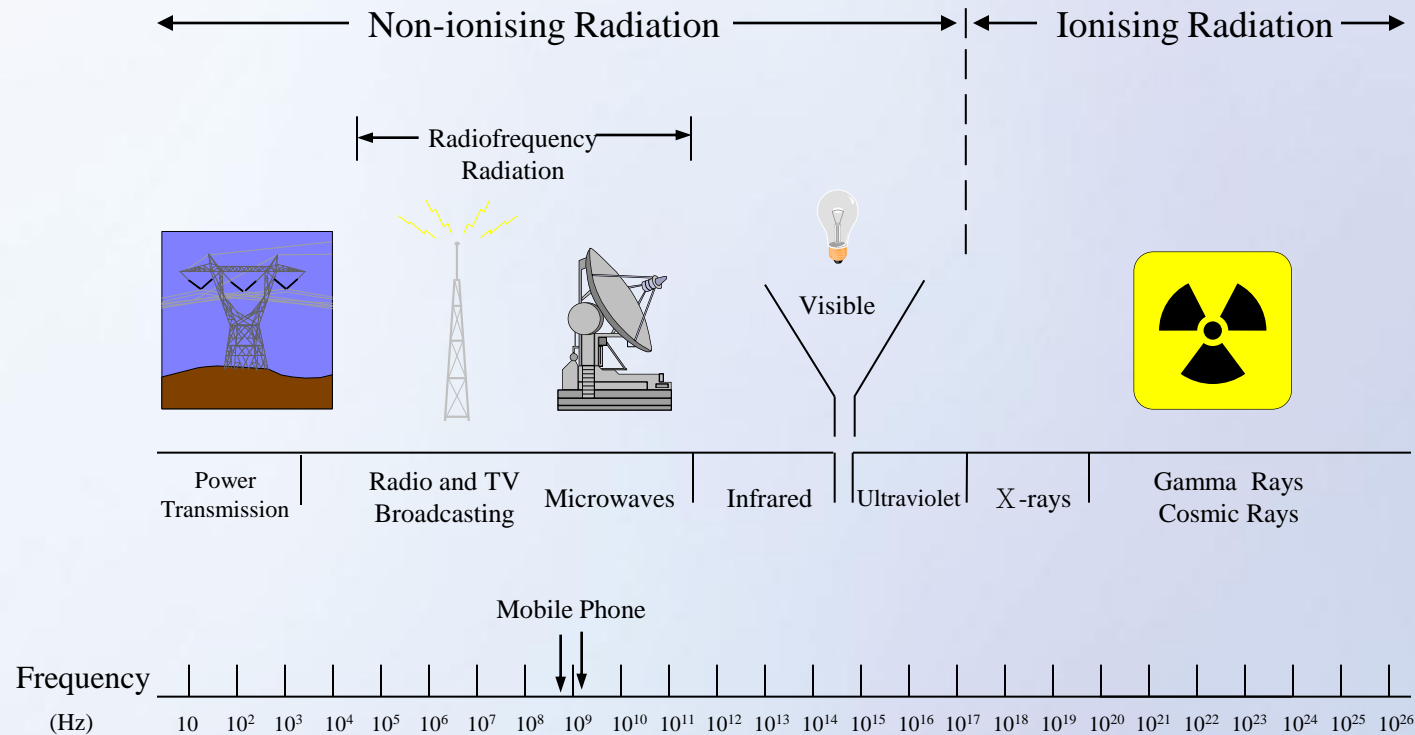
25 July 2013

Mobile Phone Radio Base Stations

- To provide an uninterrupted service, mobile network operators need to install mobile phone radio base stations (RBS) on a territory-wide basis
- Over 31,000 RBS are installed
- There is increasing public awareness of radiation safety



Classification of Electromagnetic (EM) Radiation



EM Radiation of RBS

- RBS emits EM radiation in form of radiofrequency (“RF”) signals to convey information.
- RF signals
 - relatively low frequencies
 - ~ 3 kHz to 300 GHz
 - non-ionising radiation (“NIR”)
 - low energy level, which is insufficient to cause ionization of atoms or molecules

Radiation Safety Standard

- In consultation with the Department of Health, limits as recommended by the International Commission on Non-ionising Radiation Protection (“ICNIRP”) are adopted as the radiation safety standard.
- According to the World Health Organization, there is no convincing scientific evidence to suggest that NIR levels below the ICNIRP limits will cause adverse health effects
- ICNIRP (or similar) limits are widely used
 - including the USA, Canada, Germany, France, Korea, Australia and New Zealand etc.

ICNIRP Limits

- ICNIRP
 - set limits for exposure to NIR
 - applicable to frequency bands of RBS:

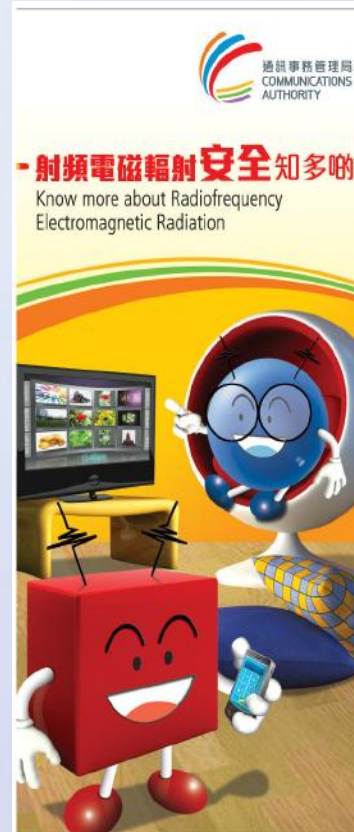
Frequency Band	800/900 MHz	1800 MHz	Beyond 2000 MHz
Time-varying fields	41.3 V/m	58.3 V/m	61.0 V/m

Regulation concerning Radiation Safety of RBS

- According to telecom licence condition, operators are required to obtain approval from the Communications Authority (CA) before putting their RBS into operation.
- Operators shall observe the “Code of Practice for the Protection of Workers and Members of Public Against Non-Ionising Radiation Hazards from Radio Transmitting Equipment” issued by OFCA
 - to ensure that the overall radiation levels in public areas do not exceed ICNIRP limits
- Operators are required to submit the reports of NIR measurement within one month from the commencement of RBS operation. OFCA will conduct a sample check on RBS by on-site measurement of radiation level.

Responses to Public Concern over RBS Radiation

- issue leaflet “Know more about Radiofrequency Electromagnetic Radiation”
- provide a web page on “RF Radiation Safety” on OFCA’s website
- promote a better understanding of RF radiation safety on the newspaper
- set up a hotline to respond to public enquires
- attend district council meetings to brief members on radiation safety of RBS



Thank you

OFCA

Broadband Performance Test System

Telecommunications Users and Consumers Advisory Committee
25 July 2013

Objective

- ◆ To serve public needs on understanding broadband services performance through testing for smart choices of broadband services
 - Provide simple means to measure the performance of their fixed and mobile broadband services directly
 - Consumers may benchmark against the performance pledges issued by operators
- ◆ To improve service of broadband service provider by testing results
 - Consumers may compare broadband service performance of different providers
 - Urge broadband service providers to improve service quality and network speed

History

- December 2010
 - Test website and mobile apps launched
 - Optimised for measuring up to 100Mbps fixed and mobile broadband
- December 2012
 - New test option of “100Mbps – 300Mbps” added for fixed internet access services with increased measurement accuracy at high speed.
- January 2013
 - Updated mobile apps for IOS and Android platforms: improve accuracy for 4G mobile services with speed up to 100Mbps

Service Overview

- Hosted at HKIX
 - Unique hub for intra-Hong Kong Internet traffic
 - Directly connect to all major fixed and mobile Internet service providers with high capacity broadband circuits
 - Ensure impartiality and accuracy of the performance test
- Fixed Internet access services (Test website)
 - measure download speed, upload speed, network latency, packet loss and jitter
 - 2 test options optimised for different broadband speeds:
 - below 100 Mbps and 100 – 300 Mbps
- Mobile apps
 - Applicable to iOS and Android platforms
 - measure download speed, upload speed and network latency

Intended Purpose

- Users can easily measure broadband performance easily
 - Able to benchmark measurement result against service pledges and performance statistics published by service providers
 - Enhance transparency of broadband performance of service providers
- Encourage competition among broadband service providers
 - Driving force on service providers to improve their service quality and network speed

Popular for Public(1)

- Increasingly used by citizens
- Frequently used by local media to compare the performance of new mobile phones and mobile services

Popular for Public(2)

- Example of local media coverage

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COVERSTORY 1/11/2012

隨着多款旗艦級 4G LTE 手機登陸香港，
再加上各網絡供應商已把 4G LTE 網絡逐步開通至港鐵，全城 4G 升級熱一觸即發。
e-zone Phone 今期找來全港多間網絡供應商的 4G SIM 卡，
再藉 iPhone 5 及 Samsung Galaxy Note II LTE 兩部 4G 手機，
進行多種應用連線速度測試，且看它們跟哪一個 4G LTE 網絡「最匹配」！

iPhone 5 vs Note II LTE

四台速鬥

網速全線

「香港之 4G」香港通訊管理局特許「e-zone」刊登的「4G」及「3G」網絡支援，提供詳盡的數據及測試結果，讓公眾更了解 4G 網絡，並可比較不同網絡商之 4G 網絡服務，包括：下載速度、上傳速度、延遲時間、及穩定性測試。本報之測試結果，將為公眾提供參考，並可作為選擇 4G 網絡商之參考。

為配合香港 4G 網絡的普及化，e-zone 特別安排了「4G」專題，讓公眾更了解 4G 網絡，並可比較不同網絡商之 4G 網絡服務，包括：下載速度、上傳速度、延遲時間、及穩定性測試。本報之測試結果，將為公眾提供參考，並可作為選擇 4G 網絡商之參考。

Usage ONE 視 | 像 | 新 | 聞

定點：@OFCA • Now 新聞

測試日期：11月10日
測試地點：九龍半島
測試時間：11時至12時

	iPhone 5 (4G)	iPhone 5 (LTE)	Galaxy Note II (4G)
31M	下載速度：0.02 Mbps 上傳速度：0.18 Mbps 延遲時間：1.5 秒	下載速度：26.85 Mbps 上傳速度：4.05 Mbps 延遲時間：1.9 秒	下載速度：0.02 Mbps 上傳速度：0.04 Mbps 延遲時間：4.5 秒
1080P HD	下載速度：0.89 Mbps 上傳速度：0.04 Mbps 延遲時間：4.53 秒	下載速度：1.70 Mbps 上傳速度：21.46 Mbps 延遲時間：4.3 秒	下載速度：0.52 Mbps 上傳速度：0.03 Mbps 延遲時間：12.4 秒
PGOW (720P)	下載速度：7.43 Mbps 上傳速度：2.59 Mbps 延遲時間：1.43 秒	下載速度：31.67 Mbps 上傳速度：3.98 Mbps 延遲時間：1.9 秒	下載速度：2.75 Mbps 上傳速度：0.38 Mbps 延遲時間：3.7 秒
SmartPhone	下載速度：13.42 Mbps 上傳速度：20.62 Mbps 延遲時間：1.42 秒	下載速度：22.29 Mbps 上傳速度：16.93 Mbps 延遲時間：2.1 秒	下載速度：2.12 Mbps 上傳速度：0.92 Mbps 延遲時間：3.5 秒

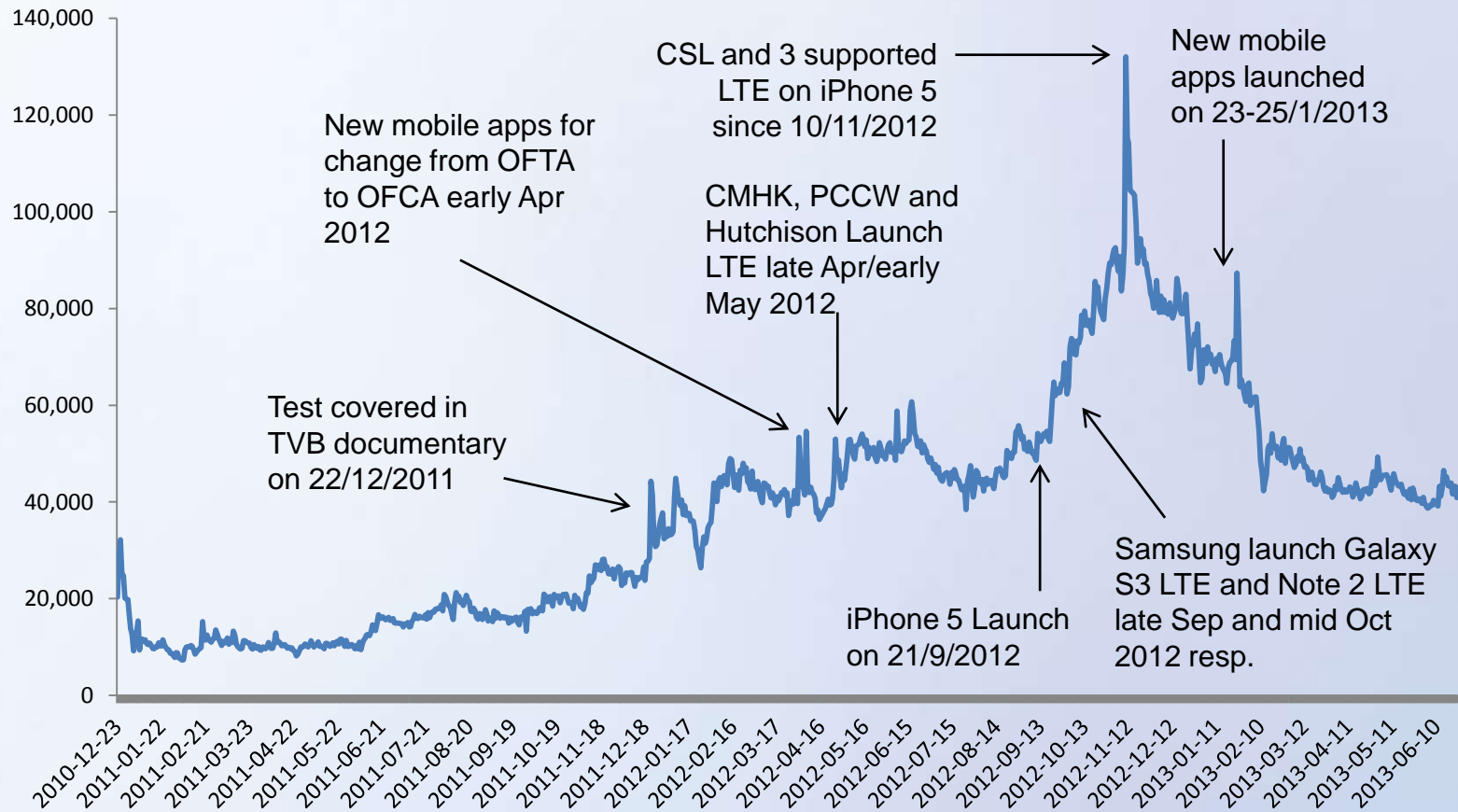
測試結果：iPhone 5 (LTE) 表現最佳

e-zone 的 iPhone 5 測試 iPhone 5 (LTE) 表現最佳，其下載速度為 31.67 Mbps，上傳速度為 3.98 Mbps，延遲時間為 1.9 秒。而 iPhone 5 (4G) 的表現則較差，其下載速度為 0.89 Mbps，上傳速度為 0.04 Mbps，延遲時間為 4.53 秒。Galaxy Note II (4G) 的表現則最差，其下載速度為 0.52 Mbps，上傳速度為 0.03 Mbps，延遲時間為 12.4 秒。

測試方法：e-zone 的 iPhone 5 測試 iPhone 5 (LTE) 表現最佳，其下載速度為 31.67 Mbps，上傳速度為 3.98 Mbps，延遲時間為 1.9 秒。而 iPhone 5 (4G) 的表現則較差，其下載速度為 0.89 Mbps，上傳速度為 0.04 Mbps，延遲時間為 4.53 秒。Galaxy Note II (4G) 的表現則最差，其下載速度為 0.52 Mbps，上傳速度為 0.03 Mbps，延遲時間為 12.4 秒。

Popular for Public(3)

OFCA Broadband Performance Test Daily Usage Statistics



Popular for Public(4)

No. of access	2013 Jan - Jun	2012	2011	% Change 2011 - 2012
Yearly total	8,666,275	20,265,442	5,714,907	354.61%
Daily average over the year	49,522	55,370	15,657	353.64%
Max. daily peak in the year	87,341	132,071	44,284	298.24%

Award Received



The Office of the Communications Authority Broadband Performance Test is accredited with the "Certificate of Merit" under the category of "Best Public Service Application (Web/Mobile Application) Award" in the "Hong Kong ICT Awards 2013".

Improvement Plan

- To enhance user experience by new interface to record testing results
- To evaluate the capability of the test website to test higher speed to respond to market development
- To consider whether or not other mobile platforms, such as Windows Mobile (Windows 8), RIM (Blackberry), etc. should be included.

Testing Demonstration

<http://speedtest1.ofca.gov.hk/index.html>

The screenshot shows the initial selection screen of the OFCA Broadband Performance Test. The browser address bar displays <http://speedtest1.ofca.gov.hk/select.html>. The page features the OFCA logo and the text "通訊事務管理局辦公室" and "OFFICE OF THE COMMUNICATIONS AUTHORITY". Below the logo, it says "OFCA Broadband Performance Test". A instruction bar reads "Select one of the test options below according to the broadband connection speed:". There are two main test options presented as buttons: "Broadband Test Below 100 Mbps" and "Broadband Test 100 Mbps to 300 Mbps". At the bottom, there is a small award logo and a note: "*The Office of the Communications Authority Broadband Performance Test is accredited with the 'Certificate of Merit' under the category of 'Best Public Service Application (Web/Mobile Application) Award' in the 'Hong Kong ICT Awards 2013'."

The screenshot shows the results screen of the OFCA Broadband Performance Test. The browser address bar displays <http://speedtest1.ofca.gov.hk/100M/speedtest.php?lang=en>. The page features the OFCA logo and a "Restart Test" button. The test results are displayed in four columns: "Initialisation" (Completed), "Latency Test" (Network Latency: 4 ms, Jitter: 1 ms), "Packet Loss Test" (Packets Sent: 100, Packets Received: 100, Packet Loss: 0%), and "Speed Test" (Download Speed: 73.64 Mbps, Upload Speed: 27.67 Mbps). At the bottom, the user's IP address is shown as "Your IP: 202.82.15.254" and the Reference Number is "B357533090519Z".

Thank you

Radiation Safety of Mobile Phone Radio Base Stations

Telecommunications Users and
Consumers Advisory Committee (TUCAC)

25 July 2013

**The 4th Meeting of the Telecommunications Users and Consumers Advisory Committee
(25 July 2013)**

**CA's Latest Statistics on Consumer Complaints on Telecom Services
(1st Quarter of 2013)**

Service Type	2st Q 2012		3rd Q 2012		4th Q 2012		1st Q 2013		Number of Cases found to involve breach of the Telecommunica- tions Ordinance / Licence Conditions after Investigation
	No. of Complaints Received	Number of Cases Outside the Scope of the Telecommunications Ordinance / Licence Conditions	No. of Complaints Received	Number of Cases Outside the Scope of the Telecommunications Ordinance / Licence Conditions	No. of Complaints Received	Number of Cases Outside the Scope of the Telecommunications Ordinance / Licence Conditions	No. of Complaints Received	Number of Cases Outside the Scope of the Telecommunications Ordinance / Licence Conditions	January to March 2013
Mobile	580	575	688	675	904	890	519	512	0
Fixed Network	197	185	187	176	165	159	173	163	0
Internet	389	382	463	456	356	354	316	298	0
External Telecommu- nications	28	28	20	19	19	19	16	16	0
Others	19	18	31	30	17	16	8	6	0
Unclassified	10	10	6	6	10	10	8	8	0
Total	1223	1198	1395	1362	1471	1448	1040	1003	0

Remarks: The aforesaid statistics on consumer complaints about telecom services do not include reports made by consumers in respect of the Unsolicited Electronic Messages Ordinance.

A. Analysis of Complaints in the 1st Quarter of 2013

Overview

- In the 1st Quarter of 2013, CA received 1040 consumer complaints, which showed a significant decline from the number of complaints received respectively in the past three quarters. This was mainly because the number of complaints about mobile services and Internet services had recorded a noticeable decrease. Among the complaints in the 1st Quarter of this year, 1003 cases (96.4% of the complaints) were outside CA's scope of jurisdiction as they did not involve any breach of the Telecommunications Ordinance ("TO") or licence conditions ("LC"). The majority of these complaints were concerned with disputes on bills / contract terms / service termination, dissatisfaction with customer service and dissatisfaction with the quality of mobile / fixed network / broadband services. The total number of these three types of complaints accounted for 86.8% (871 cases) of the cases which did not involve any breach of the TO or LC. CA referred these cases to the operators, which would contact the complainants directly to resolve the issues.

Cases Involving Possible Breach of the TO or LC

- The remaining 37 cases (3.6%) of the consumer complaints in the 1st Quarter of 2013 were related to possible breach of the TO or LC, i.e., they might be within CA's scope of jurisdiction. Among the 37 complaint cases, 19 cases (51.4% of the possible breaches) were related to allegation against service providers of suspected anti-competitive practice, 8 cases were related to alleged misleading or deceptive sales conduct, with 3 cases concerning mobile services, 3 about Internet services, and 2 involving fixed network services. The remaining cases of possible breach of the TO or LC included 7 cases which involved access by operators to public areas of buildings for the installation of telecommunications / broadcasting equipment and networks, 2 cases which were related to allegation against mobile service providers of the discrepancy between the

concessionary details/charges in the service plans and those stated in the promotional materials, and 1 case which was related to allegation against a mobile service provider of the discrepancy between service pledges and reality. CA would conduct investigation on possible breach of the TO or LC should there be sufficient *prima facie* evidence.

Mobile Services

- In the 1st Quarter of 2013, CA received 519 cases of consumer complaints which were related to mobile services (including cases not involving breach of the TO or LC), accounting for 49.9% of the total number of complaints. The number of complaints and the complaint rate were both substantially lower than those in the 4th Quarter of 2012 (904 cases, 61.5%). Among the complaints received concerning mobile services, the major types of complaints were disputes on bills / contract terms / service termination (269 cases), followed by dissatisfaction with network service quality (113 cases) and dissatisfaction with customer service (76 cases), totalling 458 cases and accounting for 88.2% of the total number of complaints received concerning mobile services. Among the complaints which involved possible breach of the TO or LC in this Quarter, 7 cases in total were about mobile services, including 3 cases which were related to alleged misleading or deceptive sales conduct, 2 cases to allegation against service providers of the discrepancy between the concessionary details/charges in the service plans and those stated in the promotional materials, 1 case to allegation against a service provider of suspected anti-competitive practice, and 1 case to allegation against a service provider of the discrepancy between service pledges and reality.

Fixed Network Services

- In the 1st Quarter of 2013, among all the consumer complaints received by CA (including cases not involving breach of the TO or LC), 173 cases were related to fixed network services, accounting for 16.6% of the total number of complaints. The number of complaint cases and the com-

plaint rate had both slightly increased when compared to those in the 4th Quarter of 2012 (165 cases, 11.2%). The major types of complaints received in the 1st Quarter of 2013 were disputes on bills / contract terms / service termination (80 cases), dissatisfaction with customer service (56 cases), and dissatisfaction with network service quality (11 cases). The total number of these cases was 147, accounting for 85% of the complaints about fixed network services received by CA. There were 10 cases which involved possible breach of the TO or LC, among which 5 were related to access by operators to public areas of buildings for the installation of telecommunications / broadcasting equipment and networks, 3 were about allegation against suspected anti-competitive practice of service providers, and 2 were related to alleged misleading or deceptive sales conduct.

Internet Services

- In the 1st Quarter of 2013, CA received 316 cases of consumer complaints related to Internet services, accounting for 30.4% of the total number of complaints. The complaint rate was slightly higher than that in the 4th Quarter of 2012 (24.2%), while the number of cases saw a small decline compared to that in the 4th Quarter of 2012 (356 cases). In the 1st Quarter of 2013, the three major types of complaints were disputes on bills / contract terms / service termination (124 cases), dissatisfaction with customer service (74 cases) and dissatisfaction with Internet service quality (47 cases). The total number of these cases (245 cases) accounted for 77.5% of the total number of complaints related to Internet services. In the 1st Quarter of 2013, there were totally 18 complaint cases related to Internet services that involved possible breach of the TO or LC. Of these cases, 15 were related to allegation against service providers of suspected anti-competitive practice, the remaining 3 cases were about alleged misleading or deceptive sales conduct.
- The figures in the columns of “Number of Cases Outside the Scope of the Telecommunications Ordinance / Licence Conditions” and “Number

of Cases found to involve breach of the Telecommunications Ordinance / Licence Conditions after Investigation” of the above table do not include complaints under study / investigation.

B. Case Analysis of Breach of the Telecommunications Ordinance / Licence Conditions

- In the 1st Quarter of 2013, no breach of the TO or LC was established.

Statistics on Consumer Complaints Received by CA

Service Type	2010	2011	2012	2013 (1st Quarter)
Mobile	3023	2302	2738	519
Fixed Network	812	801	735	173
Internet	1561	1603	1590	316
External Telecommunications	112	89	87	16
Others	176	99	73	8
Unclassified	27	56	39	8
Total	5711	4950	5262	1040