

**For Discussion
on 8 February 2010**

**Legislative Council Panel on
Information Technology and Broadcasting**

Review of Telephone Directory Enquiry Services

PURPOSE

This paper briefs Members on the review currently being conducted by the Telecommunications Authority (“TA”) on the telephone directory enquiry services (“directory services”).

BACKGROUND

2. Directory services provide telephone users with the means to find the directory information such as the names, addresses and telephone numbers of other subscribers. At present, various types of directory services are available in the market. They include the printed directories (in the form of “White Pages” for all subscribers and “Yellow Pages” containing only the information of business entities), the directory enquiry services which are commonly known as 1081/1083 services (hereinafter referred to as “DQ services”), and Internet directory services (i.e. Internet White Pages and Internet Yellow Pages). Among these directory services, it is at present a mandatory requirement for fixed network operators (“FNOs”)¹ to provide White Pages and DQ services to their subscribers free of charge under the relevant licence conditions.

3. The requirement for directory services can be traced back to the monopoly era before 1995, the year when the local fixed telephone services were liberalised. With the advent of new technologies and the rapid development of the telecommunications industry, certain services

¹ FNOs refer to the licensees of fixed telecommunications network service licences, fixed carrier licences or unified carrier licences that are authorised to provide fixed services.

deemed to be essential in the old days may have lost their importance in the present day context. Over the years, the usage pattern of directory services has undergone fundamental changes. For example, instead of making calls from public payphone booths or flipping through the White Pages, the increasing popularity of the mobile phone services allows users to gain access to the DQ service while on the move. The advent of the Internet further enables users to search the detailed “contact us” information of a company or organisation through the search engines or visiting its website directly. These changes have resulted in a falling demand for White Pages but sustained use of the DQ services. In view of these developments, the TA is conducting a review on directory services to assess the latest position and the possible way forward.

CONSUMER SURVEY

4. To gauge the public demand of and perception about the directory services, the Office of the Telecommunications Authority (“OFTA”) commissioned the Social Sciences Research Centre of the University of Hong Kong in early 2009 to conduct a market survey. The survey looked into matters such as the frequency of using the directory services, and whether users considered a particular directory service important. A summary of the major findings of the survey is given in **Annex 1**.

PUBLIC CONSULTATION

5. Based on the findings of the survey, the TA conducted a public consultation exercise from 6 November 2009 to 19 January 2010 to seek the views of the industry and the public on whether, and if so how, the regulatory regime governing the provision of directory services should be updated to keep pace with the changing situation. The relevant consultation paper is at **Annex 2**. The gist of the consultation is set out in the ensuing paragraphs.

Deregulating White Pages

6. Under their respective licences, FNOs are obliged to publish White Pages for their subscribers. However, the actual copies of White Pages collected by subscribers have been declining over the years. Moreover, members of the public are becoming increasingly conscious of their own privacy, and the number of telephone subscribers who have opted not to include their directory information in the directory database has increased over the years². The survey results also indicate that the respondents' frequency of using White Pages and their perception of the importance of White Pages are extremely low.

7. As the provision of free White Pages comes at a cost, the withdrawal of the mandatory provision of White Pages should enable FNOs to utilise better their resources in other areas for greater benefit to customers. It will also result in less paper consumption. In the consultation, the TA held the preliminary view that there was no need to maintain the mandatory requirement for FNOs to provide White Pages.

Continual Provision of DQ Services

8. Among the various directory services, the DQ services were found to be the most popular channel for the public to retrieve the necessary information. According to OFTA's survey finding, three out of four respondents used such services at least once in the past year. The survey results reflect that there is a substantial public demand for the DQ services.

9. In addition, the DQ services are also important to visitors and tourists. These users may have a genuine need to use the DQ services to find their contacts conveniently during their stay in Hong Kong. Deregulation of the DQ services may cause inconvenience to these users. In the consultation, the TA was of the preliminary view that the FNOs should continue to provide the DQ services under the current arrangement.

² White Pages published by FNOs typically contain the names, addresses (down to the street level) and telephone numbers of the customers of all fixed networks (except those who choose to opt out of the directory database). Subscribers can choose to opt out of the directory database as they first install the telephone line or at any time during their subscription of the service.

Cost Recovery for DQ Services

10. According to the statistics provided by the industry, telephone users on average made over 2 million DQ calls a month. The statistics, together with the survey findings, indicate that the vast majority of them make only a few DQ calls a month. Only 0.6% of the users across the whole subscribers base make more than 10 DQ calls a month. The statistics further reveal that in the extreme case, certain customers make more than 100 DQ calls a month. These indicate that a few customers are generating a disproportionately large number of DQ calls.

11. Provision of the DQ services imposes a considerable amount of operating expenses on the FNOs. At present, as a requirement in the licence, subscribers do not need to pay a stand-alone service fee for gaining access to the DQ service of their concerned network. The imbalanced use of the DQ service may create a situation whereby the relatively light users of the service, who represent the overwhelming majority, subsidise a very small number of heavy users. It seems reasonable that arrangements should be made to improve the use of the DQ services.

12. Charging of DQ calls has been implemented for a long time in many advanced economies, including Australia, Ireland, Singapore, the UK and the USA. However, the charging schemes in these countries are generally based on a per-call basis and the charge level may be as high as a few Hong Kong dollars per call. The TA considers that replacing the currently free-of-charge scheme by a per-call charging scheme may be too drastic and will not be acceptable to the community. If a cost recovery scheme is to be considered for the DQ services, a more palatable approach has to be found.

13. One possible solution is to cap the number of free DQ calls bundled in the monthly subscription of telephone service. Users would be subject to a charge for the calls that they may make in excess of a threshold during the month. Another arrangement is to require heavy users to listen to an advertisement before the enquiry is answered for calls above the threshold.

14. The survey asked the respondents about their views on these cost recovery schemes. The result shows that around 60% of the respondents did not agree to these schemes whereas nearly 40% of the respondents found them acceptable. The TA remained open-minded on recovering the costs of the DQ services from heavy users and would solicit the public views on the issue.

Protecting Disadvantaged Groups

15. Certain disadvantaged groups, especially the visually impaired, may have to rely solely on the DQ services to search for the directory information they need. For the welfare of these groups, such users should be exempted from any DQ service fee if this would be implemented after the review.

Provision of Yellow Pages and Internet Directory Services

16. It is currently not a mandatory requirement for FNOs to provide Yellow Pages or Internet directory services. In view of the low public demand for these services, the TA did not see any justification to extend the regulation to cover these services. The TA also noted that such services are currently provided out of commercial initiative. As such, in the consultation, the TA held the preliminary view that there was no justification for regulation and it would be in the best interest of the consumers to continue to allow the market to provide these directory services on a commercial basis.

Directory Services for Mobile Phone Numbers

17. Under the current licensing regime, mobile network operators (“MNOs”)³ are required to provide directory services only if they are directed by the TA. Although the TA has yet to issue any direction, all MNOs have out of their own business decisions established commercial arrangements with FNOs or set up their own systems to provide DQ services to their customers. With such an arrangement, mobile phone

³ MNOs refer to the licensees of mobile service licence or unified carrier licence who are authorised to provide mobile services.

subscribers are able to make a 1081/1083 call via their mobile phones to enquire the directory information of any fixed line telephone service subscriber. However, such arrangement is not extended to cover other types of directory services (i.e. printed directories or Internet directory services), or includes mobile phone numbers in their DQ services.

18. Some FNOs previously contended that it was unfair and discriminatory for them to provide and maintain the directory services while the MNOs were not equally imposed with such an obligation. In view of the high penetration of the mobile services, the TA has considered whether there would be a need to extend the requirement of directory services to cover mobile phone numbers.

19. The TA has looked into the practices of some advanced economies such as Australia, Ireland, the UK and USA. However, the experiences in these countries are not encouraging. For example, the UK's directory services have covered mobile phone numbers, but according to the internal research of the Office of Communications, the telecommunications regulator of the UK, most (94%) of the UK adults would not like their mobile numbers to be included in the phonebook and DQ service. In practice, the mobile operators in the UK have experienced extremely low levels of demand for mobile directory listings. In the USA, a consortium of wireless network operators has advocated the setting up of a mobile phone directory service. Nonetheless, consumers were reported to be quite concerned with such an initiative as it would attract unwanted telemarketing calls.

20. Public opinion in Hong Kong on the issue was also collected in the survey conducted by OFTA. The result shows that the public need for enquiring mobile phone numbers is very low. Even for the around 16% of respondents who opined that there was a need to include mobile phone numbers in the directory services, only one-third of them agreed to the inclusion of their own mobile phone numbers in the directory database. It indicates that mobile phone numbers are considered as a vital piece of personal information.

SUMMARY OF RECEIVED VIEWS

21. In response to the public consultation exercise which ended on 19 January 2010, a total of 11 submissions were received (the names of the respondents are listed in **Annex 3**). Respondents include the FNOs, MNOs, the Hong Kong Telecommunications Users Group and members of the public. The consultation paper and the submissions have been published on the website of the OFTA at www.ofta.gov.hk for public consumption.

22. The respondents in general agreed to the deregulation of White Pages as well as the continual provision of Yellow Pages and Internet directory services based on the commercial initiatives of FNOs. They also agreed that it would not be necessary to extend the current directory services to cover mobile numbers.

23. Among the respondents, members of the public and MNOs would like to maintain the status quo of requiring FNOs to provide a basic DQ service free of charge to their subscribers. The FNOs responding to the consultation held a contrary view.

24. As regards the cost recovery of the DQ services from heavy users, the views of the submissions were diverse. Some supporting respondents suggested different caps (ranging from 5 to 30) of free DQ calls bundled in the monthly subscription of telephone service while a FNO proposed to charge not more than HK\$1 for each DQ call. Some respondents opined that operators should be encouraged to offer more optional chargeable services in addition to the free basic DQ services, such as call connection to the searched number for the enquirer.

25. The opposing respondents, however, argued that the approach would create confusion to consumers arising from the complication of the charging mechanism and subscription packages. It would also increase the administrative cost of network operators in metering and charging DQ calls. Furthermore, call charging might not be effective for the FNOs to recover the cost unless it was set at a high level. For the more efficient use of resources, a FNO advocated the establishment of a single call centre for all FNOs to provide the DQ services. Most of the respondents,

apart from the FNOs, did not welcome listening to advertisements before their enquiries were answered.

WAY FORWARD

26. The TA will consider carefully the views collected during the public consultation exercise, as well as those to be expressed by Members of this Panel before deciding the way forward.

**Commerce and Economic Development Bureau
(Communications and Technology Branch)
Office of the Telecommunications Authority
1 February 2010**

**Summary of the Major Findings
of the Survey on Directory Services**

- (a) The respondents' frequency of using White Pages was low. About 94% of respondents had never used it or had not used it in the past year. The majority of respondents considered White Pages not important. For those respondents who had ever used the printed White Pages, only 8% of the respondents considered White Pages very important/quite important. Most respondents (around 70%) held the opposite view.
- (b) The frequency of using Yellow Pages was low. Around 83% of respondents reported that they had never used or had not used Yellow Pages in the past year. For those respondents who had ever used the printed Yellow Pages, the majority considered Yellow Pages unimportant and only 11% of the respondents held the opposite view.
- (c) DQ services were found to be the most popular means to obtain directory information among various directory services covered in the survey. Over 76% of respondents had used the service at least once a year in the past year. A high proportion (over 62%) of respondents indicated that the service was very important/quite important whereas only around 11% of them gave the opposite view. On the other hand, most of the respondents reported that they usually did not make enquiry about residential telephone numbers.
- (d) Over half of the respondents (58%) did not agree to the charging in respect of additional DQ calls. The proportion of supporters was about 40% and over half of them (54%) considered that the cap should be 1 – 10 free DQ calls per month, including 17% opting for 1 – 5 calls and 37% opting for 6 – 10 calls per month.
- (e) About 63% of respondents did not accept recovering the cost of DQ calls by means of listening to advertisements whereas around 35% of the respondents agreed to the arrangement. Of those respondents who agreed to listen to advertisements, about half of them (accounting for around 18% of the total respondents) accepted listening to an advertisement of up to 10 seconds.

- (f) The use of online directory services was low. Over 70% of respondents had never used Internet Yellow Pages and around 84% of respondents had never used Internet White Pages. Most respondents did not consider the online services important at all.

- (g) At present, consumers can only enquire the directory information of fixed telephone lines. Mobile phone numbers are not included in the directory database. On this issue, the majority of respondents (about 82%) considered that there was no such need to include mobile phone numbers in the directory database. Only around 16% of respondents opined that there was such a need. When these respondents were further asked as to whether they would agree to include their own mobile phone numbers in the directory database, only 35% of them (or less than 6% of all the respondents) agreed to the arrangement.

**DIRECTORY SERVICES
CONSULTATION PAPER**

6 November 2009

INTRODUCTION

Directory services provide telephone users with a convenient means to find the directory information, including name, telephone number and address, of other telephone subscribers either from the printed directory, through direct telephone call or by online Internet search. Directory services have been available since the monopoly era when the Hong Kong Telephone Company Limited was granted the sole franchise to supply and operate local telephone services in Hong Kong. As the monopoly telephone service provider, Hong Kong Telephone Company Limited was obliged to provide the printed directory (in the form of White Pages) and directory enquiry (“DQ”) service (also known as 1081/1083 service)¹ to the public free of charge. In July 1995, the local fixed telephone services were liberalized and under the terms and conditions of their licences, both the incumbent and the three new entrants² continue to be subject to the mandatory requirement for provision of these two directory services³.

2. With the advent of new technologies and the rapid development of the telecommunications industry, certain services deemed to be essential in the old days may have lost their importance in the present day context. Directory services are no exception. Over the years, the practice of using directory services has undergone fundamental changes. For example, the increasing popularity of the mobile phone service allows users to access directory information by calling the DQ service at any place, rather than making the call at a public payphone booth or

¹ This is referred to as “telephonic directory service” in the relevant licences.

² In this consultation paper, unless otherwise specified, “fixed network operators” refer to the holders of fixed telecommunications network service licence, fixed carrier licence and unified carrier licence who are authorized to provide fixed services.

³ The mandatory requirement for the provision of the directory services is set out in General Condition 25 of the fixed telecommunications network services licence, Special Condition (“SC”) 10 or SC 12 of the fixed carrier licence and SC 11 of the unified carrier licence. For Class 1 Services-based Operators licence, SC 20 also sets out the requirement for the provision of directory services.

having to flip through the White Pages. The advent of the Internet enables users to search detailed contact information of a commercial entity through the search engines or visit direct the website of that entity, instead of having to rely on the directory services operated by the telecommunications service providers.

3. In December 2007, the Telecommunications Authority (the “TA”) issued a consultation paper entitled “Licensing Framework for Unified Carrier Licence”⁴ (the “UCL Consultation Paper”). In that consultation paper, the TA recognized that the provision of directory services was a complex subject and that a thorough review on various pertinent issues would be needed before any change to the existing regime was to be made. Taking into account of the views of the respondents, the TA concluded in his statement entitled “Licensing Framework for Unified Carrier Licence”⁵ that the provision of directory services is an important element of the public telephone service. A more thorough review by way of public consultation to gather the views of the industry, the business community and consumers is needed before any fundamental change to the existing regime is to be made.

4. In this consultation paper, the TA carries out the said review and he would like to seek the views of the industry and interested parties on whether, and if so how, the regulation on directory services should be updated so that we may keep pace with our fast developing economy.

5. For avoidance of doubt, the preliminary views and the proposed approaches expressed in this paper in relation to various issues on the subject matter are solely for the purpose of consultation and do not represent the decision of the TA on the issues. These issues remain to be the subject of consideration by the TA. Nothing in this paper shall be construed as indicating that the TA has formed any final opinion or decision on these issues.

⁴ The consultation paper can be downloaded at www.ofta.gov.hk/en/report-paper-guide/paper/consultation/20071221.pdf.

⁵ The TA Statement can be downloaded at www.ofta.gov.hk/en/tas/others/ta20080509.pdf.

EXISTING AVAILABLE DIRECTORY SERVICES

White Pages

6. White Pages is a form of the printed telephone directory in which the names, telephone numbers and addresses of the subscribers of residential or business fixed telephone service are listed in alphabetical order (for English) and stroke-count (for Chinese). The residential White Pages and business White Pages are distributed to subscribers as a complete set of the White Pages.

7. The fixed carrier licence sets out the following requirement in relation to the provision of printed directory information:

“10.3(a) [The licensee shall] publish or arrange at least biennially for the publication of directory information in a printed or other form approved by the Authority ... (“the printed directory”).”

8. To fulfil this licence condition, fixed network operators provide an updated paper-based White Pages to their subscribers every two years. Alternatively, if a fixed network operator does not publish the White Pages itself, it has to arrange commercially with another fixed network operator for the provision of sufficient copies for distribution to its own subscribers in order to fulfil this licence obligation.

DQ Service

9. The DQ service is another mandatory directory service stipulated in the licences for fixed network operators as follows:

“10.3(b) [The licensee shall] establish, maintain and operate, or arrange for the establishment, maintenance or operation of a telecommunications service whereby customers may, upon request, be provided with directory information... (“the telephonic directory service”).”

10. A fixed line telephone service subscriber may dial 1081/1083 to enquire telephone number of a known person or business entity. When a

fixed line telephone subscriber makes a 1081/1083 call, the call will be directed to the DQ service centre of the fixed network operator to which he subscribes. The operator or the automated system at the DQ service centre will then retrieve the required information from the directory database.

11. To ensure the integrity of the database information, the relevant licence conditions require fixed network operators to exchange raw directory data with one another so that all of them may have access to a complete set of directory data for all fixed line telephone service subscribers (including those of its competitors), regularly update the information with other fixed network operators and maintain a unified directory database which contains the directory information of all fixed line telephone service subscribers. Under the current regulatory regime, fixed network operators are allowed to impose a charge on other fixed network operators so that they may be fairly compensated for providing the raw directory information.

Ex-directory Service

12. In general, subscribers' telephone directory information is registered in the directory database automatically when they subscribe to a fixed telephone service. However, subscribers may exercise the opt-out right for not putting their directory information in the directory database, either at the time of subscribing to the service or at any time during the service. This right is commonly known as "ex-directory service". If a telephone subscriber exercises the opt-out right, his directory information will not be found in the White Pages or through DQ service.

Mobile Network Operators' Directory Services

13. For mobile network operators⁶, there is a licence condition in their licences which require them to provide directory services if they are so directed by the TA. Although the TA has yet to issue any direction in

⁶ In this consultation paper, unless otherwise specified, "mobile network operators" refer to the licensees of mobile service licence and unified carrier licence who are authorized to provide mobile services.

this respect to any mobile network operator, all mobile network operators have out of their own business decisions established commercial arrangements with fixed network operators or set up their own systems to provide the DQ service to their customers. With such an arrangement, mobile phone subscribers are able to make a 1081/1083 call via their mobile phones to enquire the directory information of any fixed line telephone service subscriber (but not the mobile subscriber of any mobile network).

Other Directory Services

14. Apart from White Pages and DQ service, other directory services, including Yellow Pages⁷, Internet Yellow Pages and PCCW's 1081/1803 Directory Inquiries online service⁸ are also available in the market. The provision of these services is not mandated in the licence conditions but is provided at the industry's own initiative.

15. Yellow Pages is a printed directory which contains only the information of business entities. Publication of Yellow Pages is purely a commercial initiative and not a regulated service. All information contained in Yellow Pages is collected by the publisher, i.e. PCCW Media Limited. The company is a wholly-own subsidiary of PCCW Limited and is the sole Yellow Pages publisher in Hong Kong. Any business entity who wants to place its company information in the Yellow Pages has to make commercial arrangement with PCCW Media Limited.

16. With the advent of Internet, it is handy and convenient for the public to access the required information online. Currently, PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited provides the online White Pages, i.e. 1081/1083 Directory Inquiries online service, at its website⁹ whereas PCCW Media Limited provides the Yellow Pages online through its Internet Yellow Pages portal¹⁰.

⁷ Yellow Pages contains business fixed line telephone numbers which are categorized by industry.

⁸ Internet Yellow Pages and the PCCW's 1081/1083 Directory Inquiries service are the online versions of Yellow Pages and White Pages respectively.

⁹ The website can be accessed at www.pccw.com/eng/CustomerSupport/Directories/1081DirectoryInquiries.html.

¹⁰ The website can be accessed at www.yip.com.hk.

17. For the online Internet Yellow Pages enquiry, after users input the name of the company to be searched, the full company directory information including the company name, telephone number, and address will be provided. As for the online White Pages, users only need to input part of or all information, including surname, given name, and location information, of the individual subscriber, and the top 20 closest matches will then be displayed. Similar parameters (i.e. the company name and its location information) are required for the search of business directory information.

THE SURVEY ON DIRECTORY SERVICES

18. Recognizing that directory services are important telephone services and that any change to the services may have significant impact on the community, the TA considers that there is a need to conduct a consumer survey in order to gauge the public's demand of and perception towards the services. In early 2009, the Office of the Telecommunications Authority ("OFTA") commissioned the Social Sciences Research Centre of the University of Hong Kong as an independent third party to conduct a market survey so that it may understand more about the consumers' perception, usage pattern, and reaction to possible charging arrangement in relation to the directory services. The survey was duly conducted from 13 January 2009 to 9 February 2009. A total of 1,036 telephone interviews were successfully conducted. To ensure the balance of the survey questions, the questionnaire was prepared in consultation with the relevant fixed network operators.

19. The full survey report can be downloaded at www.ofta.gov.hk/en/report-paper-guide/report/rp20091106.pdf. The highlights of the survey findings are given below:

- The respondents' frequency of using White Pages was low. 94% of respondents had never used it or had not used it in the past year. The majority of respondents considered White Pages not important. For those respondents who had ever used the

printed White Pages, only 8% of respondents viewed White Pages as very important/quite important. Most respondents (70.2%) held the opposite view. Around 80% of the respondents agreed that White Pages should be charged as a separate item. 17% of the respondents opposed the arrangement. When those 80% respondents were further asked the maximum amount they were willing to pay, 31.5% of them did not want to pay any.

- The frequency of using Yellow Pages was also low. Around 83% of respondents reported that they had never used or had not used Yellow Pages in the past year. Only 16.6% of the respondents had used Yellow Pages at least once a year. For those respondents who had ever used the printed Yellow Pages, the majority of the respondents (61.7%) considered Yellow Pages not important/not important at all. Only 11.1% of them considered Yellow Pages very important/quite important.
- DQ service is the most popular means to obtain directory information. 76.2% of respondents had used the service at least once a year in the past year. A high proportion (62.2%) of the respondents who indicated that the service was very important/quite important whereas only 11.2% of them gave the opposite views. Of those respondents who used the DQ service at least once for every 6 months in the past year, most of them mainly used the DQ service for private purpose whereas only 3.6% of them used the service solely for business purpose. Most of the said respondents (85.1%) reported that they usually did not enquire any residential telephone numbers.
- For the respondents who had ever made DQ calls, majority of them were satisfied with the DQ services they accessed through residential fixed line, business fixed line and mobile networks. Less than 6% of those respondents were not satisfied with the

service accessed through the said means.

- Most respondents did not agree with the imposition of charge on DQ calls irrespective of the arrangements, e.g. charging on additional DQ calls or by means of listening to an advertisement.
- Over half of the respondents (57.7%) did not agree the charge on additional DQ calls. The proportion of proponents was 39.9% and over half of them (54.3%) considered that the cap should be 1 - 10 free DQ calls per month, including 16.8% opted for 1 – 5 calls and 37.5% opted for 6 – 10 calls per month.
- Slightly over 60% of all respondents (63.1%) did not accept the charging on DQ calls by means of listening to advertisement whereas 34.9% of the respondents agreed to the arrangement. Of those respondents who agreed to the charging by means of listening to advertisement, about half of them (accounting for 17.9% of the total respondents) accepted listening to advertisement with a maximum length of 10 seconds.
- The use of online directory services was low. Over 70% of respondents had never used the Internet Yellow Pages. Of those respondents who had ever used the Yellow Pages Internet portal, 40.9% of them considered the service important and 62.1% of them opined that the service was sufficient to replace the printed Yellow Pages. However, the figures only accounted for 10.8% and 16.4% of the total respondents.
- 84% of the respondents had never used the 1081/1083 Directory Inquiries online service. 35.2% of the respondents who had ever used the service considered it important. In other words, if all the successful interviewed respondents were taken into account, only 4.8% of the respondents considered that the service was important, and only 7.1% of them opined that the service

might be accepted as a substitute for the printed Whites Pages.

- At present, consumers can only enquire the directory information of fixed line telephone numbers. Mobile phone numbers are not included in the directory database. On this issue, majority of respondents (82%) considered that there was no need to include mobile phone numbers in the directory database. Only around 15.6% of respondents opined there was such a need. When these respondents who opined there was such a need were further asked whether they would agree to include their own mobile phone numbers to the DQ database, only 35.4% of them (or 5.5% of all the respondents) agreed to the arrangement.

REVIEW OF DIRECTORY SERVICES

Provision of Printed Directory

20. White Pages used to be the major source for subscribers to obtain the directory information. However, according to the information provided by fixed network operators, the number of White Pages distributed to subscribers has been decreasing steadily over the years. Only an insignificant number of subscribers are still interested in picking up a copy of White Pages. In addition, the number of entries in the directory database is not high as citizens become more conscious of the need to guard their privacy and a considerable number of subscribers have opted not to include their telephone numbers in the directory database.

21. The trend of decreasing demand for White Pages is reflected in the survey result which shows that the respondents' frequency of using White Pages and their perception of the importance of White Pages are very low. 94% of respondents have never used White Pages or have not used White Pages in the past year. Over 72% of respondents who have ever used White Pages considered it not important/not important at all.

The proportion of the said respondents who consider White Pages very important/quite important is only 8%.

22. Although White Pages is free of charge to the subscribers, the publication of it does incur cost to fixed network operators. This expenditure is included in the operational costs of the fixed network operators. For PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited, who is currently the sole universal service provider, the cost incurred for the provision of basic telephone services (which includes directory services) to uneconomic customers¹¹ is used for calculating the net loss of the provision and the loss will be compensated under the universal service arrangement. There is no such arrangement for other fixed network operators as they are not mandated to provide basic services to the uneconomic customers. The deregulation of the printed directory should enable the fixed network operators to redeploy their resources to areas with greater consumer demand so as to better serve their customers in those areas, resulting in enhanced benefits to the community. In addition, the deregulation of printed directory would result in less paper consumption and is conducive to a better environment.

23. In consideration of the low public demand for White Pages and the benefit of more efficient allocation of resources, the TA is of the preliminary view that the mandatory requirement for the fixed network operators to provide White Pages should be deregulated.

Question (1): Do you agree that the TA should deregulate the provision of the White Pages?

Provision of DQ Service

24. Among the various directory services, the DQ service is the most popular channel for the public to enquire telephone numbers. According to the survey finding, 76% of respondents have used the service at least

¹¹ "Uneconomic customers" refer to those telephone service subscribers who would otherwise not be served by the fixed network operators on a pure commercial basis as it is not economically viable to do so.

once a year in the past year. Majority of the respondents are also satisfied with the DQ service irrespective of whether they make the call through residential fixed line, business fixed line or mobile phones. For those respondents who used the DQ service at least once every six months in the past year, most of them make enquiries about non-residential telephone numbers and solely for private purpose. These findings reflect that there is substantial public demand for the DQ service.

25. In addition, the importance of the DQ service to visitors and tourists should be taken into account. Tourism is an important pillar of the Hong Kong economy. Millions of tourists and visitors visit Hong Kong every year, either for pleasure or on business. These users have a genuine need for the DQ service so that they may find their contacts expeditiously while they are in Hong Kong. Deregulation of DQ service may cause inconvenience to these users.

26. Based on the considerations above, the TA is of the preliminary view that the DQ service should continue to be mandated and regulated. Subject to the further discussion in paragraphs 28 – 34 below, the TA is of the preliminary view that fixed network operators should continue to provide a basic DQ service free of charge to their subscribers.

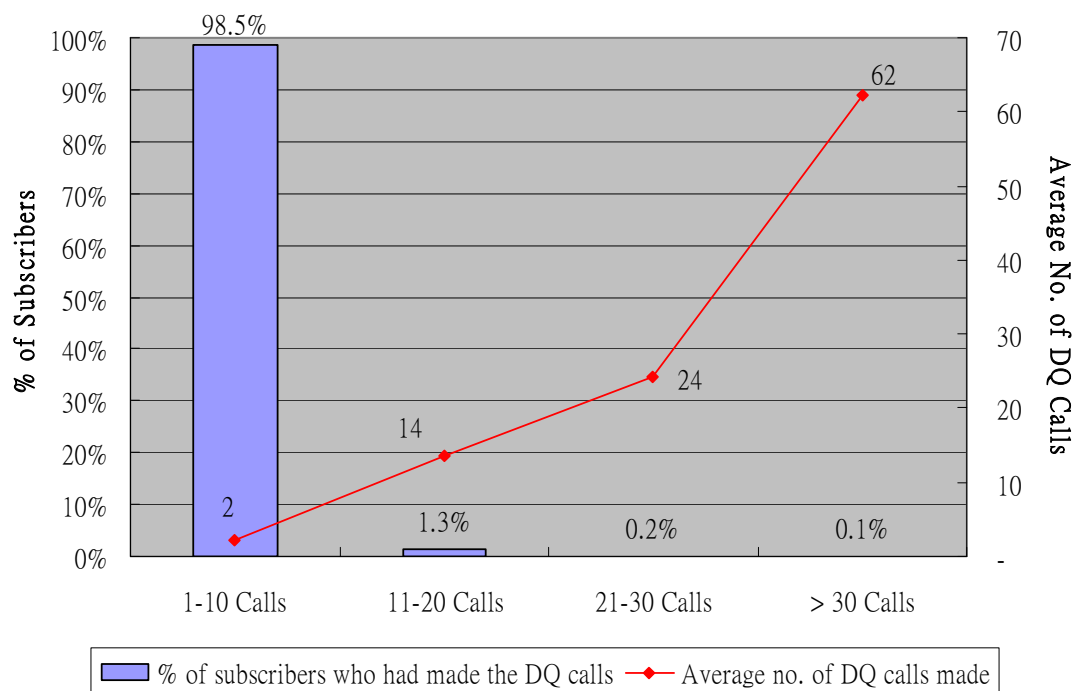
27. To support the operation of the DQ service, the fixed network operators should continue to maintain the unified directory database. As the current directory database system has been in operation since July 1995 and no major operational deficiency has been encountered so far, the current form of unified directory database should be preserved.

Question (2): Subject to Questions (3) – (5) below, do you agree that the TA should maintain the status quo requiring fixed network operators to provide a basic DQ service free of charge to their subscribers?

Levying Charges on DQ Service

28. According to the information provided by the industry, telephone service subscribers made over a total of 2 million DQ calls in a month. The diagram below is prepared based on the statistics provided by one major fixed network operator. It depicts the typical distribution of the

DQ calls made by subscribers in a month.



29. It is observed that the majority of subscribers (98.5%) who had made use of the DQ service made 1 – 10 DQ calls in a month. This group of subscribers made 2.1 DQ calls on average. However, the rest 1.6% (i.e. 1.3%+0.2%+0.1%) of subscribers made 14 DQ calls on average in a month. Some of them (0.1%) even made an average of 62 DQ calls in a month.

30. When calibrating the figure (1.6%) in the preceding paragraph against the survey finding that 38.3% of respondents have used the service at least once a month, it can be estimated that 0.6% (i.e. 1.6% times 38.3%) of the subscribers across the whole customer base are making more than 10 DQ calls in a month. In addition, the statistics provided by the major fixed network operator further reveals that, in the extreme case, certain subscribers, many of which are business entities, make more than 100 DQ calls in a month. These indicate that a few subscribers are generating a disproportionately large number of DQ calls.

31. At present, fixed network operators are required under their respective licences to provide directory services free of charge to their customers¹². Although customers do not need to pay any service fee for

¹² It should be noted that a licence condition of the UCL allows licensees to impose charge for the

accessing the DQ service, such provision of the services does impose a significant amount of operating expenditure on the fixed network operators. The current universal service arrangement compensates the sole universal service provider, PCCW-HKT Telephone Limited and Hong Kong Telecommunications (HKT) Limited, the net loss for the provision of basic telephone services (which include the directory services) to uneconomic customers. However, other fixed network operators who are not the universal service provider but are mandated to provide the DQ service do not receive similar compensation. The imbalanced use of the DQ service may create an unfair situation whereby the majority of the subscribers, who are relatively light user of the service, are subsidizing a small number of heavy users. Consideration can be given to coming up with some form of arrangements to ensure fair use of the free DQ service. The implementation of such arrangements would allow fixed network operators to re-allocate resources for the provision of other services in greater demand in this highly competitive market for the benefit of the general public. Charging of DQ calls has been implemented for a long time in many overseas economies, including Australia, Ireland, Singapore, the UK and the USA. The charging scheme in these countries is on a per call basis and the charge level may be as high as a few Hong Kong dollars per call. The TA considers that the change from a totally free of charge scheme to a per-call charging scheme may be too drastic and probably not acceptable to the majority of the public. If a charging scheme is ever to be considered for the DQ service, a less drastic approach is to be preferred.

32. One possible solution is to cap the number of free DQ calls bundled in the monthly subscription of telephone service. A direct charge would be imposed for additional DQ calls which exceed the cap so that only the relatively heavy users would be affected. Another arrangement is to require these relatively heavy users to pay for the DQ calls by listening to an advertisement before the enquiry is answered.

33. The survey asked the respondents about their views of these direct and indirect service charges. The result shows that over half of the respondents did not agree with the imposition of charge through either arrangement. Although 57.7% of the respondents were opposed to

provision of the 1081/1083 service if it is approved by the TA.

levying a charge on additional DQ calls and 63.1% of the respondents opposed to charging by means of listening to advertisement, 40% and 35% of the respondents agreed to the arrangements of levying charge and the charging by means of listening to advertisement respectively.

34. Among those respondents who agreed to the imposition of charge for any additional DQ calls above a cap, most of them would accept that a cap of six to ten free DQ calls per month. As for those respondents who agreed with the charging by means of listening to advertisement, around 54% of them opined that advertisement with a maximum length of 10 seconds would be acceptable.

Question (3): Do you agree that fixed network operators may impose charge for additional DQ calls if the DQ service is bundled with a certain number of free DQ calls? How many free DQ calls per month should be provided if you agree to this arrangement?

Question (4): Do you agree that advertisement may be allowed in the DQ service? What should be the maximum length of the advertisement allowable if you agree to this arrangement?

Question (5): Do you agree that fixed network operators may impose charge on the DQ service through other means, such as on the basis of different response times or a different cap for different subscription packages?

Protecting the Interest of Disadvantaged Groups

35. The DQ service is used by all walks of life, including certain disadvantaged groups (e.g. the visually impaired group). Members of the disadvantaged groups may have no choice but rely on the DQ service to search for directory information. The TA considers that the welfare of these disadvantaged groups should not be ignored if the imposition of charge on DQ service is allowed. It is our social responsibility to continue taking care of this particular group of citizens and they should not be unduly affected if the imposition of charge is allowed.

Question (6): Do you agree that certain disadvantaged groups which have to rely on the DQ service to search for directory information should be exempted from paying the service fee if the DQ service is chargeable?

Directory Services of Mobile Phone Numbers

36. As explained in paragraph 13, all mobile network operators have established commercial arrangement with fixed network operators to provide the DQ service to their customers. The arrangement does not however extend to include the printed directory or include the mobile phone numbers in the directory database.

37. In the light of the high penetration of mobile services and the growing trend that mobile phone service is substituting fixed telephone service (the so-called fixed mobile substitution), the current directory database is incomplete as mobile phone numbers are not included. The consumers are therefore not able to enjoy the full benefit of the directory service. Some fixed network operators have contended that the asymmetric licence requirement for fixed network operators and mobile network operators is unfair and discriminatory in the sense that fixed network operators have to provide the directory services at a cost while the mobile network operators have no such obligation. According to these fixed network operators, this licence requirement has impaired their positions in the current highly competitive market.

38. To gauge the public's need on the directory services for mobile phone numbers, the survey asked the respondents whether there would be a need for the directory services to cover mobile phone numbers. In this aspect, the survey result shows that the public's need for enquiring mobile phone numbers is rather low. Only 15.6% of respondents opined that there was a need to include mobile phone numbers into the directory services. When this group of respondents were further asked whether they would agree to include their own mobile phone numbers to the directory database, only 35.4% of them (accounting for 5.5% of the total number of respondents) responded positively with the arrangement. The results are in line with the other findings in the survey that the most frequent use of directory services is to search business numbers, which are fixed line telephone numbers in general. However, we should not

rule out the possibility that if the trend of fixed-mobile substitution continues, more and more companies may switch to mobile service and the aspiration of the public may change.

39. In some developed economies such as Australia, Ireland, the UK and the USA, mobile phone numbers are included in the directory services. However, the experience in these economies has not been encouraging. For example, the UK's directory services have covered mobile phone numbers but the arrangement is not very popular. According to the internal research of the Office of Communications, most (94%) of the UK adults would not like their mobile number to be included in the phonebook and DQ services. The UK mobile network operators experience extremely low levels of demand for mobile directory listings. In the USA, some wireless network operators have advocated the setting up of a mobile phone directory service similar to the existing 411 directory assistance service for fixed lines. However, consumers are reported to get quite concerned with such an initiative as they are worried that this would generate unwanted telemarketing calls.

40. Certain practical issues have to be addressed if mobile phone numbers are to be included in the directory services. For example, at present most companies holding a large quantity of telephone numbers may only list a few telephone numbers in the directory database for external contact purposes. If mobile phone numbers are included in the directory services, the directory database may have to be expanded substantially so that it may have enough capacity to store the directory information of all the mobile phone numbers.

41. With the move towards fixed mobile convergence and the voluntary implementation of fixed mobile number portability (FMNP)¹³, the boundary of fixed and mobile services may no longer be clearly distinguished. If both fixed line and mobile phone numbers are put into the directory database, we may need to devise a method to distinguish whether a telephone number is a fixed line telephone number or a mobile

¹³ The TA promulgated in the statement entitled "Fixed Mobile Number Portability" on 10 July 2009 that operators are allowed to implement the FMNP on a voluntary basis. The statement can be downloaded at www.ofta.gov.hk/en/tas/numbering/tas20090710.pdf.

phone number.

42. To sum up, the survey result indicates that there is insignificant local demand for the inclusion of mobile phone number in the directory services. Overseas experiences also indicate that the actual user demand for including their mobile numbers in the directory is extremely low. There are certain practical issues to be tackled if mobile phone numbers are to be included in the directory database. At this stage, however, the TA is open-minded in respect of the inclusion of mobile phone numbers in the directory services in Hong Kong and he would welcome views from the public and the industry on this issue.

Question (7): Do you agree that it is not necessary to extend the current directory services to cover mobile numbers?

Question (8): Are there any other issues that should be considered for the inclusion of mobile phone numbers into the directory database?

Terms and Conditions for the Provision of Raw Directory Information

43. In the few determinations that the TA has made between fixed network operators¹⁴ on the provision of directory services, the TA has determined the issues in relation to the amount of compensation, the mode of exchange and the transmission format for the provision of raw directory information.

44. However, there is a view¹⁵ that the TA's power to determine the aforementioned issues was too narrow. Appropriate amendments, whether in the Telecommunications Ordinance, licence or otherwise, should be made to allow the TA to determine all the terms and conditions of exchange of directory information. The TA's power for the

¹⁴ Those TA's determinations can be downloaded at www.ofta.gov.hk/en/ta-determine/ta-determine-dulc.html.

¹⁵ The view was given by New World Telecommunications Limited in its response to the TA's consultation entitled "Revision of Regulatory Regimes for Fixed-Mobile Convergence". (www.ofta.gov.hk/en/report-paper-guide/paper/consultation/20051125/06.pdf)

determination on the issues of implementation schedule, migration arrangement and auditing process was questioned in the two disputes between PCCW-HKT Telephone Limited and New World Telecommunications Limited, which were concluded on 13 October 2005 and 25 January 2007¹⁶.

45. The TA stated in the January 2007 Determination that

“While it was not disputed that GC 25 of the FTNS licence or SC 10 of the fixed carrier licence does not explicitly mention the auditing process and implementation schedule as matters to be included in a determination made by the TA, the licence conditions also do not specify what items or categories should be excluded from a determination. The purpose of the licence condition is to enable licensees to self-provide a directory enquiry service that is comprehensive (in the sense that it covers all customers of all fixed carriers or FTNS licensees, except for those customers who request that directory information about them not to be disclosed), and of high integrity and accuracy. The determination procedure under the licence condition is intended to be a dispute resolution mechanism, so that the licensees may comply with the licence condition and commence the exchange of raw directory information without undue delay. In considering the appropriate scope for determination, the TA must consider including all matters that are necessary to accomplish the purpose of the licence condition; otherwise the purpose of including the determination procedure in licence condition would be defeated. Under the licence condition, both parties are obligated to provide updates of the raw directory information to each other with a view to ensuring the comprehensiveness, integrity and accuracy of directory enquiry

¹⁶ The two determinations are “Determination under Special Condition 10 of Fixed Carrier Licence of PCCW-HKT Telephone Limited and General Condition 25 of Fixed Telecommunications Network Services Licence of New World Telecommunications Limited on the Terms and Conditions for the Provision of Raw Directory Information between PCCW-HKT Telephone Limited and New World Telecommunications Limited” and “Supplementary Determination under Special Condition 10 of Fixed Carrier Licence of PCCW-HKT Telephone Limited and General Condition 25 of Fixed Telecommunications Network Services Licence of New World Telecommunications Limited on the Terms and Conditions for the Provision of Raw Directory Information between PCCW-HKT Telephone Limited and New World Telecommunications Limited” (“the January 2007 Determination”).

services, and to commence doing so within a reasonable period. In deciding the scope of determination, the TA may exercise his discretion to include the auditing process, implementation schedule and other things if they are reasonably necessary to ensure the comprehensiveness, integrity, accuracy and timely implementation of the provision of the raw directory information.”

46. Based on the determination above, the TA considers that the current power conferred to him on making determination is sufficient. No further expansion is required unless it can be proved otherwise.

Question (9): Do you consider that there is a need to enhance the power of the TA in the relevant licences in making a determination on matters in relation to directory services?

Provision of Yellow Pages

47. Similar to White Pages, the public’s frequency of using the Yellow Pages is low. The survey reveals that only 17% of respondents stated that they had used the Yellow Pages at least once a year. Over 45% of the respondents had never used the Yellow Pages. Most respondents considered the Yellow Pages not important and 62% of respondents who had ever used the printed Yellow Pages considered it not important/not important at all.

48. In view of the survey figures, there is no sufficient justification for the government to regulate the provision of the Yellow Pages. The TA is also mindful of the principle of “market leads, government facilitates”. He believes that it is in the best interest of the consumers to continue allowing the market to provide Yellow Pages on a commercial basis.

Question (10): Do you agree that the TA should continue to forebear from regulating the Yellow Pages?

Provision of Internet Directory Service

49. The Internet directory services provide a convenient and environmentally friendly means for the public to make directory enquiry. The survey result shows that although Internet is popular nowadays, the use of the Internet directory services is not as high as expected. Only 20% of the respondents had used the Internet Yellow Pages in the past year. Over 70% of the respondents had never used the service. Of those respondents who had ever used the Internet Yellow Pages, 41% of them considered the service very important/quite important. 62% of them opined that the service was sufficient to replace the printed Yellow Pages. However, these figures only account for 10.8% and 16.4% of the total respondents.

50. Similar to the Internet Yellow Pages, the frequency of using PCCW's 1081/1083 Directory Inquiries online service is low as well. Only 11% of respondents had indicated that they had used the PCCW's 1081/1083 Directory Inquiries online service in the past year whereas 84% of respondents had never used it. 35.2% of the respondents who had ever used the service considered it important. In other words, if all the successful interviewed respondents were taken into account, only 4.8% of the respondents considered that the service was important, and only 7.1% of them opined that the service might be accepted as a substitute for the printed Whites Pages.

51. The survey result indicates that the majority of the respondents has never used the online services and does not consider the services to be important. Despite this, 26.3% and 13.8% of respondents have used the Internet Yellow Pages and the PCCW's 1081/1083 Directory Inquiries online service respectively. It is uncertain at this point in time whether the services will become popular with the increasing use of mobile Internet and public Wi-Fi services.

52. As stated in paragraph 48, the TA is of the preliminary view that the Yellow Pages shall not be regulated as this has all along been purely a commercial initiative. Similarly, the TA does not intend to regulate the Internet-based Yellow Pages and he would welcome the public and industry to provide him with their views and comments on this matter.

Question (11): Do you agree that the TA should forebear from regulating the provision of Internet-based directory?

INVITATION FOR COMMENTS

53. The TA would like to seek views from interested parties on the various issues on directory services discussed in this consultation paper. Views and comments should reach OFTA on or before **5 January 2010**.

54. Any person who submits views and comments should note that the TA may publish all or any part of the submissions received and disclose the identity of the source in such manner as the TA sees fit. Any part of the submission which is considered commercially confidential should be clearly marked. The TA would take such markings into account in making his decision as to whether or not to disclose such information. Submission should be addressed to:

Office of the Telecommunications Authority
29/F Wu Chung House
213 Queen's Road East
Wanchai, Hong Kong
(Attention: Regulatory Affairs Manager (R11)4)
Fax: 2591 0316
Email: ds@ofta.gov.hk

An electronic copy of the submission should be provided by e-mail to the address indicated above.

Office of the Telecommunications Authority
6 November 2009

**List of Respondents
to the Consultation Paper on Directory Services**
(listed in alphabetical order)

1. A Retired HK Citizen
2. China Mobile Hong Kong Company Limited
3. CSL Limited
4. Hong Kong Broadband Network Limited
5. Hong Kong Telecommunications Users Group
6. Hutchison Global Communications Limited
7. New World Telecommunications Limited
8. PCCW-HKT Telephone Limited and Hong Kong
Telecommunications (HKT) Limited
9. Peggy Ma
10. SmarTone Mobile Communications Limited and SmarTone
Communications Limited
11. Wharf T&T Limited