CABLE & WIRELESS JAMAICA

Response to Office of Utilities Regulation (OUR) on their Consultative Document:

'Liberalizing Telecommunications
Directory Information Markets
(Products and Services) – July 2001'

SEPTEMBER 4, 2001

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1. Summary of the key issues regarding directory information services and products in Jamaica

- 01. In July 2001, the Office of Utilities Regulation (OUR) published its Consultative Document 'Liberalizing Telecommunications Directory Information Markets'. This document sets out OUR's initial views of the liberalization of directory information markets and has invited comments from users, operators and service providers.
- 02. Before responding in detail to OUR's Consultative Document, Cable and Wireless Jamaica (CWJ) wishes to provide its summary comments on the OUR options and set out its own view of the key principles which need to be considered in any prospective liberalization of the directory services market.
- 03. OUR's purpose for the consultation as stated in the introduction is:

'to propose changes to the markets for directory enquiry services and directory products that will facilitate the provision of more efficient and innovative services to meet consumer's expectations.'

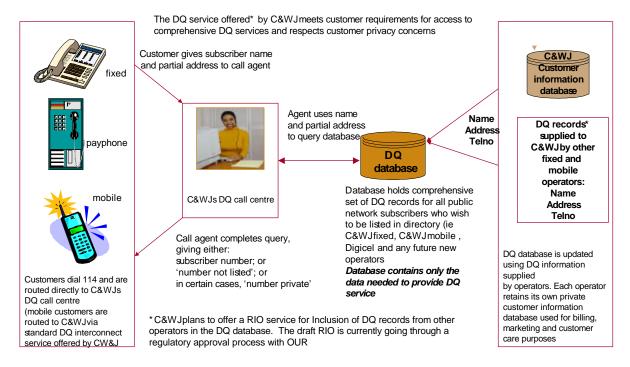
04. OUR takes the view that the best way to achieve this objective is through the introduction of competition and, potentially, provision of some form of access to CWJ's database to other service providers. OUR also makes a number of suggestions about methods for costing and pricing of directory information products and services; principles for access to directory information databases and concerns about privacy and intellectual property rights.

Summary comments on OUR options

05. CWJ is fully supportive of any changes to the provision of directory information

services that will provide demonstrable public benefits in the particular circumstances of Jamaica and directly improve the level of services provided to end users while fully protecting user privacy and proprietary information. In this regard, the various mechanisms suggested by the Consultative Document should not be seen as objectives in their own right. Rather, they should be considered as potential mechanisms to achieve the fundamental objective: to ensure high quality, efficient and reasonably priced telecommunications services for the Jamaican public. CWJ also believes that it is equally important, however, that the option selected also be one which respects rights of consumers and providers of directory services including, without limitation, the privacy rights of consumers and the proprietary intellectual property rights of service providers (whether incumbents or new entrants) as well as the proprietary rights of other third parties.

- 06. OUR has put forward four potential options (as set out in paragraph 4.24):
- ? Full liberalization where all products and services are open to competition with unrestricted entry;
- ? Limited entry liberalization where all products and services are open to competition with entry restricted to service providers and carriers;
- ? Limited product market liberalization where entry is only allowed in the DQ service market; and
- ? Single independent database owner/operator CWJ would relinquish proprietorship of the database to a single private commercial entity, but all other products and services will be open to competition.
- 07. CWJ considers that these do not reflect the full range of potential options. The options presented by the OUR also focus on degrees of competition rather than the logistics of directory service supply. Also, as presented, the options do not take systematic account of the regulatory principles which must apply in order that universal access to directory services continues to be safeguarded.
- 08. CWJ recommends that OUR should also consider a fifth option, as described below:
- ? CWJ will have responsibility for operating and maintaining a comprehensive DQ database and DQ service;
- ? CWJ will also have responsibility for collating, maintaining and publishing a comprehensive White Pages printed directory;
- ? CWJ will offer to other operators an interconnect DQ service, allowing their subscribers access to CWJ's DQ services;
- ? CWJ will offer to other operators a service which allows their subscribers, if they choose to take this up, a Directory Number Inclusion and Publication Service and service for inclusion in CWJ's DQ database.
- 09. The Consultative Document (at paragraph 4.27) sets out several options for directory enquiry (DQ) database operations:
- (1) a number of duplicate comprehensive databases for all listed customers on all Public Telephone Networks (PTNs); or
- (2) individual databases fragmented into customers listed on the same PTNs.
- 010. CWJ notes that it has developed a reference interconnect offer (RIO) for a DQ service which allows for collection, storage and query handling of a comprehensive database of DQ records of all listed customers for all carriers and service providers. The diagram below shows the main features of the service.



011.

- 012. Under its current RIO CWJ already offers the following directory information services to other operators to enable their subscribers to:
- ? Access CWJ's national DQ service;
- ? Access CWJ's international DQ service;
- ? If customers request this service from their operator, have a Directory Number Inclusion and Publication Service to enable their subscriber's listings to be published in CWJ's White Pages printed and Electronic Directory.
- 013. In its new RIO, which is currently going through a regulatory approval process with OUR, CWJ proposes to offer a service by which customers of other operators can, by request of their operator, be included in CWJ's DQ database and thus make their number available to users of CWJ's national DQ service.
- 014. CWJ considers that the benefits of this comprehensive approach should be fully taken into account in this consultation. In particular, the potential drawbacks and benefits of possible alternatives should be compared against the demonstrable benefits of this approach, which meets customer requirements for access to comprehensive DQ services; provides access to a comprehensive printed alphabetic directory and also fully respects customer privacy concerns. This approach can be implemented within the current legislative and regulatory framework and does not require major policy developments prior to its introduction.
- 015. International experience to date in multi-operator markets has shown that, given the choice, new operators often prefer this approach as a cost-effective alternative to setting up their own service. For example, it is worth noting that

although BT in the UK is required to supply on-line access to its database (including a search facility), most operators prefer to use BT's DQ service, provided as an interconnect service, and to pass on customer DQ listings for inclusion in the printed alphabetic directory managed by BT. This is the same as the service now offered by CWJ. These UK operators are long-established and have significant customer bases. Given the smaller size of Jamaica and the significantly smaller customer base, it is probable that new Jamaican operators would find the current DQ service to be cost effective, particularly when the technical and logistical issues involved in DQ service in a multi-operator environment are fully considered. In Section 3 we discuss a number of these technical and logistical issues. We would also note that the same arrangements between new entrants and incumbents as offered by CWJ have been directed by the regulator in Canada, the CRTC, and are proving to be practical and efficient for new entrants from both an operations and commercial point of view.

Principles for achieving fundamental objectives

016. The UK Regulator, Oftel, carried out a consultation on directories in 1998/1999. This addressed whether competition in supply should be extended to Service Providers (access to on-line data is currently limited to other authorised operators). Oftel found that the overwhelming concerns of the general public were:

- ? Privacy concerns of individual subscribers, particularly the prevention of unsolicited direct marketing calls and, as a result, restrictions on what can be done with directory information; and
- ? Customer requirements to ensure continued access to comprehensive directory information services.
- 017. CWJ considers that these concerns, as reflected in public consultations carried out in other markets, are likely to be universal concerns and, as such, of importance to the general public in Jamaica. Any proposals for the development of the directory market should be based upon principles which respond to these public concerns. To this end, CWJ puts forward the following principles for directory information services in a multi-operator environment:
- 018. **Principle 1:** Regardless of the service provider involved, customers should continue to have the possibility to find by simple query, the telephone numbers of other subscribers, both business and residential, to the public telecommunications network (to the extent that such subscribers want their particulars to appear in public);
- 019. **Principle 2:** Subscribers should continue to have a right to have a listing in a universal public alphabetic printed directory
- 020. **Principle 3:** Customers should continue to have a right of access to international directory information services;

- 021. **Principle 4:** Supply and usage of directory services and products should respect subscriber's expectations of privacy both explicit (choice of ex-directory and exclusion from direct marketing) or implicit (DQ services should provide only the subscriber's number and exclude possibility of 'reverse directory' searches to disclose subscriber's address or other details except in the case of Yellow Pages listings for which such searches are conducted;
- 022. **Principle 5:** Pricing of directory services should continue to adhere to the universal service principles of accessibility and affordability;
- 023. **Principle 6:** The extent of any access to directory information database records should be limited solely to retrieval of information necessary to provide a directory service or product;
- 024. **Principle 7:** Technological developments should not undermine the standard of service offered in the directory information market;
- 025. **Principle 8:** Reciprocity of supply of directory listings should be assured between all service providers in any competitive environment and each party should be required to adhere to a similar level of quality of service and security for customer data.
- 026. **Principle 9:** Any system for access to directory information database records must respect the intellectual property rights of the service providers (whether incumbent or new entrants) and those of all third party suppliers involved in respect of the databases and surrounding operating systems.

Concluding comments

- 027. CWJ strongly believes that the choice of solution should be firmly based on the key principles outlined above, in order to protect the privacy concerns of individual subscribers, respect the legal rights of all industry players and meet customer requirements for access to comprehensive directory information service.
- 028. CWJ considers that its approach to DQ service provision and provision of alphabetic directories meets the key principles and provides demonstrable benefits for both the public and industry players, including DIGICEL and any future new operators and recommends that OUR take this fifth option into consideration. CWJ considers that this option would support the development of competition in telecommunications services, since it assures customer access to directory information for customers of all operators, thus supporting potentially increased traffic in call origination and completion.
- 029. Furthermore, CWJ agrees that, if the market for directory information services and products is opened up further, development of and adherence to a Code of Practice for industry players will be an essential requirement.

CWJ's Response to Office September 2001	of Utilities Regulati	on on their Consul	tative Document	
September 2001				:

2. Commentary and Observations on the OUR Consultative Document

- 030. This section discusses some of the main issues which arise from the Consultative Document and identifies a number of areas where CWJ seeks further clarification or would like to see deeper discussion of the underlying issues. Section 3 discusses specific implementation issues while Section 4 provides CWJ's response to the specific questions raised in the Consultative Document.
- 031. The Consultative Document introduces a number of important issues relating to the liberalization of the directory information market and raises a number of significant questions. However, CWJ wishes to point out the provision of directory services and products in a liberalized environment would be significantly more complex than would seem evident from the description in the Consultative Document.
- 032. CWJ notes that there are a number of highly significant matters relating to the provision of directory services and products which are not dealt with in the Consultative Document but which have direct implications on the quality of services which are received by the end users.
- 033. Before proceeding with a framework for liberalization of the directory information market, CWJ recommends that OUR clarify the following matters:

a) Liberalization Options

- 034. In paragraph 4.24, OUR puts forward four options which it sees as feasible for introducing liberalization in the directory information market. CWJ feels strongly that these four options are not exhaustive. In particular, due consideration should be given to the benefits of adopting CWJ's recommended approach to DQ and directory listings provision, which is proven, practical and non-disruptive for the public. Not least, CWJ points out that this approach is likely to provide an attractive, cost-effective alternative for new entrants considering setting up their own comprehensive national service.
- 035. Furthermore, OUR states "total liberalization based on the free market-principle is expected to yield the optimal solution" (Section 4.25). CWJ considers that it is essential that the rights of consumers continue to be safeguarded, including the right to ready access to comprehensive directory information which is secured from potential misuse.

b) Mobile listings

036. As a means to improve services to subscribers, OUR discusses expanding the scope of directory listings to include mobile numbers as well. CWJ, through its current RIO, already makes provision for the inclusion of mobile subscribers in the alphabetic directory, if they wish. The draft RIO includes a service for inclusion in its DQ database. In each case, the procedure allows for the relevant mobile operator to

notify CWJ of the request and to provide the customer details and for CWJ to include the number in its core listings and treat this exactly as other numbers for DQ and printed alphabetic purposes.

037. As OUR has pointed out, mobile subscribers are apparently more likely than fixed subscribers to wish to be ex-directory. CWJ notes OUR's comment that the particular circumstances of the Jamaica market (called party pays until recently) have contributed to this reluctance. However, international experience (in calling party pays markets) shows that mobile subscribers often keep their mobile numbers exdirectory. This appears to be partly a function of wider subscriber concerns about privacy, discussed below, and subscriber perceptions of mobile as being complementary to fixed listings. Since subscribers need to continue to be offered a range of choices which meet their perceived needs, CWJ agrees with the principle that mobile subscribers should have the choice of whether or not to be included in a unified, comprehensive directory.

c) Privacy concerns

038. The overall trend in markets worldwide is towards ex-directory. More and more subscribers, given the choice, are electing to be ex-directory, raising concerns that the level of exclusions will erode the value of national listings. This reflects subscriber concerns about the perceived use and abuse of personal information. A number of countries have Data Protection Laws which seek to protect personal privacy. Since Jamaica has no such law, it is particularly important to develop policy for the use of directory information which meets user concerns. For example, CWJ does not offer "reverse directory" searches on its DQ database except in the case of Yellow Pages listings where such searches are offered. With this exception, DQ assistance is limited to giving a listed telephone number in response to a request, where the customer gives the subscriber name and, where necessary, address. Any Code of Practice for use of directory information must, at a minimum, ensure that user expectations of privacy are met and that both the source and recipients of information can be trusted not to misuse the information available to it.

039. CWJ also notes that the *Telecommunications Act*, Section 47 requires all carriers and service providers to treat as confidential "all information regarding the Yellow Pages, location, use, destination, quantity and technical configuration of services used by their customers". Disclosure is prohibited without written customer consent. Accordingly, CWJ has concerns about the legal basis of any system which mandates provision of customer databases without explicit subscriber consent. The provision of a DQ service to the public requires only that CWJ discloses information which has been agreed by the customer in the context of providing a service to end users.

d) Definition of Directory Information Products

040. Section 1.2 of the Consultative Document states that directory information products include "alphabetic phone books and classified business directories that are publicly available". CWJ wishes to point out that a clear distinction needs to be made

between alphabetic phone books (also known as "directory listings" and "White Pages") which are recognised as directory information products and classified business directories (also known as "directory advertising" and "Yellow Pages") which are excluded from this definition. Classified directories are a competitive advertising product or publication and, as such there are no major barriers to entry to this market.

c) Unified Printed Alphabetic Directory

041. The Consultative Document refers to opening access to CWJ's core directory database for the purpose of introducing competition in the DQ services market. Consideration needs to be given to ensuring the provision of a unified, comprehensive printed alphabetic directory (of public telephone numbers) and the process and logistics for collecting and aggregating information for this purpose. The provision of a universal printed alphabetic directory is also of importance to telephone subscribers. Any proposals must take account of the practical steps needed to assure production of such a unified directory.

e) Market for Directory Information Services and Products

042. In the consultative document, the focus is primarily on the liberalization of "directory enquiry services". It is not made clear why the focus is on this service or if the discussions encompass all directory services and products. In practice the policy and economics for each Yellow Pages of service (DQ services, printed alphabetic, online services) are different. OUR states that the market "is expected to become more competitive". However, international experience to date shows that only a selection of services and products have so far proved attractive commercial propositions. For example, interest in national residential listings is usually low. CWJ would recommend that each Yellow Pages of service and product be considered separately and that the discussion take into account the impact upon universal provision.

f) Process for introducing competition in the directory information market within the wider liberalization timetable

043. CWJ considers that the key objective will be to ensure supply of comprehensive service in a multi-operator environment. Ensuring comprehensive DQ services and the production of printed directories are essentially administrative issues, in comparison with the regulatory goal of ensuring effective competition between operators in the provision of telecommunications services. The fifth option recommended by CWJ provides a solution which will help support competition in the provision of telecommunications services. It promotes access by the general public, by simple query, to telephone numbers, thus helping customers of all operators to get the information needed to contact any other subscriber who wants to be listed.

g) Core Customer Information and Core Directory Database

044. In the Consultative Document OUR states that "it is desirable that the information in each SP's core database be made available on request and on non-discriminatory terms to all authorized directory information SPs" (Section 2.3). In

another instance OUR states that "...customer information must be shared with the new entrants" (Section 4.22).

045. CWJ is particularly concerned when the Consultative Document refers to access to CWJ's 'customer information' without specifying what is meant by customer's directory information. CWJ considers that without the necessary clarification, confusion could arise about what information is used to provide DQ services and alphabetic listings. DQ information is a sub-set of wider customer information, which is subject not only to personal privacy concerns but also to commercial and proprietary considerations. OUR should define the kind of information that is required for the provision of directory services and products and recognize that other Yellow Pages of customer data give rise to wider privacy and commercial, competitive concerns.

h) Code of Conduct and Second Consultative Document

046. CWJ considers that it will be helpful at this stage for OUR to provide clarification on the contents of the second consultative document and the issues it will raise in respect to implementing the conclusions of the first Consultative Document. CWJ also recommends that any suggested Code of Conduct would need to be developed at the same time as the second Consultative Document, in order that the regulatory base for further action is fully in line with legislative requirements. CWJ already applies internal rules for the use of DQ information and the content of DQ interactions and would be willing to provide its views on the suggested content of such a Code of Practice.

3 Implementation Issues in the directory information market

- 047. CWJ wishes to emphasise that the directory market consists of a number of different Yellow Pages of services and products which reflect different characteristics and economics and varying levels of competitive potential. It is therefore necessary to look at each of these services and products separately to clearly distinguish between directory information services and products (provision of DQ services and the alphabetic printed directory) and directory advertising products such as classified business directories, which has no barrier to entry.
- 048. In this Section, CWJ summarises the potential implementation issues which need to be taken into consideration for the following core directory services and products, for which a set of directory information (directory listings), consisting of subscriber name, address and telephone number is used for the provision of:
- ? DQ services: Operator directory enquiry service
- ? Directory Products: Alphabetic directory listings (White Pages)
- 049. These are further discussed in Section 4 in the context of CWJ's response to the specific questions raised in the Consultative Document.

DQ Services: Operator directory enquiry service

050. This is the national DQ service provided by CWJ and already described in Section 1.

Potential Competitive Issues in DQ Services

- 051. In its current RIO CWJ offers an interconnect DQ service on a cost-oriented and non-discriminatory basis. CWJ also provides a comprehensive DQ service available to customers of all PTNs on dialling a single, universal short code
- 052. Introduction of further competition in the area of directory services could potentially require access from other Operators and Service Providers (SPs) to CWJ's core database of directory information. This would entail implementation of complex technical requirements for access and the resolution of a range of legal, commercial, financial and operational issues, as discussed below. This would be complicated by the existence of rights held by third party (foreign) suppliers in respect of the databases and operating systems. For these reasons, CWJ considers that the most practical alternative is for the current approach to continue. We summarise these issues below:

? IPR/copyright for database structures, interfaces and search methods

053. The OUR Consultative Document identifies intellectual property rights, including copyright, as important issues to be considered in any plan for liberalization of directory services. CWJ agrees and would stress that it is essential to ensure that intellectual property rights or any other legal rights in the relevant databases are respected and that any interference therewith be minimised and that appropriate compensation be paid. Otherwise, the regulatory system devised at the conclusion of this process would fail to respect copyright and other rights held by CWJ and third party suppliers. Accordingly, any system for directory liberalization involving any form of access to databases and surrounding operations support systems must address these issues with the utmost care. CWJ provides further elaboration regarding these intellectual property rights issues, including the rights of third party suppliers, in the responses to Questions 6 and 7 as set out in the Consultative Document.

? Other data protection and privacy issues

054. A number of countries have national, multi-sector Data Protection Laws which seek to protect personal privacy. While Jamaica has no equivalent law at this time, the *Telecommunications Act* (Section 47) prohibits disclosure of customer information without written customer consent. It is particularly important to develop policy for the use of directory information which meets user concerns. For example, CWJ does not offer "reverse directory" searches on its DQ database. DQ assistance is limited to giving a listed telephone number in response to a request, where the customer gives the subscriber name and, where necessary, address. Any Code of Practice for use of directory information must, at a minimum, ensure that user expectations of privacy are met and that both the source and recipient of information can be trusted not to misuse the information available to it. Such a Code, as a form of subsidiary legislation, cannot override or derogate from Section 47 of the *Telecommunications Act*.

055. CWJ currently provides additional protection for customer privacy by excluding ex-directory numbers from its DQ database. To provide call completion for ex-directory numbers, where the DQ operator connects a DQ customer with the ex-directory subscriber without disclosing the ex-directory number to that customer, such numbers would need to be included in all databases used for DQ, with increased potential for disclosure, whether accidental or deliberate.

056. Subscriber expectations of privacy preclude the supply of directory listings for other purposes without the explicit written consent of the subscriber. International experience also shows a growing trend towards ex-directory, as subscribers are becoming increasingly concerned about privacy issues. CWJ considers it is essential to maintain user confidence in the probity of all telecommunications organisations, not only CWJ, which are custodians of sensitive customer data.

? Reciprocal access

- 057. To ensure that each DQ operator has access to comprehensive listings, any arrangements for other operators and SPs to access CWJ's database information would have to be reciprocated multilaterally in cases where the set of DQ information is unique to each party.
- 058. However, reciprocal on-line access would require a complex IT solution to ensure the effective performance in real-time of the series of distributed databases maintained by each party. Where an *ad hoc* solution is adopted (for example each operator retains its own database format, interface, search techniques etc), this would require each operator to access two or three separate systems, sometimes even separate terminals, to complete the search. An *ad hoc* solution becomes completely unworkable once a third operator is introduced.

? Database standards and access methods

- 059. In practical terms, rigid standardisation would be required for reciprocal online access to function as a practical solution. CWJ notes that the only major adoption of such a solution has been in Sweden, where intense effort has gone into standardisation. Each of the parties needs to be an ongoing member of a technical group to oversee and maintain performance. Any changes have to be agreed in committee. The downside of this rigid standardisation, needed to maintain performance, is a major loss of information systems flexibility and potential delays in introducing innovation by all parties.
- 060. Even if it were agreed that CWJ's database would be the standard for database development, the necessity for all parties to adhere to the same standards would continue to limit flexibility for each party. For example, all operators and their third party suppliers naturally wish to upgrade and customise their interfaces and search techniques. Any change, however minor, would need to be agreed in consultation between the parties.
- 061. In order to maintain security of the database content, it would also be necessary to limit the Yellow Pages of allowable searches to those which are mutually agreed between the parties and are acceptable to the Regulator.

? Record Structures

062. To ensure continued compatibility between the record structures contained in the various databases, there will have to be a required minimum set of data held in a standard format. These would be the allowable data fields for external searches. Additionally, the parties would need to mutually agree a set of characteristics for the field and a common vocabulary. Any potential changes to this agreed set would require to be handled through similar consultation procedures as for other upgrades, since on-line access to each of the party's databases and systems may be adversely affected by major changes to record structures. Any mandated use of existing database record structures would have to consider intellectual property rights in such record structures.

? Security considerations

063. Parties would need to commit to common standards of security, for example for access to restricted areas, password protection, authorisation procedures, in order to ensure that remote on-line access is at least as secure as on the source operator's premises. The handling of ex-directory information also needs to be consistent across DQ databases. CWJ currently excludes ex-directory customers from its DQ database, for additional security.

? Access numbers

064. The provision of DQ services by individual operators to their own customers need not require any change to be made to the existing 114 number. However, if operators, and potentially SPs are required to provide access by their customers to DQ services offered by other parties, this would mean introducing a new range of DQ access codes, with consequent disruption to the general public. CWJ considers that, because of the importance of DQ to the general public and the high recognition factor of the 114 code, any changes should be limited to the minimum needed to route calls.

? Emergency services information

065. If, after consultation with the emergency services, OUR considers that operators need to make arrangements for provision, in special secure circumstances, of access to ex-directory subscribers, this would require coordinated arrangements to be made between DQ providers to ensure that user privacy continues to be safeguarded.

? CWJ charges to operators for on-line access

066. CW&J, and other interested operators would need to undertake costing analyses to isolate the specific costs involved in providing on-line access in order to determine the charges to other operators and the basis on which they will be charged (for example: elapsed time, search 'hits') and principles for apportionment of overheads in common between the parties. In this respect, if the parties take part in joint development of interfaces and standards there may be a requirement to apportion according to the degree of 'ownership' which may be implied by that contribution. Agreement would also be required on whether such charges would be reciprocal (based on CWJ's costs) between the parties or whether different operators would charge according to their cost base. Operators would also need to determine the wholesale costs which may be charged to SPs for provision of access.

? Directory Products: Alphabetic directory listings (White Pages)

067. This is the comprehensive set of directory listings of all PTN subscribers in Jamaica who wish to be included. WHITE PAGES is provided as a universal directory ordered alphabetically.

The Consultative Document raises the possibility of competition in the supply of telephone directories. However, CWJ would point out that WHITE PAGES has very different characteristics from advertising directories such as Yellow Pages.

? Potential Competitive Issues in Directory Products

068. CWJ considers that, as evidenced by international experience, the market for supply of comprehensive, national White Pages listings is unlikely to attract wide interest from competitors. However, direct marketers and tele-marketers are likely to be interested in acquiring tailored sub-sets of these data. CWJ does not consider that resale of customer listings to marketers is an appropriate use of DQ listings. We discuss these issues below.

? Supply/collation of universal listings

- 069. CWJ already supplies a universal printed alphabetic directory which includes directory information of listed subscribers from CWJ and, on request, by customers of other existing and potential operators. It charges the other operator a cost-based charge for this service.
- 070. If multiple core DQ databases were introduced, it would still be essential to ensure that a single printed directory is provided, since the provision of a universal printed directory is also of importance to telephone subscribers. CWJ considers that its current approach provides a straightforward and cost-effective means for ensuring supply of this directory.

? Resale of directory listings to alternative Directory Publishers

071. In the case of White Pages, CWJ would observe that, in markets worldwide where the Regulator has required operators to make listings available to publishers on request, SPs have displayed little interest in publishing these as a nationally available, comprehensive directory.

? Potential resale of directory listings for non-directory information purposes

- 073. CWJ does not agree with the supply of directory listings to third parties for non-DQ purposes, such as direct marketing or tele-marketing. In the view of CWJ, the public would strongly oppose such use of listings data.
- 072. As noted elsewhere, to comply with Section 47 of the *Telecommunications* Act, the explicit consent of its existing base of customers would be required before

use of directory listings for direct or tele-marketing purposes. If CWJ were required to do this, it would expect that the costs that it incurred in conducting this activity and conditioning data entries would be recouped from the parties to whom the information was provided.

073. CWJ notes that such external parties are generally interested to obtain specific sub-sets of information. CWJ would expect that all additional costs which it incurred would be recouped. However, CWJ considers that OUR should take into account the potential societal impacts of opening the market to direct marketing/tele-marketers against the potential benefits to be gained from making this data accessible to marketers.

4. CWJ Response to OUR Consultative Document specific questions

074. The previous sections have discussed key principles which CWJ believes need to be considered when considering the directory information market. Furthermore, a number of general observations and comments have been made regarding OUR's consultative document, particularly in respect to some key issues which have not been dealt with in detail in the Document, but which have important implications for the legality, security and quality of the future provision of information services and products to end users.

075. This final section presents CWJ's response to the consultative document's specific questions although CWJ would strongly recommend that this section is read within the context of the previous sections.

Question 1: Do you agree that CWJ is in a dominant position in the provision of directory information in a comprehensive database?

076. While CWJ has a large customer base and has responsibility to provide universal DQ services for its own and other operators' subscribers, on request, it is not in a dominant position in having collated directory information in a comprehensive database since other organisations (such as utilities, banks and business organisations) already have access to significant elements of what would populate CWJ's core directory database.

077. CWJ notes that CWJ already offers an interconnect DQ service, on a costoriented and non-discriminatory basis, to other operators (currently DIGICEL and CWJ mobile and potentially to new fixed operators also) as part of its RIO. Also, as stated earlier, CWJ has developed a RIO offer which gives the potential for the DQ database to include listings for all subscribers who wish to be included regardless of service or network operator.

078. CWJ's comprehensive service has the potential to provide a streamlined means for maintaining a universal directory both for DQs and for a Jamaica-wide printed alphabetic directory. As already pointed out, this directory information is used for provision of DQs and the universal printed alphabetic directory, since CWJ considers that subscriber expectations of privacy preclude the supply of this information for other purposes without the explicit written consent of the subscriber. International experience also shows a growing trend towards ex-directory, as subscribers are becoming increasingly concerned about privacy issues. CWJ considers it is essential to maintain user confidence in the probity of telecommunications organisations, such as CWJ, which are custodians of sensitive data.

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Question 2: What are the obstacles to providing/using directory enquiry services? Industry respondents should outline any obstacles they encounter in provision and comments from users should focus on difficulties in using these services with suggestions as to how they might be overcome?

079. CWJ currently provides a comprehensive DQ service available to customers of all PTNs on dialling the short code 114 (given that their network operator is a user of CWJ's interconnect DQ service). CWJ mobile and DIGICEL customers have transparent access to this service via the interconnect DQ service offered as part of CWJ's RIO. Where customers require international DQs the DQ operator connects them with the appropriate international operator, where available, and remains on the line until the query is completed. The comprehensive listings are intended to cover all customers who wish to be listed. In cases where a customer has chosen to be exdirectory, the DQ operator can only respond with "no listing".

080. CWJ notes that, in some other countries, treatment of ex-directory subscribers is handled differently. In this case an ex-directory entry is permanently retained in the DQ database and the DQ operator then responds with the message "not to be disclosed". The drawbacks of this approach include the additional risk, either intentionally or by accident, of disclosing the number inappropriately. This risk is higher where access to DQ services is opened up to third parties. If DQ operators (or Service Providers) have privileged access to numbers for ex-directory subscribers, safeguarding user privacy would then become more difficult.

Question 3. Identify any additional directory service products that could be provided? Are there technical difficulties or bottlenecks preventing the provision of these products?

081. CWJ considers that it is important to avoid potential fragmentation in the supply of DQ services in a multi-operator environment to ensure that customers will have access to a comprehensive DQ service and universal White Pages directory, whereby they can obtain a listed number through simple query.

Question 4: Should the price of DQ service reflect cost to the users based on benefits received or should this cost be spread over the customer base? Why?

As noted by the OUR in the Consultative Document, CWJ currently spreads the costs for DQ services and its printed alphabetic directory across its customer base. It therefore does not make explicit charges to its customers for these services. Each subscriber is allowed one free entry in the "White Pages" Listings. For fax numbers, the subscriber can choose to have this entry in the separate fax book free of cost but additional charges would apply to repeat this entry in the White Pages.

082. CWJ provides DQ services as an interconnect service and charges the other operator a cost-based transaction charge. There is also the facility in place for CWJ to charge a cost-based charge (currently to C&W mobile and DIGICEL) for entry in the

directory. The other operator has the choice of directly re-charging the customer or, as is CWJ's current practice, spreading the cost across its customer base.

CWJ notes that international regulatory trends are towards charging customers directly for DQ services. The introduction of DQ charges has been the subject of discussion with the appropriate authorities and CWJ is working towards implementing such a charge.

083. CWJ also wishes to point out, in response to OUR's comments in Section 3.2, that CWJ already has rules in place to ensure that its DQ services are provided on the same basis to its mobile operations and to external parties.

Question 5: Are there any objections to the proposed charging principles? If yes, state the basis of the objections.

084. CWJ is in general agreement with the charging principle of cost reflective prices, where users who receive the benefits of the service should pay. CWJ has already proposed, in ongoing discussions on transfer pricing, that cost causality be one of the general accounting and regulatory principles to be used in the preparation of regulatory accounts. Cost causality is outlined by CWJ as entailing revenue (including transfer charges), costs (including transfer charges), assets and liabilities being attributed to cost components, services and businesses in accordance with the activities which cause revenues to be earned, assets to be acquired or costs and liabilities to be incurred. Cost causation and measurement would also have to include fair compensation in respect of intellectual property of CWJ and third party suppliers, as discussed further below.

085. CWJ agrees that cost minimisation is an essential element of an efficient service. However, it does not consider that "cost minimisation is only likely to be achieved if effective competition exists". This argument does not consider incentives which have been adopted in other markets where competition has not been deemed practical or timely. It also does not take into account whether, for example, the market size in Jamaica is sufficient to encourage or even permit effective competition. It is notable that even in large markets, such as Germany, the UK and Canada, relatively few operators are interested in providing comprehensive DQ or competing WHITE PAGES directories. Additionally Service Providers, who are not themselves operators, are attracted by the opportunity to leverage a database covering several countries, rather than focus on a single market. Jamaica, which is relatively small, with no land borders with other countries, arguably does not present the potential economies of scale which would make it an attractive market for competing DQ Service Providers.

086. CWJ agrees with the charging principles of reciprocity, symmetry and practicability.

087. Section 3.14 of the Consultative Document states that direct access to the CWJ DQ database on terms and conditions that are non-discriminatory is required if entrants are to self-provide directory services. CWJ has pointed out elsewhere in this

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document that self-provision of directory services may not prove attractive to new entrants once they have given deeper consideration to the costs, the technical requirements and overheads involved. For example, flexibility for both parties is limited by the need to standardise technical elements for access and interfacing and maintain integrity. The standardisation requirements and the need to consult before any changes are made limit the potential for innovation and upgrades by either party. CWJ considers that these potential technical and operational difficulties need to be fully taken into account.

Question 6: Does the service provider (SP) have proprietary rights to the information in the DQ database or the printed telephone directory?

Question 7 (a): What are the constraints (if any) on those rights?

7(b): What should these constraints be?

CWJ has legal proprietary rights in its databases. Jamaican law recognizes that copyright subsists in databases and compilations of data. The recent amendments to the Jamaican Copyright Act explicitly recognize that databases are a category of work protected by copyright law. In respect of the CWJ's databases in electronic form, CWJ has proprietary rights in the database as a whole as well as in its internal methodologies and structures in relation to the database. In respect of its printed directories, CWJ owns rights in the printed directory itself as well as in its internal methodologies, structures, Yellow **Pages** geographical arrangements classifications used in said directories. Certain of the information contained in the various CWJ databases is also confidential business information of CWJ, the proprietary nature of which is protected by law. The protection afforded by law to the CWJ databases and the data therein recognizes the significant time, money and effort (both intellectual and otherwise) which has been invested and continues to be invested by CWJ in the creation, maintenance and verification of these databases.

089. The protection of databases and the data therein as intellectual property under Jamaican law is consistent with the treatment of databases and collections of data in relevant international jurisdictions most notably, Europe and the United Kingdom. Both Jamaican and UK copyright law provide for the protection of databases. It should also be noted that UK law also provides a *per se* right for the protection of databases separate and apart from protection under copyright law, pursuant to the 1996 EC Directive on the Legal Protection of Databases. Other important jurisdictions (including the United States) are contemplating legislating such additional, *per se* protection for databases and compilations of information.

090. CWJ also notes that third party suppliers have intellectual property rights in the software and systems that form an integral part of the CWJ directory services offerings. These third parties are suppliers (from outside of Jamaica) who have provided essential systems for the operation of directory services. Such third party

rights must be taken into account and dealt with in a fair and equitable manner in any liberalization approach which is adopted.

- 091. The OUR Consultative Document notes that intellectual property rights are an important consideration in this context and that the databases involved are protected by copyright. The Consultative Document (at paragraphs 1.12 and 1.13) notes that:
 - 092. "Intellectual property rights can have a significant impact on the market for information services. Some of the issues that could be related to intellectual property rights in determining access (direct or indirect) to database information are industrial design, trademarks and protection against unfair competition.
 - 093. As far as databases are concerned, the Copyright Act (1993) indicates that computer generated works are protected under this Act. Therefore, access to such databases via copies, electronic transfers or otherwise, without the required authorization could constitute a breach of the Act. According to information from the World Intellectual Property Organization (WIPO) the Yellow Pages of works covered by copyright include computer programs and databases."
- 094. The Consultative Document also notes that Jamaica is a member of the World Intellectual Property Organization (WIPO).
- 095. While CWJ does not suggest that its legal rights in and to its various databases, directory services products and the operating systems to support them would bar any and all forms of liberalization of directory services, it is of the firm view that its intellectual property rights and those of third parties must be taken into account as a primary issue in determining the nature, manner and scope of any access that may be granted to the CWJ databases. Restrictions on the data accessible, the manner of such access, the use of such data and appropriate, fair compensation for such access must be considered in order to ensure that any new system respects intellectual property law and the rights granted thereunder.
- 096. CWJ is continuing to investigate the manner in which these and other intellectual property rights (such as patents and trade-marks) of CWJ and third parties may impact the liberalization of directory services.
- Question 8: Do you think all the markets for directory information should be open to competition? If not, identify (with justification) those markets that should be open to competition.
- 097. The Consultative Document cites two main areas for potential competitive supply. CWJ comments as follows:

Printed telephone directories

098. CWJ currently supplies an annual combined alphabetic "White Pages" White Pages and classified "Yellow Pages" Yellow Pages directory to its customers, without charge. WHITE PAGES is provided as a universal directory ordered alphabetically. The classified YELLOW PAGES is an advertising directory. The cost of the White Pages directory is not directly charged to customers, as the costs are spread across its customer base.

099. The Consultative Document raises the possibility of competition in the supply of telephone directories. However, CWJ would point out that WHITE PAGES and YELLOW PAGES have very different characteristics. WHITE PAGES is the directory which is viewed by Regulators as potentially the universal directory, containing an alphabetic record for each listed subscriber.

0100. The classified listings which CWJ provides are packaged, for convenience, with the White Pages but are not a service subject to regulation. The market for classified listings already has no significant barriers to entry, since potential publishers are free to compile these from a variety of sources and to devise their own products geared to specific market niches.

0101. In the case of White Pages, CWJ would observe that, in markets worldwide where the Regulator has required operators to make listings available to publishers on request, SPs have generally displayed little interest in publishing these as a nationally available, comprehensive directory. Furthermore, as evidenced by public response to Oftel's 1998/99 consultation, the UK public is also indifferent to alternative supply of White Pages, since potential cost savings would be minimal if this were unbundled from line access rentals.

DQ services

0102. The Consultative Document also discusses a number of potential innovations which could be brought about if DQ services were to be provided by different companies at different prices for differentiated services. CWJ would comment that potential barriers to providing a call completion option, as discussed therein, would be increased in multiple service provider environment. Call completion services are a value added service for DQ customers. When the DQ operator provides a listed number in response to a query, this provides an additional opportunity for the operator (or an automatic system) to offer to ring the number for the inquirer. In the case of an ex-directory call completion service, the operator (or system) would have access to the ex-directory number but would not pass this on directly to the inquirer. Instead, the offer would be made to complete the call for the inquirer. As discussed elsewhere in this document, CWJ currently provides additional protection for customer privacy by excluding ex-directory numbers from its DQ database. To provide call completion of this Yellow Pages, ex-directory numbers would need to be included in all databases used for DQ. The potential for disclosure, whether additional or deliberate, would be greatly increased, not least by the potentially large number of different parties which would have access to these data.

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0103. In the same way, attempting to exclude customers from direct marketing (by marking their records as such) is made more difficult in an environment where a large number of parties have access to these data. As noted elsewhere, under the *Telecommunications Act* (Section 47) the explicit consent of its existing base of customers would be required before use of these data for direct marketing purposes.

0104. The Consultative Document discusses the following specific proposals for directory enquiry (DQ) database operations:

- (1) a number of duplicate comprehensive databases for all listed customers on all PTNs; or
- (2) a set of individual databases fragmented into customers listed on the same PTNs.
- 0105. The Document also considers as possibilities:
- (3) CWJ (and presumably other operators) would relinquish proprietorship of its DQ database to a third party presumably to support provision of a single comprehensive database; and
- (4) There would be direct (on-line) access to CWJ's DQ database by other operators, specifically DIGICEL the second mobile operator.

0106. CWJ wishes to point out that the DQ service it plans to offer already allows for collection, storage and query handling of a comprehensive set of DQ records of all listed customers, regardless of PTN. In CWJ's view, this is the preferred option for continued provision of comprehensive DQ services and directory listings.

0107. CWJ's wishes to summarise its views on these proposals as follows:

- (1) CWJ agrees with OUR that enforcing a regulatory requirement for duplication of databases would not provide an optimal alternative, particularly as standardisation formats, logistics of collection, search techniques would need to be resolved before any duplication could be considered;
- (2) CWJ considers that a regulatory requirement for a set of individual databases is also inappropriate. This requires a complex IT solution to ensure the effective performance in real-time of a series of distributed databases. Where an *ad hoc* solution is adopted (for example, each operator retains its own database format, interface, search techniques etc) this requires each operator to access two or more separate systems, sometimes even separate terminals, to complete the search. An *ad hoc* solution becomes completely unworkable once a third party is introduced. CWJ would point out that the only major adoption of such a solution has been in Sweden, where intense effort has gone into standardisation. Each of the parties needs to be an ongoing member of a technical group to oversee and maintain performance. Any changes have to be

agreed in committee. The downside of this rigid standardisation, needed to maintain performance, is a major loss of speed of potential innovation and flexibility by all parties;

(3) CWJ notes that there are various intellectual property rights owned by CWJ and its third party suppliers in respect of its DQ database and the supporting operating systems. Any regulatory requirements must fully respect the legal rights of all the parties involved. Any new system must also respect the privacy expectations of subscribers.

Question 9: Are you in agreement with the Office's suggestions as stated in paragraph 4.21?

0108. CWJ agrees with all recommendations which give individual subscribers choice over their information in publicly available directory services and control over the calls they receive. CWJ respects customer expectations that the information is used solely for directory purposes and this is its current policy.

0109. CWJ therefore points out that any change to this policy would result in an erosion of privacy for customers since they would effectively have to proactively opt out or, by default, otherwise be deemed to agree to this further use of data which were supplied for the agreed sole purpose of directory information. Further, CWJ considers that the explicit permission of each individual existing customer, as well as new customers, would be required before such a step could be undertaken.

0110. The OUR cites the results of a UK poll. CWJ would comment that the UK public, in common with other European countries where the resale of directory listings on request is a regulatory requirement, is overwhelmingly choosing to be exdirectory in order to maintain their privacy. In London alone, the percentage of subscribers choosing to be ex-directory is more than 50%. Even if 20% of these returned to the directory, this would mean that up to 40% of the total subscriber base still declined to be included.

0111. CWJ considers that OUR should take into account the potential societal impacts of opening the market to direct marketing/tele-marketers and weigh carefully these societal impacts against any benefits to be gained from making these data accessible to marketers.

Question 10(a): Are there other liberalization options that the Office should consider?

10(b): What is the preferred option?

- 0112. CWJ considers that the options cited focus on degrees of competition rather than the logistics of directory service supply. As presented, the options do not take systematic account of the regulatory principles which must apply in order that universal access to directory services continue to be safeguarded. CWJ considers that it is critical that the OUR must fully satisfy all privacy, commercial confidentiality and legal rights of the parties concerned, including any third party rights involved in operation of directory services. The fifth option, recommended by CWJ, satisfies these concerns.
- 0113. CWJ further considers that the benefits of their proposed comprehensive service would be difficult, if not impossible, to replicate in an environment where listings were potentially fragmented across operators, with resulting problems of security, technical access and duplication of costs:
- ? The interconnect DQ service provided by CWJ is cost-based (on terms regulated by the OUR) and the service is provided on exactly the same terms to all existing and potential operators;
- ? The proposed DQ service meets customer requirements for access to comprehensive DQ services, regardless of PTN;
- ? Usage of DQ listings respects user privacy;
- ? Security of private customer information is guaranteed since the DQ database will contain only the set of data needed to provide DQ;
- ? CWJ will provide a comprehensive printed WHITE PAGES directory, which will include all subscribers who wish to have a listing.

Question 11: Do you agree that the rules embodied in a Code of Practice should constitute the subsidiary regulatory framework for access to directory information and databases?

0114. CWJ is in agreement in principle and already applies a set of internal rules for the treatment of its DQ information. CWJ considers that a binding Code of Practice could be useful in the event that access to DQ information is extended to any third parties, in order to help protect consumers and ensure consistency of treatment by all interested parties. However, any such Code would be subsidiary legislation. As such, it cannot validly or legally derogate from the requirements of statute, in particular Section 47 of the *Telecommunications Act*.

Question 12: Is specific legislation for data protection necessary?

0115. As noted above, the Telecommunications Act already has a provision providing strong protection for customer data. Whether national data protection legislation is necessary in Jamaica is a matter which CWJ will not comment at this time.

Question 13: Are there any objections to the continued use of 114 to access DQ services (irrespective of service provider)? If yes, indicate the basis of any objection?

0116. CWJ notes that the question relates specifically to a presumed multioperator/provider environment. CWJ considers that, because of the importance of DQ to the general public and the high recognition factor of the 114 code, any changes should be limited to the minimum needed to route such calls.

Question 14: In the interest of deepening competition, should all SPs be mandated to provide customer access to other DQ service suppliers?

0117. CWJ questions whether the expected level of interest from competing SPs would be sufficient to require such a mandate and to justify the complex technical, commercial and logistical actions which would follow on from such a requirement. For example, in Germany, with a population of 80million+ the Regulator sought to create a 'level playing field' for competitive entry by introducing a new range of DQ access codes and associated regulations covering many detailed aspects of potential competitive supply. In the event, four years later, there are only a handful of Service Providers. Bearing this in mind, CWJ considers that OUR should defer any such mandatory arrangement until such time as it appears that the Jamaican market is attractive enough to other SPs to offer their own DQ service.

5 Conclusion

0118. CWJ strongly believes that the choice of a liberalization solution should take the needs of consumers and providers of directory services into consideration. If liberalization is to be pursued, it must be undertaken in a manner which both seeks to achieve high quality, efficient and reasonably priced services and which respects rights of consumers and providers of directory services including, without limitation, the privacy rights of consumers and the proprietary intellectual property rights of service providers (whether incumbents or new entrants) as well as the proprietary rights of other third parties.