
Office of Utilities Regulation

Indirect Access

Consultative Document No. 2



OFFICE OF UTILITIES REGULATION

February 24, 2006

Second Consultative Document on Indirect Access

Document No. Tel 2006/03

February 24, 2006

Office of Utilities Regulation

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ABSTRACT

Indirect Access (IA) remains a matter of important concern to the Office because of the far reaching benefits it can afford to stakeholders within the local telecommunications industry. Indirect Access can add to the competitiveness in service offerings within the local telecommunications' markets by allowing subscribers on the PSTN to have access to alternative service providers for the completion of calls locally and internationally and at the same time, PSTN operators will be able to offer a wholesale call origination product to these alternative service providers. This is the Office's second consultative document on the subject of Indirect Access. This Consultative Document hopes to glean further constructive inputs on the way forward and to also bring this issue closer to a resolution.

COMMENTS FROM INTERESTED PARTIES

Persons who wish to express opinions on this second Consultative Document on "Indirect Access in Telecommunications" are invited to submit their comments in writing to the OUR. Responses to this Consultative Document should be sent by post, fax or e-mail to:-

Carey Anderson

P.O Box 593

36 Trafalgar Road, Kingston

Fax: (876) 926-3635

Email: canderson@our.org.jm

Responses are requested by Friday, March 24 2006. Any confidential information should be submitted separately and clearly identified as such. In the interest of promoting transparent debate, respondents are requested to limit as far as possible the use of confidentiality markings. Respondents are encouraged to supply their responses in electronic form, so that they can be posted on the OUR's Website, <http://www.our.org.jm>, (or a link included where the respondent wishes to post its response on its own website).

Comments on responses

The OUR's intention in issuing this Consultative Document is to stimulate public debate on the important regulatory issues pertaining to Indirect Access. The responses to this Consultative Document are a vital part of that public debate, and so as far as possible, should also be publicly available. The OUR considers that respondents should have an opportunity both to have access to the evidence and opinions submitted in other responses, with which they may disagree, and to comment on them. The comments may take the form of either correcting a factual error or putting forward counterarguments.

Comments on responses are requested by Friday, April 7, 2006

Arrangements for viewing responses

To allow responses to be publicly available, the OUR will keep the responses that it receives on files, which can be viewed by and copied for visitors to the OUR's offices. Individuals who wish to view the responses should make an appointment by contacting Lesia Gregory, PUR Information Centre, by one of the following means:-Telephone: (876) 968-6053, email: lgregory@our.org.jm

Fax: (876) 929-3635

The appointment will be confirmed by a member of the OUR's staff. At the pre-arranged time the individual should visit the OUR's offices at:

3rd Floor, PCJ Resource Centre, 36 Trafalgar Road, Kingston 10

The individual will be able to request photocopies of selected responses at a price, which just reflects the cost to the OUR.

TIMETABLE

The timetable for the various public consultations including an indicative date for publication of determination notice is set out in the Table below:-.

Event	Proposed Date
Publication of Second Consultative Document on Indirect Access	Friday, February 24, 2006
Responses to Second Consultative Document	Friday, March 24, 2006
Comment on Responses	Friday, April 7, 2006
Publication Third Consultative Document on Indirect Access	July 2006

This Consultative Document is not a legally binding document and does not constitute legal, commercial or technical advice of the Office of Utilities Regulation. This consultation is engaged without prejudice to the legal position of the Office and its duties under relevant legislation. Additionally, the views and opinions expressed reflect the Office's thinking at this point in time and as such should not be construed as a definitive position of the Office.

Chapter 1: Introduction

1.0 In Consultative Document Tel 2003/03 dated May 30, 2003 the Office sought to stimulate debate within the telecommunications sector on the subject matter of Indirect Access. Key topics covered by the Document include:

- proposed Indirect Access regime for Jamaica;
- measures to protect consumers from unfair trade practices such as slamming¹ and cramming²;
- assignment of carrier identification and carrier access codes
- principles for recovering the costs of Indirect Access;
- criteria for selecting operators eligible for Indirect Access; and
- proposed rules for purposes of Indirect Access.

Legislative Framework

1.1 Effective competition in the supply of telecommunications services confers benefits to customers as well as carriers and service providers. For customers such benefits usually take the form of improved service quality and reliability, choice of supplier, and lower prices. Carriers and service providers are also given incentives to make improvements in their efficiency and to exploit opportunities for growth and innovation, thereby leading to a more operationally efficient telecommunications sector.

1.2 Phase III of the liberalization of the telecommunications sector in Jamaica commenced in March 2003. To date, over 190 carrier and service provider licences have been issued for the establishment and operation of international telecommunications facilities. The process of liberalization started in March 2000 and has as its primary goal the establishment, over time, of a robustly competitive market for the telecommunications sector in Jamaica. The legal instrument underpinning the liberalization process is the Telecommunications Act 2000 ("the Act"). Important objectives of the Act are listed below:-

¹ The practice by operators of switching customers to their service without the customer's knowledge or authorization

² Cramming is the practice of placing unauthorized, misleading, or deceptive charges on customers' telephone bills. Cramming also occurs when an operator does not provide clearly or accurately describe all of the relevant charges to the customer when marketing specified service(s).

- a. to promote and protect the interest of the public by-
 - i. promoting fair and open competition in the provision of specified services and telecommunications equipment;
 - ii. promoting access to specified services;
 - iii. providing for the protection of customers
- b. to promote the telecommunications industry in Jamaica by encouraging economically efficient investment in, and use of, infrastructure to provide specified services in Jamaica.
- c. Various provisions of the Telecommunications Act, 2000 seek to engender the development of a competitive regime for Jamaica's telecommunications sector. This includes provisions related to number portability and Indirect Access. The requirements regarding the latter are set out at section 36 of the Act. Sections 36(1) and (2), provided-

“(1) The Office may make rules subject to affirmative resolution imposing on a dominant public voice carrier, the responsibility to offer a particular form of Indirect Access to its network to other interconnection providers, if the Office is satisfied on reasonable grounds that such rules are necessary in the interest of customers and that:-

- a. the benefits likely to arise from the requirement to provide a particular form of Indirect Access outweigh the likely cost of implementing it; and
- b. the requirement to provide the particular form of Indirect Access will not impose an unfair burden on any carrier or service provider.”

(2) In section 36, subsection (1) “Indirect Access” is said to mean the method whereby customers are able to select the services of any service provider who uses a public voice carrier's network to provide specified services”.

1.3 Other provisions that are likely to have a bearing on the issue of Indirect Access are sections 28, 29, 30, 31, 32, 33, and 34 of the Act. Other provisions of the Act pertinent to the consultation on Indirect Access are Section 8 which sets out the legislative framework for the management, assignment and use of numbering resources. The assignment and use of short prefixes and other relevant numbering resources are critical to successful introduction and implementation of call-by-call carrier selection.

The Office has issued its Determination Notice on the management and allocation of numbering resources for various services and thus this issue will receive no further consideration in this document³.

This document

- 1.4 Since Tel 2003/02 was published, the OUR has received a number of responses. Further analysis on the subject has also been carried out by the OUR and its consultants since then. To date, this analysis has focused on technical issues associated with the introduction of Indirect Access and the cost-benefit analysis methodology to be applied in evaluating the Indirect Access options.
- 1.5 This is the Office's second consultative document on the subject of Indirect Access in the telecommunications sector. This second consultative serves as a development to TEL 2003/02 and to consult on new issues. There are three objectives for this consultation document. These include:
 1. Present the outcome of the discussions arising out of the previous consultative document Tel 2003/02;
 2. Discuss new issues concerning the introduction of Indirect Access; and
 3. Present a timetable for the commencement and completion of various tasks relating to Indirect Access.
- 1.6 The structure of the remainder of this document is as follows:
 - o Chapter 2 describes and discusses the comments on general issues made in response to Tel 2003/02;
 - o Chapter 3 describes the different forms of Indirect Access and discusses their relative merits;
 - o Chapter 4 proposes the methodology to be applied by the OUR in estimating the costs and benefits of the introduction of Indirect Access and an approach for ensuring that Indirect Access does not impart an unfair burden on stakeholders.
 - o Chapter 5 discusses the operators that will be eligible to obtain Indirect Access services;
 - o Chapter 6 presents a specification of the services to be provided by the Indirect Access provider;

³ Jamaica National Numbering Plan, Tel 2003/09, October 2003.

- Chapter 7 discusses the principles on which charges for Indirect Access services will be based; and
 - Chapter 8 discusses implementation issues, including the timetable for implementation.
- 1.7 In each chapter, responses to Tel 2003/02 are summarised and discussed. This is followed by a further discussion of any related issues that have arisen since the publication of Tel 2003/02, followed by a presentation of the OUR's proposals arising from the discussions thus far.

Chapter 2: General responses to the initial Consultation Document (Tel 2003/02)

- 2.0 Responses were filed by the Cable & Wireless Jamaica, Digicel, and Reliant Enterprise Communications Limited. The Office thanks all parties for their comments and anticipates their full and continued participation in the process.
- 2.1 In this document, the key points made in response to Tel 2003/02 are summarised, followed by a discussion. The discussion conducted in two ways. General comments about the issues raised in Tel 2003/02 and are summarised below while any points which refer to specific issues addressed in consultation document is summarised and discussed in the relevant sections of this document.

Timing

- 2.2 One respondent questioned the timing of the document's publication citing the fact that determinations on a number of issues that have been the subject of previous consultations had not been finalized. Reference was made to numbering, asset valuation, accounting separation, a revised price cap mechanism, RIO5 and dominance. This respondent also requested clarification from the Office with regard to the timing of publication of a "position paper" on aspects of Indirect Access and the Consultative Document on Indirect Access. The Office was also accused of establishing an abbreviated process of public consultation regarding indirect access, with the respondent drawing attention to the practice in the UK where an elaborate system of public consultation was used to inform decisions about Indirect Access.

Discussion of responses to Tel 2003/02

- 2.3 The Office acknowledge that at the time of publication of the document, decisions on some issues that are currently under consideration by the OUR could have material bearing on aspects of the decision to introducing Indirect Access. However, the Office does not accept that it was "legally incorrect" for it to engage in public consultation on Indirect Access prior to the full resolution of those issues. In practice, it is not unusual to have simultaneous consultations on issues of importance to the industry.
- 2.4 The Office fully appreciates the importance of the interaction between decisions and to ensure that they are fully consistent with each other. It is neither the intention nor the practice of the Office to make determinations on Indirect Access without

considering the relevance and importance of interrelated matters. The timetable set out in the document is predicated on the assumption that decisions relating to related issues on which the Office had previously consulted would have been taken in time to allow the Office to progress its work on Indirect Access. As respondents acknowledged, Indirect Access straddles complex operational and economic consideration and its implementation can be very time consuming, in this regard. The Office's initiation of public consultation on this matter is both sensible and pragmatic and provides a longer period for considerations of the various issues.

- 2.5 Respondents are likely to be aware of some of the reasons for the Office's delay in issuing decisions on several of these matters. For example, the assessment of RIO5 was delayed due to litigation in the Supreme Court of Judicature of Jamaica brought by Digicel. Decisions related to C&WJ's price cap plans which were slated for November 2002 were delayed due to legal proceedings brought by Digicel. That matter was finally disposed of in favour of the Office on September 2003 and has now cleared the way for the Office to proceed with its determination on the issue.
- 2.6 Asset valuation has a bearing on the proposed charges in RIO5 as well as the review of C&WJ's price cap plan. Determinations with regard to the principles and methods to be used by C&WJ for purposes of valuing its fixed assets were communicated to C&WJ on an ongoing basis and the Office has published its decisions in Determination Notice dated August 7, 2003 (TEL 2003/06) titled "Principles and Methods of Asset Valuation for C&WJ."

Dominance

- 2.7 C&WJ was particularly concerned with the issue of dominance as at the time of the initial Consultative Document on Indirect Access, Tel 2003/02, consultation on the issue was on going and as such C&WJ was not yet declared to be a Dominant Public Voice Carrier. C&WJ contended that the pre-supposition of dominance by the Office on C&WJ in the voice market in the absence of a determination was premature, irresponsible and prejudicial to C&WJ. C&WJ further argued that the issuance of its initial RIO did not constitute an admission of dominance in anyway on its part, but was rather done by virtue of being the existing telecommunications carrier, a default position imposed on it by the Act under Section 32. On this ground, C&WJ questioned its obligation for Indirect Access.

Discussion of responses to Tel 2003/02

- 2.8 The Office's position with regard to the various legislative provisions on dominance is well known and hence there is no need for further discussions as to the legal interpretation of the statute. By way of its Determination Notice dated August 14, 2003 (TEL 2003/07) titled "Dominant Public Voice Carriers" the Office has declared the incumbent fixed network operator (C&WJ) to be dominant in various markets, including those relevant to the form of Indirect Access being contemplated by the Office.
- 2.9 With regard to the "position paper" vis-a-vis the Consultative Document on Indirect Access the Office responds as follows. During fourth quarter 2002, and in anticipation of phase III liberalization, the OUR began work on a consultative document on Indirect Access. At a meeting on January 10, 2003 between OUR and C&WJ several issues relating to phase III including Indirect Access were discussed. The OUR indicated that a consultative document on Indirect Access was being prepared. The OUR also enquired as to whether C&WJ would be making provisions for Indirect Access within the revised Reference Interconnect Offer (RIO). The timetable for publishing the consultative document was severely hampered by two important court cases which were initiated by mobile entrant Digicel. Both cases consumed a substantial amount of OUR's resources resulting in delays in the preparation and publication of the document. In the interim the OUR received complaints from several service providers alleging that under certain conditions C&WJ was refusing to meet their requests for toll free lines on the ground that the particular service they intended to provide with such facilities constituted a form of Indirect Access and that the OUR had not yet issued a determination nor commenced public consultation on what form Indirect Access should take. In order to clarify its position and allay the fears of the investing public the Office took the decision to issue a position paper outlining its stance in respect of C&WJ's claims. Additionally, given C&WJ's contention that the afore-mentioned use of toll free lines constitute a form of Indirect Access, the Office considered it appropriate to incorporate the issue in this consultative document.

Toll Free Lines

- 2.10 C&WJ maintained the view that certain uses of Toll Free Lines or Toll free Dial-Up access constituted a form of Indirect Access. According to C&WJ *"where service providers purchase toll free services for gaining access to C&WJ's contract customers, so*

that these customers can purchase services from another operator to which they are directly connected, this is a form of indirect Access". C&WJ further contended that the Office's definition and noted characteristics of Indirect Access as per Consultative Document, Tel 2003/02, is not consistent with the definition of Indirect Access in the Act.

Discussion of responses to Tel 2003/02

2.11 The Office stands by its view that the mere use of Toll free service purchased from C&WJ to provide access to some other service, to which C&WJ's customers may have access, is not by definition a form of Indirect Access. The Office concedes however that such mode of access to a third-party service could potentially have similar results in the market as would Indirect Access.

Consumer Protection

2.12 C&WJ contended that a detailed design of processes for consumer protection is premature at this time as a decision has not yet been made on whether Indirect Access should be implemented or not. However, it did state that Slamming should be of primary concern and suggested that the Office adopt the "preferred carrier freeze" as exists in the USA as a major protective tool. This, C&WJ noted, will require C&WJ to obtain written consent from the customer before the customer's selection can be changed. In this regard, C&WJ made the suggestion that separate billing would be helpful in detecting slamming. To ensure consumer protection Digicel recommended that a Code of Conduct/Practice be signed by all Indirect Access service providers.

Discussion of responses to Tel 2003/02

2.13 Essentially, the Office has not been persuaded to change its view with regard to the need for a Code of Practice. The Office believes that Indirect Access providers should put in place mechanisms to ensure that customers are reliably informed about the choices available. The Office also wants to reiterate that "cramming" is also a major issue of concern. This means that there must full disclosure of information on customers' bill. The Office also believes that a Code of Practice must be signed by all providers of Indirect Access. Additionally, the Office will explore the "Preferred Carrier Freeze" as a tool for protecting customers.

Numbering

- 2.14 Digicel expressed concern about the likely allocation of numbers and what it could mean, and whether numbers will be allocated from an existing pool or will Jamaica be allocated a new pool. Digicel contended that Carrier Access codes system could be cumbersome for customers to utilise and proposed that the Office make short codes available for use with the Indirect Access service. C&WJ response mostly surrounded the issue of the Office not making a Determination on “The Jamaican National Number Plan” at the time the Consultative Document Tel 2003/02 was issued. C&WJ further stated that it should not be applying directly to the Office for numbers the Office had no authority to issue.

Discussion of responses to Tel 2003/02

- 2.15 Since the publication of the Consultative Document Tel 2003/02, the Office has concluded consultation on the Jamaican National Numbering Plan and has made a Determination on the issue. C&WJ’s position regarding the Office’ authority over North American Numbering Plan (NANP) resources is ill-advised as borne out by the following statements by the North American Numbering Administration(NANPA):

“Regulatory authorities in each participating country have plenary authority over numbering resources, but the participating countries share numbering resources cooperatively ” (http://www.nanpa.com/about_us/abt_nanp.html)

Additionally:

*“NANPA holds overall responsibility for the neutral administration of NANP numbering resources, **subject to directives from regulatory authorities in the countries that share the NANP**.... Regulatory authorities in various NANP countries have named national administrators to oversee the numbering resources assigned by NANPA for use within their country... NANPA, in its overall coordinating role, consults with and provides assistance to regulatory authorities and national administrators to ensure that numbering resources are used in the best interests of all participants in the North American Numbering Plan.*
(http://www.nanpa.com/about_us/index.html)

- 2.16 The Office’s authority over Carrier Access codes is therefore not an issue. The Office proposes to make Carrier Access Codes in the format 101-XXXX available for Indirect Access. XXXX

represents the Carrier Identification Code (CIC) and X represent digits from 0 to 9. 101-XXXX is generally associated with Feature Group D access arrangement which provide access to both pre-subscribed and non-prescribed customers, and enables the over-ride of carrier-selection.

Chapter 3: Proposed Form of Indirect Access

- 3.0 There are a number of different forms of Indirect Access these include, Carrier Selection (CS), Carrier Pre-Selection (CPS) and Carrier Pre-Selection with call by call over-ride. Tel 2003/02 outlined these three and noted that all three were under consideration. In Tel 2003/02, the Office took the view that “the CPS option with the facility to override the pre-selected carrier would be most appropriate for Jamaica...”⁴. In Tel 2003/02⁵, the OUR also stated its position that the toll-free lines did not constitute a form of Indirect Access and invited comments on this position.
- 3.1 The purpose of this Chapter is to describe the options for Indirect Access and to discuss their relative merits from a technical point of view. On the basis of this technical analysis, an option will be selected and subjected to a cost-benefit test. In this chapter, responses to Tel 2003/02 on this topic are summarised and discussed. This is followed by further discussion of the Indirect Access options available and a set of revised proposals.

Summary of responses to Tel 2003/02

- 3.2 Respondents made it clear that either market options for Indirect Access as proposed by the Office, inter-parish calls and/or outgoing international calls will require substantial investment on the part of the Indirect Access Operator (IAO) to establish sufficient points of interconnection (PoI) so as to ensure end to end call delivery. One respondent further noted that for inter-parish Indirect Access the IAO will need significant infrastructure investment for independent handling of call transmission and termination. The respondent therefore questioned the viability of Indirect Access for inter-parish calls given that C&WJ is the only active Fixed Line operator (only provider of fixed access) and in the absence of an independent termination facility will have to purchase call termination from C&WJ.
- 3.3 On the form of Indirect Access, respondents seemed to exhibit a certain preference for CPS. Digicel postulated that CPS is better for the customer and carrier. C&WJ noted that under CPS the Office should not be in the business of assessing margins because market participants should be free to make commercial

⁴ TEL 2003/02 Section 3.4

⁵ TEL 2003/02 Section 3.7

judgements about which markets to enter and the margins they perceive to be available.

Discussion of responses to Tel 2003/02

- 3.4 It was never the intent of the Office to assess market margins. The Office however reserves the right to express an opinion on the potential viability of a particular call market and it is within this context the Office expressed the view. It was thought initially that intra-parish calls may not be attractive to IAO's and inter-parish calls may provide more incentives to IAO's. However the local calls market has changed and there no longer exist an inter-parish and intra-parish call distinction. This is the result of C&WJ introducing a Single National Rate (SNR), which means that all national calls have the same tariff. The existing tariff is presently above what the intra-parish tariff was and below what the inter-parish tariff was before the introduction of the SNR. This development has cast further doubt on the feasibility of Indirect Access for national calls both from an economic and technical standpoint. This issue is however expounded on further in the document.

Indirect Access options

- 3.5 On the basis of the discussion in Tel 2003/02, the subsequent discussions and the further investigations carried out by the Office, it is now possible to outline the relative merits of the Indirect Access options.
- 3.6 **Carrier selection (CS)** is achieved through the customer inserting a carrier selection code in front of the telephone number they wish to call. This carrier selection code can be inserted manually by the customer (potentially using a fast-dial option in the telephone) or using a PBX or another routing device. To offer CS an operator needs to obtain a carrier selection code from the relevant numbering authority and the access provider (ANO) needs to update its switches to recognise the code and to route all calls with this code to the nearest Pol with the operator to whom that code is assigned.
- 3.6 To facilitate CS, the ANO's local switches must be able to process or forward the total set of digits dialled by the customer, that is the carrier selection code and the full telephone number of the called party. In Jamaica, the North American numbering system is used and thus the Carrier selection code will be 7 digits.
- 3.7 The CS operator needs to create a contract with the customer for the Indirect Access service (this could be pre-paid or post-paid),

but it is not necessary for the Indirect Access operator to notify the ANO of individual customers with whom the Indirect Access operator has a contract. There are therefore no administrative procedures required between the Indirect Access operator and the ANO to activate individual Indirect Access customers, only the initial activation of the carrier selection code on the ANOs switches.

3.9 Figure 1 illustrates how calls flow between operators under Carrier Selection.

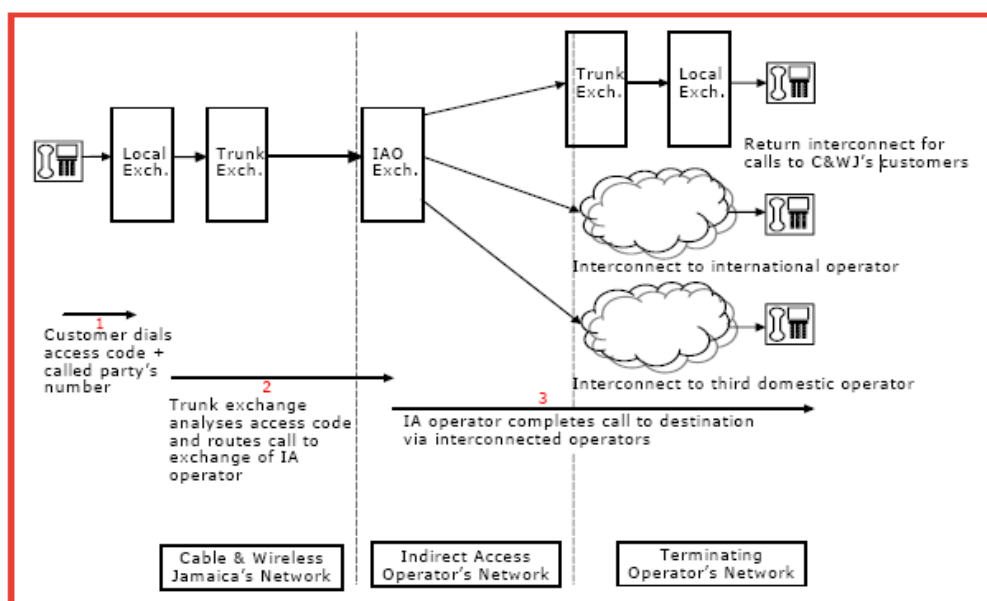


Figure 1: Call flow diagram for CS

Source: GOS Consulting

3.10 **Carrier pre-selection (CPS)** allows customers to opt for certain defined classes of calls to be carried by a CPS Operator selected in advance, without having to dial a routing prefix or follow any other procedure to invoke such routing.

3.11 In order to allow the automatic routing of certain classes of calls to a pre-specified operator, the Indirect Access operator needs to obtain a carrier selection code (as per CS) and the ANO's switches need to be modified to recognise this code. In addition to this, however, the Indirect Access operator needs to notify the ANO about each customer choosing that Indirect Access operator for Indirect Access services and the ANO needs to programme its switches to automatically insert the carrier selection code in front of the called numbers for the call categories specified.

3.12 Figure 2 illustrates how calls flow between operators under Carrier Pre-Selection

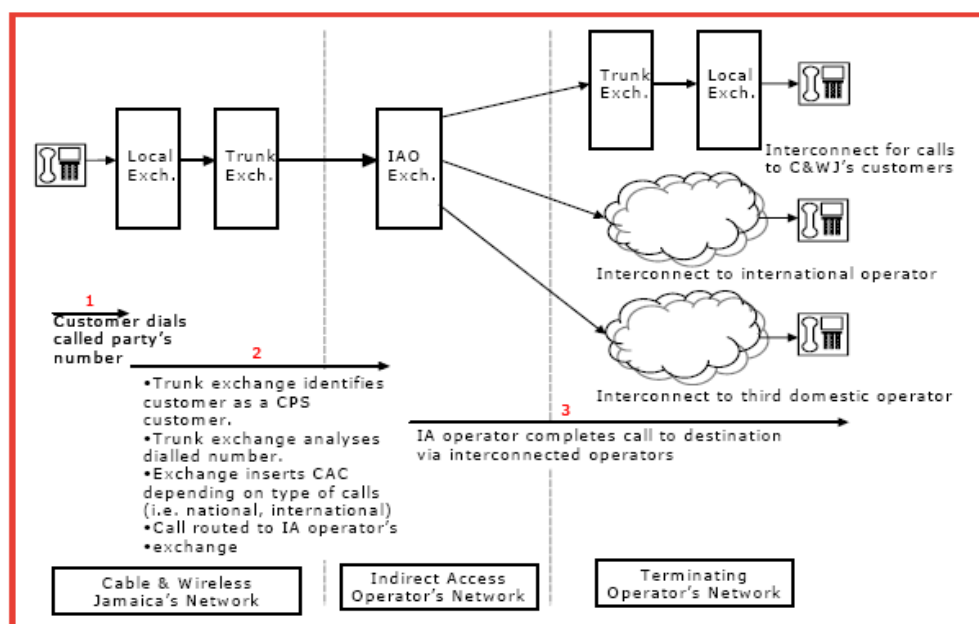


Figure 2: Call flow diagram for CPS

Source: GOS Consulting

3.13 **CPS with call-by-call override** combines the functionality of the two previous definitions. A customer can pre-select a carrier for certain call categories but can then override the pre-selection by inserting the carrier selection code for another carrier on a call-by-call basis.

3.14 To implement this form of Indirect Access, the full CPS and CS functionalities as described above need to be implemented. In addition, the ANO's switches must recognise whether a carrier selection code has already been inserted by the customers and thus should not automatically insert the CPS carrier selection code.

- 3.15 Figure 3 illustrates how calls flow between operators under Carrier Pre-Selection with call by call override

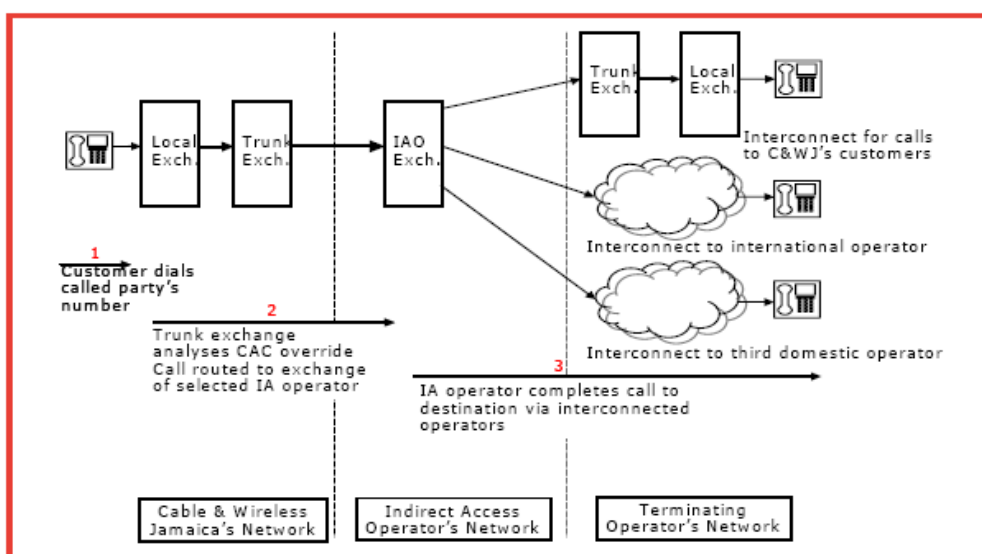


Figure 3: Call flow diagram for CPS with call by call override

Source: GOS Consulting

Discussion

- 3.16 This section describes the technical merits of each Indirect Access option. It includes an assessment of the technical/engineering challenges that would be presented by their introduction, their practical feasibility, the speed at which they can be introduced and the likely impact on customers.
- 3.17 C&WJ has informed the OUR that its local switches will need upgrading to accommodate the provisioning of Indirect Access. This is technically critical to CS as local switches must be able to process or forward the full set of digits dialled by the customer, including the carrier selection code. Further, given that Jamaica will be using the 7-digit carrier selection codes an international call could involve more than 20 dialled digits. C&WJ has informed the Office that approximately 25%-30% of customers are served by NEAX switches which are unable to process or forward in excess of 15 digits. Therefore CS cannot be introduced throughout Jamaica until C&WJ has phased out its NEAX switches, a process scheduled for completion in 2009-10. This technical limitation would also apply to CPS with call-by-call override as the override function also requires this additional functionality in C&WJ's local switches.

- 3.18 To enable Indirect Access in Jamaica, C&WJ's switches will require upgrading. However, in contrast to CS, the scope of the

CPS service will determine whether all switches or just trunk level switches will need upgrading. Whilst the OUR understands from C&WJ that it might not be able to implement CPS in its local NEAX switches, it has confirmed that it is able to implement the necessary upgrades to its trunk switches. The OUR is continuing to investigate this issue although if C&WJ is indeed unable to upgrade its local switches, it would only be possible, in the short-term, to offer CPS for calls that are switched at trunk level exchanges. This would include international calls, fixed to mobile calls and potentially calls to non-geographic numbers. With the SNR unless C&WJ is able to implement the appropriate upgrades to its local NEAX switches it will not be able to offer CPS for national calls.

- 3.19 The CPS service definition is considerably more complex than the CS definition, requiring the establishment of inter-operator processes and procedures. This typically takes a significant amount of time and may mean that new systems or systems interfaces have to be developed to facilitate these inter-operator processes. As such it might not be possible to implement CPS in the very short term.

Two Stage Dialling

- 3.20 The Office has considered the option of using **two-stage dialling** to deliver some of the benefits of Indirect Access. Two-stage dialling is the use by a service provider of a standard retail service to allow customers to access its services and may be implemented using either direct exchange lines or toll-free lines. The service provider would use and pay for the retail service just like any other customer using these services and no special wholesale arrangements are required.
- 3.21 As set out in Tel 2003/02⁶, the Office does not consider two-stage dialling to be an Indirect Access service because it does not provide consumers with a similar end-to-end call experience provided by access network operators. However, the OUR accepts that two-stage dialling could potentially have a similar effect on the market as Indirect Access. As with Indirect Access, the introduction of two-stage dialling is likely to lead to an increase in the level of competition in those call markets in which two-stage dialling is offered. Increased competition may in turn lead to increased levels of consumer welfare, for example,

⁶ TEL 2003/02 Sections 3.8 – 3.15

through lower prices, increased customer choice and quality of service⁷.

- 3.22 Two-stage dialling uses existing retail functionality on the ANO's network (e.g. either a non-geographic or a geographic number) and there are therefore no technical issues related to implementing this service. It could therefore be introduced in a short period of time and at relatively low cost.

Direct Exchanges Lines

- 3.23 The Office has received a number of complaints from operators using C&WJ's direct exchange lines to provide telecommunication services, of being blocked by C&WJ. C&WJ claimed that the use of direct exchange lines for the provision of telecommunications services is a breach of the Terms and Conditions of service.
- 3.24 The Office is aware that a licensee may also abuse its dominant position by only granting access to an essential facility subject on unreasonable term and conditions. Based on information received and after reviewing the Terms and Conditions of Service the Office found no basis on which business lines (a direct exchange line) may not be used for the purpose of completing outgoing international calls⁸.
- 3.25 Pursuant to Section 5 of the Act the Office is obligated to refer matters of competitive significance to the Fair Trading Commission (FTC). However as a result of the Supreme Court ruling in the case Jamaica Stock Exchange v The Fair Trading Commission, the FTC is unable to make rulings on matters of competitive significance. Therefore matters of competitive significance and the issue of direct exchange lines in particular must be dealt with by complainants' private right of action under section 48 of the Fair Competitions Act. Additionally, the OUR may seek to address this issue under Section 45 of the Act that deals with non-discrimination and continuity of supply.

⁷ The OUR notes that the relative benefit of each form of IA, and two-stage dialling is likely to differ. The relative benefits of each will be explored further in the cost benefit analysis.

⁸ This in the case of March Communications and Technology Limited (MCT).

3.26 Figure 4 illustrates how calls flow between operators under Two-stage dialling

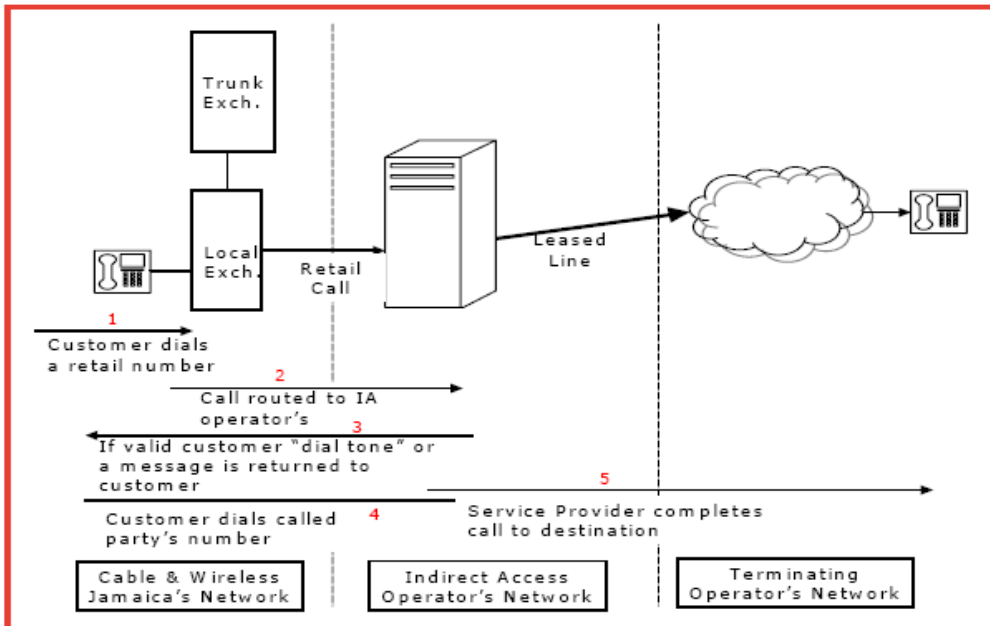


Figure 4: Call flow diagram under Two-stage dialling

Source: GOS Consulting

3.27 Figure 5 how calls flow between operators under Two-stage Dialling using toll-free numbers.

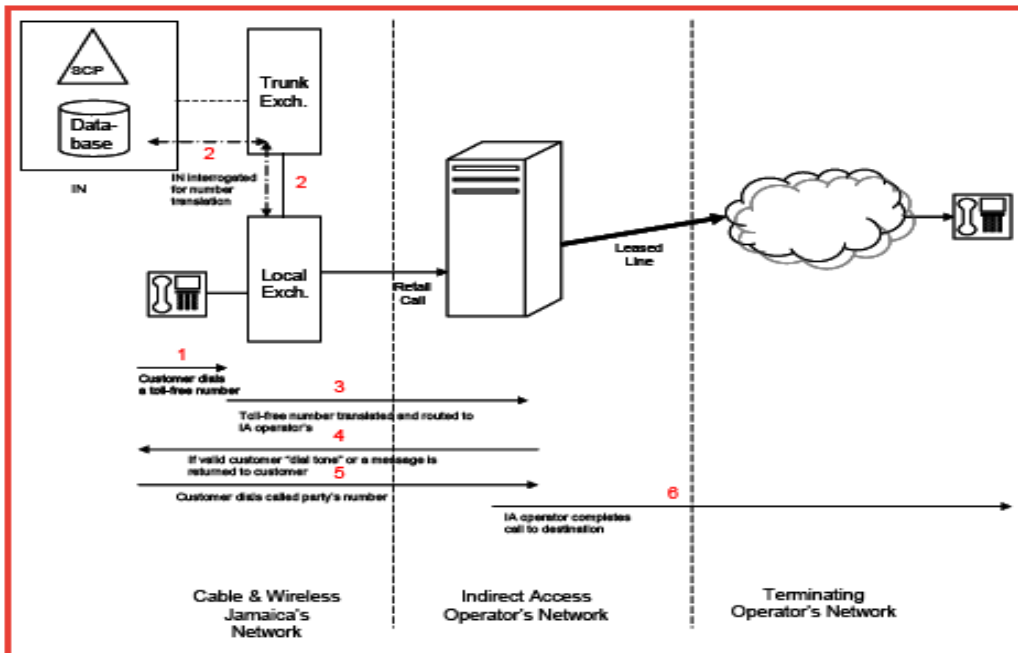


Figure 5: Call flow under Two-stage Dialling using toll-free numbers

Source: GOS Consulting

OUR proposal

- 3.28 The Office intends to further investigate C&WJ's claims that it is not possible to upgrade its local NEAX switches in order to be able to offer CPS. In particular, for this purpose the OUR will consult with the vendors/ manufacturers of C&WJ switches to get an idea of the software loaded on these switches and the scope for upgrade on these switches.
- 3.29 If C&WJ is correct, it will not be possible for C&WJ to offer some categories of CPS services until its local NEAX switches have been replaced. C&WJ is unlikely to complete this replacement programme until 2009-10 and therefore, without bringing this investment programme forward it would not be possible for C&WJ to offer some categories of CPS services before 2009-10.
- 3.30 Therefore, pending the results of this investigation and in the event that the net benefit of the following forms of Indirect Access are positive, the Office proposes to mandate C&WJ to provide CPS on services for which this is technically feasible. However, the Office acknowledges that in a number of other markets CPS has taken a number of months to implement, requiring for example detailed inter-operator processes to be developed.
- 3.31 The Office continues to hold the view that two stage dialling is a naturally occurring phenomenon of telecommunications' infrastructure and design and as such should not be viewed in the same light as the forms of Indirect Access being consulted on.
- 3.32 The Office proposes that C&WJ offer two-stage dialling to other operators, this outside of the consideration of CPS. The OUR will issue a separate decision on the matter on April 14, 2006, that is after reviewing responses to Question 2 below. The Office will enforce the offering of two-stage dialling through the principle of non-discrimination pursuant to Section 45 of the Act.

Question 1: Do respondents agree with C&WJ's assessment of the technical capability of its network to provide Indirect Access services. In particular,

- **Is it correct that C&WJ's network is not capable of providing CS services prior to the replacement of the local NEAX switches? Please give reasons.**

- *Is it correct that C&WJ's trunk switches will be capable of providing CPS services using its current network? Please give reasons.*

Question 2: *Do respondents agree with the OUR's proposal to require C&WJ to offer two-stage dialling prior to the introduction of CPS? Please give reasons.*

Chapter 4: Benefit cost analysis methodology and unfair burden test

- 4.0 The Office is required by Section 36 of the Act to undertake a Cost Benefit Analysis (CBA) and to consider whether the obligation to offer Indirect Access imposes an unfair burden on a carrier or service provider.
- 4.1 In this section a methodology for estimating costs and benefits is proposed. Firstly, we review the comments related to this topic received based on the OUR's first consultation paper on Indirect Access.

Summary of responses to Tel 2003/02

- 4.2 By and large, respondents expressed the common sentiment that Indirect Access will provide the opportunity for increased competition in the retail level for voice services which will lead to increased consumer choices, reduced prices and likely increased innovation. Digicel noted that Indirect Access if implemented properly will benefit all stakeholders. However, Digicel warned that while the introduction of Indirect Access will lead to increased competition in retail voice services it should not be done at the expense of or reduce the incentives for network infrastructure roll-out and the adoption of new technologies. C&WJ however differed on the perceived benefits of Indirect Access. C&WJ contended that while the cost of introducing Indirect Access is unquestionable the benefits are not clear as the Office might argue. C&WJ further contended that some of the benefits that Indirect Access hoped to achieve have already been achieved through other regulatory mechanisms such as the Price Cap. C&WJ noted that these benefits include reduction in call prices, better network utilization, network efficiency, innovation in retail services and increased choices and any CBA must reflect this.
- 4.3 C&WJ noted that key to the introduction of Indirect Access are customers' expectations and expectation of customers' take-up, which will have implication(s) for cost recovery. C&WJ also argued that the discount rate to be used for the CBA should be higher than that used for the Price Cap regime, this to reflect the risk associated with undertaking investment in an uncertain demand environment. Continuing on the issue of demand, the C&WJ noted that there is not sufficient data to support market demand for Indirect Access. Further, the respondent postulated that there should be a cost/investment recovery period of 5 years so as to promote infrastructure development.

- 4.4 C&WJ made the case that there are indirect costs associated with the upgrading of switches, and urged the Office to examine these. These include reduction in access infrastructure investments, which has implications for future competition and benefits to consumers.

Discussion of responses to Tel 2003/02

- 4.5 The Office is cognizant of the costs and benefits that are associated with the introduction of Indirect Access and as such will be very thorough in its approach to the CBA. The Office will explore all the costs, direct and indirect, that are likely to be associated with Indirect Access. The Office will take a very balanced approach the CBA so as to ensure that the right and informed decision is taken. The Office is however still of the view that the CBA should be conducted over a 10-year period. Below, likely costs and benefits are explored and a description of the Office's proposed Cost Benefit Analysis is given.

Benefit-cost methodology

- 4.6 Indirect Access enables a competitor with some core network infrastructure to interconnect with the incumbent's network so that it can offer call services to customers connected to the incumbent's local loop without itself having to deploy a duplicate local loop. Customers are then able to choose to have the alternative operators (and not the incumbent) deliver some or all of particular types of call⁹. Under Indirect Access, the investment required to enter the calls market is therefore reduced and the costs of entry into the market may therefore be lower. Indirect Access also allows customers to obtain call services from a provider other than their access provider. The introduction of Indirect Access therefore lowers the cost to customers of switching call service providers (for example, through neither having to change phone number or organise porting an existing number to a new carrier).
- 4.7 The lower barriers to entry for call service providers and the reduced cost of customer switching between call service providers means that the introduction of Indirect Access should stimulate competition in the market for fixed line retail calls more quickly and effectively than would otherwise be the case. The

⁹ Note that both with and without IA, competing operators can also purchase call termination services from the incumbent so a competing operator is also able to deliver calls to the called party without its own local loop infrastructure.

benefits of the introduction of Indirect Access arising from an increase in competition include:

- lower call prices;
- increased efficiency in the provision of call services; and
- increased choice of fixed service provider and fixed services.

4.8 However, the introduction and implementation of Indirect Access will also impose costs on the operators:

- the one-off costs of preparing the incumbent's network and/or systems for Indirect Access;
- the costs incurred each time indirect access is offered to a new operator;
- the costs incurred each time a customer wishes to switch to an alternative provider from the incumbent; and
- the cost of additional network elements that are used to carry calls via indirect access operators.

4.9 The cost benefit methodology to be applied in the assessment of Indirect Access estimates these benefits and costs and then compares the two. The results of the analysis will partially depend on the time period over which the analysis is conducted. Initially, given the high degree of set up costs and the likely time-lag before consumers benefit from increased competition, it is likely that the costs of Indirect Access may outweigh the benefits. However, over time the benefits from Indirect Access are likely to increase relative to the costs. The OUR proposes to conduct the analysis on a ten-year time horizon, in line with cost benefit analyses conducted by other regulatory authorities such as Oftel.

Estimating the benefits of Indirect Access

4.10 As set out above, Indirect Access is likely to lead to an increase in the level of competition in Jamaica's fixed line telecoms sector. This increase in competition and in particular the likely fall in prices arising from increased competition is likely to create the economic benefits associated with Indirect Access. These benefits can be divided into two types:

- Type 1 benefits accrue to those consumers who switch from the incumbent provider to an Indirect Access provider. These benefits result from the lower call prices and possible increased quality and service features that migrating customers enjoy.

- Type 2 benefits accrue to those consumers who remain with the incumbent operator. The increased level of customer switching that is precipitated by Indirect Access forces the incumbent to also reduce tariffs and increase service quality.
- 4.11 In order to estimate the economic benefits of Indirect Access, the OUR proposes to calculate the total consumer surplus that will arise from call services that are provided by both C&WJ and by indirect access operators¹⁰. It will compare this with the consumer surplus that would have been generated if Indirect Access had not been introduced. The difference between the two measures of consumer benefit is a measure of the economic benefit of indirect access¹¹.
- 4.12 Wherever possible, the OUR proposes to base the assumptions used in the calculation of the economic benefit of Indirect Access on market forecasts provided by the operators, comparing the likely development of the market in situations where Indirect Access is introduced and situations where Indirect Access is not introduced. It will compare these with available and appropriated international benchmarks in order to ensure that the forecasts provided by operators are not inconsistent with the experience of other countries.

Estimating the costs of Indirect Access

- 4.13 Both the ANO and Indirect Access operators may incur a number of costs as a result of the introduction of Indirect Access. The scale of these costs is likely to vary according to a number of features, including the form of Indirect Access that is introduced and the network and process upgrades that are necessary. However, the OUR will consider the following four cost categories.
- 4.14 **Network and Operator Support Services costs.** Both C&WJ and Indirect Access operators will incur a number of fixed costs when implementing CS and CPS. These costs may include:
- implementation of points of interconnect;

¹⁰ Consumer surplus refers to the net economic benefit that accrues to consumers from the consumption of a good. It reflects, for each customer, the difference between the amount the customer is willing to pay for a good and the amount the customer actually pays for the good.

¹¹ The OUR notes that increased competition can lead to other benefits aside from lower prices. However, other benefits may be more difficult to quantify and as such the OUR proposes to concentrate on estimating the benefits that may accrue from lower prices.

- per-operator costs to set-up and maintain the routing of CPS; and
 - per-call costs to identify a Indirect Access calls.
- 4.15 In addition to these fixed costs, the cost of call conveyance may differ between calls delivered using Indirect Access and calls delivered by C&WJ. In some cases the cost of call conveyance may be greater under Indirect Access than previously, as Indirect Access will require additional transmission and switching stages.
- **Customer management costs.** A number of customer management costs will also be incurred, particularly under CPS. For example, C&WJ may have to change its systems in order to identify those customers who have chosen to use CPS and to manage the process by which the responsibility for carrying the relevant calls is transferred to the CPS operator. Similarly, CPS operators must have systems that are counterparts to C&WJ's systems. In addition to the system set up costs, both C&WJ and the CPS operator will incur costs each time there is a customer transfer.
 - **Billing and customer care costs.** If single billing is implemented and C&WJ bills consumers on behalf of the Indirect Access operator, it may incur additional costs as a result of any necessary upgrades to its billing and customer care system that may be necessary.

- 4.16 In the case where an Indirect Access operator bills its customers, it will have to put in place its own billing and customer care systems. As C&WJ will still be issuing bills to the customer as well, the IA operator's costs will be in addition to C&WJ's costs.
- **Sales and marketing costs.** The Indirect Access operators will have to invest in sales and marketing to inform and acquire potential customers. In addition, C&WJ may increase sales and marketing expenses as a competitive response to the introduction of Indirect Access.

Question 3: Do respondents agree with the Office's proposed approach to identifying and calculating the costs and benefits of indirect access? If not, please state reasons and preferred approach.

Unfair burden test

- 4.17 Section 36 of the Telecommunications Act, 2000 states that, in addition to determining that the benefits of Indirect Access outweigh the likely costs of implementing Indirect Access, the

OUR must be satisfied, on reasonable grounds that, *“the requirement to provide the particular form of indirect access will not impose an unfair burden on any carrier or service provider”*. In Tel 2003/02, the OUR had requested that stakeholders submit their views on the correct interpretation of the concept of ‘unfair burden’.

Summary of responses to Tel 2003/02

4.18 C&WJ argued that the phrase “unfair burden” ought to be disaggregated and the terms defined separately to allow a much better understanding and appreciation of the phrase. The result is that any rules formulated by the Office must be fair and reasonable. The respondent further urged the Office to balance opposing interests in the rules making as what might be a burden to one might be a benefit to another. C&WJ noted that “unfair burden” may result from Indirect Access even if the benefits are found to outweigh the costs. Additionally, C&WJ noted that Indirect Access, if implemented, the method of recovering costs of Indirect Access should not present an “unfair burden”.

Proposed approach

4.19 In the absence of a definition of “unfair burden”, the OUR considers that Indirect Access might cause an unfair burden if it is not implemented in a way that is fair and reasonable to all parties. As such, a particular form of Indirect Access may create an unfair burden if it does not allow an efficient operator to:

- a. earn a reasonable rate of return on the provision of services; and
- b. compete effectively in the provision of all services.

4.20 In determining whether or not Indirect Access may create an unfair burden, and in proposing an approach for ensuring that it does not a number of factors must be considered. As set out above, C&WJ may incur a number of costs as a result of a requirement to offer Indirect Access to its network. Thus, ensuring that Indirect Access does not create an unfair burden on any operator will require a ‘fair and reasonable’ approach to the recovery of these costs. In Chapter 7 of this consultation document the OUR sets out its proposed approach for ensuring that the recovery of the costs of Indirect Access does not impose an unfair burden on C&WJ.

4.21 The introduction of competition through Indirect Access is also likely to reduce C&WJ’s share of the retail fixed line call markets. C&WJ currently faces a number of regulatory obligations that

result from its position as a dominant operator. As competition develops in these markets the Office will continually review C&WJ's regulatory obligations to ensure they remain appropriate and do not result in an unfair burden being placed on C&WJ.

Chapter 5: Indirect Access Operators

5.0 The Act limits the obligation to offer Indirect Access to public voice carriers that have market dominance. As such, dominant operators in both the fixed and mobile markets could be obliged to offer Indirect Access.

5.1 Tel 2003/02¹² discussed the operators that might be eligible to obtain Indirect Access from the operator that is obliged to provide it. The OUR proposed that CPS facilities should be provided to all operators who:

- are holders of a service provider licence which allows for the supply of voice retail services to customers;
- provide services over a network which has points of interconnection with the dominant public voice carrier's network;
- are able to deliver calls to all destinations in accordance with the service option(s) determined by the Office; and
- are in receipt of relevant numbering codes from the Office.

5.2 The purpose of this chapter is to review the OUR's proposals in these areas and propose an approach for determining the eligibility of operators to offer Indirect Access services. In the following section, responses to Tel 2003/02 on this topic are summarised and discussed. This is followed by further discussion of the issues and a set of revised proposals.

Summary of responses to 2003/02

5.3 Digicel made it clear that it is important for operators intending to provide Indirect Access must have a network as this will reduce the likelihood for inefficient market entry. Digicel reiterated the need for such requirements as Indirect Access operators may be allowed similar rights to those enjoyed by the incumbent network operator. It is Digicel's belief that the absence of this requirement will compromise long-term competition in the provision of network services, customer benefits and investment in telecommunications network in Jamaica. C&WJ, another respondent, continued to argue that interconnection is not necessary for Indirect Access as under Two-stage Dialling or toll-free access customers could obtain access to a competitor's network. C&WJ is further implying that operators intending to

¹² TEL 2003/02 Sections 3.17 and 3.18

provide Indirect Access should have an independent switching and transmission network.

- 5.4 In response to Tel 2003/02, C&WJ argued that it is yet to be declared dominant as a public voice carrier and therefore is not obligated to provide Indirect Access. The C&WJ expressed some level of concern that mobile operators with likely dominant position are not targeted by the Office to provide for Indirect Access.

Requirements to provide Indirect Access services

- 5.5 As set out above, C&WJ has been declared dominant in the market for fixed access, domestic retail services, international retail services and fixed network interconnection services, TEL 2003/07. The OUR is therefore in a position, depending on the results of the CBA and unfair burden tests, to direct C&WJ or any other fixed operator declared dominant to provide Indirect Access services.
- 5.6 The OUR has not to date found any mobile operators to be dominant in mobile call markets (with the exception of the market for mobile call termination), although the matter is presently under consideration. As such, the Office is not in a position at this point in time to mandate any mobile operators to offer Indirect Access services.
- 5.7 Additionally, C&WJ is this of the view that toll-free access and other forms of two stage dialling is a form of Indirect Access. The Office however still does not share this view and has addressed this as a separate issue and not as a form of Indirect Access in this document.

Eligibility criteria for offering Indirect Access services

- 5.8 The criteria by which operators and service providers should be eligible to offer Indirect Access services in Jamaica may vary between the Indirect Access service options. Two-stage dialling may be offered by service providers without any (or with very limited) physical networks. It would therefore seem inappropriate to impose any limitations on the eligibility of operators to offer this service.
- 5.9 CS, CPS and CPS with CS override are all based on switched interconnection interfaces between the Indirect Access operator and access network operator. As such, these services can only be offered by operators with switching functionality. International best practice is to not limit the eligibility to offer Indirect Access services to any particular type of operator, but instead to allow all

licensed operators to offer the service if they so wish. However, the Office still requires that service providers should:

- i. hold a service provider licence which allows for the supply of voice retail services to customers, a requirement of the Act; and
- ii. be in receipt of relevant numbering codes from the Office.

5.10 In practice, the OUR does not consider that these will create a barrier to entry for (potential) Indirect Access providers.

OUR proposal

5.11 In the event that the CBA suggests that a form of Indirect Access will generate net benefits for Jamaica, the OUR proposes to require C&WJ, the dominant fixed line operator, to offer Indirect Access services on its fixed line network. The OUR does not currently consider it appropriate to require any of the Jamaican mobile operators to offer Indirect Access services to eligible operators.

5.12 The OUR also proposes that:

- any operator/service provider that is permitted to offer services should be able to offer two-stage dialling; and
- service providers holding relevant licences allowing for the provision of voice retail services to customers and who are in receipt of relevant numbering codes should be able to offer Indirect Access services.

5.13 For the avoidance of doubt, this would enable mobile operators to offer IA services over C&WJ's fixed network.

Question 4: Do respondents agree with the OUR's proposal that all service providers who wish to offer two-stage dialling should be eligible to do so? Please state reasons.

Question 5: Do respondents agree with the OUR's proposal that, to be eligible to offer Indirect Access services to customers, operators must:

- ***be in receipt of relevant numbering codes from the Office? Please state reasons.***

Chapter 6: Service specification

- 6.0 This chapter of the consultation paper reviews the possible service specification for Indirect Access services, focussing in particular on:
- a.) services that may be offered by Indirect Access operators;
 - b.) discount tariff plans and Indirect Access services; and
 - c.) billing for Indirect Access services.
- 6.1 For each aspect, this chapter reviews the OUR's original proposals (as set out in Tel 2003/02) and the responses received by the OUR to Tel 2003/02. It then discusses the options available to the OUR and makes proposals in each area.

Call services that may be offered by Indirect Access operators

- 6.2 In Tel 2003/02, the OUR stated that, in deciding on the number and type of call services available to Indirect Access operators, it would be mindful that:
- a.) the regime must be simple and easily understood by stakeholders; and
 - b.) Indirect Access operators should be able to offer services where the margin of profitability is assessed by the operator to be attractive.
- 6.3 Taking into account the above factors, the following options should be available under the proposed regime:
- i. Option 1: national calls; and/or
 - ii. Option 2: outgoing international calls.

Discussion of responses to Tel 2003/02

- 6.4 As mentioned earlier, the structure of calls market have changed since Tel 2003/02 was published. Following the introduction of the SNR, there now only exists the following fixed-line origination call markets, national call market, international outgoing call market, fixed-to-mobile and calls to non-geographical numbers. Again, the Office will, contingent on the CBA along with considerations of technical and economic feasibilities, mandate Indirect Access as appropriate for all relevant markets.

Discussion

- 6.5 International experience shows that Indirect Access was typically introduced first for international calls and sometimes also for

national (long distance) calls. Increasingly Indirect Access is now also applied to other call categories, including local calls, calls to mobile customers and non-geographic calls. Whilst a larger basket of Indirect Access services may be more attractive to customers it also typically involves greater costs for operators.

- 6.6 The potential scope of Indirect Access services may be determined by the technical feasibility of offering each call service via Indirect Access. The OUR's research suggests that, due to the way in which C&WJ's network is configured, it may not be feasible to include national calls in CPS-based Indirect Access services. This is because some national calls are handled at local switch level and a number of C&WJ's local switches may not offer CPS-based Indirect Access services and may not be able to be upgraded to include this functionality. Two-stage-dialling option could however include these calls.
- 6.7 The OUR is currently reviewing whether C&WJ's claims regarding its inability to upgrade its local switches are sustained. If this review concludes that C&WJ is able to appropriately upgrade its local NEAX switches, the Office would be inclined to include national calls in the proposed Indirect Access regime. However, if this review indicates that C&WJ is not able to upgrade its local NEAX switches, or that the estimated cost of the upgrade outweighs the potential benefit to society, the OUR proposes that only those calls which are handled through a C&WJ transit/trunk switch should be eligible for CPS-based Indirect Access at this point. These calls include international outgoing, fixed-to-mobile call and/or calls to non –geographic numbers.
- 6.8 The Office will however review Indirect Access options with the view for implementation on a progressive basis as upgrades to C&WJ switches are carried out.

Question 6: *Do respondents agree with the OUR's proposed approach for reviewing the inclusion of national calls in any Indirect Access regime in Jamaica? Please state reasons.*

OUR proposal

- 6.9 In view of the likely importance to customers of different call categories, the Office proposes that the following call categories be included in any Indirect Access regime in Jamaica:

- international calls, and

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- calls to mobile phones.

- 6.10 The OUR will continue to review the technical and economic feasibility of including national calls in an Indirect Access regime for Jamaica.
- 6.11 The Office does not propose to impose any restrictions on the call categories that may be offered by service providers under two-stage dialling. This will give service providers maximum commercial freedom to offer the widest range of services to their customers.

Question 7: Do respondents agree with the OUR's proposal that international outgoing calls and calls to mobiles should be included in any Indirect Access regime in Jamaica? Please explain.

Question 8: Do respondents agree with the OUR's proposal that there should not be any restrictions on the call categories that may be offered by service providers under two-stage dialling? Please explain.

Discount tariff plans and Indirect Access services

- 6.12 C&WJ currently offers its users a low user package. Under this package, subscribers receive a discounted monthly line rental but pay higher call charges.
- 6.13 In Tel 2003/02 the OUR proposed that Indirect Access should not be made available to customers who opt for a discount tariff plan from C&WJ such as the low user package. The purpose of such a restriction would be to prevent a customer from taking advantage of discounted line rental from the ANO and discounted call charges from Indirect Access operators.

Summary of responses to 2003/02

- 6.14 Digicel declared support for the exclusion of customers on specific discount tariffs from Indirect Access offerings but is however not clear as to what is meant by "discount tariff plan", as in the Digicel's view it could apply to both low end and high end users (e.g. friends and family scheme).

Discussion of responses to Tel 2003/02

- 6.15 In this context, "discount tariff plan" refers specifically to customers on C&WJ low user package. The idea is, as was mentioned in Tel 2003/02, is to prevent a customer from taking

lower line rental but lower call charges from competing Indirect Access operators.

Discussion

6.16 The Office is still of the view that its proposal to make Indirect Access unavailable to customers who opt for a discount tariff plan from C&WJ such as the low user package is appropriate. More generally, the OUR proposes that Indirect Access should be unavailable to customers of any discount tariff plan, where the plan:

- i. is sanctioned by the Office;
- ii. offers a discount on the monthly access charge;
- iii. offers a verifiable discount; and
- iv. where there are regulatory constraints which prevents the ANO from charging cost based tariffs for access.

Question 9: *Do respondents agree with the OUR's proposal that Indirect Access services should be unavailable to customers of certain discount tariff plans? Please state reasons for your answer.*

Question 10: *Do customers foresee any technical or process issues in ensuring that Indirect Access services are unavailable to customers of certain discount tariff plans? Please state reasons for your answer.*

Customer billing

6.17 In paragraph 3.16 of Tel 2003/02, the OUR noted the different options available for customer billing under the Indirect Access arrangements. The OUR also stated its preference for a single billing solution.

Summary of responses to 2003/02

6.18 All respondents argued against the single bill proposal put forward by the Office. C&WJ expressed clear preference for allowing Indirect Access operators to bill their own customers directly as it sees no benefit in single billing. Support for the proposal put forward by C&WJ came from Digicel and Reliant Communications.

Discussion

6.19 The nature of Indirect Access services means that customers using Indirect Access will be purchasing telecommunications services from two or more providers. Basic access services will

continue to be supplied by the ANO whereas calls may be purchased from any number of providers.

- 6.20 Receiving several bills for telecommunications services may be inconvenient, especially as many Jamaican telecommunications users pay their bills in cash rather than through bank transfers. This may also be potentially confusing for subscribers and may act as a disincentive to consumers for taking up the Indirect Access service.
- 6.21 Single billing is only appropriate to CPS and is not applicable in the case of CS where a customer can make calls through a number of Indirect Access operators. Under CPS it is more practical to consider offering the customer a single bill, as a customer will only contract with two operators. However, the issues involved in specifying a single billing process can be complex, involving not only the transfer of billing data and the communications of call charges between the operators, but also issues such as the synchronisation of billing cycles, the agreement of layout and branding of the billing documentation, handling of disputes of one party's charges and the management of bad debt.
- 6.22 The provision of separate bills has a number of advantages. Most notably it provides the Indirect Access operator with the opportunity to establish direct and regular communication with its customers.
- 6.23 The OUR also notes that in most countries, CPS has been introduced using separate bills and the single billing aspect has been introduced later, usually with the CPS operator billing the customer on behalf of the access provider, rather than the other way around. This is because of the importance attached by CPS operators to regular bills as a means of communicating with customers.

OUR proposal

- 6.24 For the reasons set out above, the OUR proposes to allow separate billing arrangements with the introduction of Indirect Access. However, the OUR reserves the right to review this situation once the CPS service has been established.

Question 11: Do respondents agree with the OUR's proposal to allow separate billing arrangements with the introduction of Indirect Access? Please state your reasons.

Chapter 7: Charging for Indirect Access

7.0 This chapter describes the OUR's proposed approach for ensuring that the recovery of the costs of Indirect Access does not create an unfair burden on any party and will review the OUR's original proposals (as set out in Tel 2003/02) as well as the responses received by the OUR to Tel 2003/02. It then discusses the options available to the OUR and makes revised proposals in this area.

OUR's original proposals

7.1 The costs associated with implementing Indirect Access can be categorised as follows:

- *System set-up costs.* The costs of developing and implementing, if applicable, switch software upgrades needed for the capability to provide Indirect Access, and the cost of modifying support systems.
- *Per operator set-up costs.* The costs of enabling Indirect Access for any individual operator.
- *Per line set-up costs.* The costs of implementing CPS for a particular customer line when that customer wishes to switch to using an Indirect Access operator¹³.

7.2 In Tel 2003/02 the OUR proposed that, in line with the principle of cost causation, both the per line set-up costs and the per operator set-up-costs of Indirect Access should be recovered from Indirect Access operators.

7.3 The OUR expects that the benefits of the Indirect Access regime will be distributed across all customers, inclusive of those of the ANO. It therefore proposed that the system set-up costs should be shared between the ANO and the providers of Indirect Access services.

Summary of responses to 2003/02

7.4 There was a general consensus from all respondents that there are three primary categories of cost associated with Indirect Access, system set-up cost, per line set-up costs and per operator set-up costs. C&WJ argued that the costs should be recovered using the principles of pricing for interconnection services as is laid out in the Act under Section 33 (1). In

¹³ These costs may also be incurred by C&WJ if a customer who had previously selected to use an IA operator chose subsequently to switch to take calls from C&WJ.

addition, C&WJ argued that the cost recovery method should pose no unfair burden on any party and should benefit competition positively.

- 7.5 All respondent agreed that the recovery of per line and per operator set-up costs should be guided by the principle of cost causation, which under Section 33 (1) of the Act implies that cost shall be borne by the carrier whose activities cause those costs to be incurred.
- 7.6 Digicel further believed that system set-up cost should be borne by the IAO and the ANO. C&WJ argued that even though the general principle of sharing system set-up costs was based on the principle of distribution of benefits, under the present regulatory framework this principle of cost recovery/allocation will impose an unfair burden on C&WJ and its customers. C&WJ argued that this was a result of its access deficit failing to be funded in a competitively neutral way. C&WJ made the point that all network operators selling the relevant services (including mobile services) should be made to contribute to the recovery of systems set-up costs since all customers using these services would benefit. Digicel does not share this view however and argued that no costs associated with Indirect Access should be borne by a direct access provider unless they are offering an Indirect Access service. Reliant Communications made the point that systems set-up costs should not be recovered via interconnection charges but should be recovered directly from IAO's.

Discussion of responses to Tel 2003/02

- 7.7 Following the introduction of Indirect Access, C&WJ will incur the costs associated with all three categories. These costs will not be incurred as part of a commercial decision by C&WJ but as a result of a regulatory obligation to provide Indirect Access services. In such circumstances it is generally not regarded as 'fair and reasonable' that the operator in question finance all of the costs.
- 7.8 The Telecommunications Act provides a number of guiding principles to be used in assessing how such costs should be recovered. For example, Section 33(1) of the Act outlines six guiding principles that the OUR should follow when it is required to determine the prices at which interconnection services are made available by a dominant provider¹⁴. These include:

¹⁴ The forms of IA proposed in this report and by the OUR in its first consultation document on IA may be considered to be interconnection services.

- costs shall be borne by the carrier whose activities cause those costs to be incurred;
- non-recurring costs shall be recovered through non-recurring charges and recurring costs shall be recovered through recurring charges; and
- costs that do not vary with usage shall be recovered through flat charges and costs that vary with usage shall be recovered through charges that are based on usage.

Recovering per-operator and per-line set-up costs

7.9 Per operator set-up costs and per line set-up costs are both specific to Indirect Access operators and are incurred by C&WJ as a result of decisions made by Indirect Access operators and their customers. Thus the principles laid down in the Act suggest that per operator set-up costs should be recovered from each Indirect Access operator that enters the market and per line set-up costs recovered from an Indirect Access operator every time that operator gains a customer from C&WJ. Both are examples of non-recurring costs and should thus, following the principles laid out in the Act, be recovered using a one-off, non-recurring charge.

Recovering system set-up costs

7.10 It is less clear that the principles laid out in Section 33(1) of the Act provide guidance as to how system set up costs should be recovered. The costs are not caused by the activities of any particular operator, but are incurred by C&WJ as a result of a regulatory obligation, regardless of how many Indirect Access operators enter the market.

7.11 When developing and reviewing tariff proposals aimed at cost recovery, it is worth considering the approach adopted in other jurisdictions. Oftel, in the UK, has historically taken the following six factors into consideration, namely:

- costs should be borne by those whose actions cause the costs to be incurred at the margin;
- the charging mechanism should reflect the distribution of benefits that accrue from the service that is being provided;
- producers should face strong incentives to minimise costs;
- pressures for effective competition should not be weakened by the actions of any party unduly raising the

costs of a competitor. Tariffs should encourage efficient entry;

- where equivalent services are supplied on a reciprocal basis it may be appropriate for charges to be symmetric in each direction; and.
- charges should be practicable and implementable and not unduly raise administration costs.

7.12 Taking these factors into account, the OUR considers that system set-up costs should be recovered from C&WJ and Indirect Access operators. Such an approach:

- mirrors the distribution of benefits from Indirect Access, where customers of both the Indirect Access operator and the ANO may benefit from the increased competition that results from the introduction of Indirect Access;
- ensures no operator is put at a competitive disadvantage; and
- provides an incentive to all parties to keep system set-up costs as low as possible.

The structure of cost recovery charges

7.13 System set-up costs do not vary according to the number of Indirect Access operators that enter the market or the volume of Indirect Access calls that are made. However, it may be impractical to recover such costs using a non-recurring charge. The pattern of future entry by Indirect Access operators is not known and so recovering system set-up costs through non-recurring charges may result in instability and uncertainty in cash-flows received by C&WJ.

7.14 System set-up costs can practically best be recovered from usage charges. Adding a surcharge to call origination minutes (for those services offered by both C&WJ and Indirect Access operators) ensures that the costs are recovered from all consumers who may benefit from the introduction of Indirect Access. This also means that an operator will pay system-set-up costs in direct proportion to its market share, thus ensuring that each operator pays in proportion to its size in the market.

OUR Proposal

7.15 The OUR proposes that system set-up costs be recovered through assigning a surcharge to call origination tariffs. As a

result, both C&WJ and Indirect Access operators will contribute to the recovery of these costs.

- 7.16 Per-operator set up costs and per-line set up costs are incurred as a result of the actions of Indirect Access operators. The OUR therefore proposes that per-operator and per-line set up costs should be recovered through non-recurring charges to the Indirect Access operator causing those costs to be incurred.

Question 12: Do respondents agree that per-operator and per-customer set up costs should be recovered through non-recurring charges levied on Indirect Access operators? Please state reasons?

Question 13: Do respondents agree that system set up costs should be recovered through a surcharge on call origination tariffs? Please state reasons.

Chapter 8: Implementation Issues and Timescales

Introduction

8.0 There are various tasks involved in implementing a workable framework for Indirect Access and this has been recognized by respondents. Respondents cited the UK where different working groups comprising of operators, consumer groups and consumer protection agencies were established by Oftel to examine and inform decisions relating to the technical and commercial aspects of Carrier Pre-selection. For its part the Office is well aware of the approaches used in a number of countries including the UK, Ireland, and France in examining the implementation of CPS. The Office finds respondents' comments on key implementation issues relating to Indirect Access to be constructive and useful and anticipate their full participation in the consultation.

Indirect Access Advisory Committee (IAAC)

8.1 If the results of the benefit cost test and unfair burden test are in favour of the imposition of Indirect Access, the Office will proceed to establish an Indirect Access Advisory Committee (IAAC). There is general consensus among respondents that indirect access straddles very complex operational and costing issues and failure to ensure its proper implementation and consumer safeguards may lead to undesirable outcomes for consumers and operators. The Office is in favour of a single committee comprising of representatives of carriers and service providers, OUR, the Fair Trading Commission (FTC), and the Consumer Affairs Commission (CAC) and Consumer Advisory Committee on Utilities (CACU). The purpose of this Committee would be to examine and develop guidelines relating to the introduction and implementation of indirect access in Jamaica's telecommunications sector, including the following :-

- i. functional specifications relating to the implementation and commercial introduction of the form of indirect access determined by the Office.
- ii. inter-operator processes relating to the successful introduction and implementation of the form of indirect access determined by the Office.
- iii. development of a Code of Practice aimed at guarding end-users and competitive operators from abuse.

8.2 The Committee may also consider other matter germane to the successful implementation of indirect access in the telecommunications sector but only after it has consulted with the

Office and received its written approval. For each of the items in paragraph 6.4 the Committee is to submit a report to the Office. Where there are conflicting areas of interest between operators these should be clearly set out in the reports. Further details relating to the work of the Committee including its Terms of reference, date and time for meeting, etc, will be finalized following its formation.

- 8.3 Given the inter-relatedness of the activities outlined above, the Office takes the view that a single committee is the most efficient and expeditious way to proceed recognizing that the committee would have to establish a number of subcommittees that would look at specific aspects of the overall mandate. For example, a separate group to deal with issues relating to consumer protection and another to deal with inter-operator processes, functional specifications and technical matters. The first group may be made of representatives of the FTC and CAC while the second would be representatives of carriers and service providers.
- 8.4 The role of the Committee shall be of an advisory nature and at best shall be considered another aspect of public consultation. The Office may accept, reject, or modify the proposals of the Committee. More importantly, the establishment of the Committee shall be without prejudice to the statutory powers of the Office or any other duly constituted body. For example, the existence of the Code of Practice will not eliminate the obligations of operators to abide by other relevant regulations.

Timescales for implementation of Indirect Access

- 8.5 C&WJ expressed concern that the Office has not set a timescale for the implementation of Indirect Access. C&WJ made it apparent that the time needed for software and technical upgrades must be factored into an implementation time period. C&WJ cited the extensive process that Oftel underwent in implementing Indirect Access on British Telecoms (BT), and suggested that the Office follow a similar process. In annexe 1 the Office proposed the time scales the Office is anticipating for the full implementation for CPS-based Indirect Access

Question 14: What is a reasonable and an appropriate time period for the implementation of Indirect Access offerings for C&WJ? Please explain.

Annexes

Annexe 1: Timescales for introducing a form of Indirect Access in Jamaica

- 10.0 It is envisaged that a period for implementation of CPS-based Indirect Access should be no longer than 18 months from the date of the final Determination by the Office. Before the final Determination however there will be another round of consultation on this matter. The third consultative document will focus on results of the Cost Benefit Analysis and the test of 'unfair burden'.
- 10.1 The table below provides the expected timescale for Indirect Access service implementation in Jamaica. It is anticipated that CPS-based Indirect Access, if commissioned by the Office will be implemented by April 2008.

Table 1. Proposed date for the implementation of CPS-based Indirect Access in Jamaica

Event	Proposed date
Publication of Second Consultative Document	February 2006
Publication of Third Consultative Document	August 2006
Determination on Indirect Access	November 2006
CPS-based Indirect Access full implementation/ Service offering	May 2008

Annexe 2: Functional specification for Indirect Access

Introduction

10.0 This chapter describes the functional specifications for providing a form of Indirect Access. Under the services specifications, elaborated on in Chapter 3 of the consultative document, there exist variations in functionality. In this chapter functional specifications for CPS are described under the following headings:

1. Technical and switching issues
2. Scope of Indirect Access service (which calls will be eligible for Indirect Access)
3. Points of Interconnection (where C&WJ will hand over Indirect Access calls to the Indirect Access operator)
4. Billing Arrangements (who bills the customer)

Technical and switching issues relating to CPS Indirect Access

10.1 Technical and switching issues were introduced and expounded on chapter 3 of the consultative document. However, the technical and switches issues are now stated to reflect CPS form of Indirect Access only.

10.2 As noted earlier to enable CPS in Jamaica, C&WJ's switches will require upgrading to CPS functionality. Again, the scope of the CPS service will determine whether all switches or just trunk level switches will need upgrading. Implementation of CPS on C&WJ's trunk switches is not a complex matter but C&WJ will incur costs to purchase the functionality from Nortel (the supplier of C&WJ's DMS switches). It may also take some time to implement the necessary functionality. C&WJ have informed the OUR that it is not possible to implement CPS in its NEAX switches.

10.3 If this is correct, CPS can only be implemented for calls which are switched at the trunk level. This would include international calls, fixed to mobile calls and potentially calls to non-geographic numbers. Extending the CPS scope to calls switched at local level would not be possible unless C&WJ finds a way to implement CPS on their NEAX switches.

10.4 The CPS Indirect Access service requires the establishment of inter-operator processes and procedures which will need to be agreed in an inter-operator forum with the participation of all operators. This typically takes a significant amount of time and it

may mean that new systems or systems interfaces must be developed to facilitate these inter-operator processes.

Scope of CPS service

- 10.5 The scope of CPS is defined by the categories of calls which are eligible under CPS. Since the first consultation on the issue of Indirect Access the domestic calls markets have changed and it appears that the CPS service may only be attractive for international calls for both Indirect Access operators and customers.
- 10.6 International experience shows that Indirect Access was typically introduced for international calls only and sometimes also for national calls. Increasingly however Indirect Access is now also applied to other call categories, including local calls, calls to mobile customers and non-geographic calls, leaving only calls to emergency services, customer services and operator assistance calls outside the scope of Indirect Access.
- 10.7 However, in Jamaica the choice of which Indirect Access services should be included is determined by several factors including technical feasibility, costs and benefits and customer demand. International experience indicates that a larger basket of Indirect Access services is more attractive to customers. However, this also involves greater costs. The OUR research suggests that, due to the way in which C&WJ's network is configured, it may not be feasible to include national calls in the CPS-based Indirect Access services. This is because some national calls are handled at local switch level and the majority of C&WJ's local switches apparently cannot offer CPS-based Indirect Access services. The Two-stage-dialling could include these calls. However, the OUR is of the view that until C&WJ has completed its scheduled replacement of NEAX local switches, only calls which are handled through a C&WJ transit/trunk switch could be eligible for CPS-based Indirect Access.

Points of Interconnection

- 10.8 For the purpose of interconnection the C&WJ network is divided into four Interconnect Access Areas (IAA) and within each of the four IAA's there are two Points of Interconnection (PoI) or Interconnect Switch Locations (ISL). Currently C&W Mobile has interconnection at both of the Poles in the Kingston and Montego Bay IAA and all other operators interconnect at either or both of the Poles in the Kingston IAA. The C&WJ switch network is built with 10 NEC NEAX-61E Local exchanges (in addition there are 8 NEC NEAX-61E RSUs and 1 RLU deployed) and 12 Nortel

DMS-100 Local exchanges. In addition, tandem functionality is provided by four trunk switches based on Nortel DMS 100/200 or 500¹⁵.

Processor Capacity

10.9 Implementing Indirect Access services on to C&WJ's switches would cause an increase in the amount of processing capacity required. According to the data supplied by C&WJ on its Nortel DMS switches, only two of these are running at above 50% processing capacity with Carlton at approximately 50% and the maximum occupancy being at Central with approximately 60% processor occupancy¹⁶. For the NEAX switches only two CPUs were running near to 60% (PTAN¹⁷ and Spanish Town)¹⁸.

10.10 Notwithstanding other technical issues discussed above, these processor occupancy levels should allow Indirect Access to be implemented onto C&WJ switches without causing processor capacity issues or requiring the processors to be upgraded.

Trunk Capacity

10.11 As previously identified, C&WJ have interconnect customers on four of the Interconnect Switch Locations¹⁹. The trunk capacity utilisation at these four locations are shown in Table 2²⁰.

¹⁵ Source – Section 5.1 & 5.2 Network Configuration, compiled by C&WJ Networking Planning, September 2004, Issue 9.

¹⁶ Processor Occupancy of CW Switches, DMS CPU, October 2004, C&WJ

¹⁷ Unable to cross reference this exchange to the list provided by C&WJ

¹⁸ Source – 'Processor Occupancy of CW Switches, NEAX-CPU, October 2004', C&WJ

¹⁹ Although only C&WJ mobile interconnects in Montego Bay

²⁰ Source 'Trunk Capacity Utilisation by Host Switch', C&WJ

Table 2: Trunk capacity utilisation in C&WJ's network

Switch	Trunk Capacity Utilisation
Montego Bay	97.7%
Rose Hall	66.3%
Carlton 1	99.8%
Carlton 2	95.8%
Central	95.2%

10.12 Apart from Rose Hall, all of these locations are reaching 100% utilisation of their trunk capacity.

10.13 At the four Interconnect Switch Locations where there are no interconnection customer currently connected the trunk capacity utilisation is shown in Table 3.

Table 3: Trunk capacity utilisation in C&WJ's network

Switch	Trunk Capacity Utilisation
Mandeville	83.8%
May Pen	53.3%
Ocho Rios	66.7%
St. Anns Bay	71.9%

10.14 The introduction of Indirect Access could lead to an increase in trunk traffic and therefore it may be necessary to upgrade the trunk interfaces on the C&WJ switches, especially at ISLs where there are currently customers interconnected. It might be necessary for C&WJ to add Digital Trunk Controllers (DTC) to the Nortel DMS switches in order to handle Indirect Access services.

Billing Arrangements

10.15 This issue received substantive mention in chapter 6, but the main issues as they relate to CPS are repeated here. The billing

issue is of enormous importance because it can have varying impacts on customers and operators of Indirect Access. Additionally, billing has implications for operators' revenues and relationships between operators and consumers.

- 10.16 Under CPS, the customer would only contract with two operators (C&WJ and the CPS operator). It is therefore more practical to consider offering the customer a single bill. The issues involved in specifying a single billing process are complex and involve not only the transfer of billing data and the communications of call charges between the operators, but also issues such as the synchronization of billing cycles, the agreement of layout and branding of the billing documentation, handling of disputes of one party's charges and the management of bad debt, to name but a few.
- 10.17 In most countries, CPS has been introduced using separate bills and the single billing aspect has been introduced later, usually with the CPS operator billing the customer on behalf of the access provider, rather than the other way around. This is because of the importance attached by CPS operators to regular bills as a means of communicating with customers. It is the view of the Office that if CPS service is mandated, this should be based on separate billing with the option to review this situation 2 or 3 years after introducing the CPS service.

Annexe 3: Code of practice for Indirect Access Operators

Introduction

- 11.0 The need for a Code of practice gains prominence because customers must be reliably and adequately informed on the choices that are available to them and how the services will work. Additionally, consumers' must be adequately protected and as such consumer protection procedures must be established.
- 11.1 In keeping with the requirements of section 36 of the Act the Office set out in this Chapter rules to govern the implementation and operation of CPS. It is expected that as the consultation process progresses there will be need to make modifications to the proposed rules.

Definitions

- 11.2 **“Authorized operator”** means any operator that submits a request for change, on behalf of a customer, in the customer's choice of an operator specified service with the customer's authorization verified in accordance with the procedures for authorization and verification.
- 11.3 **“Act”** means the Telecommunications Act, 2000
- 11.4 **“Access Network Operator”** means a person who is granted a carrier licence pursuant to section 13 of the Act to own, establish and operate a fixed network and or mobile network and providing specified service including access to customers.
- 11.5 **“Carrier Pre-Selection”** means the facility offered to customers which allows them to opt for certain defined classes of call to be carried by an operator selected in advance and having a written contract with the customer, without having to dial a routing prefix or follow any other different procedure to evoke such routing.
- 11.6 **“Cramming”** is the practice of placing unauthorized, misleading, or deceptive charges on customers' telephone bills. Cramming also occurs when an operator does not provide clearly or accurately describe all of the relevant charges to the customer when marketing specified service(s).
- 11.7 **“Customer”** means a person who is provided with a specified service by a service provider and includes the end user of that service.
- 11.8 **“Determination”** means determination, decision, directives, instructions, consents, by the Office on matters relating to its regulatory duties, obligations and responsibilities under the Act.

- 11.9 “**Determination Notice**” means the document with that title which sets out the Office’s determination(s) on matters relating to its regulatory duties, obligations and functions under the Act.
- 11.10 “**Fixed network**” means a telecommunications network that is not a mobile network.
- 11.11 “**Gaining Operator**” means the operator which the ANO’s customer has pre-select and/or select on a call-by-call basis to provide indirect access services.
- 11.12 “**Indirect Access Facilities**” means those facilities which enable the IAO to provide to the customer requesting CPS Service and call-by-call selection in that request and comprise of: -
- system setup facilities,
 - per operator set up facilities, and
 - per customer line set up facilities.
- 11.13 “**Indirect Access**” means the method whereby customers are able to select the services of any service provider who uses a public voice carrier’s network to provide specified services.
- 11.14 “**Indirect Access Service(s)**” means Carrier Pre-Select service.
- 11.15 “**Interconnection**” means the physical or logical connection of public voice networks of different carriers.
- 11.16 “**Losing Operator**” means the operator which the Access Network Operator’s customer has pre-select and/or select on a call-by-call basis to provide indirect access services prior to the customer electing to change to the Gaining Operator.
- 11.17 “**Mobile network**” means a telecommunications network used to provide specified services that-
- permits a user to move continuously between places (including places accessing that network through different mobile base facilities) during the provision of a single calls; and
 - does not require physical contact between the network and the customer equipment.
- 11.18 “**Operator**” means a person who is granted a carrier licence and or service provider licence pursuant to section 13 of the Act, 2000 and includes Access Network Operator(s), and Indirect Access Operator(s).
- 11.19 “**Per operator set up facilities**” means the indirect access facilities required from the ANO by an individual IAO for routing of calls specified in a subscriber’s request for indirect Access service and include activities similar to data management

amendments and the setting up of arrangements for the electronic transfer of customer orders.

- 11.20 **“Per operator set up costs”** means the costs incurred by the ANO in providing per operator set up facilities.
- 11.21 **“Per customer line set up facilities”** means the Indirect Access facilities required by an IAO for a particular customer line in order to meet that customer’s request for indirect access service.
- 11.22 **“Per customer line set up costs”** means the costs incurred by the ANO in providing per customer line set up facilities.
- 11.23 **“Reference Interconnect Offer”** means an offer document setting out matters relating to the price and terms and conditions under which a public voice carrier will permit interconnection to its public voice network.
- 11.24 **“Slamming”** means the practice by operators of switching customers to their service without the customer’s knowledge or authorization.
- 11.25 **“Specified service”** means a telecommunication service or such other service as may be prescribed.
- 11.26 **“System set up facilities”** means the software and any alterations needed on the ANO’s switches and the modifications required for the ANO support systems to enable the ANO to provide Indirect Access facilities.
- 11.27 **“System set up costs”** means the costs incurred by the ANO in developing and implementing the system set up facilities.
- 11.28 **“The Office”** means the Office of Utilities Regulation established under the Office of Utilities Regulation Act.
- 11.29 **“Take up of service date”** means no less than 5 business days from the date of signing of the contract during which time the customer who has request to change his or her operator could decide to reverse this decision at no cost.
- 11.30 **“Telecommunications service”** means a service provided by means of a telecommunications network to any person for the transmission of intelligence from, to or within Jamaica without change in the content or form and includes any two way or interactive service that is provided in connection with a broadcasting service or subscriber television service.
- 11.31 **“Unauthorized Provisioning of Indirect Access Service”** means any activity undertaken by an operator that dishonestly attempts to initiate an indirect access service change without the explicit permission of the customer (e.g. slamming).

11.32 “**Unauthorized operator**” means any operator that submits a request for change, on behalf of a customer, in the customer’s choice of operator but fails to obtain the customer’s authorization verified in accordance with the specified authorization and verification procedures.

Part 1

11.33 Following public consultations the Office shall issue determinations detailing:

- (a) the designated Access Network Operator(s);
- (b) a list of Indirect Access facilities to be offered by operator designated at
 - (a) above as part of its Reference Interconnect Offer.
- (c) criteria for selecting operators eligible to offer Indirect Access Services to ANO(s)’s customers.
- (d) assignment of numbering codes for purposes of CPS and call by call selection;
- (e) directing any carrier designated as Access Network Operator to make modifications to the Indirect Access regime and the carrier shall comply in full.

11.34 In making any such determination or amendments to any such determination the Office shall have regard to the provisions of the Act and rules made pursuant to the provisions of the Act.

11.35 Charges for interconnection related to the provision of Indirect Access facilities shall be cost oriented and direct charges to customers, if any, should not present deterrence to the use of the services.

11.36 In assessing and or arbitrating a pre-contract relating to charges the Office shall have regard to the following principles: -

- **Effective competition:** cost allocation system should encourage competition
- **Cost minimization:** the cost allocation system should encourage operators to minimize cost and in particular to adopt technically efficient solutions
- **Cost causation:** the operator responsible for causing cost should bear the burden of such cost. Considerations should be given however, to mitigating such cost by assessing and setting off the attendant benefits to other users.

- **Distribution of benefits:** the costs of the proposed regime should be recovered from those who directly and indirectly benefit from indirect access. This means that where feasible consideration should be given to the externalities associated with the provision of Indirect Access
- **Practicability:** the mechanism for cost recovery needs to be practicable and relatively easy to implement while at the same time not acting as a barrier to the development of the indirect access regime.
- Any other matter, which the Office consider relevant, from time to time, to the development of an effective competitive market for specified services.

Part II Customer Contracts

11.37 In order to offer indirect access service(s) to a customer, the Indirect Access Operator must enter into a contractual arrangement with the customer. The contract shall be in writing and shall contain at least the following: -

- the take-up of service date,
- provisions for the customer to terminate the contract.
- any minimum period during which the contract will remain in force (which must not be more than three months) and explicitly state the penalties for breach of the minimum contract period.
- any upfront charge to the customer.
- tariffs, payment options and billing frequency.
- Means for informing the customer of variations to the contract, including any tariff changes and the notice period they will be given before these come into effect.

11.38 The contract for Indirect Access shall also:

- be fair and reasonable.
- Provide a detailed description of the Indirect Access service(s) to be provided.
- include an option for the customer to reject unsolicited communications and confirm that usage of all customer data shall comply with Jamaican laws.
- include a customer service contact number.
- set out what compensation or refund arrangements are in place if service level commitments are not met.

- set out mechanism for resolution of disputes.
- indicate the rights which the Indirect Access Operator has to terminate the contract with the customer (e.g. for persistent non-payment) and the circumstances in which calls will revert to the Access Network Operator(s).
- exclude all reference to promotions or incentives.
- require operators to inform customers clearly and accurately in writing in advance of any changes to tariffs or discount schemes as published in advance by the operators from time to time.

Part III Authorization and/or Verification of Request for Change of Operator

- 11.39 An operator shall not submit or execute a request for change of operator on the behalf of a customer in the customer's selection and or pre-selection of an IAO service unless it is in receipt of authorization from the customer and verification of that authorization of the customer's request to change his or her operator.
- 11.40 The submitting IAO shall maintain and preserve records of verification of customer authorization for a minimum period of two years after obtaining such verification.
- 11.41 Where the IAO is selling more than one type of specified service (e.g. outgoing international calls, fixed-to mobile) that IAO must obtain separate authorization from the customer for each specified service. Each authorization must be verified separately from any other authorizations obtained. Verifications could possibly be on one sheet separated by perforations.
- 11.42 Authorization and or verification of a customer's request shall take the form of a written letter.
- 11.43 The written authorization shall be a separate document or an easily separable document or located on a separate screen or web page containing only the authorizing language and having the sole purpose of authorizing an operator to initiate a change. The authorization must be signed and dated by the customer to the telephone line(s) requesting the change.
- 11.44 The letter shall not be combined on the same document, screen, or web page with inducements of any kind.
- 11.45 The letter must be printed with a type of sufficient size and readable type to be clearly legible and must contain clear and unambiguous language that confirms: -

- The customer's billing name and address and each telephone number to be covered by the request for change.
 - That the customer designates [insert the name of the operator] to act as the customer's agent for the change.
 - That the customer may consult with the operator as to whether a fee will apply to the change.
- 11.46 Any operator designated in a letter as agent as a gaining operator must be the operator directly setting the rates for the customer.
- 11.47 The letter shall not suggest or require that a customer take some action in order to retain the customer's current operator.
- 11.48 An operator shall submit a request for change on behalf of a customer within no more than 60 days of obtaining a written signed letter.
- 11.49 If problems arise in the order handling processes, operators should not attribute fault or blame for delay to another operator.
- 11.50 The Losing Operator should not state to the customer that the delay is a good reason for maintaining the existing service and to cancel the switch.
- 11.51 An operator must not release misleading or derogatory information about another operator's service.

Part IV Indirect Access Operator Liability for Slamming

- 11.52 Where a customer's choice of indirect access operator is changed, adjusted, or amended without authorization and verification in accordance with the procedures set out in Part III the unauthorized operator shall be liable to pay to the authorised an amount equal to 150% of all charges paid by the customer to the unauthorized operator.
- 11.53 Within ten business days of receipt of the amount the authorized operator shall provide a refund or credit to the customer in the amount of 50% of all charges paid by the customer to the unauthorized operator. The customer has the option of asking the authorized operator to re-rate the unauthorized operator charges based on the rates of the authorized operator and, on behalf of the customer, seek an additional refund from the unauthorized operator, to the extent that the re-rated amount exceeds the 50% of all charges paid by the customer to the unauthorized operator.

- 11.54 If an authorized operator incurs billing and collection expenses in collecting charges from the unauthorized operator, the unauthorized operator shall reimburse the authorized operator for reasonable expenses.
- 11.55 If the authorized operator has not received payment from the unauthorized operator as required under this section the authorized operator is not required to provide any refund or credit to the customer.
- 11.56 Where applicable the authorized operator must reinstate the customer in any premium program in which that customer was enrolled prior to the unauthorized change, if the customer's participation in that program was terminated because of the unauthorized change. If the customer has paid charges to the unauthorized operator, the authorized operator shall also provide or restore to the customer any premiums to which the customer would have been entitled had the unauthorized change not occurred. The authorized operator must comply with the requirements of this section regardless of whether it is able to recover from the unauthorized operator any charges that were paid by the customer.

Part V Reporting Requirement for Slamming Complaints

- 11.57 Each Indirect access Operator shall submit to the Office via e-mail, post or facsimile a slamming complaint report form identifying the number of slamming complaints received during the reporting period inclusive of the following: -
- the number of slamming complaints received during the reporting period that the IAO has investigated and found to be valid.
 - the number of slamming complaints received during the reporting period, investigated or not, that the IAO has directly resolved with consumers.

Part VI Misuse of Customer Information

- 11.58 Any use by an operator of customer information must be restricted so as to ensure compliance by that operator with their obligations, for the time being, at law. These obligations include but are not limited to obligations under:
- All relevant Jamaica laws and any other applicable domestic and/or binding non-domestic laws concerning the protection of personal information/data;

- All Competition legislation and any other applicable domestic and/or binding non-domestic laws concerning anti-competitive behaviour and/or abuse of dominance position.

11.59 Operators must take all reasonable steps to safeguard the privacy and confidentiality of customer information such as names, addresses, telephone numbers, calling patterns and telephone bills. This information must only be used or disclosed to the extent that this is necessary for providing the telecommunication service or used in the provision of telecommunication services (e.g. directories).

11.60 Operators must disclose available customer information, to the extent permitted by law, when requested in writing by the customer, to that customer within 5 working days of receiving the request. The customer may then pass it to another operator or other third party.

11.61 A Losing Operator may disclose customer information to the Gaining Operator or Access Provider, subject always to the provisions of Jamaican laws and any other related provisions concerning the protection of personal data.

11.62 An operator must use bona fide efforts to achieve compliance by its employees, agents, contractors and dealers with the provisions of the rules herein.

Part VII Complaint Handling and Enquiries

11.63 Operators must inform customers clearly whom they are to contact in the event of a query or fault with the service and this should be prominently displayed on the contract and on bills.

11.64 An Access Network Operator who is contacted by customers regarding a problem with an Indirect Access Operator service provided by another Indirect Access Operator must transfer the query to the customer service staff of that operator.

Part VIII Contact with Customer

11.65 Subject to obligations otherwise at law, following notification by the Access Network Operator of loss of service, the Losing Operator has five (5) days within which it may make one unsolicited contact with the customer. The Losing Operator shall refrain from making further unsolicited contact with the customer thereafter until a reasonable period of time has elapsed.

Part IX Unauthorised Provisions of Indirect Access Services

11.66 Operators shall not engage in unauthorised provisioning of Indirect Access services of any form whatsoever.

- 11.67 Where an incident(s) of unauthorised provisioning of Indirect Access service is detected by an Indirect Access Operator or the Access Network Operator, the incident(s) shall be notified to the Operator who has gained as a result of the unauthorized provisioning.
- 11.68 All Operators who are party to the incident(s) complained of shall use their best endeavours to resolve the matter. Where the matter is resolved the Gaining Operator shall notify the Access Network Operator to reinstate the customer's service to the status prior to the disputed provisioning.
- 11.69 Where complaints concerning incident(s) of unauthorized provisioning of indirect access service cannot be resolved in accordance with paragraph 11.68 or within ten (10) working days of the Operator who has gained as a result of the unauthorized provisioning being notified per paragraph 7.67, the Operator claiming loss as a result of the alleged unauthorized provisioning of indirect access service shall have the option of requesting arbitration as per their Interconnection Agreement.