Office of Utilities Regulation

Quality of Service Standards for the Telecommunications Sector

A Consultative Document

OFFICE OF UTILITIES REGULATION

October 10, 2007

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Abstract

The Office of Utilities Regulation (OUR) is mandated under the Telecommunications Act 2000 (the Act) to prescribe minimum quality of service standards for specified utility services. Section (44)(3) of the Telecommunications Act states that "*The Office may make rules subject to affirmative resolution prescribing quality standards for the provision of specified services in relation to all service providers or dominant service providers as the case may be.* These Regulatory Rules will provide the means by which other general and specific objectives for maximizing consumer welfare can be achieved. Such objectives include improving service reliability and service provider responsiveness to customer complaints.

In an ideal market in which customers are fully informed about the characteristics and reliability of all products, no regulation of quality is required as each person is able to make an optimal choice given the range of services and service providers and their relative prices. However, markets fail to meet these perfectly competitive conditions. In the absence of adequate information on quality, consumers may not make informed choices regarding their purchases and thereby be able to determine their optimal service provider.

This consultative document is a public discussion paper aimed at bringing to the attention of the public issues relating to service quality in the telecommunications sector. It is expected that the service quality standards which emerge from this consultative process will benefit from the active participation of all stakeholders. The Office therefore invites comments on the Proposed Standards to assist in identifying basic quality issues which exist in the sector.

Comments from Interested Parties

Persons who wish to express opinions on this Consultative Document are invited to submit their comments in writing to the OUR. Comments are invited on the issues raised – specifically in relation to the questions posed in various sections of the document, as well as on any issue that would add value to this process. Responses to this Document should be sent by post, fax or email to:

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Kingston 10

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Email: mminott@our.org.jm

Responses are requested by November 15, 2007

Respondents are requested to limit their use of confidentiality markings as far as possible, and are encouraged to supply their responses in electronic form so that they can be posted to the OUR's website.

Comments on Responses

There will be a specific period for respondents to view other responses (non- confidential) and to make comments on them. The replies may take the form of either correcting a factual error or putting forward counter arguments.

Comments on responses are requested by November 30, 2007

Arrangement for viewing responses

The responses received by the OUR will also be made available to the public through the OUR's Information Centre (OURIC). Persons who wish to view the responses should make an appointment by contacting Gillian Henderson, Senior Information Officer by one of the following means:

Telephone: (876) 968 6053 or 6057

Fax: (876) 929 3635

Email: ghenderson@our.org.jm

Individuals with appointments should visit the OUR's offices at:

3rd Floor, Petroleum Corporation of Jamaica (PCJ) Resource Centre,

36 Trafalgar Road, Kingston 10.

Photocopies of selected responses may be requested at a price which just reflects the cost to the OUR.

Consultation Timetable

The timetable for this consultation is summarized below:

Event	**Date**
Responses to this document	November 15, 2007
Comments on Responses	November 30, 2007
Determination	January 14, 2008

CHAPTER 1: Introduction and Background

1.1 Regulatory Framework

Section 4(5)(b) of the Office of Utilities Regulation Act empowers the Office to *"prescribe standards for the measurements of quantity, quality or other conditions relating to prescribed utility services"*. In the Office's programme of work to satisfy this responsibility, the OUR has developed service standards for the Water and Electricity sectors.

For the telecommunications sector, the Telecommunications Act, 2000, Section 44(3) states that "*the Office may make rules subject to affirmative resolution prescribing quality standards for the provision of specified services in relation to all service providers or dominant service providers, as the case may be"*.

In 2001, the OUR published a Consultative Document which proposed quality of service standards for Cable & Wireless Jamaica Ltd (CWJ). Prior to the release of the document, Cable and Wireless Jamaica Ltd had a monopoly presence in the Jamaican telecoms market, and as such, the standards proposed were specific to the services provided by that Company. It was however noted in the document that the standards would be made applicable to new entrants in the market. As the Jamaican telecommunications sector at that time was predominantly of a fixed line nature, the document focused solely on this aspect of service.

Since the release of the document, the Jamaican telecommunications landscape has undergone significant changes with the entry of two additional mobile operators, one of which is the major operator in the local market, and the rapid expansion of the cellular mobile industry as a whole.

The OUR is aware that the changes taking place in the sector provide consumers with the choice (where possible) to switch, at a cost, to alternative service providers in the event of service dissatisfaction. However, the OUR is not of the view that it should intervene only after there is a case of market failure causing harm to consumers. It should be noted that switching costs are significant. These include: the cost of unlocking the phone or replacing the phone and the inability to port telephone numbers.

The OUR is of the view that its role to "….promote the interests of consumers …" as per the telecommunications Act 2000, makes it imperative that it prescribes basic standards for quality of service and that information on such standards and the performance of operators in the market are made available to guide consumer choice.

A primary objective of the OUR in this exercise is to ensure that the information provided to consumers is current, clear, accurate and consistent with relevant local, and international standards and practice. This, the OUR believes will improve consumers' awareness and understanding of the options available in the market and what should be their legitimate expectations from service providers.

Ques. 1.1 ***Should quality of service be regulated?***

Ques. 1.2 ***Do you believe that a regulatory approach to quality of service will have a significant positive or negative impact on consumers' choices?***

1.2 Regulating Quality of Service in the Telecommunications Sector

Although the presence of competition in the Jamaican telecommunications sector reduces the need for extensive regulation, it is important for a regulator to implement measures that ensure that service to consumers meet minimum standards of quality.

The regulator has a responsibility to ensure that the quality of core services does not deteriorate when the prices for such services are under price-cap regulation or in the event of increased competition for some unregulated services (that is, services that are not subject to economic regulation). This is important as in a market that is regulated under a price-cap regime a company can achieve its desired level of profit by cutting costs without much consideration for quality where adequate penalties are not enforced by the regulatory framework. A similar situation may exist with a company that enjoys market power in a particular sub sector. For example, a company that is the sole provider of fixed line telephone service might be indifferent to its customers' service quality complaints and preferences. Here, the competitive element forcing companies to meet customer demands is missing and must be replaced by some form of regulation and penalties for poor performance.

In the absence of number portability consumers are faced with high switching costs especially in the mobile industry in Jamaica. A consumer in the mobile market who is dissatisfied with the level of service received from a particular service provider, will, in most instances need to purchase a new cellular phone to acquire the services of another provider. This would be necessary as the mobile instruments in Jamaica are normally purchased with the service of the mobile provider. The instrument would need to be unlocked at a cost if the same instrument is to be used to acquire the services of another provider.

Basic aspects of services may sometimes be neglected as consumers' interests evolve with technological advancements and market expansion. Thus, even with seemingly robust competition, it is necessary to monitor company performances in relation to the quality of service standards by providing avenues for consumer complaints and regulatory responses to such complaints. Where an appropriate Quality of Standards regulation is not in place, service providers might reduce their monitoring activities and responsiveness to consumer complaints resulting in higher costs in terms of inconvenience to consumers from dropped calls and other system failures, delays in clearing faults etc. Consumers benefit from information on service quality when quality standards are regulated, and service providers' performances on quality of service indicators are published. This is so because the exercise of choice by better informed consumers leads to increased competition as service providers compete to offer better quality services to retain customers or attract new ones.

Service providers argue that given the competitive nature of the market, consumers should be the final arbiter of quality. However, unlike other markets where competition is well established, the Jamaican telecoms markets do not (neither in fixed line services nor the

cellular mobile services) have these level of competition. The OUR is also of the view that it is inadequate to rely solely on the market to discipline suppliers of services.

Important also is the fact that the regulatory capacity in Jamaica is just developing as the process of liberalisation has only recently started. Currently, there is very little competition in the market for fixed line services while the mobile sector is based on an oligopoly market structure. These facts along with the level of consumer complaints in the market provide some amount of guidance on the issues that should inform regulatory decision regarding quality of service regulation. Some of the quality of service concerns identified through customer feedback relate to the wait time for installation for fixed line services, and the incidences of dropped calls and call setup failures on the mobile networks.

In relation to internet services, the market is small but growing; however, the existing regulatory framework is not conducive to its sustained growth and development. Currently, the local loop of the dominant fixed line service provider remains unbundled, which constrains the growth of competition in the market for high speed internet access. Despite this fact, the mobile operators seem to be on the verge of providing high speed wireless internet access. Additionally, in the medium term, the level of competition in the market is expected to increase with the recent entry of a new market player who will be providing high speed internet access as a part of its Triple Play of services. Although the market for internet access is relatively young, there is clear scope for growth and as such, much regulatory intervention is not advised. Notwithstanding, an appropriate first step to ensure that customers get value for the services purchased is to have in place basic standards and guidelines for providers of internet services.

***Ques. 1.3** Is the information currently available to consumers sufficient for them to make the best decision on operator services?*

Ques. 1.4 ***Do you believe that the benefits to consumers from the implementation of quality of service standards outweigh the cost to service operators to monitor & publish their performance on these standards?***

1.3 The Telecommunications Sector without Regulation

As we seek to introduce QoS regulation, it is important to mention some likely detriments to consumers in a market without quality regulation;

- Consumers are disempowered if recent, comparable and relevant QoS information is unavailable.
- Some consumer groups such as businesses may also suffer financial losses if they are unable to clearly identify their optimal supplier.

- The information that is made available to consumers on service quality might not be easily accessible, and in the absence of independent verification, consumers may be misled by individual service provider's claims.
- Without the pressure to compete with other service providers on their performance in relation to service quality indicators, and with the absence of regulatory discipline, there might be less incentive for operators to provide meaningful information going forward.

Ques. 1.5 ***Do you believe that a voluntary quality reporting scheme by service operators is adequate? If yes, explain.***

CHAPTER 2: Quality of Service Standards

The OUR is mindful that while a need for quality regulation is recognized, it is critically important to ensure that the standards established are appropriate and consistent with the level of competition in the industry. Accordingly the standards developed should reflect input from all stakeholders.

The performance indicators proposed by the OUR were a result of extensive review of indicators used internationally, and the selection of those that are compatible with the Jamaican telecoms market.

Upon completion of this consultative process, and pursuant to the relevant statutory instruments, the draft standards shall form the quality of service standards for the telecommunications sector in Jamaica.

2.1'Technical' and 'Customer' Standards

The quality of service of a telecommunications network operator is characterised by the level of satisfaction that the consumer receives. Service standards can be categorized under two broad headings; those that are technical and those which are 'customer driven'. There are a number of technical and customer service indicators that are used to measure quality of service. From a customer perspective they may be relate to voice quality, delay, speed and the experiences when interacting directly with the service provider. From a network 'technical' perspective they include network reliability and accessibility factors etc.

2.2 Guaranteed Standards

Guaranteed Standards are specific to individual customers and will attract monetary compensations when breached by the utility company. The OUR will not propose a compensation amount at this time, but is however cognisant of the importance of establishing an appropriate amount as some companies may be willing to risk fines if the costs of improving an area of service are much higher than the potential aggregate amount in penalties. The next chapter looks at the Guaranteed Standards and reviews the performance of the scheme in the water and electricity sectors.

2.3 Overall Standards

Overall Standards unlike Guaranteed Standards are not customer specific, and as such, do not have a compensatory payment attached for individual consumers in the event that the provider performs below the standard. However, in the event of unsatisfactory results of technical monitoring, penalties may be introduced in regulatory mechanisms such as price caps through audits at the network level or consumers complaints statistics. In some

jurisdictions, direct fines are imposed as an effective compliance enforcement mechanism. The technical characteristics may however differ for fixed and mobile networks.

CHAPTER 3: The Guaranteed Standards

3.1 The Performance of the Existing Scheme

The Guaranteed Standards scheme currently in place for the National Water Commission (NWC) and the Jamaica Public Service Company (JPS) has not met with the success the OUR anticipated. The scheme's objectives include ensuring that the service levels agreed on are maintained or surpassed, as well as to provide redress for consumers in the form of a compensatory payment for sub standard service. A breach of a Guaranteed Standard by NWC attracts a compensatory payment of **four (4) times the applicable service charge**, while a breach by JPS attracts compensation of **$1,000** for residential customers and **$8,400** for rates 40 and 50 customers. The compensatory payment was also designed to force the utility companies to continuously improve the efficiencies of their operation rather than payout monies to customers for poor service.

These objectives were however undermined by factors such as insufficient promotion of the standards by the utility companies as well as disinclination on the part of customers who were aware of the standards to claim compensation where a breach was identified. Ironically, as a part of the consultation on the Guaranteed Standards, the OUR had asked consumers to indicate their preferred means by which to obtain compensation. The preferred method communicated was that of individual claiming as opposed to the utility company automatically crediting the account. However despite reports of numerous breaches of the Guaranteed Standards by the companies, very few customers have submitted claims for compensatory payment. Consequently, there is little incentive for the companies to ensure compliance or improve quality of service.

Ques. 3.1 ***How should the companies effectively promote the Guaranteed Standards?***

The tables below summarize the utilities' performance on the Guaranteed Standards:

Table 1: Report on the Guaranteed Standards (JPS)[1]

Reporting Quarter	# of Breaches	Potential Compensation	Compensation Claimed
January – March 2007	16,684	$33,210,490	$109,000
Oct. – Dec. 2006	21,334	$49,762,092	$152,000

[1] JPS' report on Quality of Service Standards (Oct –Dec '06 & Jan –Mar '07)

Table 2: Report on the Guaranteed Standards (NWC)[1]

Reporting Quarter	# of Breaches	Potential Compensation	Compensation Claimed
January – March 2007	14,876	$15,247,900	-
Oct. – Dec. 2006	14,349	$14,707,725	-

The tables above indicate that in any of the reported quarters, had customers claimed compensation in all instances of breach, the utility company's revenue would have been greatly impacted and as such they would have deemed it necessary to ensure compliance in the future, and thus improve the service to consumers.

It is the view of the OUR that for the scheme to be successful, automatic credits to the affected accounts by service operators would have to be the prescribed method of making compensatory payments. A provision has since been made in the JPS licence mandating the company to switch over to an automatic payment regime within a specified timeframe. Although no timeframe was specified for the NWC, the same compensation method switch is planned for the Company.

Ques. 3.2 ***Should the company automatically credit customer's account when a breach is identified?***

Ques. 3.3 ***How much time should a company be given to credit the amount to the customers account?***

Ques. 3.4 ***What should be the penalty if this "time to credit account" standard is breached?***

Ques. 3.5 **How** ***much do you think is a reasonable compensation for breaches?***

[1] NWC's report on the Guaranteed Standards (Oct. –Dec '06 & Jan. – Mar '07)

3.2 The Guaranteed Standards Proposed

The Guaranteed Standards Scheme proposed for fixed line telephony will cover the following areas:

- Installation
- Repairs
- Disconnection
- Reconnection
- Billing and Delivery
- Appointments
- Complaints Handling
- Payment of Compensation

The service operator will be required to make additional compensatory payments for up to four (4) periods that a breach of a Guaranteed Standard remains unaddressed.

Compensation through the Guaranteed Standards scheme will not apply if the violation of the standard occurs due to:

1. a negligent or willful act by the customer
2. malfunction of customer-owned telephone or other customer premises equipment
3. operator's inability to gain access to customer's premises within the time agreed with the customer for such access.

The Guaranteed Standards proposed below are for fixed line service:

- **Installation (prepaid & post paid)** - The waiting time to install service (where facilities are available) after the customer has been approved for the service on the Company's system.

Breach Threshold

For fixed line (commercial); any wait time exceeding 5 business days results in a breach

For fixed line (Residential); any wait time exceeding 7 business days results in a breach

- **Repair (prepaid and post paid)** - Delay by the utility company to repair a 'provider fault' that affects the service to the consumer.

Breach Threshold:

Commercial - A delay exceeding 2 days will result in a breach.

Residential - A delay exceeding 3 days will result in a breach.

For post paid customers, the full monthly rental/access charge will not apply if the service is unavailable for more than 7 days.

- **Appointments** (**prepaid and post paid**) – The Company must keep an appointment agreed with the customer and must notify the customer at least a day in advance if the appointment cannot be kept.

Breach Threshold: Any appointment not kept by the company for which no prior notification of such was received by the customer.

- **Reconnection (post paid)** - Where the company fails to reconnect the service after all monies deemed by the company to be outstanding are paid.

Breach Threshold:

Any delay exceeding 24 hours will result in a breach by the company.

- **Wrongful Disconnection (post paid)** - Where the customer's service was erroneously disconnected by the company. This constitutes an automatic breach for which the customer is to be compensated. The compensation for this breach accumulates for each additional 24 hours that the customer's service remains disconnected.

- **Disconnection– monies being disputed (post paid) –** The company must place a hold on the customer's account for amounts being disputed by the customer pending the outcome of the company's investigation of the customer's complaint. The company should notify the customer of the results of the investigation before the hold on the account is lifted.

Breach Threshold – Disconnection of the customer's service should not occur if there are no amounts outstanding on the account except that which remains under investigation.

- **Issue of First Bill (post paid)** – Where the company fails to send the customer a bill within a specified time after the service is activated.

Breach Threshold:

First bill to be produced and dispatched within 30 working days after the service has been activated.

- **Complaint Handling/Queries**

Breach Threshold:

Acknowledgements (prepaid and post paid) - All written queries/complaints are to be acknowledged within 5 business days after receipt.

Response to Billing Complaints (prepaid and post paid) – Maximum 30 business days from the receipt of the complaint to complete investigations and inform customer of the findings.

- **Method for Payment of Compensation** -Where the requisite payment for breach of a standard is credited to the affected customer's account.

Breach Threshold:

The customer's account should be credited with the relevant compensation within 30 business days after confirmation from the company or the OUR that a standard was breached. Given the 'pay as you go' nature of the prepaid service, the Company must notify the customer when the payment is applied to the account. The company may notify the customer of the credit by means of a voice message on the customer's phone.

- **Billing Adjustment** – the time taken to adjust a customer's account after the identification of an error.

Breach Threshold:

The customer's bill must reflect the necessary adjustment within 1 billing period of identification of the error.

Ques. 3.4 Should the compensation be a multiple of the monthly line rental charge for post paid customers?

Table 3: Comparisons of Guaranteed Standards proposed for Fixed Line Service and Existing Utility Guaranteed Standards

Code	Service Type	Guaranteed Standard Proposed	Current Standards For JPS	Current Standards for NWC
TGS1	**Installation**	Maximum of 5 working days for installation after approval of service and availability of the required infrastructure	New Service Installation within 5 working days.	Maximum time of 10 working days for connection.
TGS2	**Repair**	Maximum of 2 working days to effect repairs.		
TGS3	**Reconnection**	Maximum of 24 hours to restore service after outstanding amts have been settled by the customer.	Reconnection after payment of overdue amts – Urban 24 hrs; Rural 48 hrs	Reconnection after payment of overdue amts – Urban 24 hrs; Rural 48 hrs
TGS4	**Wrongful Disconnection**	Any disconnection done erroneously by the company results in an automatic breach.	-	-
TGS5	**Payment of Compensation**	Maximum of 30 business days after claim is received to process claim	Response to claim for compensation within 45 days of verification of breach	Maximum of 60 days after claim is received to process and make payment.
TGS6	**Issue of Bill**	First bill to be dispatched within 30 business days after installation of service	Produce and dispatch first bill within 45 working days after service connection.	Maximum time of 48 working days after connection to issue first bill.
TGS7 (a)	**[Complaint Handling]** **Acknowledgements**	Maximum 5 working days to acknowledge written correspondence from customer.	Maximum 5 working days to acknowledge customer complaints after receipt.	Acknowledge written complaints/queries within 5 working days.

TGS7 (b)	**[Complaint Handling]** **Response to Billing Complaints**	Maximum 30 business days to investigate and respond to customer after receipt of complaint.	Complete investigation with 30 working days. Complete in 60 working days if 3rd party is involved.	Maximum time of 30 working days to complete investigation and respond, from the date of receipt of the complaint.
TGS8	**Billing Adjustments**	Customer's account must be adjusted within 1 billing period of identification of error	1 billing period for adjustment	-

CHAPTER 4: Overall Standards Proposed For Fixed Line Telephone Service:

As the name suggests, overall standards are aimed at monitoring the overall performance of the utility companies in the delivery of service to the end users. Overall standards cover service areas where individual guarantees to consumers may not be possible, but where companies are expected to deliver predetermined levels of service. These standards are usually defined in terms of a percentage of performance. The OUR is aware that its capacity to effectively monitor performance may be reduced if there are too many parameters to consider. Also, the quality of data available will determine the appropriate number of parameters to be measured. Consequently, the OUR considers it prudent to start with fewer indicators to which additions will be made as reliable data becomes available.

The following standards are proposed for fixed line telephony service:

1. Service Installation

This is defined as the ability to provide a customer with the requested service after registration and approval.

Standard Proposed:

The service provider shall complete 90% of all requests for primary service in any month within an interval of five (5) business days, provided that:

1. *The customer has not requested a later installation date*
2. *The service requested does not require the installation of special equipment.*

2. Dial Tone Delay

This is the time interval between off hook and reception of dial tone.

Standard Proposed:

The proposed standard is for over Ninety-eight percent (98%) of all calls attempted to receive a dial tone within 3 seconds.

3. Post Dialling Delay

This is also called *dial-to-ring delay* or *call setup delay*. In its simplest form it is defined as the interval between the time when the customer has completed dialling the required number and the instant of time when the Called Party phone rings or there is access to service tones in a case of non-availability of the acquired service, e.g. receiving a busy signal.

- ***Standard proposed for inter Network Post Dialling Delay***

  Post dialling delay for 95% of calls attempted should be less than 15 seconds

- ***Standard proposed for Intra Network Post Dialling Delay***

  Post dialling delay for 98% of calls attempted should be within 10 seconds

4. Call Completion Ratio (CCR)

This measures the percentage of originating calls successfully completed during peak traffic hour and reflects the degree of congestion in the network. To accurately measure the CCR, a call is deemed successful when a connection is established irrespective of whether the called party answers the phone.

Standard Proposed:

A 95% call completion success rate is proposed for local calls during normal Peak Traffic

A 75% call completion success rate is proposed for international calls during normal peak traffic.

5. Trouble Reports/Faults Incidences

These may be 'out of service' reports or 'service affecting' trouble report, and may include the loss of dial tone or the customer's reported inability to complete either or both incoming and outgoing calls over the access line.

If the service operator's investigation reveals that the customer is responsible for correcting the reported service problem, the operator shall notify the customer within twenty-four (24) hours.

Standard Proposed:

Each service operator should ensure that Ninety percent (90%) of all out of service reports received in a given month are addressed within 24 hours from the time the trouble report is received.

Eighty-five percent (85%) of all service-affecting problems should be corrected within 48 hours

6. Complaints Handling

This is defined as the percentage of customer complaints that are resolved within a specified time.

Standard Proposed:

90% of customer complaints are to be resolved within 30 business days.

7. Billing Accuracy

This is defined as the percentage of valid accuracy-related complaints per 1,000 bills.

Standard Proposed:

Complaints re billing accuracy should be no more than 5 valid complaints per 1,000 bills.

8. Reconnection

This is defined as the restoration of service after the customer has paid the outstanding amounts on the bill.

Standard Proposed:

>90% of all reconnections to occur within 24 hours of receipt by the company of sums outstanding on the customer's account.

9. Planned Outage

This is the notice given to the public (hours) for any planned interruption of the customer's service for such purposes as maintenance work.

Standard Proposed:

≥ 90% of planned outages to have a notice period of 48 hours.

10. Local Service Operator

The average answer time for the service provider's local operators should not exceed twenty (20) seconds.

Standard Proposed:

≥90% of calls to customer service contact agents should be answered within 20 seconds

Directory Assistance – The average answer time for local directory assistance operators should not exceed twenty (20) seconds.

Standard Proposed:

≥90% of all calls to directory assistance contact agents should be answered within 20 seconds

11. Repair Service Centre – The average answer time for calls to the service provider's repair centre should not exceed sixty (60) seconds.

Standard Proposed:

≥90% of all calls to repair service contact agents should be answered within 20 seconds

The average number of calls to each service listed above which encounter a busy signal should not exceed ten percent (10%)

The table below shows comparisons between the proposed fixed line standards and international standards:

Code	Service Type	Proposed Standards	CRTC (Canadian Radio& Telecommunications Commission)	NCC (Nigerian Communications Commission)	C1TC (Communications and Information Technology Commission – Saudi Arabia)	TRAI (Telecom Regulatory Authority of India)
	Service Installation: % of orders for services filled within the specified time	≥90% of all requests to be completed within 5 business days	≥90% completed within 5 working days for urban and 10 working days or less for rural	-	90% of lines installed within 5 working days	100% of request for installation in <7 working days
	Dial Tone delay: % of calls attempted during peak hour receiving dial tone within 3 seconds	>98% of calls to receive dial tone within 3 seconds	>98.5% of calls during busy hour to receive delay of 3 sec. or less	Average dial tone delay should be < 2 seconds.	-	-
	Post Dialling Delay % of calls with post dial delay within 12 seconds	**Inter network delay** Post dial delay less than 15 seconds for 95% of calls attempted **Intra network Delay** Post dial delay within 10 seconds for 98% of calls attempted	-	**Local** - < 5 sec. **STD** - <10 sec **Int'l** - <5 sec.	-	-
	Call Completion Ratio: % of calls successfully completed during peak traffic hour	**Local** – 95% Call Completion success rate during peak traffic **Int'l** – 75%	-	**Local** - 70% or more **Int'l** - 60% or more	-	**Local** - >55%

	Trouble Reports % of reported faults cleared within the specified time.	**Out of Service** – 90% of such report to be cleared within 24 **Service Affecting –** 85% cleared with 48 hrs. [averaged over a 1 month period]	**Out of Service** – 80% cleared within 24 hours	>65% cleared within 24 hrs >70% cleared with 48 hrs >90% cleared within 7 days	85% clearance within 24 hrs	>90% within 24 hrs 100% within 3 days
	Complaints Handling % of customer complaints [written or verbal] resolved within the period specified	90% resolution within 30 business days.	N/A	>90% within 3 months >70% within 30 days	-	
	Billing Accuracy # of valid accuracy related billing per 1,000 bills	≤5 valid complaint per 1,000 bills		<1% of total bills issued	no more than 5 such complaints per 1,000 bills	<0.5% of bills issued should be disputed
	Reconnection Restoration of service after payment of overdue amounts.	>90% of reconnections to occur within 24 hrs of receipt of overdue amounts	N/A	N/A	N/A	N/A
	Planned Outage The notice to the public (hours) for planned interruption of service	≥ 90% of planned outage to have a 48 hrs notice period.	N/A	N/A	N/A	N/A
	Local Service Operator % of calls answered within 20	≥90% within 20 seconds	N/A	N/A	90% answered within 35 seconds	80% within 60 seconds 95% within 90 seconds

	seconds					
	Directory Services % of calls answered within 20 seconds	≥90% within 20 seconds	N/A	N/A	90% answered within 20 seconds	N/A
	Repair Service Centre % of calls answered within 20 seconds	≥90% answered within 60 seconds	≥80% within 20 seconds	N/A	N/A	N/A

CHAPTER 5: Overall Standards for Mobile/Wireless Network

The mobile industry in Jamaica is currently deploys GSM (Global System for Mobile communications) and CDMA (Code Division Multiple Access) technologies. The quality of service parameters selected to be measured for the mobile networks will apply to these various technologies. The parameters should be measured only in Time Consistent Busy Hour (TCBH). TCBH is defined as "the one hour period starting at the same time each day for which the average traffic of resource group is greatest over the days under consideration". The International Telecommunications Union (ITU) recommends analysis of ninety (90) days to establish the TCBH.

As it relates to the mobile instruments, the network operator who provides these handsets as a part of a bundled service has the responsibility of ensuring that the device is capable of satisfactory performance. In the event that the handset provided does not operate satisfactorily, the operator should accept its return and replace or satisfactorily repair it. All handsets that are offered to the market should have type approval certification by the competent local authority.

The parameters to be measured are as follows:

- **Lost/Dropped Call Rate** – a call is lost or dropped when access to the network is gained and set up is successful but the call is prematurely disconnected due to technical problems such as network congestion, interference, weak signal.

Measurement: $\frac{\text{Number of dropped Calls}}{\text{Total number of calls}} \times 100$

Measurement should be only in the TCBH for all days of the week.

Standard Proposed: <5% of intra network calls should result in dropped calls

- **Blocked Call Rate** - A call is considered blocked when it is not connected because there is no free channel to serve a call attempt. [the % of call attempts for which callers receive a busy signal because all channels are in use]

Measurement: $\frac{\text{Number of blocked calls}}{\text{Total number of attempts}} \times 100$

Standard Proposed:

<5% of all call attempts should get a circuit busy/no network available message

- **Call Completion Ratio** - CCR measures the percentage of successfully connected calls relative to the total number of call attempts. Successful calls are those calls where the customer receives a service tone or a "ringing tone".

Standard Proposed: >80% call completion success rate during TCBH

- **Network Availability/Coverage** - This occurs when a subscriber tries to gain access to the network but is denied service due to poor coverage which is expressed by low signal levels.

  Standard Proposed: >90% access within the given access specification.

- **Billing Accuracy (Post-paid)** – The number of valid complaints related billing.

  Standard Proposed: ≤ 5 valid billing related complaints per 1,000 bills

- **Reconnection (Post-paid):** Restoration of supply after payment of overdue amounts.

  Standard Proposed: ≥ 95% of all reconnections to be done within 24 hours of payment of outstanding amounts.

- **Planned Outages:** - The notice given to the public by the company when service to the customer will be interrupted for purposes such as maintenance.

  Standard Proposed: ≥ 90% of planned outages should have a notice period of 48 hours.

- **Local Service Provider** - The average answer time for the service provider's local centre should not exceed twenty (20) seconds.

  Standard Proposed: ≥90% of all calls to the customer service centre agents should be answered within 20 seconds

CHAPTER 6: Quality of Service for Internet Service providers

An internet service provider (ISP) may be defined as one who supplies or arranges to supply a service which enables end-users to access the internet. There are approximately seven ISP's that are currently operating in Jamaica. The OUR is mindful of the diversity of the ISP industry in terms of the variety of service offerings to consumers – some consumers may choose a low cost service for primary purposes such as email access while other consumers may be willing to pay a higher price for faster or more reliable service.

It is the view of the OUR that the ISP's should all follow some basic standards and guidelines in service delivery regardless of the technologies (wireless, cable modem, ADSL, etc.) used to deliver the service, or whether the internet service which they provide to customers originates from their own network or they re-sell a network provider's service. Noteworthy however, is the fact that not all technical elements of an Internet service are within the direct control of the ISP. A number of these factors may be under the control of other parties such as the customer. The customer's service may be affected due to the distance from the exchange or the customer's configuration such as modem type, computer set-up and other equipment and services being used. The service standards and guidelines proposed speak to factors related to compatibility, quality and reliability of access.

The internet penetration in Jamaica is currently less than 20% however, the policy of the government is to promote rapid increase in penetration by means of all the available reliable technologies such as DSL, WiMax, and cable modems. This will be supported by the newly licensed international submarine fibre installations that have dramatically increased the existing internet backbone capacity from the previous 2.5 Gbps to almost 50 Gbps.

The guidelines are intended to foster an expectation about the type of information consumers should receive from the ISPs as well as to enable the ISPs to compete on the basis of comparable information.

6.1 Basic Quality of Service Standards for ISPs:

1. Installation

Standard Proposed:

≥90% of all connection after approval of application to occur within 5 business days.

2. Fault clearance

Standard Proposed

I. ≥80% of faults to be cleared within 24 hours

II. >95% of faults to be cleared within 48 hours

3. Service Disruption

The number of incidents in a 30 day period where the service to 50 or more customers located in the same area is disrupted.

Standard Proposed

< 3 such incidents within a 30 day period

3.1 Network Service Availability

The ISP should endeavour to ensure continuous, reliable network services are available to consumers.

Standard Proposed

Average Network availability per customer per month should be ≥95%

3.2 Planned Disruptions

Standard proposed

90% of planned disruptions of service should carry a 24 hour notice

4. Reconnection

Standard Proposed

≥ 90% of all reconnects to occur within 24 hours after payment of overdue amounts.

6.2 Basic Guidelines for ISPs:

The information contained in these guidelines should be made available by the ISP both on their websites and also in written form if so requested by the customer.

(a) Price and Billing

- The price of each service offered should be detailed so as to make clear all components of charging for the service
- The ISP should advise the customer of any fees applicable in the event that the customer wishes to terminate the service before the end of the contract period

- Information should be provided by the ISP on the frequency of billing, the method of bill delivery and the payment options
- The customer's bill should include a brief description of the extent to which the charges are itemised
- The ISP should state where internet service is bundled with other products or services and all elements of the bundled service listed.

(b) Installation and Assistance

- The ISP should provide information on basic network elements and their interconnection configurations.
- The ISP should provide information about the types of assistance available with the initial activation of the service and any charging arrangement for such assistance.
- The ISP should provide information which might assist customers to set up their own equipment in a way which is likely to lead to the most efficient performance.
- The ISP should provide clear and adequate specification of the computer system or other access devices by which the customer can receive service.
- Information should be provided on contact points for customers to report faults and the times that customer technical help is available.

(c) Communication

- The ISP should provide contact numbers for administrative and account and billing enquiries.
- The ISP should provide a description of what the customer needs to do in order to terminate the service including any period of notice that is to be given to the ISP prior to termination.
- The ISP should inform customers of where any operational manuals, guidebooks or other information supplied by the ISP may be found, including the location of any internal policies and processes about complaint handling and dispute resolution.
- The ISP should inform customers of any service standards that exist.
- Reliable and accurate information on the service characteristics and specification should be provided to subscribers, for example, peak bandwidth, and average bandwidth.

CHAPTER 7: Prepaid Calling Cards

Prepaid calling cards emerged in the last 5 years as a convenient and efficient means of delivering telecommunications service which minimizes billing and collection problems for both consumers and service providers. While there are numerous cards to choose from, they are not created equal nor are they all without problems. Despite the convenience of prepaid cards, many consumers do not have the information about these cards to assist them in making informed choices.

In recent years, the Office of Utilities Regulation has received complaints from consumers who have purchased these cards but for one reason or another have not derived total satisfaction from their usage. Concerns have been expressed in terms of the limited or lack of information that have been made available to consumers about the card, the quality of service that the card provides as well as the value that the card delivers.

Many prepaid cards do not disclose information about rates including any access charge that consumers may incur with each usage. Some cards may even carry charges for calls that are not connected. The quality of the service provided may also vary dramatically among these cards. While some cards provide excellent service, with others consumers may encounter trouble with the quality of the call or even getting a call connected. In other instances the card's access number may not work, or may be frequently busy.

Given the varying concerns about prepaid calling cards, the OUR is of the view that consumers would benefit from a greater disclosure of information from phone card providers that will enable more informed purchasing decisions.

The OUR proposes the following to form a part of this consultative document on quality of service standards:

The following are proposed to be included on all phone cards:

Proposal 1:

All cards should carry the name, address and toll-free access number of the company that issues the card and the company that is licensed to provide the service.

Proposal 2:

A customer care telephone number should be stated on the card.

Proposal 3:

Information on rates and other charges including any access charge must be disclosed.

Proposal 4:

The expiration date of the card must be shown.

CHAPTER 8: Force Majeure Conditions and Reporting Requirements

8.1 Force Majeure

The standards proposed for both fixed line and mobile services will be suspended in circumstances where compliance is beyond the reasonable control of the service operators. In the event of any such circumstance, the company must notify the OUR in writing within 24 hours of any of the listed force majeure conditions indicating the nature of the difficulty and its intended duration. Exceptional circumstances include:

- Natural disasters
- Civil unrest
- Vandalism
- Strikes, lockouts and other industrial disturbances
- Wars
- Arrests and restraints of Government
- Embargo
- Fires/Explosions
- Breakdown of international links (e.g. satellite, submarine cable), machinery or equipment or other forces or causes of a similar nature not within the control of the company and which by the exercise of diligence it is unable to avoid, prevent or mitigate.

Approval must be obtained from the OUR to suspend the applicable standards.

8.2 Reporting Requirements

The service operators will be requested to compile monthly data on their performance against the standards which is to be reported to the OUR on a quarterly basis. These reports are to be submitted within thirty (30) days after the end of the quarter. Reports may be sent electronically and in hard copy format. The OUR will make annual publications of the operators' performance against the standards.

In the event of below standard performance the operator shall separately document the specific cause, duration and the magnitude of each failure to comply. The operator should also provide a detailed action plan to ensure future compliance.

Depending on the severity of the quality deterioration, the OUR may request monthly reports from the low performing operator instead of quarterly submissions. Persistent substandard performance shall lead to recommendation by the OUR to the Minister for suspension or revocation of the service provider's licence.

8.3 Reporting Format for Overall Standards

The report to be submitted should be produced in an Excel spreadsheet in keeping with the format below:

SERVICE INDICATOR	**STANDARD**	**% Compliance**					
		Current reporting quarter			**Previous Quarter**		
		Jan	Feb	March	Dec	Nov	Oct
e.g. Service Installation	**≥90% within 5 business days**						

8.4 Reporting Format for Guaranteed Standards

The following is proposed as the reporting format for the Guaranteed Standards

Parameter	**Performance Indicator**	**Compliance Achieved**					
		This Quarter			**Previous Quarter**		
		Apr	**May**	**Jun**	**Jan**	**Feb**	**Mar**
E.g. TGS1. Installation	Compliance (%)						
	Target	100%	100%	100%	100%	100%	100%
	Variation from target						
	Number of breaches						
	Potential Compensatory Payment						
	Compensatory Payments made						

TGS.2 Repair	Compliance (%)						
	Target	100%	100%	100%	100%	100%	100%
	Variation from target						
	Number of breaches						
	Potential Compensatory Payment						
	Compensatory Payments made						

Ques. 8.1 What should the OUR's response be to below standard performance?

CHAPTER 9: List of Consultation Questions

Chapter 1

Q 1.1 Should quality of service be regulated?

Q 1.2 Do you believe that a regulatory approach to quality of service will have a significant positive or negative impact on consumers' choices?

Q 1.3 Is the information currently available to consumers sufficient for them to make the best decision on operator services?

Q 1.4 Do you believe that the benefits to consumers from the implementation of quality of service standards outweigh the cost to service operators to monitor and publish their performance on these standards?

Q 1.5 Do you believe that a voluntary quality reporting scheme by service operators is adequate? If yes, explain.

Chapter 3

Q 3.1 How should the service providers promote the Guaranteed Standards?

Q 3.2 Should the company automatically credit customers' accounts when a breach is identified?

Q 3.3 How much time should a company be given to credit the amount to customers' accounts?

Q 3.4 What should be the penalty if this "time to credit the account" standard is breached?

Q 3.5 How much do you think is a reasonable compensation for other breaches?

Chapter 7

Q 8.1 What should the OUR's response be to below standard performance?