

**QUALITY OF SERVICE STANDARDS AS A MEASURE OF  
REGULATORY TRANSPARENCY AND EFFECTIVENESS:**

**A CASE STUDY OF JAMAICA**

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<sup>1</sup> The views expressed in the paper are strictly those of the author and in no way reflect the views of the organization to which she works.

**Abstract**

While the Office of Utilities Regulation has stipulated quality of service standards for the water and sewerage and electricity sectors in Jamaica it has yet to implement such standards for the telecommunications sector. This state of affairs obtains despite the fact that the supply of various telecommunication services (e.g. access to the fixed network by end-users, internet and other value-added services) are dominated by a single firm. This paper offers an assessment of the effectiveness of the OUR in implementing and administering quality of service standards for the water and electricity sectors and looks at the proposed standards for the telecommunications sector. The paper also explores the linkage between service standards and the price setting mechanisms for the three sectors. Suggestions regarding how the implementation and administration of standards can be improved to better serve customers will be considered.

The main conclusion of the paper is that the OUR has not been very effective in monitoring and enforcing compliance with the standards. While improvements have been made over time, the situation is far from satisfactory. It also points to the fact that the effectiveness of a regulatory body in discharging its functions is dependent on a host of social, legal and economic factors which fall outside the control of the regulatory body. It is suggested that the OUR may become more effective in regulating service quality by making an explicit link between pricing and QOS.

**Section 1: INTRODUCTION**

Various types of structures exist for the regulation of utilities among OOCUR members. Jamaica, Guyana, Bahamas, Barbados, and Anguilla have multi-sector regulatory bodies. These agencies not only regulate telecommunications but water and sewerage, electricity, and transportation by road in some instances. In Trinidad & Tobago, the Regulated Industries Commission regulates water and sewerage and electricity while the newly established Telecommunications Authority regulates the telecommunications sector. These agencies are supposed to be independent of the political directorate. This is viewed as a necessary condition if they are to carry out their duties and responsibilities in an impartial manner. However, independence, although a necessary condition for effective regulation, is not a sufficient condition. The effectiveness of regulators in carrying out their functions is a measure of regulatory success or failure. One method of assessing the performance of these newly established agencies is to analyze their effectiveness in regulating service providers through developing and administering quality of service standards.

It has been argued<sup>2</sup> that regulators should establish clear goals that they expect to achieve in regulating service providers in order to improve their transparency and also as a measure against which their performance can be assessed. The OUR has not set clear performance targets which it expects to achieve but instead has resorted to actions as prescribed by the various sector specific legislation that govern its operations. One could reasonably argue that the establishment of the quality of service standards for the various utility sectors, could in effect, be a reasonable proxy in discerning how effective the OUR has been in regulating the various sectors.

Surveys<sup>3</sup> by the author have shown that many Caribbean utility regulators have yet to implement specific standards to monitor the performance of service providers in the water, electricity and telecommunications sectors. One possible reason is that most of the service providers are still state owned. It is also the case that in telecommunications, regulators are relying on market forces to generate high quality and will only intervene when there is clear evidence of market failure. To the extent that OOCUR members do not have specific quality of service standards for the various utility service providers, the Jamaican experience may serve as a useful starting point for other countries in the design and implementation of service standards.

This paper examines how effective the Office of Utilities Regulation (OUR) has been in developing, implementing and monitoring quality of service standards (QOS) for the water, electricity and telecommunications sectors. The paper examines the adequacy of existing service standards in the water and electricity sectors and those proposed for the telecommunications sector.

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<sup>2</sup> See “How good is your regulatory framework”, (2003) Robert Hall, Sunrise Consulting.

<sup>3</sup> Surveys were done via email enquiries and browsing of relevant websites.

**Section 2: LEGAL FRAMEWORK FOR SERVICE QUALITY REGULATION**

The OUR is the economic regulator of the water and sewerage, electricity, telecommunications and transportation (by road, rail and ferry) sectors and its functions include:

- regulating the provision of prescribed utility services by licencees; and
- giving directions to ensure that the needs of the consumers of the services provided are met and that the utility service provider operates efficiently and in a manner designed to afford to its consumers economical and reliable service.

The OUR can also undertake such measures as it considers necessary to:-

- protect the interests of consumers in relation to the supply of the prescribed service and in this regard can, by order published in the gazette, prescribe standards for the measurement of quantity, quality or other conditions relating to prescribed utility service.
- Additionally, it can make such provisions as it considers necessary to ensure the safety of the public as it relates to the prescribed utility service.

In addition to the provisions of the OUR Act, sector specific legislation have also specified the role of the OUR in dealing with consumer protection with respect to each of the sectors.

**Telecommunications**

Section 44 of the Telecommunications Act, 2000 states that the providers of retail services shall ensure that the service provision is reliable and rendered in accordance with standards reasonably expected of a competent service provider. It further provides for the Office<sup>4</sup> to make rules, subject to affirmative resolution, prescribing quality standards for the provision of specified services and any other matter it considers necessary or desirable for the effective performance of its functions. The Office can also receive complaints from customers dissatisfied with services provided, and make rules relating to the administration and resolution of complaints.

**Electricity**

Service standards in the electricity sector are governed by the provisions in the OUR Act as well as licence conditions in the Jamaica Public Service Company Limited (JPS) All-Island Electricity Licence, 2001,

**Water**

Unlike the telecommunications and electricity sector, no sector specific legislation is available for the water and sewerage sector. The existing legislation, the NWC Act, does not make provisions for the development of comprehensive quality of service standards. In light of this, the OUR exercises its functions under the OUR Act when regulating the water sector.

There are also provisions for enforcement in all the various sector specific legislations if any of the service providers fail to adhere to rules and regulations of any nature prescribed by the OUR. Given these provisions, the OUR has the power to request information from service providers on their operations with a view to monitoring their performance. The OUR can also ensure compliance by resorting to imposition of penalties.

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<sup>4</sup> OUR is the organization and the Office is the persons who are in charge of the organization.

### Section 3: DEVELOPING QOS – THE CONSULTATION PROCESS

Government owned monopolies tend to be inefficient in their operations and provide poor service quality to their customers. One reason for this is that the prices charged are not sufficient to cover the cost of operations and maintenance. However, this does not explain the poor service quality of privately operated companies who are able to recover the costs of operation and maintenance. Because of their monopoly status there is no incentive for each of the companies to improve their service quality. It is in this context, as well as in response to constant complaints by customers about the delivery of service, that independent regulators such as the OUR developed quality of service standards for water and sewerage and electricity sectors which mandate that service providers improve their quality of service.

The general process that the OUR follows in conducting its consultation is outlined in “Conducting Public Consultations: A consultative document”. The document speaks to the types of documents (Consultative documents, Explanatory statement<sup>5</sup>) that are issued during consultation, the modes of consultation as well as the time period that is assigned to the consultative process. Consultative documents outline the initial view of the Office and may contain a series of specific questions to which responses as well as general comments are sought from stakeholders. In addition to these documents, the Office may also consult through other mediums such as public hearings and public meetings.

Given the importance of the various issues that maybe consulted on from time to time, it is important for the consultation to be done in a timely manner. The OUR has specified various time periods for conducting public consultation and these vary from:

- One (1) to three (3) months for responses to consultative documents. After the deadline of responses has passed a time period of 2 to 4 weeks is allowed for comments on responses.
- One to six months from the end of the first consultation to issue a second consultative document, if necessary.
- One month from the end of consultation to issue a determination notice, statement or policy position.

Determination notices, statements and policy decisions, outlining the Office’s final position on the issues being consulted on are issued at the end of the consultation period. The determination outlines the Office’s reasons for decisions and disagreement. All documents published by the OUR, including responses to the consultative documents and determination notices are made available to the public via its Information Centre and website<sup>6</sup>.

Public consultation on quality of service in the water, electricity and telecommunications sectors began in 1999. Two main sets of standards were proposed in these documents: overall and guaranteed standards. The overall standards address general areas of service provision to ensure that the basic services are provided in an acceptable manner. While the guaranteed standards address specific areas of service delivery to individual customers for which a compensatory payment is made if a breach is committed. The amount of compensatory payments and how compensatory payments are to be made were also consulted on. The standards which were developed at the end of the consultation served to monitor the performance of the quality of service delivered to customers.

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<sup>5</sup> This has subsequently been changed to determination notice/decision.

<sup>6</sup> This is subject to confidentiality provisions. Once respondents submit confidential information to the OUR, the Telecommunications Act stipulates that the Office should treat with such information submitted to it under confidential cover. To avoid the limitation of exchange of ideas and opinions as well as to minimize persons submitting responses under confidential cover without a justifiable reason, the Office may remove the confidential cover if it deems that the public’s interest is best served if the response disclosed. This will be done after informing the respondents of its intentions not less than 14 days before such disclosure is made.

**Section 4: QUALITY OF SERVICE STANDARDS for the UTILITY SECTORS**

• **TELECOMMUNICATIONS**

The first consultative document on service quality in telecommunications was issued on in 1999 and a second consultative document in June 2001. However, to date no final determination has been made on the QOS.<sup>7</sup> At the same time in February 2001 CWJ introduced its own QOS in its customer service charter. With the absence of general QOS to govern the telecommunications industry, these standards are the only ones available that monitor the service quality delivered by one of the many service providers in the industry. In the context of the customer charter the following could be considered overall standards:

- Respond to customers' needs in a friendly, courteous and professional manner
- Deliver service and effect repairs within the times specified
- Available to receive telephone requests and fault reports on a 24-hour basis
- Offer a wide range of products and service

Guaranteed standards are also included (see Table 3, Annex 1) but in order for customers to be compensated for breaches they would have to file complaints to CWJ's business offices. In such cases, compensation payment is limited to installation/connection charge or rental rebate, whichever is applicable.<sup>8</sup> Nevertheless, these standards are inadequate as they exclude several critical areas of service such as service disruption and reconnection and time limit to make payments.

The OUR does not monitor CWJ's performance in relation to the standards it outlines in the customer service charter. Essentially, one could assume that these standards do not really exist, as it involves self monitoring and no external verification. It can be argued that the OUR in fact should not monitor these standards because it would be subscribing to regulations developed by a company it regulates and as such, this may compromise the OUR's ability to develop and effectively administer the QOS standards for the industry. Furthermore, the OUR's monitoring of CWJ's performance based on standards that CWJ has developed may foster the view that the OUR endorses such standards.

In spite of full liberalization the telecommunications market is not effectively competitive. In fact, the OUR has recently issued a determination notice proclaiming CWJ to be dominant in the fixed line service (CWJ) market. Preliminary evidence also points to the view that mobile termination services constitute dominance and makes the case for regulation of quality of service standards in this sector also.

With the various entrants in the market, the present consultative document that addresses the service of only one provider is not sufficient. It is suggested that the OUR should develop a comprehensive document which address all aspects of the telecommunications service by the various service providers.

• **WATER**

The standards for the water sector became effective April 1<sup>st</sup> 2001 and are outlined in Annex 2. The overall standard does not attract a compensatory payment but breaches of guaranteed standards attract a payment between J\$100 and J\$3000. Consumers, would however, make claims to the company and upon completion of investigations, receive the compensatory payment. A number of factors resulted in the perceived ineffectiveness of these standards.

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<sup>7</sup> Annex 1 (Tables 1 and 2) summarizes OUR's proposed standards

<sup>8</sup> Rental charges for residential and commercial customers are \$500 and \$1,250 respectively. Installation charges are \$660 and \$840 for residential and business customers respectively.

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Firstly, the majority of consumers were unaware of these standards, which resulted from the lack of publicity by the NWC and the OUR. Although the OUR expressed dissatisfaction with the publicity of the standards,<sup>9</sup> there was no documented action that was taken against the NWC.

Secondly various provisions in the NWC Act nullified some of the standards that were developed and the NWC resorted to these provisions whenever it was convenient.

Thirdly, the standards were issued by the Minister, who also acted in a regulatory capacity. Furthermore, the absence of the gazzetted standards reduced their legal effect as the OUR could not resort to the compliance provisions available under the OUR Act.

Finally, the claims scheme as well as the low compensation was not sufficient to warrant the submission of claims by customers.

There was also evidence of ineffective monitoring of the performance of the NWC against these standards as the OUR have stated that it did not receive consistent reports on the NWC's performance as measured against these standards. It can be argued however, that ownership by the government makes it difficult to implement an incentive mechanism to allow managers to perform efficiently. However, this should not prevent the OUR from enforcing compliance with respect to these standards, given that it is dissatisfied with the NWC's performance.

- **ELECTRICITY**

The standards for the electric service provider, JPS, are outlined in Annex 3. While the standards themselves are different, the compensation mechanism for the electricity is similar to that of the water sector. That is, payment is not automatic even when it is known that there is a clear breach. If upon submission of claim and investigation the company was found to be in violation of the standards, a payment of between J\$150 and J\$750 would be made to residential and commercial customers respectively.<sup>10</sup>

The OUR had more success with the JPS with the publicity and implementation of the standards as well as the submission of reports which outlined the company's performance against the individual standards. However, customers did not make claims for breaches and it is theorized that this poor response was due primarily to the low compensatory payment as well as the lack of trust in the company. Additionally, the reports that have been submitted have also been questionable as an audit of the system in July 2003 revealed that the process for administering and recording data for the guaranteed standards as well as developing and submitting reports to the OUR, cannot be relied on to produce results that are verifiable, accurate and reliable.

### **COMPARISON OF THE WATER AND ELECTRICITY STANDARDS**

Although the water and electric utilities industry cannot be directly compared, as the design and delivery of services are different, certain basic parameters pertaining to delivery of service should be the same in both sectors. A simple comparison of the guaranteed standards, specifically those that are sector neutral revealed the following:

- (1) Whilst the water sector standards seek to address the frequency of meter reading as well as receipt of last bills after the customer has relocated, these standards are noticeably absent from the electric utility's standards. Various reports from the Consumer Affairs Department (CAD)<sup>11</sup> of the OUR indicate that the frequency of meter readings have been a constant source of complaints by

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<sup>9</sup> See OUR Annual Report 2001/02 and 2002/03.

<sup>10</sup> For each period that the compensatory payment remains outstanding, the licensee shall make additional payments of the same amount for each succeeding period provided that maximum exposure of the licensee for such payments shall not exceed four periods.

<sup>11</sup> Available at [www.our.org.jm](http://www.our.org.jm)

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customers. Furthermore, although the overall standards have addressed frequency of meter testing for accuracy, there is no follow up standard to stipulate the time frame in which the company should treat with meters that are defective. In this regard a situation could arise whereby, a meter could be tested and recognized as defective, but if that meter consistently over estimates the consumption of a customer, it would be in the company's best interest to delay the changing of the meters for as long as possible. A follow up provision should be made in the standards to prevent such incidents from occurring.

- (2) Whilst the electric standards seek to address testing of meters, the water standards have not included this provision in neither its overall nor guaranteed standards. Although there is provision in the guaranteed standards for the repair of faulty meters, it would appear that the OUR assumes that the NWC will routinely conduct random tests on meters to ensure their accuracy. This should not be left to the discretion of the company, and should be included as a part of the quality of service standard for the water company.

Standards pertaining to meter reading, meter testing and replacement of meters underpins the delivery of acceptable quality of service by service providers to their customers, and also would not only improve accuracy of billing but could serve to reduce the number of complaints that could arise with regards to allegedly high consumptions. This could also improve the overall trust in the relationship between the consumer and the company.

- (3) There are no provisions in the water standards for flooding of customers properties as a result of blocked mains. Although this is not a frequent occurrence, it should not be at the company's discretion to act when this occurs and should be provided for in the standards.
- (4) The electricity standards have no provision for making and keeping appointments with customers. This becomes important if customers report problems with their meters and site inspection is necessary. It would also prevent unnecessary wasting of time and resources by either customers or company and in light of these considerations, provision should be made in the standards.

**Section 5: REVIEW OF QUALITY OF SERVICE SURVEY**

The initial determination on the quality of service standards for both the water and sewerage and electricity sector, indicated that the OUR would conduct a comprehensive review of the standards in 2003. As a precursor to the review, the OUR commissioned a consumer survey in 2002 to get feedback from customers on the quality of service standards as well as overall service provision delivered by the various service providers. The results of the survey<sup>12</sup> highlighted several things.

1. Consumers perception of the OUR's role is centered more around problem solving than ensuring delivery of good quality service (see Table 1, Annex 4).
2. There are several key areas, upon which the OUR must improve, to make itself more relevant and effective. The most critical area is the customers' awareness of the existing quality of service standards. Only 42% of persons surveyed were aware of QOS and even more striking is that the category of persons that were unaware of these standards (58%) were in the 18-24 age group.<sup>13</sup> Of this figure only 65% knew that they could make a claim against the service providers if a standard was breached. Although this percentage is high, when respondents were further asked how many of them made claims, the result was even more disappointing, a paltry 8% (see Annex 4 (table 2) for summary).
3. In addition to the perceived role of the OUR by the consumers, the lack of promotion of the standards by the utility companies, as well as the schemes governing compensatory payment can explain the poor results of the survey. The fact that consumers had to make a claim, as opposed to getting automatic compensatory payment did not improve the attractiveness of the schemes.

Generally, compensation payments should at least be equal to the average bills for consumers in different customer categories. In the case of the water sector, for example, compensatory payment should be at least the average bill for each category of customers.<sup>14</sup> The results of the survey with regards to the claim mechanism was interesting as generally consumers (residential and commercial) preferred to make claims if the amount of compensation increased.

4. Several service parameters were also highlighted as critical to good service delivery (see Table 3, Annex 4). Service without disruption was deemed the most important and response to emergency calls and restoration of service after disconnection were also important.

Based on the results of the survey, three main things should be addressed at the 2003 review:

1. Level of compensatory payment
2. Public awareness campaign of service providers
3. Automatic versus claim for breach

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<sup>12</sup> Available from OUR Information Centre.

<sup>13</sup> Persons in red areas were also unaware of the QOS. These beneficiaries generally do not pay for the services so knowledge of standards is not considered important to them.

<sup>14</sup> For example the average residential customer consumes between 3000-6000 gallons of water per month and pays J\$1000 for water. In the case of electric utilities the average bill for a rate 10 customer is \$2118.

**Section 6: REVIEW OF QOS 2003 AND PRICING REGIME**

• **WATER**

The review of the quality of service standards for the NWC was done simultaneously with the review of the tariffs in 2003 and the revised standards were issued in March 2004. Annex 5 summarizes the revised overall and guaranteed standard that governs the water sector. An extensive consultative process was not done for the review of the standards. In fact, comments were only received from the NWC. It could be argued that this is not consistent with the procedural guidelines for consultation as published by the OUR, however, given that a consumer survey was recently conducted, one could also say that this was sufficient serving to assist in obtaining extensive responses from consumers and the public in general that would serve to inform the Office's decision.

A review of the new standards showed that several areas of concern highlighted in the survey were addressed. The important service parameters, with the exception of response to emergency calls, were incorporated and the compensatory payments were increased to 4 times the price of service charge.<sup>15</sup> There is, however, a noticeable absence of the frequency of meter testing from the overall and guaranteed standards as well as flooding of customer premises resulting from blocked mains. As stated before these are also critical areas of customer service and should not be left to the discretion of the relevant utility company. Hopefully, at the 2007 review, this will be addressed.

With regards to the issue of whether payments should be made after claim is submitted or automatically, the OUR decided that the current scheme governing the submission of claims will be continued. This may be as a result of the feedback from the survey where both households and commercial customers indicated that they would prefer a claim system if the amount for compensation is increased.

The OUR has also introduced a new pricing mechanism<sup>16</sup> wherein the performance of the company against the overall QOS standards will have to be taken into account at rate reviews. However, it has yet to set out a feasible method by which it will integrate performance into determining appropriate rates to be charged for services. The effectiveness of the OUR in the water sector will ultimately be determined by whether it can enforce compliance as well as effectively monitor the NWC's performance against the standards. The development of sector specific legislation should also empower the OUR and make the enforcement and monitoring process less difficult. The OUR should also periodically audit the QoS system to ensure that reports are accurate and verifiable.

**ELECTRICITY**

Although the licence conditions specified a review date of 2003, a comprehensive review of the overall and guaranteed standards that govern the electricity sector was done at the same time of the review of rates charged to customers in June 2004. Like the water sector, the OUR made several changes to both category of standards in this review. The period of public consultation on the standards was longer when compared to the water sector and this was used in addition to the results of the survey to conduct the revision. The new standards are outlined in Annex 6.

Examination of these standards reveals that there have been several additions which address critical areas of service quality. The five additional standards are:

- Estimated billing
- Estimated consumption
- Meter replacement
- Billing adjustment and
- Street light maintenance

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<sup>15</sup> Payments will range from \$760 for residential customers to \$24300 for high end commercial customers. This amount will be adjusted by the price adjustment mechanism (PAM) relevant at the payment period.

<sup>16</sup> Prices are set such that they increase by a price adjustment mechanism (PAM) less an efficiency factor.

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Hopefully, these standards should address several areas of dissatisfaction including, resolving the mysterious methodology from which estimated bills are derived and addressing the problem of inadequate street lighting and timely repairs of street lamps.

Like the water sector, the compensatory amounts have also increased. The new rates for residential customers (rate 10 and 20 category) vary from \$150 to \$1000 and \$8400 for commercial customers. Although these amounts are below the average bill of a residential customer, the amount is noteworthy. For street lamps, JPS is required to pay \$300/street lamp/month if it fails to meet the guaranteed standard of repairing street lamps within fourteen days.

However, the concern of making and keeping of appointments by JPS to its customers has still not been addressed in the revised standards. As expressed before, this is also critical to delivering good quality of service and it is hoped that at the next review, albeit 4 years from now, this will be addressed.

JPS operates under a price cap regime and there is a built in quality of service indicator (Q-factor) that is included in the price cap formula. This Q factor penalizes service providers for delivering poor quality service. Under the current pricing regime, the Q factor has been assigned a value of zero until 2005. The delay in assigning a positive value to Q is to give the JPS sufficient time to accumulate the necessary data on the operations of the company to inform that decision. In the absence of this the OUR will resort international benchmarks to determine Q. It is presumed that the Q will take into consideration the performance of the JPS against the overall standards only as the guaranteed standards would have made payments to customers if breaches were committed.

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CWJ, presently operates under a price cap mechanism on its fixed line network. While the price cap formula includes a quality of service parameter (Q) its de facto value is zero as no set standards are established against which the performance of the company can be assessed. The price cap is set for review in 2005 at which time the OUR will have to decide whether to forgo the QOS in favour of a specific value for Q or forgo the Q and use the QOS scheme.

It may be easier to use the QOS standards for all service providers, as their application will be impartial, and it also will be much easier to monitor as the mobile segment of the incumbent provider does not operate under a price cap plan. Furthermore, there seems to be less difficulty with generating reports outlining performance against the standards as compared to developing a mechanism to adequately measure a Q factor.

**Section 7: Conclusion/Recommendation**

One of the objectives in developing a regime for effective quality of service delivery should be to ensure that the service provider has the correct incentive to improve service quality as well as to have the requisite enforcement mechanism that will enable effective enforcement of the standards. This is germane in light of the fact that operators, especially those that are monopoly providers, are sometimes unwilling to embrace quality of service standards. It is also important that the dimensions of service quality be appropriately defined and measured so as to allow for independent assessment of service providers' performance against the stipulated standards.

Over the last 5 years the OUR has developed several overall and guaranteed standards for the electricity and water sector. The response to these standards has been less than favourable primarily because of several legal, social and economic impediments, which by extension, limited the regulatory effectiveness of the OUR.

In an attempt to encourage customers to make claims, the OUR has increased the level of compensatory payments in both sectors. It has also mandated that the JPS and NWC adequately publicize the standards. In addition, several service quality parameters have been included to address concerns with the frequency of meter reading and meter replacement, as well as street lighting in the electricity sector. However, a standard governing keeping appointments is missing in the QoS for the electricity sector and a meter testing standard should be included in the water standards.

In the area of telecommunications the OUR's performance is well below those of the other two sectors. It is theorized that the reason for the slow implementation of the development of standards is because the OUR was unsure of how the various markets would have evolved with the onset of competition and as such the decision was made to apply quality of service regulations to CWJ's fixed and mobile services only.

It is fair to say that the markets for telecommunications services have long been liberalized and the existence of dominant operators warrants regulation of service quality. Several types of markets exist in the telecommunications sector and one set of standards cannot apply to all markets. The Internet market, for example, may prove very difficult to set quality of service standards for and may be the most difficult to monitor because of traffic transmission and different network architecture. However, basic standards which address the level of redundancy on a network and the minimum acceptable dial up connection speed should be addressed.

The existing standards proposed by the OUR are not adequate and it is proposed that a different set of standards should be established for the various types of markets. It is apparent that the present lack of urgency does not speak well of the transparency of the regulator's functions, in light of the fact that there is no available benchmark against which to measure the performance of regulated entities.

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**Annex 1: OUR proposed and CWJ imposed QOS standard**

**Table 1: Draft OUR Quality of Service Standards for CWJ**

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Indicators	Proposed Standards for CWJ
<p>Percentage of unreported faults cleared within:</p> <ul style="list-style-type: none"> <li>- 24 hours</li> <li>- 48 hours</li> <li>- 72 or more hours</li> </ul> <p>Percentage of reported faults cleared within:</p> <ul style="list-style-type: none"> <li>- 24 hours</li> <li>- 48 hours</li> <li>- 72 hours</li> </ul> <p>Average daily % of payphones in working conditions</p> <p>Percentage of Payphones repaired within:-</p> <ul style="list-style-type: none"> <li>- 1 working day</li> <li>- 2 working days</li> </ul>	<p>&gt;60%</p> <p>&gt;80%</p> <p>&gt;90%</p> <p>&gt;80%</p> <p>98%</p> <p>100%</p> <p>&gt;95%</p> <p>&gt;90%</p> <p>&gt;98%</p>
<p>Percentage of originated calls successfully completed during peak traffic (international calls)</p> <p>Percentage of originated calls successfully completed during peak traffic (domestic long distance)</p> <p>Percentage of externally originated calls successfully completed during peak traffic (local calls)</p> <p>Percentage of calls receiving dial tone in 3 seconds or less</p>	<p>&gt;75%</p> <p>&gt;95%</p> <p>&gt;98%</p> <p>&gt;98%</p>
<p>Percentage of calls answered by operator in -</p> <ul style="list-style-type: none"> <li>- 10 seconds</li> <li>- 20 second</li> </ul> <p>Percentage of calls answered by international operator within 10 seconds</p> <p>Average answer time on directory assistance in</p> <ul style="list-style-type: none"> <li>- 10 seconds;</li> <li>- 20 seconds</li> </ul> <p>Percentage of calls to repair service answered in 20 seconds</p> <p>Number of billing accuracy complaints per 1,000 bills</p> <p>Number of credit notes per 1000 bills due to incorrect billing</p> <p>Percentage of requests for new numbers available within 48 hours:</p> <ul style="list-style-type: none"> <li>- rural</li> <li>-</li> <li>- urban</li> </ul>	<p>80%</p> <p>&gt;90%</p> <p>&gt;90%</p> <p>&gt;80%</p> <p>&gt;90%</p> <p>&gt;95%</p> <p>5</p> <p>&lt;10</p> <p>&gt;80%<sup>17</sup></p>

OOCUR/CRRC

	100%
Directory Accuracy: Percentage of customer listings in the white pages of the company directory published without errors and omissions	>95%
Community Isolation: Number of incidents and communities affected resulting from trunk failure that lasts one hour or more. - rural incidents/communities per 3 months  - urban incidents/ communities per 6 months	1 incident/ <3 communities  2 incidents/ <5 communities

**Table 2: OUR Draft Guaranteed Standards for CWJ**

<b>Description</b>	<b>Proposed Performance Standards for CWJ's Fixed Line Customers</b>	<b>Proposed Performance Standards for CWJ's Mobile Customers</b>
Delay in installation	Maximum time of 5 working days from signing of contract.	Maximum time of 16 working hours from signing of contract.
Delay in repair	Fault correction should be done by the end of the next working day	-
Reconnection after payment of overdue amount	Where disconnection of service is due to non-payment, maximum restoration time is 24 hours	Where disconnection of service is due to non-payment, maximum restoration time is 24 hours
Wrongful disconnection	Due from the first day of disconnection	Due from the first hour of disconnection
Repeated total or partial loss of service	Repeated loss of total/partial service within 30 days	-
Response to customer	Maximum time of 40 days to complete investigation and supply response to customer	Maximum time of 40 days to complete investigation and supply response to customer
Missed Appointment	i) Failure to keep either morning or afternoon appointment. ii) Failure to give customer 12 hours notice of a change of appointment date/time.	-
Advance Notice to customer of planned disruption in service	Minimum notice of 24 hours	-
Receipts of compensation payments	Maximum time to disburse payment to customer – 30 working days	Maximum time to disburse payment to customer – 30 working days

**Table 3: CWJ imposed guaranteed standards**

<b>Service type</b>	<b>Delivery time residential</b>	<b>Delivery time business</b>
Installation of telephone	14 working days	7 working days
Provision of features	8 hours	8 hours
Provision of voicemail	8 hours	8 hours
Provision of internet – dial up	1 hour	1 hour
Access to call centre services	24 hours/day	24 hours/day
Answer time - 110	15 seconds	15 seconds
Answer time all other calls to the call centre/corporate switchboard	20 seconds	20 seconds
Resolution of queries	1 <sup>st</sup> point of contact	1 <sup>st</sup> point of contact
Response to written communication	Acknowledgment 2 days	Acknowledgment 2 days
Response	5 days	5 days
Maximum repair time to telephone line	5 days	2 days

**Annex 2: QOS for the water sector****Table 1: Overall Standards for NWC**

<b>FOCUS</b>	<b>DESCRIPTION</b>	<b>PERFORMANCE MEASURE</b>
Water Quality	Testing samples for impurities	To ensure that water is within standards as specified by MOH
Water Pressure	Minimum/maximum water pressure	Must maintain a pressure ranging from 20 to 60 psi
Reliability of supply	Notify public of intention to interrupt supply – planned interruptions	Minimum notification time of 12 hours for short interruptions (not more than 4 hours) and 24 hours for longer interruptions (more than 4 hours)
Sewerage	Correction of sewerage problems	Maximum of 24 hours to correct sewerage problems, after being informed
Sewage	Sewerage effluent quality	Ensure that sewerage effluent is within the standards specified by NRCA
Water meters	Changing meters	NWC must provide consumers with details of the date of the change, meter readings on the day and serial numbers of the new meter

**Table 2: Guaranteed Standards for NWC**

<b>FOCUS</b>	<b>DESCRIPTION</b>	<b>PERFORMANCE MEASURE</b>
Access	Connection to supply	Maximum time of 10 working days
Delivery of bills	Issue of first bill	Maximum time of 48 working days after connection
Appointments	Keeping appointments	Must notify customer prior to appointed time, if cannot keep appointment.
Complaints	Response to complaints not bill related	Maximum of 5 working days to acknowledge customer complaints, after receipt. Maximum time of 30 working days to complete investigation and respond, from date of receipt of complaint
Complaints	Response to billing complaints	Maximum of 5 working days to acknowledge customer complaints, after receipt. Maximum time of 30 working days to complete investigation and respond, from date of receipt of complaint
Account status	Issue of account status	Meter to be read on same day customer is moving, if on a weekday (within 2 days of move if on a weekend) providing 5 days notice of move is given. Maximum time of 48 working days to provide final bill after move
Reliability of supply	Restoration after emergency lock-off	Maximum time of 24 hours to restore supply in urban areas. Maximum of 48 hours in rural areas.
Water meters	Meter installation	Maximum of 30 working days to install meter on customer's request
Water meters	Repair or replacement of faulty meters	Maximum time of 40 working days to repair or replace meter after being informed
Water meters	Meter reading	Maximum of 3 months between each meter reading and between bill issues
Reconnection	Reconnection after payment of overdue amount	Maximum of 24 hours to restore supply in urban areas. Maximum of 48 hours to restore supply in rural areas.
Compensation	Payment of compensation	Maximum of 60 working days to make payment when it becomes due

**Annex 3: QOS for the electricity sector****Table 1: Overall Standards – JPS**

Standard	Units	Apr. 2001- Dec 2001	Jan 2002-Dec 2002
Minimum of 48 hours prior notice of planned outages	Percentage of planned outages for which at least forty-eight hours advance notice is provided	100%	100%
Percentage of line faults repaired within a specified period of that fault being reported	Urban – 48 hrs	100%	100%
	Rural – 96 hrs	100%	100%
Number of complaints to JPS	Total telephone and written complaints per 10,000 customers per year	245	230
Average number of customer minutes lost per customer	Average minutes lost per customer per year	324	275
Total number of customer minutes lost split into: - generation - transmission - distribution	Total customer minutes lost per annum allocated between the licensee's main areas of operation	29.872M 61.109M 70.563M	T.B.A. at adjustment date
Total system losses (difference between energy generated and energy for which revenue is received)	System losses as a percentage of total energy delivered to customers	15.8%	T.B.A. at adjustment date
Frequency of meter reading	Percentage of meters read within time specified in the licensee's billing cycle (currently, monthly for non-domestic customers and bi-monthly for domestic customers)	99%	99%
Frequency of meter testing	Percentage of rates 40 and 50 meter tested for accuracy annually	50%	50%
Frequency of meter testing	Percentage of other rate categories of customers meters tested for accuracy annually	20%	25%
Billing Punctuality	98% of all bills to be mailed within specified time after meter is read	6 working days	5 working days
Restoration after unplanned (forced) outages on the distribution system	Percentage of customer's supplies to be restored within 24 hours of forced outages in both Rural and Urban areas	98%	98%

**Table 2: Guaranteed Standards – JPS**

Description	Performance measure	April 2001-Dec 2002	Jan 2002 – Dec 2002
Connection to Supply (simple) connection point within 30 meters	a) supply and meter already installed b) service drop and meter to be installed	4 working days 5 wkg dys	4 working days
Connection to Supply (complex) connection point between 30 and 250 meters	a) supply within 30 to 100 meters: i) provide works estimate ii) complete construction after customer acceptance of estimate b) supply between 100 and 250 meters i) provide works estimate ii) complete construction after customer acceptance of estimate	10 WD 30 WD  15 WD 40 WD	10 WD 30 WD  15 WD 40 WD
Response to emergency and service calls (single events affecting the distribution system)	Maximum time to restore supply to all affected customers	6 hrs	6 hrs
Billing punctuality	Time for first bill to be mailed after service connection	30 WD	30 WD
Response to customers' queries (including metering queries)	Time to acknowledge inquiry after receipt: a) Maximum time to complete investigation and communicate final position. Time begins to run from receipt of enquiry b) Maximum time to complete investigation and communicate final position. Time begins to run after 3 <sup>d</sup> party action is complete if 3 <sup>d</sup> party is involved (e.g. insurance claim)	5 WD 30 WD  60 WD	4 WD 24 WD  60 WD
Reconnection after payment of overdue amounts or agreement on payment schedule	Maximum time to restore supply after payment is made: a) urban b) rural	1 WD 2 WD	1 WD 2 WD
Receipts of compensation payments	Maximum time to respond to a claim for compensatory payment	45 days	45 days

WD – working days

**Annex 4: Results of Consumer Survey**

**Table 1: Survey results on role of OUR**

<b>Purpose</b>	<b>Households</b>	<b>Commercial Enterprises</b>
Aware of OUR	54%	81%
Protect consumers from the unfair practices of utility companies	41%	40%
Help solve problems that customers have with utility companies	37%	31%
Ensure utilities offer good service	19%	28%
Ensure utility companies charge a fair price	17%	39%

**Table 2: Awareness of QOS**

<b>Categories</b>	<b>Positive</b>	<b>Negative</b>
Aware of standards	42%	58%
Aware that can make claims	65%	35%
Persons that make claims	8%	92%

**Table 3: Service quality parameters rankings**

<b>Issue/Standards</b>	<b>Most important among Households</b>	<b>Most important among Commercial Enterprise</b>
No Disruptions without notification	36%	46%
Immediate reconnection after payment	21%	11%
Response to emergency calls	18%	28%
Response to Queries	11%	6%
Carrying out repairs	11%	9%

**Annex 6: New QOS for water sector****Table 1: Overall Standards**

FOCUS	DESCRIPTION	PERFORMANCE MEASURE
Water Quality	Testing samples for impurities	To ensure that water is within standards as specified by MOH
Water Pressure	Minimum/maximum water pressure	Must maintain a pressure ranging from 20 to 60 psi
Reliability of supply	Notify public of intention to interrupt supply – planned interruptions	Minimum notification time of 12 hours for short interruptions (less than 4 hours) and 24 hours for longer interruptions (more than 4 hours)
Reliability of supply	Restoration after emergency lock -off	Maximum time of 24 hours to restore supply in urban areas. Maximum of 48 hours in rural areas.
Sewerage	Correction of sewerage problems	Maximum of 24 hours to correct sewerage problems, after being informed
Sewage	Sewage effluent quality	Ensure that sewerage effluent is within the standards specified by NEPA
Water meters	Changing meters	NWC must provide consumers with details of the date of the change, meter readings on the day and serial numbers of the new meter

**Table 2: Guaranteed Standards**

CODE	FOCUS	DESCRIPTION	PERFORMANCE MEASURE
WGS1	Access	Connection to supply	Maximum time of 10 working days
WGS2	Delivery of bills	Issue of first bill	Maximum time of 48 working days after connection
WGS3	Appointments	Keeping appointments	Must make and keep an appointment at customers request and must notify customer prior to appointed time, if cannot keep appointment.
WGS4	Complaints	Response to complaints not bill related	Maximum of 5 working days to acknowledge customer complaints, after receipt. Maximum time of 30 working days to complete investigation and respond, from date of receipt of complaint
WGS5	Complaints	Response to billing complaints	Maximum of 5 working days to acknowledge customer complaints, after receipt. Maximum time of 30 working days to complete investigation and respond, from date of receipt of complaint
WGS6	Account status	Issue of account status	Meter to be read on same day customer is moving, if on a weekday (within 2 days of move if on a weekend) providing 5 days notice of move is given. Maximum time of 15 working days to provide final bill after move
WGS7	Water meters	Meter installation	Maximum of 30 working days to install meter on customer's request
WGS8	Water meters	Repair or replacement of faulty meters	Maximum time of 40 working days to repair or replace meter after being informed of defect
WGS9	Water meters	Meter reading	Maximum of 2 months between each meter reading and between bill issues
WGS10	Reconnection	Reconnection after payment of overdue amount	Maximum of 24 hours to restore supply in urban areas. Maximum of 48 hours to restore supply in rural areas. Not applicable in situations where NWC has removed infrastructure as a consequence of illegal connections.
WGS11	Compensation	Payment of compensation	Maximum of 60 days after claim is received to process and make payment. Customer must make claim within 2 billing periods or 60 days (whichever is longer) to make claims of perceived breach

**Annex 7: New Standards for Electricity sector****Table 1: Guaranteed standards for JPS**

<b>Focus</b>	<b>Description</b>	<b>Performance Measure</b>
Access	Connection to Supply - New Installations	New service Installations within 5 working days.
Access	Connection to Supply – Simple Connections	Connections within 4 working days where supply and meter already on premises
Access	Complex Connection to supply	Between 30 and 100m of existing distribution line i- estimate within 10 working days ii- connection within 30 working days after payment
Access	Complex Connection to supply	Between 101 and 250m of existing distribution line i- estimate within 15 working days ii- connection within 40 working days after payment
Response to Emergency	Response to Emergency	Response to Emergency calls within 6 hours
Billing Punctuality	Issue of First bill	Produce and dispatch first bill within 45 working days after service connection
Complaints/Queries	Acknowledgements	acknowledge written queries within 5 working days
Complaints/Queries	Investigations	complete investigation within 30 working days
Complaints/Queries	Investigations involving 3rd party	complete investigation within 60 working days if 3rd party involved
Reconnection	Reconnection after Payments of Overdue amounts - urban areas	Urban reconnection within 1 day
Reconnection	Reconnection after Payments of Overdue amounts – rural areas	Rural - reconnection within 2 days
Estimated Bills	Frequency of Meter reading	Should not be three (3) or more consecutive estimated bills (where company has access to meter). This changes to two (2) on September 1, 2006
Estimation of Consumption	Method of estimating consumption	An estimated bill should be based on the average of the last three (3) actual readings (first 6 bills of new accounts excepted)
Meter Replacement	Timeliness of Meter Replacement	Maximum of 20 business days to replace meter after detection of fault
Billing Adjustments	Timeliness of adjustment to customer's account	Where necessary, customer must be billed for adjustment within one (1) billing period of identification of error
Street Lighting Maintenance	Timeliness of repairs of street lights	Reported street lights failures must be repaired within 14 days. (Reports to be made by Local Authorities).
Compensation	Making compensatory payments	Response to claim for compensation within 45 days of verification of breach

**Table 2: Overall standards for electricity sector**

Standard	Units	Targets June 04 –May 09 (inclusive)
Minimum of 48 hours prior notice of planned outages	Percentage of planned outages for which at least forty-eight hours advance notice is provided	100%
Percentage of line faults repaired within a specified period of that fault being reported	Urban – 48 hrs	100%
	Rural – 96 hrs	100%
System Average Interruption Frequency Index (SAIFI)	Frequency of interruptions in service	To be set June 2005
System Average Interruption Duration Index (SAIDI)	Duration of interruptions in service	To be set June 2005
Customer Average Interruption Duration Index (CAIDI)	Average time to restore service to average customers per sustained interruption	To be set June 2005
Total system losses (difference between net energy generated and billed energy)	System losses as a percentage of total energy delivered to customers	15.8%
Frequency of meter reading	Percentage of meters read within time specified in the licensee's billing cycle (currently monthly for non-domestic customers and bi-monthly for domestic customers)	99%
Frequency of meter testing	Percentage of rates 40 and 50 meter tested for accuracy annually	50%
Frequency of meter testing	Percentage of other rate categories of customers meters tested for accuracy annually	7.5%
Billing Punctuality	98% of all bills to be mailed within specified time after meter is read	5 working days
Restoration of service after unplanned (forced) outages on the distribution system	Percentage of customer's supplies to be restored within 24 hours of forced outages in both Rural and Urban areas	98%
Responsiveness of call center representatives	Percentage of calls answered within 20 seconds	90%
Effectiveness of call center representatives	Percentage of complaints resolved at first point of contact	To be set June 2005
Effectiveness of street lighting repairs	Percentage of all street lighting complaints resolved within 14 days	99%