

QUALITY OF SERVICE REGULATIONS

BACKGROUND

The ECTEL Directorate conducted extensive consultations on Quality of Service in Telecommunications Services in an effort to finalize appropriate Regulations. The consultations involved a public sensitization program in all the ECTEL Member States combined with two rounds of Public Consultation on the Draft Revised Telecommunications (Quality of Service) Regulations. There were consultations on the initial draft starting on 30th November 2005 until 28th February 2006. A further period of consultation was held from 14th August 2006 to 13th September 2006. Final consultations were held on the subject matter during the period 27th February 2007 to 19th March 2007.

The Regulations represent the distillation of all inputs received during the consultations. Comments on the final round of consultations were received from the office of the Attorney General in St. Vincent and the Grenadines and the NTRCs of Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines.

THE REGULATIONS

The key features of these Regulations are:

- The exclusion of the Regulation for resellers including the ISVR Licensees. It is considered that this might best be addressed in separate Regulations;
- Inclusion of enforcement provisions in Regulation 19;
- Redefinition of loss of service to eliminate the need to differentiate between the various causes of service loss and to allow the provider to indicate in his reports the reasons for any abnormality;
- The schedules have been modified to reflect the results of the extensive consultations with the public and the providers in Regulation 10 and 11;

- Detailing of the obligations of the wholesale providers of service in the above mentioned Regulations 10 & 11:
- A requirement to establish service level agreements with entities that will be reselling services; and
- Clarification of what constitutes *force majeure* in Regulation 21 (1) and 12 (2).

POLICY IMPLICATIONS

The application of Quality of Service Obligations to resellers of telecommunications services was suggested by two commentators, with the caveat that such obligations must be less stringent than those obligations that apply to Individual Licensees. This meant that since all of the standards included in the Quality of Service Regulations would not apply to the resellers, they could not be included under Regulation 3 (1) of the Regulations: the Application Regulation.

In order to address the dilemma of ensuring that some and not all of the Regulations applied to resellers, it was agreed that a separate set of Regulations would be developed and consulted upon in the near future. This would enable the ECTEL Directorate to address the specific concerns and peculiarities of establishing QoS standards for resellers, while at the same time ensuring the completion of the Regulations that were first consulted upon in November 2005.

CONCLUSION

Significant changes were made to the draft revised Regulations and the finalized document represents the end result of one of the most extensive consultations ever conducted by ECTEL.

[MEMBER STATE]

TELECOMMUNICATIONS (QUALITY OF SERVICE) REGULATIONS 200[-]

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[Member State]

STATUTORY RULES AND ORDERS No. [-] of 200[-]

(Gazette [Date])

IN EXERCISE of the powers conferred by section [-] of the Telecommunications Act 200[-], the Minister makes the following Regulations:

TELECOMMUNICATIONS (QUALITY OF SERVICE) REGULATIONS 200[-]

Citation

1. These Regulations may be cited as the Telecommunications (Quality of Service) Regulations, 200[-].

Commencement

2. These Regulations shall come into force on the date of its publication in the Gazette.

Interpretation

3. In these Regulations—

“**Act**” means the Telecommunications Act No. [-] of 200[-];

“**Billing accuracy**” means the measure of the number of incorrect bills per 1000 bills issued where an incorrect bill is one which has been determined by the telecommunications provider or Commission to have been issued with an error;

“**Call completion success rate**” means the percentage of originated calls successfully completed where a successfully completed call is established by a successful connection to the called number although the called party may not answer;

“**Commission**” means the National Telecommunications Regulatory Commission established by section [-] of the Act;

“Compliance manual” means a document that includes details of work processes and information systems concerning criteria and parameter treatment, and details of algorithmic treatment of parameter calculations;

“Connection of service” means the interval between approval of an application for a service and the provision of the service by the telecommunications provider;

“Customer Care Service Answered and Attended” means the duration from the instant when the address information required for setting up a call is received by the network to the instant a human operator answers the calling party to provide the service requested where the service provided is not wholly automatic or does not employ the use of a voice response system;

“ECTEL” means the Eastern Caribbean Telecommunications Authority established by Article 2 of the Eastern Caribbean Telecommunications Authority Treaty;

“Fault report” means a report of disrupted or degraded service that is made by a customer and is attributable to the network of the telecommunications service provider or any interconnected public network, and that is not found to be invalid;

“Force majeure” means any event or effect that can be neither anticipated nor controlled and includes both acts of nature such as earthquake, flood, lightning and hurricane, and acts of people such as riot, strike, civil disorder, declared state of emergency and war or any similar act which the Commission determines to be *force majeure*;

"Loss of Service" means the interruption of the transmission, conveyance or routing of voice, data, audio, video, or any other information or signals that the consumer has engaged the services of telecommunications provider to ensure that transmission, conveyance or routing occurs;

“Peak period” means a twelve hour period of the day, between 6:00 am and 8:00 pm, on Monday to Friday and special days, that the relevant telecommunications provider designates as the period of high level of telecommunications traffic on its network;

“Planned disruption of service” means the scheduled or planned downtime of the telecommunication service by the telecommunications provider;

“Quality of Service” means the measurement of the performance for a telecommunications network and the degree to which the network conforms to the stipulated parameters;

“Quarter” means a period of three months ending 31st March, 30th June, 30th September or 31st December in a calendar year;

“Reconnection time” means the period between the settling of outstanding amounts by the customer and the resumption of service;

“Reconnection of service” means the restoration of telecommunications service by the telecommunications provider after the telecommunications provider or its duly authorized agent receives overdue payment from the customer;

“Reported fault cleared” means the duration from the instant a fault has been notified by the customer to the published point of contact of the telecommunications service provider to the instant when the service or service element has been restored to normal working order;

“Reseller of Service” means a telecommunications provider engaged in the subsequent sale or lease on a commercial basis with or without adding value, of a telecommunication service provided by a telecommunications provider on a wholesale basis;

“Service Level Agreement” means a formally negotiated agreement between a wholesale service provider and a reseller of service with the main purpose of agreeing on the level of service the wholesale service provider provides to the reseller of service;

“Service Level Objectives” means the level of service the wholesale service provider and the reseller of service agree on and usually include a set of service level indicators such as availability, performance and reliability;

“Special days” means (i) Christmas Day, (ii) New Year’s Day and (iii) Mothers’ Day;

“Standard installation” means an installation where the necessary equipment to carry out the installation is readily available and no significant additional resources are required;

“Universal service provider” means a telecommunications provider that is required to provide universal service;

“Unreported fault cleared” means the duration from the instant a fault has been detected by the telecommunications service provider to the instant when the service or service element has been restored to normal working order.

Application

4. (1) These Regulations apply to a telecommunications provider of any of the following telecommunications services:
 - a) Public Fixed Telecommunications Service;
 - b) Public Mobile Telecommunications Service;
 - c) Internet Service.
- (2) The Minister may, by Order published in the Gazette amend sub-regulation (1) to add to or remove any of the services to which these Regulations apply.

Quality of service criteria and parameters

5. The quality of service criteria and parameters in respect of:
 - a) Public Fixed Telecommunications Service are set out in Schedule 1;
 - b) Public Mobile Telecommunications Service are set out in Schedule 2; and
 - c) Internet Service are set out in Schedule 3.

Publication of Quality of Service Information

6. The Commission may, after consultation with ECTEL, determine the content, form and manner of publication of information on the quality of service to be provided by a telecommunications provider to its customers.

Universal Service Providers

7. Nothing in these Regulations shall exempt a universal service provider from complying with the established quality of service criteria and parameters.

Amendment of Service Criteria and Parameters

8. (1) The Commission may, after consultation with ECTEL, and having regard to market needs or the regulatory objectives of the Commission make recommendations to the Minister to amend the service criteria and parameters set out in the Schedules.

- (2) The Minister may, upon receipt of a recommendation from the Commission, amend the Schedules to these Regulations by Order published in the Gazette.

Obligations of Telecommunications Provider

9. (1) A telecommunications provider may in addition to the criteria set out herein adopt additional service criteria or parameters to determine its level of quality of service.
 - (2) Where a telecommunications provider adopts additional criteria in accordance with sub-regulation (1) and introduces procedures and information systems intended for the treatment of quality of service criteria and parameters it shall notify the Commission at least 30 days prior to the intended introduction and shall notify the public of its quality of service information.
 - (3) In the notice sent to the Commission, the telecommunications provider shall detail all relevant matters including the methods and systems used for their measurement.

Obligations of Wholesale service providers

10. A wholesale service provider who intends to make his retail services available as wholesale services to a reseller of service shall enter into a service level agreement with a wholesale service provider to ensure that the service being delivered to the customer meets the desired expectation of the customer with the regard to the quality of service being provided.

Content of Service Level Agreements

11. A service agreement shall include the following provisions related to:
 - a) definition of the service being provided;
 - b) the measurement of performance;
 - c) service level objectives;
 - d) duties of the wholesale service provider;
 - e) duties of the reseller of service;
 - f) problem management;
 - g) warranties;
 - h) disaster recovery;
 - i) dispute resolution; and
 - j) penalties.

Connection Service Time

12. (1) Requests for connection of service that do not involve a standard installation because the telecommunications provider:
- a) does not supply the particular service in the requested geographical area;
 - b) cannot technically install the service within the time frame provided for in the Schedules; or
 - c) cannot install the service because it is not technically feasible;

are excluded from the operation of these Regulations.

- (2) The burden of proving that the service cannot technically be installed within the time frame set out in the Schedules or that it is not technically feasible to install the service shall lie with the telecommunications provider.
- (3) Notwithstanding sub-regulation (1), where a service provider and a consumer agree that a request for connection would be completed within an agreed time frame, the delivery time shall be taken into consideration for measurement purposes.

Compliance Manual

13. (1) A telecommunications provider shall, within 3 months after the introduction of the criteria and parameters established in the Schedules, keep current a compliance manual in respect of each service that it is licensed to provide.
- (2) A telecommunications provider shall not delete any part of the compliance manual without the prior written consent of the Commission.
 - (3) The telecommunications provider shall keep and provide the compliance manual referred to in sub-regulation (1) in any format directed by the Commission.
 - (4) Where pursuant to sub-regulation 7(2) the Schedules hereto have been amended, the affected telecommunications providers shall within 30 days of the coming into effect of those amendments include them with any necessary adaptations in the compliance manual referred to in sub-regulation (1).

Record Keeping

14. A telecommunications provider shall retain quality of service data as well as all measurements and related records for a minimum period of eighteen months after the end of the reporting period or until such time as the Commission may direct.

Information to Commission

15. (1) A telecommunications provider shall submit to the Commission on a quarterly basis a report on its achievements for each of the service criteria and parameters set out in the Schedules to these Regulations for the last reporting quarter.
 - (2) The telecommunications provider shall submit the report referred to in sub-regulation (1) on the last working day of the month following the end of the quarter.
 - (3) Where a telecommunications provider has not attained the service criteria and parameters set out in the Schedules hereto, the telecommunications provider shall state the reasons therefore and the time period within which it shall attain the required service criteria and parameters.

Unpredictable situations and cases of *force majeure*

16. (1) In the event of a natural disaster or other case of force majeure affecting quality of service, a telecommunications provider shall within the reporting period in which the natural disaster or other case of force majeure occurred:
 - (a) provide the Commission with satisfactory information with regard to compliance with quality of service requirements during the reporting period; and
 - (b) make available to the Commission and the public details of the achieved level of compliance during the reporting period.
- (2) The Commission may take into account factors relating to:
 - (a) any changes in environmental or operating conditions that could not have been reasonably foreseen by the telecommunications provider; or
 - (b) any service deficiencies that arise partly or wholly from the operations of another telecommunications provider;

which may affect a telecommunications provider's ability to achieve the quality of service criteria and parameters as set out in the Schedules.

- (3) Where a telecommunication provider is unable to submit a report during the relevant quarter as a result of a natural disaster or a case of force majeure, he may apply to the Commission in writing for an extension of time.
- (4) In the event of a natural disaster or a case of force majeure, the Commission may exempt a telecommunication provider from the obligation to submit a report during the quarter in which the natural disaster or the case of force majeure occurred until the subsequent quarter.

Making available information to customer

17. (1) A telecommunications provider shall, before it concludes a contract with a customer, make available to that customer clear and up-to-date information on its quality of service for each service that it is licensed to provide.
- (2) Notwithstanding sub-regulation (1), before the last working day of January each year, a telecommunications provider shall publish on its website and in one newspaper of wide circulation in [Member State]:
 - (a) clear and up-to-date information on the average performance levels achieved during the previous year compared with each criterion and parameter detailed in the Schedules to these Regulations;
 - (b) clear and up-to-date information on the minimum and average quality of service levels it proposes to provide to customers in the course of the year.

Advance Notice

18. A telecommunications provider shall give customers advance notice of planned interruption of service by publishing the notice in the electronic media or the print media.

Compliance and Enforcement

19. (1) Notwithstanding Regulation 17, a telecommunications provider to whom these Regulations apply shall comply with the obligations provided for in these Regulations within six months of the coming into effect of these Regulations.

- (2) A telecommunications provider who”
- (a) fails to comply with these Regulations after six months have elapsed from the coming into effect of these Regulations;
 - (b) fails to submit during a time period specified in these Regulations or by the Commission, information requested by the Regulations;
 - (c) submits or publishes false or misleading information relating to quality of service; or obstructs or prevents an investigation by the Commission of the quality of service measurement, reporting or record keeping procedures;

Commits an offence and shall be liable to the enforcement measures outlined in the Act including suspension of its licence as provided for in Section [-] of the Act.

- (3) Without prejudice to sub-regulation (2) above, the Commission may also take one or more of the following enforcement measures:
- (a) require the telecommunications provider to implement a remedial plan to improve the quality of service of the relevant services over a period to be determined by the Commission; and
 - (b) require the telecommunications provider to publish additional information about the quality of the relevant service and, if so determined by the Commission, its implementation of the remedial plan.

SCHEDULE 1

Quality of Service Criteria and Parameters Fixed Public Telecommunications Service		Year 1	Year 2	Year 3	Compliance
1	Maximum waiting time for connection of service (working days)	14	10	7	> 90 %
2	Unreported faults cleared within 24 hours	70%	75%	80%	Not applicable
3	Unreported faults cleared within 48hours	80%	85%	90%	Not applicable
4	Unreported faults cleared within 72 hours	90%	90%	>90%	Not applicable
5	Reported faults cleared within 24 hours	80%	90%	>90%	Not applicable
6	Reported faults cleared within 48hours	90%	95%	>95%	Not applicable
7	Reported faults cleared within 72 hours	95%	>95%	>98%	Not applicable
8	Loss of service not to exceed (days) in a 30 day period	7	5	3	Not applicable
9	Call completion success rate for local calls during peak period (percent)	80	85	90	Not Applicable
10	Call completion success rate for International calls during peak period (percent)	75	80	85	Not Applicable
11	Number of billing errors per 1000 bills	10	8	5	> 90 %
12	Percentage of calls to customer care service answered and attended to in 20 seconds (percent)	70	75	80	Not Applicable
13	Reconnection of service after payment of overdue amounts within period (Business hours)	5	4	3	85 %
14	Advance Notice for planned disruption of service (hours minimum)	48	48	48	95 %

SCHEDULE 2

Quality of Service Criteria and Parameters Mobile Telecommunications Services		Year 1	Year 2	Year 3	Compliance
1	Maximum waiting time for connection of service (working days)	3	2	2	85 %
2	Repeated loss of service not to exceed (days) in a 30 day period	3	2	1	90 %
3	Call completion success rate for local calls during peak period (percent)	85	95	98	Not Applicable
4	Call completion success rate for International calls during peak period (percent)	80	85	90	Not Applicable
5	Number of billing accuracy errors per 1000 bills (Post paid)	10	8	5	> 95 %
6	Percentage of calls to customer care service answered and attended to in 20 seconds (percent)	70	75	80	Not Applicable
7	Reconnection of service after payment of overdue amounts (post paid) within period(Business hours)	5	4	3	> 90 %
8	Advance Notice for planned disruption of service (hours minimum)	48	48	48	95 %

SCHEDULE 3

<i>Quality of Service Criteria and Parameters</i> Internet Services		Year 1	Year 2	Year 3	Compliance
1	Maximum waiting time for connection of service (working days)	14	10	7	90 %
2	Access time to ISP for dial up connection	<90 secs	<60 secs	<60 secs	90 %
3	Repeated loss of service not to exceed (days) in a 30 day period	1	1	0.5	90 %
4	Isolation of a geographical area affecting more than 50 customers; number of incidences in a 30 day period	5	3	2	95 %
5	Reported faults per 100 subscribers for a 30 day period	<3	<3	<3	90 %
6	Redress complaints within 7 days in respect of provision or disconnection of Internet access (%)	80	85	90	Not Applicable
7	Faults clearance <ul style="list-style-type: none"> • within 24 clock hours • within 72 clock hours • within 3 to 7 days 	80% 95% 98%	90 % 97 % 99 %	95 % 99 % 99.5 %	Not Applicable
8	Reconnection of service after payment of overdue amounts within period (Business hours)	5	4	3	79%
9	Advance notice for planned disruption of service (hours minimum)	48	48	48	>90 %