

Determination of 4.10.2006

REGULATION NO. Amends Regulation no. 46/2005, on quality of service.

Regulation no. 46/2005, of 14 June, establishes the parameters of quality for the service of access to the public telephone network at a fixed location and publicly available telephone service at a fixed location, regardless of the supporting technology, to be measured by the companies responsible for the provision thereof, and also determines the contents, form and manner of publication of information on the quality of services provided.

The increase of the Internet access service, as well as the need to improve the information provided to end users requires, as originally provided for, the setting of parameters of quality for that service, including the provision of network access, regardless of the supporting technology, to be measured by the companies responsible for the provision thereof.

Therefore, pursuant to point a) of article 9 of the Statutes of the National Communications Authority (ANACOM), approved by Decree-Law no. 309/2001, of 7 December, of paragraph 2 of article 40 and of paragraph 1 of article 125, both of Law no. 5/2004, of 10 February, the Board of Directors of ANACOM, having heard ..., hereby approves the following: (...)

Article 1 Amendment to Regulation no. 46/2005

Articles 1, 7 and 8 of Regulation no. 46/2005 are hereby amended to read as follows:

«Article 1

[...]

1. Without prejudice to the future setting up of parameters of quality for other electronic communications services, this regulation establishes:

- a) The parameters of quality of service that apply to the service of access to the public telephone network at a fixed location and publicly available telephone service at a fixed location, regardless of the supporting technology, to be measured by companies responsible for the provision thereof (Annex 1);
- b) The parameters of quality of service that apply to the Internet access service, regardless of the supporting technology, to be measured by companies responsible for the provision thereof (Annex 2).

2. All companies that provide to end-users the services mentioned in paragraph 1, hereinafter referred to as "companies", shall comply with the provisions set out herein.

3. a) b) c) d)

Article 7

[...]

1.	
	a)
	b)
	c)
3.	c)

6. The information referred to in point b) of paragraph 2 that concerns the minimum levels of service guaranteed to each customer (performance levels the company intends to provide relatively to 100 percentile values defined in Annex 2 herein) and that, at the date of conclusion of subscription contracts regarding the provision of the Internet access service, has been publicly disclosed and made available to users pursuant to paragraphs 4 and 5, must be included therein.

Article 8

[...]

Article 2 Republication

Regulation no. 46/2005, of 14 June, with the amendments introduced by this regulation, is hereby republished in annex, which forms an integral part hereof.

ANNEX

Republication of Regulation no. 46/2005, published on 14 June

Article 1

(Subject and scope)

1. Without prejudice to the future setting up of parameters of quality for other electronic communications services, this regulation establishes:

- a) The parameters of quality of service that apply to the service of access to the public telephone network at a fixed location and publicly available telephone service at a fixed location, regardless of the supporting technology, to be measured by companies responsible for the provision thereof (**Annex 1**);
- b) The parameters of quality of service that apply to the Internet access service, regardless of the supporting technology, to be measured by companies responsible for the provision thereof (Annex 2).

2. All companies that provide end-users with the services mentioned in paragraph 1, hereinafter referred to as "companies", shall comply with the provisions set out herein.

3. The provisions of the present regulation do not withdraw nor do they prejudice the compliance with parameters and levels of quality of service set up specifically under the law, namely:

- a) Upon the universal service provider;
- b) Upon companies providing electronic communications services and networks according to rights of use assigned thereto by ANACOM;
- c) Upon the concessionaire of the telecommunications public service;
- d) Upon companies providing electronic communications services and networks pursuant to Title IV of Law no. 5/2004, of 10 February.

Article 2

(Parameters of quality of service)

1. The parameters of quality of service to be measured are those that at a given time are defined in annex to the present regulation.

2. The measurement of parameters referred to in paragraph 1 shall only include the standard levels of quality of service for each parameter. This means that from the measurement of parameters are excluded the situations where a provider offers, for the same offer/technology, higher levels of quality of service through the payment of an additional price.

3. The adoption of parameters of quality of service other than those provided for in the annex to the present regulation does not exempt companies providing publicly available electronic communications services from the compliance with parameters set out by ANACOM.

4. In the absence of a specific provision, the reference period for the measurement of the quality of service corresponds to each calendar quarter.

5. The parameters of quality of service may be altered, added or complemented by ANACOM pursuant to applicable law and according to the market needs, the development at harmonization level and the regulation objectives to be pursued by this Authority.

Article 3

(Obligations on providing companies)

- 1. The following obligations fall upon companies comprised by the present regulation:
 - a) As regards the introduction of procedures and information systems intended for the treatment of indicators defined in the scope of the present regulation, to ensure the appropriate mechanisms which facilitate the audit thereto by ANACOM, or by an entity engaged by this Authority, namely the mechanisms comprised in article 4;
 - b) To make available to users and ANACOM the information on the quality of services provided, under the law and the present regulation.

2. When companies decide to adopt parameters of quality of service other than the ones set out in the present regulation, which they wish to disclose to the public, they shall inform ANACOM thereof, within at the most 30 days from the commencement of the respective measurement, explaining also the methods and systems used for that measurement.

Article 4

(Information systems and procedures used to measure parameters of quality of service)

1. Within 6 months from the expiry of the time-limit for the commencement of the measurement of the parameters of quality of service, established in paragraph 1 of article 8, companies shall be provided with a manual integrating the following documentation:

- a) Full documentation of work processes regarding indicator treatment;
- b) Relevant technical documentation on information systems concerning indicator treatment, giving details on used data structures, which must be duly commented as regards the respective functional usage;
- c) Algorithmic manual of indicator calculation, with a clear mention of information sources, which shall comply with the technical documentation referred to in the preceding paragraph.

2. Companies shall ensure the permanent updating of the manual referred to in the preceding paragraph, and where ANACOM so requests, they shall submit thereto the different versions applied, both in electronic format and attaching supporting documentation.

3. Where alterations are made to the procedures adopted by the companies or in case ANACOM so determines, companies shall promote the necessary adaptations to the manual referred to in paragraph 1, within 30 days at the most.

Article 5

(Unpredictable situations and cases of «force majeure»)

Where at a given time situations of an unpredictable nature occur, such as catastrophes or other cases of «force majeure», in the information regarding the quality of service provided, companies shall:

a) Give information on the registered situation of an unpredictable nature or «force majeure»;

b) Make information available, giving details both on real parameters and on parameters cleared from the happenings referred in point a), as well as an explanatory note on the differences observed.

Article 6 (Information to be submitted to ANACOM)

1. Companies shall submit to ANACOM, up to the last working day of the month following the end of each calendar quarter, a report with information on the quality levels registered in the course of that quarter for each of the different parameters set out in the annex hereto, save for those cases where the annex itself sets out another specific time-limit.

2. The information to be made available to ANACOM pursuant to the preceding paragraph shall concern full calendar quarters, except where the commencement of the measurement of parameters of quality of service, defined herein, does not coincide with the commencement of a calendar quarter, in which case the information to be submitted to ANACOM shall concern only the period during which the measurement was performed.

3. Without prejudice to the provision of the preceding paragraph, companies shall submit to ANACOM the information made available to end-users pursuant to and within the time limits established in points b) and c) of paragraph 2 of article 7.

4. ANACOM is entitled to publish comparable quality of service reports based on the information gathered under the preceding paragraphs, pursuant to point e) of paragraph 1 of article 109 of Law no. 5/2004, of 10 February.

Article 7 (Making information available to end-users)

1. Before any contract is concluded, companies shall make available to end-users clear, comparable and up-to-date information of the quality of service provided.

- 2. For the purpose of the preceding paragraph, companies shall every year:
 - a) Disclose, up to the last working day of January, the information on the performance levels registered regarding the elapsed year, within the scope of the measurement of each parameter defined in annex to the present regulation;
 - b) Disclose, up to the last working day of January, the information on the quality levels they propose to provide, in the course of the year, within the scope of parameters referred to in the preceding point;
 - c) Update the information made available to end-users under the terms referred to in the preceding point, where in the course of a year, they decide to alter the performance levels proposed to be provided for the same year.

3. In those cases where the commencement of the measurement of parameters of quality of service defined herein does not coincide with the beginning of the calendar year, the information to be made available pursuant to paragraph 1 shall merely relate to the period in which that measurement was performed, and shall be made known as such. 4. The information concerning quality referred to in paragraph 2 shall be made known

and made available to users, in writing, in all the service's points of sale.

5. The information referred to in the preceding paragraph shall also be disclosed in companies' websites, where they exist, in a clearly identifiable advertisement.

6. The information referred to in point b) of paragraph 2 that concerns the minimum levels of service guaranteed to each customer (performance levels the company intends to provide relatively to 100 percentile values defined in Annex 2 herein) and that, at the date of conclusion of subscription contracts regarding the provision of the Internet access service, has been publicly disclosed and made available to users pursuant to paragraphs 4 and 5, must be included therein.

Article 8 (Final provisions)

1. The measurement of the quality of service pursuant to and for the purposes provided for in the present regulation and in any amendment hereto shall begin at the most five months from the date of the publication hereof, unless otherwise is specifically provided for.

2. Where the service provision begins after the present regulation or any amendment hereto has been published, the five-month time-limit provided for in the preceding paragraph shall be calculated from the date in which the service provision begins.

3. The first conveyance of information to ANACOM on the parameters established herein shall take place up to the last working day of the month following the end of the quarter in which the respective measurement begun.

4. The first making available to end-users of the information provided for in point b) of paragraph 2 of article 7 shall coincide with the time limit referred to in the preceding paragraph.

5. The first making available to end-users of information provided for in paragraph 6 of article 7, through inclusion in subscription contracts of companies, shall coincide with the time limit referred to in paragraph 3.

ANNEX 1

PARAMETERS OF QUALITY OF SERVICE (PQS) FOR ACCESS TO THE PUBLIC TELEPHONE NETWORK AT A FIXED LOCATION AND PUBLICLY AVAILABLE TELEPHONE SERVICE AT A FIXED LOCATION

The parameters of quality of service established in the present annex and identified in the following table are based on ETSI Guide EG 201 769-1 V1.1.1 (2000-04):

PARAMETERS	PRESENTATION OF RESULTS	TYPE OF ACCESS	SCOPE OF APPLICATION	
PQS1 – Supply time for initial network connection		Direct access.		
PQS2 – Fault rate per access line	a) Number of reported faults per access	Direct access	Including all reports on faults regarding calls originating in the fixed network.	
time	 a) Average fault repair time of the local access network which corresponds to 80% and 95% of the fastest repairs. b) Average fault repair time of other type of repairs which corresponds to 80% and 95% of the fastest repairs. c) Rate of repairs carried out within the repair time limit intended to be provided to customers. 	Direct access. Direct access.	network. Excluding reports on faults regarding, namely: - Service facilities (understood as additional services as defined in recommendation I.250 of ITU-T); - Calls for audiotext services, Internet access services and services for private voice networks; - Calls made by means of virtual call cards.	
PQS4 – Response time for operator services	a) Average response time for operator services.	indirect access	Parameters concern all calls received at operator services, provided that they regard requests within the scope of services under consideration	
	b) Rate of calls taken within 20 seconds.		(including requests intended for mobile numbers).	

The parameters identified above do not apply to:

- Service facilities (understood as supplementary services as defined in recommendation I.250 of ITU-T¹);
- Calls for audiotext services;
- Calls for Internet access and for private voice networks services;
- Calls made by means of virtual call cards, except for parameter hereinafter referred to as **QSP4**, the measurement of which includes all calls received, provided that they regard requests within the scope of services under consideration.

PQS1 – SUPPLY TIME FOR INITIAL NETWORK CONNECTION

- 1. Definition:
- 1.1. The **PQS1** is intended to measure the time duration, in calendar days, from the instant a valid service request is made by a customer regarding the supply of a connection by the providing company for access to the public telephone network at a fixed location, to the instant that company actually provides a publicly available telephone service at a fixed location, regardless of the supporting technology.
- 1.2. To calculate the present parameter, a valid connection request means any solicitation made to the providing company and accepted by it, concerning:
 - a new connection to the service of access to the public telephone network at a fixed location provided by the company (first connection of a specific customer or a new connection as result of a change of the respective address); or
 - an additional connection of a customer of the company (at the same address or a different one); or
 - migration from the analogue line of a customer of the company to RDIS.
- 1.3. The cases where a new connection for the access to the FTS is installed at the same time the ADSL technology is made available shall not be excluded from the measurement of the present parameter.
- 1.4. The connection for access to the public telephone network at a fixed location means installing and making effectively available to the customer, for the use thereof, a connection between the local switching central or concentrator and the first terminal device for exclusive use of the customer, or in alternative, to the customer's network, pursuant to legislation in force regarding telecommunications infrastructure in buildings.
- 1.5. The measurement of this parameter shall be carried out only as regards the requests for connection which comprise also a network connection and service activation.
- 1.6. In those cases where a request for installation involves more than one connection for access to the public telephone network at a fixed location, the installation of each one of these connections shall be accounted in separate for the calculation of the parameter.

¹ Recommendation I.250 of the International Telecommunications Union - "Definition of supplementary services".

- 1.7 The measurement of the **PQS1** shall not consider:
 - The temporary installations, which refer to those the duration of which is of one month at the most;
 - The cases where the providing company resorts to third parties' infrastructures (local loop, leased lines) for the supply of the service connection.
- 2. To measure the quality of service according to the present parameter, providing companies shall gather:
 - a) Delay values in the supply of connections corresponding to 95% and 99% of the fastest installations;
 - b) Rate of supply requests fulfilled up to the date agreed with the customer.
- 3. Calculation method regarding the information provided for in point a) of the preceding paragraph:
- 3.1. The calculation of values provided for in point a) of paragraph 2 shall be based on the method comprised in Annex B of the document ETSI EG 201 769-1 v1.1.1 (2000-04).
- 3.2. The calculation of values provided for in point a) of paragraph 2 shall disregard the cases where the customer defines an aim date, nevertheless, the providing company shall supply, in addition to the present parameter, information on the *ratio* between the number of initial connections supplied, the customer having established an aim date, and the total number of initial connections supplied.
- 3.3. For the purpose of the preceding paragraph, an aim date is deemed to exist where the established installation date has been requested by the customer and is subsequent to the date which results from the application of the value disclosed for the present parameter of quality in the scope of point b) of paragraph 2 of article 7 of the present Regulation.
- 3.4. The supply time limit shall be considered:
 - From the date of reception of the request by the providing company; or
 - From the date of amendments/additions to agreements already concluded.
- 3.5. The parameter calculation shall disregard:
 - Time imputable to the customer that elapses from the moment the providing company is informed or is aware that the premises of the customer do not offer conditions for the supply of the connection, up to the moment the referred situation is cleared;
 - The delays associated to the installation of the customer's network or to the first terminal device for the customer's exclusive use, pursuant to legislation in force regarding telecommunications infrastructure in buildings, where such installation is not under the responsibility of the providing company.
- 3.6. The periods between delays imputable to the customer, where they exist, are deemed as being under the responsibility of the providing company, and as such, shall be added up for parameter calculation purposes.
- 3.7. The present parameter concerns all requests for connection fulfilled within the reference period and shall be broken down, where applicable, by the different types of access:
 - Analogue;
 - Basic RDIS;
 - Primary RDIS;
 - Others.

- 4. Calculation method regarding the information provided for in point b) of paragraph 2:
- 4.1. The date agreed with the customer shall mean:
 - Any date requested by the customer and accepted by the providing company;
 - Any date set by the providing company and not refused by the customer.
- 4.2. In case of postponement of a first date agreed with the customer and later setting of a new date for reasons imputable to the providing company, the first date shall be considered for parameter calculation purposes.
- 4.3. The cases where the customer defines an aim date shall be considered for the purpose of calculation of the present parameter.

PQS2 – FAULT RATE PER ACCESS LINE

- 1. Definition:
- 1.1. The **PQS2** measures the number of valid fault reports made by users to the services of the providing company, for reasons of disrupted or degraded service attributable to the network of the providing company or any interconnected public network involved in eligible communications² for calculation purposes.
- 1.2. A valid fault report shall mean:
 - a) The fault the existence of which is confirmed after a test is made;
 - b) A fault which disappears when the test is carried out, there being means to prove that it actually took place.
- 1.3. The measurement of the **PQS2** shall not consider fault reports concerning the physical state of public pay phones for the access to the telephone service at a fixed location, but the reports on faults concerning communications made from public pay phones where the disrupted or degraded service is attributable to the network of the providing company of the telephone service at a fixed location shall be considered.
- 1.4. The services of the providing company shall mean the services intended for the report of faults on the part of customers.
- 1.5. For each valid report regarding a basic or primary access, only one fault shall be accounted for, regardless of the number of activated channels that have been affected by the fault.
- 1.6. Until the fault has been repaired by the providing company, the reports on the same access shall be accounted for as a single report.
- 1.7. The common faults that affect several customers shall be accounted for by the number of customer reports associated to each fault.
- 1.8. For the purpose of parameter calculation, faults and accesses shall be accounted for evenly, even where they have been reported by the same customer.
- 1.9. The network faults from the first terminal device for the customer's exclusive use shall be excluded, pursuant to legislation in force regarding telecommunication infrastructure in buildings, and likewise shall be excluded faults in the equipment on the side of the customer.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble the total number of faults reported in the course of the reference period, only the values regarding direct access being considered for this purpose.

 $^{^{2}}$ The communications referred to in the notes following the summary table comprised in the first page of the present annex shall be excepted.

2.1. For the purpose of the preceding paragraph, the average number of accesses for a given period shall be accounted for, including all type of access³ made available by the providing company, namely, analogue access (including public pay phones for the access to the telephone service at a fixed location), and digital access, regardless of the means (means owned by third parties, including local loop and leased lines, or the company's own means) or the infrastructure involved (for example, cable, optic means, radio means).

PQS3 - FAULT REPAIR TIME

- 1. Definition:
- 1.1. The **PQS3** is intended to measure the time duration, in consecutive hours, from the instant a valid fault in the network of the providing company (or in any interconnected public network involved in eligible communications for parameter calculation purposes) has been reported to the services of the providing company to the instant where the service has been restored to full normal working order.
- 1.2. The services of the providing company shall mean the services intended for the report of faults on the part of customers.
- 1.3. For the purpose of calculation of the present parameter, full normal working order is deemed to exist where the initial situation that existed before the fault occurred has been restored, that is, where the problem reported by the customer/user has been solved (this corresponds to the moment the customer is notified of the fault repair, and this notification is not contested within at the most 5 working days).
- 1.4. In the event the same fault is reported more than once, by the same customer/user or not, the instant in which the providing company is aware of the fault for the first time, through the customer/user report, shall be considered for purposes of parameter accounting.
- 1.5. The valid fault reports considered in point b) of point 1.2 of PQS2 shall not be considered for the calculation of the present parameter.
- 1.6. Where the fault repair is scheduled for a date/hour later than that established initially by the providing company, at the convenience of the customer, the time elapsed between these two dates/hours shall not be accounted for.
- 1.7. The calculation of the present parameter shall include faults repaired within the reference period, regardless of the report date.
- 1.8. The calculation of the **PQS3** shall not include:
 - Situations where, following a prior notice of the visit, it is impossible to restore the service to full normal working order for reasons imputable to the customer;
 - Situations where the providing company provides a swifter repair service through the payment of an additional amount.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble the values regarding:
 - a) Time to repair faults of the local access network which correspond to 80% and 95% of the fastest repairs (direct access);

³ The number of accesses shall be accounted for (not the respective number of channels, in the case of basic and primary accesses).

- b) Time to repair other type of faults, which correspond to 80% and 95% of the fastest repairs (direct access);
- c) Rate of repairs carried out within the repair time limit intended to be offered to customers (direct access).
- 2.1. The calculation of values provided for in point a) and b) of paragraph 2 shall be based on the method comprised in Annex B of ETSI EG 201 769-1 v1.1.1 (2000-04).
- 2.2. For the purpose of calculation of the present parameter, the full list of events occurred shall be considered for the reference period.
- 2.3. Faults in the local access network shall mean those imputable to the connection between the first concentrator of the network of the providing company and the first terminal device for exclusive use of the customer, or in alternative, to the customer's network, pursuant to legislation in force regarding telecommunications infrastructure in buildings.
- 2.4. "Other repairs" shall mean those deemed not to be imputable to the local access network.
- 2.5. The providing company, in the scope of the parameter indicated in 2.c), shall submit to ANACOM updated information on the fault repair time limit it has established to be offered to the customers for the reference period (direct access) and as such disclosed in the scope of point b) of paragraph 2 of article 7 of this Regulation.
- 2.6. In addition to the information provided for in 2 a), b) and c), the providing company shall submit to ANACOM updated information on the numbers for access to services made available to report faults.

PQS4 – RESPONSE TIME FOR OPERATOR SERVICES

- 1. Definition:
- 1.1. The **PQS4** is intended to measure the time duration, in seconds, from the instant the calling signal is established to the instant the calling user is answered by the human operator, from whom the service effectively desired shall be solicited.
- 1.2. Operator services shall mean those services with specific access codes used for the establishment of communications with assistant intervention, to be charged at the destination or not, intended to support difficulties in obtaining calls.
- 1.3. Where providing companies do not offer operator services as defined in the preceding paragraph and, thus, do not measure the **PQS4**, they shall notify ANACOM thereof.
- 1.4. The calculation of **PQS4** shall include the time spent in going through the equivalent systems activated by voice or other means, up to the moment the caller actually requests the desired service.
- 1.5. The calculation of **PQS4** shall not consider:
 - Services provided wholly by automatic response systems;
 - Emergency services;
 - Time spent with the treatment of the request, namely the conversation time between the caller and the human operator.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble:
 - a) Average response time for operator services (direct and indirect access);
 - b) Rate of calls taken within 20 seconds by the human operator from whom the calling user requests the service effectively desired (direct and indirect access).

- 2.1. For the purpose of calculation of the present parameter, the full list of events occurred shall be considered for the reference period.
- 2.2. Where the providing company provides both direct and indirect access, it shall present the parameter broken down by both types of access
- 2.3. In those cases where a third entity is subcontracted to provide operator services, the providing company of the publicly available electronic communications service at a fixed location, notwithstanding being responsible for submitting parameters, may subcontract with that entity the calculation of the parameter.

ANNEX 2

PARAMETERS OF QUALITY OF SERVICE (PQS) FOR THE INTERNET ACCESS SERVICE

The parameters of quality of service established in the present annex and identified in the following table are based on ETSI Guide EG 202 057-1 V1.2.1 (2005-10):

PARAMETERS	PRESENTATION OF RESULTS	SCOPE OF APPLICATION
PQS1 – Supply		
time for Internet		regardless of the supporting
access	time); b) Delay in the symply of Internet access	technology, broken down by: 1. Fixed access
	b) Delay in the supply of Internet access which corresponde to 05% of the factors	
	which corresponds to 95% of the fastest access supply;	- Offers with speed ≥ 128 Kbp
	c) Rate of Internet access supply requests	- Otters with speed > 120 Kop
	fulfilled up to the date agreed with the	2 Wireless access
	customer. Where the percentage of supply	- Offers with speed ≤ 128 Kbp
	requests fulfilled by the date agreed with the	- Offers with speed > 128 Kbp
	customer is below 80%, the average number	
	of days, for the late requests, by which the	
	agreed date is exceeded, must be stated.	
PQS2 – Fault rate	Ratio: Number of valid fault reports	All valid fault reports
per customer	Average number of customers	
PQS3 - Fault repair	a) Maximum access network fault repair time	Internet access service,
time	(corresponds to 100% of the repair time);	regardless of the supporting
	b) Access network fault repair time which	technology, broken down by:
	corresponds to 95% of the fastest repairs;	1. Fixed access
	c) Maximum repair time of other faults	- Offers with speed ≤ 128 Kbp
	(corresponds to 100% of the repair time);	- Offers with speed > 128 Kbp
	d) Repair time of other faults which	
	corresponds to 95% of the fastest repairs;	2. Wireless access
	e) Rate of repairs carried out within the repair	
	time limit established by the providing	- Offers with speed > 128 Kbp
PQS4 – Response	company to be provided to customers.a) Average response time for operator	The parameters concern all calls
time for operator		received at operator services (ex.
services	b) Maximum response time for operator	
	services (corresponds to 100% of response	
	time);	· · · · · · · · · · · · · · · · · · ·
	c) Rate of calls taken within 20 seconds by the	
	operator to whom the caller requests the	
	desired service;	
	d) Rate of unanswered calls for operator	
	services.	

PARAMETERS	PRESENTATION OF RESULTS	SCOPE OF APPLICATION
PQS5 – Response	a) Maximum response time for complaints /	The parameters concern all
time for customer	enquiries (corresponds to 100% of response	complaints /enquiries received
complaints /	time);	by the service provider,
enquiries	b) Response time for complaints / enquiries	regardless of how they are
	which corresponds to 95% of the fastest	submitted (ex. shops, telephone
	responses;	call, letter, e-mail, etc.)
	c) Rate of responses to complaints / enquiries	
	that take place within the time limit for	
	response to complaints /enquiries established	
	by the providing company to be provided to	
	customers	

PQS1 – SUPPLY TIME FOR INTERNET ACCESS

- 1. Definition:
- 1.1. The **PQS1** is intended to measure the time duration, in calendar days, from the instant the customer submits a valid request for Internet access supply to the company, to the instant that company actually provides him/her such service.
- 1.2. To calculate the present parameter, a valid request for Internet access supply means any solicitation made to and accepted by the company, in verbal form, written form, or any other form it deems acceptable.
- 1.3. Where a valid request for Internet access supply takes place simultaneously with a request for the supply of other services (ex. Telephone Services, Television Distribution Service) the former shall not be excluded from the measurement of the present parameter.
- 1.4. The supply of Internet access means the provision of a set of facilities and/or services needed for the activation of the physical and/or logical access which enables the customer to access the public Internet, including:
 - a) <u>the activation of the physical access</u>: including all procedures needed for the connection of the customer's premises to the providing company's access point;
 - b) <u>the activation of the logical access</u>: including all procedures needed for the establishment of an account, involving authentication and addressing, which enables the end user to access Internet services and resources.
- 1.5. Where the service provider and the customer agree on a phased fulfilment of a request for Internet access supply, involving situations with multiple connections/offers, each supply time shall be accounted as a separate request and measured as such.
- 1.6. Where a request for Internet access supply concerns more than one location, the timing shall be accounted in separate for the calculation of this parameter.
- 1.7 The measurement of the **PQS1** shall not consider:
 - The temporary Internet access supply, which refers to contracts the duration of which is of one month at the most;
 - Service connections in public areas where the access, apart from being occasionally engaged, is sporadic (ex. hot-spots).

- 2. To measure the quality of service according to the present parameter, providing companies shall gather:
 - a) Maximum delay in the supply of Internet access (corresponds to 100% of Internet access supply time);
 - b) Delay in the supply of Internet access which corresponds to 95% of the fastest access supply;
 - c) Rate of Internet access supply requests fulfilled up to the date agreed with the customer. Where the percentage of supply requests fulfilled by the date agreed with the customer is below 80%, the average number of days, for the late requests, by which the agreed date is exceeded, must be stated.
- 3. Calculation method regarding the information provided for in point a) of the preceding paragraph:
- 3.1 The calculation of values concerning the 95 percentile shall be based on the method comprised in Annex B of the document ETSI EG 202 057-1 v1.2.1 (2005-10).
- 3.2. The calculation of values provided for in point a) and b) of paragraph 2 shall disregard the cases where the customer defines an aim date, nevertheless, the providing company shall supply, in addition to the present parameter, information on the *ratio* between the number of supplied Internet accesses, the customer having established an aim date, and the total number of Internet accesses supplied.
- 3.3. For the purpose of the preceding paragraph, an aim date is deemed to exist where the established service provision date has been requested by the customer and is subsequent to the date which results from the application of the value disclosed for the present parameter of quality in the scope of the subscription contract.
- 3.4. The supply time limit shall be considered:
 - From the date of reception of the valid request by the company; or
 - From the date of amendments/additions to agreements already concluded.
- 3.5. The parameter calculation shall disregard:
 - Time imputable to the customer that elapses from the moment the providing company is informed or is aware that the premises of the customer or the access do not offer conditions for the supply of the connection, up to the moment the referred situation is cleared;
 - The delays associated to the installation of the customer's network, where such installation is not under the responsibility of the providing company.
- 3.6 The periods between delays imputable to the customer, where they exist, are deemed as being under the responsibility of the providing company, and as such, shall be added up for parameter calculation purposes.
- 3.7. The present parameter concerns all requests for connection fulfilled within the reference period and shall be thus broken down:

	Parameters	Fixed	Wireless
	1 drumeters	access	access
≤ 128	a) Maximum delay in the supply of Internet access (100% of Internet access supply time);		
Kbps	b) Delay in the supply of Internet access which corresponds to 95% of the fastest access supply		
> 128	a) Maximum delay in the supply of Internet access (100% of Internet access supply time);		
Kbps	b) Delay in the supply of Internet access which corresponds to 95% of the fastest access supply		

- 3.8. The calculation of the parameter shall consider the time to supply the activation of the physical and logical access, or only the activation of the logical access, where appropriate.
- 4. Calculation method regarding the information provided for in point c) of paragraph 2:
- 4.1. The date agreed with the customer shall mean:
 - Any date requested by the customer and accepted by the providing company;
 - Any date set by the providing company and not refused by the customer.
- 4.2. In case of postponement of a first date agreed with the customer and later setting of a new date for reasons imputable to the providing company, the first date shall be considered for parameter calculation purposes.
- 4.3. The cases where the customer defines an aim date shall be considered for the purpose of calculation of the present parameter.

PQS2 – FAULT RATE PER CUSTOMER

- 1. Definition:
- 1.1. The **PQS2** measures the number of valid fault reports made by users to the services of the providing company, for reasons of disrupted or degraded service.
- 1.2. A valid fault report shall mean:

a) Any fault in the logical and/or physical access the existence of which is confirmed following an analysis, where appropriate through the exchange, for this purpose, of available information in different systems managed by the company that holds the logical access and/or the company that supplies the physical access;

b) A fault which disappears when the analysis is carried out, there being means to prove that it actually took place.

- 1.3. The services of the providing company shall mean the services intended for the report of faults on the part of customers.
- 1.4. Until the fault has been repaired by the providing company, other reports on the same fault shall be accounted for as a single fault report.

- 1.5. The common faults that affect several customers shall be accounted for by the number of customer reports associated to each fault.
- 1.6. For each valid fault report from a customer with one or more accesses (logical and/or physical) only one fault shall be accounted for, for the purpose of parameter calculation.
- 1.7. The network faults in the customer's individual network shall be excluded, pursuant to legislation in force regarding telecommunication infrastructure in buildings, and likewise shall be excluded faults in the equipment on the side of the customer.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble the total number of valid faults reported in the course of the reference period.
- 2.1. For the purpose of the preceding paragraph, the average number of customers for a given period, holders of active logical accesses, shall be accounted for.

PQS3 - FAULT REPAIR TIME

- 1. Definition:
- 1.1. The **PQS3** is intended to measure the time duration, in consecutive hours, from the instant a valid fault has been reported to the services of the providing company to the instant where the service has been restored to full normal working order.
- 1.2. The services of the providing company shall mean the services intended for the report of faults.
- 1.3. For the purpose of calculation of the present parameter, full normal working order is deemed to exist where the initial situation that existed before the fault occurred has been restored, that is, where the problem reported by the customer/user has been solved (this corresponds to the moment the customer is notified of the fault repair, and this notification is not contested within at the most 5 working days).
- 1.4. In the event the same fault is reported more than once, by the same customer/user or not, the instant in which the providing company is aware of the fault for the first time, through the customer/user report, shall be considered for purposes of parameter accounting.
- 1.5. The valid fault reports considered in point b) of point 1.2 of PQS2 shall not be considered for the calculation of the present parameter.
- 1.6. Where the fault repair is scheduled for a date/hour later than that established initially by the providing company, at the convenience of the customer, the time elapsed between these two dates/hours shall not be accounted for.
- 1.7. The calculation of the present parameter shall include faults repaired within the reference period, regardless of the report date.
- 1.8. The calculation of the **PQS3** shall not include:
 - Situations where, following a prior notice of the visit, it is impossible to restore the service to full normal working order for reasons imputable to the customer;
 - Situations where the providing company provides a swifter repair service through the payment of an additional amount.

- 2. To measure the quality of service according to the present parameter, providing companies shall assemble the values regarding:
 - a) Maximum access network fault repair time (corresponds to 100% of the repair time);
 - b) Access network fault repair time which corresponds to 95% of the fastest repairs;
 - c) Maximum repair time of other faults (corresponds to 100% of the repair time);
 - d) Repair time of other faults which correspond to 95% of the fastest repairs;
 - e) Rate of repairs carried out within the repair time limit established by the providing company to be provided to customers.
- 2.1 The calculation of values concerning the 95 percentile shall be based on the method comprised in Annex B of the document ETSI EG 202 057-1 v1.2.1 (2005-10).
- 2.2. Faults in the access network shall mean those imputable to the connection between the first network termination point for the exclusive use of the customer, and the first point of delivery for the exclusive use of the providing company.
- 2.3. "Other repairs" shall mean those deemed not to be imputable to the access network.
- 2.4. The calculation of values provided for in points a), b), c) and d) of paragraph 2 concerns all faults repaired during the reference period, and shall be thus broken down, where appropriate:

	Parameters	Fixed access	Wireless access
	a) Maximum access network fault repair time (100% of the repair time);		
< 120	b) Access network fault repair time which corresponds to 95% of the fastest repairs;		
\leq 128 Kbps	c) Maximum repair time of other faults imputable to the providing company (corresponds to 100% of the repair time);		
	d) Repair time of other faults attributable to the providing company which correspond to 95% of the fastest repairs;		
	a) Maximum access network fault repair time (100% of the repair time);		
> 128	b) Access network fault repair time which corresponds to 95% of the fastest repairs;		
Kbps	c) Maximum repair time of other faults (corresponds to 100% of the repair time);		
	d) Repair time of other faults which correspond to 95% of the fastest repairs.		

- 2.5. The providing company, in the scope of the parameter indicated in 2.e), shall consider as target to be offered to the customers the repair time that results from the application of the value disclosed in the scope of the subscription contract.
- 2.6. In addition to the information provided for in paragraph 2, the providing company shall submit to ANACOM updated information on the numbers for access to services made available to report faults.

PQS4 – RESPONSE TIME FOR OPERATOR SERVICES

- 1. Definition:
- 1.1. The **PQS4** is intended to measure the time duration, in seconds, from the instant the calling signal is established to the instant the caller is answered by the human operator, from whom the service effectively desired shall be solicited.
- 1.2. Operator services shall mean those services which, in the scope of the Internet access service, are disclosed by the providing company for the purpose of customer support (ex. fault report, price information, complaints, etc.), and which may be provided through call centres.
- 1.3 The calculation of **PQS4** shall include the time spent in going through the equivalent systems activated by voice or other means, up to the moment the caller actually requests the desired service.
- 1.4 The calculation of **PQS4** shall not consider:
 - Services provided wholly by automatic response systems;
 - Emergency services;
 - Time spent with the treatment of the request, namely the conversation time between the caller and the human operator.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble:
 - a) Average response time for operator services;
 - b) Maximum response time for operator services (corresponds to 100% of response time);
 - c) Rate of calls taken within 20 seconds by the operator to whom the caller requests the desired service;
 - d) Rate of unanswered calls for operator services.
- 2.1. For the purpose of calculation of parameters indicated in 2.a), 2.b) and 2.c), all calls taken by operator services in the course of the reference period shall be considered.
- 2.2. For the purpose of calculation of the parameter indicated in 2.d), all calls made to operator services shall be considered.
- 2.3. In those cases where a third entity is subcontracted to provide operator services, the ISP, notwithstanding being responsible for submitting parameters, may subcontract with that entity the calculation of the parameter.

PQS5 - RESPONSE TIME FOR CUSTOMER COMPLAINTS / ENQUIRIES

- 1. Definition:
- 1.1. The **PQS5** is intended to measure the time duration, in consecutive hours/days, from the instant providing company receives a complaint/enquiry, to the date a response is provided to such solicitation.
- 1.2. The calculation of this parameter shall consider any complaint/enquiry presented by the customer in the scope of the service provided by the company, regardless of how it is submitted (ex: shops, telephone call, letter, e-mail, etc.).
- 1.3. The date a response is provided to the customer corresponds to the moment of communication by the company, to the customer, of the conclusion of the analysis made to the complaint/enquiry by the provider.
- 1.4. From the **PQS5** calculation shall not be excluded any complaints/enquiries solved over the telephone or face-to-face with the customer.
- 1.5. The **PQS5** calculation shall include complaints on the handling by the providing company of fault reports. However, fault reports proper shall be excluded from the calculation of this parameter.
- 2. To measure the quality of service according to the present parameter, providing companies shall assemble the values concerning:
 - a) Maximum response time for complaints / enquiries (corresponds to 100% of response time);
 - b) Response time for complaints / enquiries which corresponds to 95% of the fastest responses;
 - c) Rate of responses to complaints / enquiries that take place within the time limit for response to complaints /enquiries established by the providing company to be provided to customers.
- 2.1. The calculation of values concerning the 95 percentile shall be based on the method comprised in Annex B of the document ETSI EG 202 057-1 v1.2.1 (2005-10).
- 2.2. In the scope of the parameter indicated in 2.c), the providing company shall consider as target to be offered to the customers the response time that results from the application of the value disclosed in the scope of the subscription contract.
- 2.3. The values for all complaints/enquiries submitted during the reference period shall be assembled.