
Determination of 14.12.2005

PARAMETERS OF UNIVERSAL SERVICE QUALITY OF SERVICE AND PERFORMANCE TARGETS APPLICABLE THERETO

DRAFT DECISION

Pursuant to article 86 of Law no. 5/2004¹, of 10 February, the universal service consists of the provision of a minimum set of services, with a specified quality, made available at an affordable price to all end-users, irrespective of their geographical location. According to article 87 of the same statutory instrument, the minimum set of services to be made available in the scope of the universal service includes: (a) the connection at a fixed location to the public telephone network and access to publicly available telephone services at a fixed location; (b) provision of a comprehensive directory and of a comprehensive telephone directory enquiry service; and (c) adequate provision of public pay telephones.

In particular, as defined in article 88 of Law no. 5/2004, the connection to the public telephone network and access to publicly available telephone services at a fixed location comprised in the minimum set of services that must be made available in the scope of the universal service shall allow end-users to make and receive local, national and international telephone calls, facsimile communications and data communications, at data rates that are sufficient to permit functional Internet access, taking into account prevailing technologies used by the majority of subscribers and technological feasibility.

The provider of the universal service is bound, pursuant to paragraph 1 of article 92 of Law no. 5/2004, to make available to consumers, as well as to ICP-ANACOM, adequate and up-to-date information on their performance in the provision of the universal service. According to that provision, this obligation must be operated based on parameters of quality of service established in the annex thereto: (i) "supply time for initial network connection"; (ii) "fault rate per access line"; (iii) "unsuccessful calls"; (iv) "call set-up time"; (v) "response times for operator services"; (vi) "response time for directory enquiry services"; (vii) "proportion of coin and card operated public pay-telephones in working order"; and (viii) "bill correctness complaints".

The definitions and measurement methods to be adopted in the scope of these parameters, also established in annex to Law no. 5/2004, must comply with version 1.1.1 of the document ETSI EG 201 769-1. Moreover, the parameters must enable an

¹ See <http://www.anacom.pt/template12.jsp?categoryId=97221>

assessment of the quality of service of the universal service at regional level, that is, not lower than level 2 of the Nomenclature of Territorial Units (NUTS) established by *Eurostat*. It should be stressed that the annex to Law no. 5/2004, provides for the possibility that ICP-ANACOM may not demand the maintenance of information of the performance in the universal service provision associated to the parameters “unsuccessful calls” and “call set-up time”, in case there are data to establish that the performance in the scope of parameters in question is satisfactory.

ICP-ANACOM may specify in particular, according to paragraph 2 of article 92 of Law no. 5/2004, additional parameters of quality of service to assess the performance of universal service providers as regards the provision of services to disabled end-users and consumers, where relevant parameters have been defined.

This Authority is also entitled, under paragraph 5 of the same article, to set out performance targets applicable to obligations of the universal service, following the general consultation procedure laid down in article 8 of that statutory instrument.

It should be stressed, in parallel, that article 40 of Law no. 5/2004 compels companies that provide publicly available electronic communications services to publish and render available to consumers comparable, clear, complete and up-to-date information on the quality of services provided, as well as to render available to ICP-ANACOM regular up-to-date information on the same matter. Pursuant to the same article, it is incumbent upon ICP-ANACOM, following the general consultation procedure referred to in article 8 of the same statutory instrument, to specify the parameters of quality of service to be measured by companies under consideration, and the content thereof, as well as the form and manner of information to be published. For this purpose, the provision states that ICP-ANACOM may follow the previously mentioned annex to Law no. 5/2004.

In this context, by Determination of 04.05.2005², ICP-ANACOM has approved the regulation of quality of service applicable to the service of access to the public telephone network at a fixed location and to the publicly available telephone service at a fixed location, as well as the report of the respective public consultation, launched on 30.11.2004³. It should be noted that the parameters of quality of service established in that regulation are based in general on version 1.1.1 of the document ETSI EG 201 769-1.

Therefore, taking into account the grounds presented in the assessment which is an integral part of the process, the Board of Directors of ICP-ANACOM decided to carry out the prior hearing of interested parties, pursuant to articles 100 and 101 of the Code of Administrative Procedure, as well as to submit it to the general consultation procedure, under article 8 of Law no. 5/2004, and to the consultation procedures approved by ICP-ANACOM on 12.02.2004, establishing a thirty-working day deadline in both cases for the assessment in writing of interested parties, on the Determination to be adopted with the following contents:

² See <http://www.anacom.pt/template13.jsp?categoryId=151746>

³ See <http://www.anacom.pt/template12.jsp?categoryId=139443>

Foreword

Pursuant to paragraph 1 of article 92 of Law no. 5/2004, of 10 February, the universal service provider is bound to make available to consumers as well as to ICP-ANACOM, adequate and up-to-date information on its performance in the provision of the universal service.

Article 40 of the above-mentioned Law establishes that it is incumbent upon ICP-ANACOM, following the general consultation procedure, to specify the quality of service parameters to be measured by companies that provide publicly available electronic communications services, and the content, form and manner of information to be published.

ICP-ANACOM is entitled, pursuant to paragraph 5 of article 92 of Law no. 5/2004, to set out performance objectives applicable to the obligations of the universal service, following the general consultation procedure laid down in article 8 thereof.

By determination of 04.05.2005, ICP-ANACOM approved the regulation on quality applicable to the service of access to the public telephone network at a fixed location and publicly available telephone service at a fixed location (“Regulation on quality applicable to the telephone service at a fixed location”), as well as the report of the respective public consultation, launched on 30.11.2004.

It is within this context that the present Determination defines the parameters of quality of service applicable to the universal service provider and the correspondent performance targets.

Both the definitions and the measurement methods (which follow version 1.1.1 of the document ETSI EG 201 769-1) are in accordance with the Regulation on quality applicable to the telephone service at a fixed location, with the necessary adjustments which result from the fact that the telephone service provided at a fixed location, in the scope of the universal service, comprises only analogue accesses.

It should be noted that the parameters of quality of service may be altered, added or complemented by ICP-ANACOM according to the market needs, the development at harmonization level and the regulation objectives to be pursued by this Authority.

Therefore, under point a) of article 9 of the Statutes of ICP-ANACOM, approved by Decree-Law no. 309/2001, of 7 December, to paragraph 2 of article 90 and to paragraph 1 of article 125, both of Law no. 5/2004, of 10 February, the Board of Directors of ICP-ANACOM, having heard the interested parties, hereby adopts this determination as follows:

Number 1

(Subject-matter and Scope)

1. The present determination establishes the parameters of quality of service applicable to the universal service provider and the correspondent applicable performance targets, which the universal service provider is obliged to comply with.

2. The definitions and the measurement of the parameters of quality of universal service, as well as the compliance with the respective targets, on the part of the universal service provider, are without prejudice to the application to this provider of the regulation on quality applicable to the telephone service at a fixed location.

Number 2

(Definition of parameters and targets of quality of service)

The definition of parameters and targets of quality of service to be measured are those comprised in Annex 1 hereto.

Number 3

(Measurement methods)

1. The measurement methods of quality of service are those defined in Annex 2 hereto.
2. Parameters shall be measured at national and regional level, and in the latter case, broken down by reference to level 2 of the Nomenclature of Territorial Units (NUTS) established by *Eurostat*.
3. The reference period for purposes of quality of service measurements corresponds to each month of the calendar year.

Number 4

(Performance targets)

The performance targets are comprised in Annex 3 hereto.

Number 5

(Procedures for provision of information to ICP-ANACOM)

The universal service provider shall submit to ICP-ANACOM, up to the last working day of the month following the end of each quarter, a report with information on each of the different parameters set out in Annex 1 hereto.

Number 6

(Procedures for provision of information to consumers)

1. Before any contract is concluded, companies shall make available to consumers clear, comparable and up-to-date information of the quality of service provided.
2. For the purpose of the preceding paragraph, every year the universal service provider shall:
 - a) Disclose, up to the last working day of January, the information on the performance levels registered for the elapsed year, within the scope of the measurement of each parameter defined in Annex 1 hereto;
 - b) Disclose, up to the last working day of January, the information on the quality levels it proposes to provide, in the course of the year, within the scope of parameters referred to in the preceding point; and
 - c) Update the information made available to consumers under the terms referred to in the preceding point, where in the course of a year, it decides 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 on quality of service referred to in paragraph 2 shall be disclosed 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 at the universal service provider's website, in a clear and easily identifiable advertisement.

Number 7

(Final provisions)

The universal service provider shall fulfil the information obligations provided for in article 5 within 6 months at the most from the publication of the present Determination.

ANNEX 1

Definition of parameters and targets of quality of service

I - Supply time for initial network connection (PQS1)

The "supply time for initial network connection" shall correspond, with the necessary adaptations, carried out below, to the respective parameter of quality of service defined in the regulation on quality applicable to the telephone service at a fixed location.

Along the lines of the definition presented in the regulation on quality applicable to the telephone service at a fixed location, the "supply time for initial network connection" (PQS1) corresponds to the measurement of the time duration, in calendar days, from the instant a valid service order is made by a consumer to the universal service provider regarding the supply of a connection to the public telephone network at a fixed location, to the instant the access thereto is made available.

For PQS1 measurement purposes and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, the supply of a connection to the public telephone network at a fixed location means installing and making effectively available to the consumer, for his use, a connection between the local switching central or concentrator of the universal service provider and the first terminal device for exclusive use of the consumer, or in alternative, a connection to the consumer's network, pursuant to legislation in force regarding telecommunication infrastructure in buildings. Additionally, the PQS1 measurement shall be only carried out regarding connection requests which cover simultaneously the connection to the network and the activation of the telephone service at a fixed location.

For the same purpose, and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, a valid service order to supply a connection means any solicitation made to the universal service provider and accepted by it, concerning: (i) the supply of a new connection (consumer's first

connection or new connection on account of a consumer's change of address); or (ii) supply of an additional connection, at the same or a different address, to a consumer who already engaged the service. However, in the latter situation, migrations from analogue lines to ISDN lines shall not be accounted for PQS1 measurement purposes.

Following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, the situations of installation of a new connection to the public telephone network at a fixed location simultaneously with the provision of broadband technologies shall not be excluded for PQS1 measurement purposes.

Where a request for installation involves more than one connection, the installation of each one of these connections shall be accounted in separate for PQS1 measurement purposes.

It should be noted that, for PQS1 measurement purposes, temporary installations, which refer to those the duration of which is of one month at the most, shall not be considered.

Information to be provided by the universal service provider in the scope of the PQS1: (a) delay values in the supply of connections which correspond to 95% and 99% of the swifter installations, where the consumer does not define a target date; (b) rate of supply requests fulfilled up to the date agreed with the consumer, where the consumer defines a target date; and (c) ratio between the number of initial connections supplied, the consumer having established a target date, and the total number of initial connections supplied.

For PQS1 measurement purposes, a target date is deemed to exist where the consumer requests the installation subsequently to the date which results from the application of the average time necessary for an initial connection. This information must be published and made available to consumers pursuant to article 40 of Law no. 5/2004, and likewise must be included in the contract to be concluded between the consumer and the company providing the service, under point b) of paragraph 1 of article 48 of the same statutory instrument.

Moreover, the supply time limit must be considered from the date of reception of the request by the providing company or from the date of amendments/additions to agreements already signed, or from the date agreed with the consumer, where appropriate. In the latter situation, the date agreed with the consumer means any date requested by the consumer and accepted by the universal service provider, or any date set by the universal service provider and not refused by the consumer. In case the first date agreed with the consumer is postponed and a new date is later established, for reasons imputable to the universal service provider, the first date shall be considered for PQS1 measurement purposes.

The PQS1 measurement shall disregard: (i) time imputable to the consumer that elapses from the moment the universal service provider is informed or is aware of the fact that the premises of the consumer do not offer conditions for the supply of the connection, up to the moment the referred situation is cleared; and (ii) the delays associated to the installation of the first terminal device for the consumer's exclusive use or of the consumer's network, pursuant to legislation in force regarding telecommunication infrastructure in buildings, where such installation is not under the responsibility of the universal service provider. In the first situation, the periods of time between delays imputable to the consumer, where they exist, are deemed as being under the responsibility of the universal service provider, and as such, shall be added up for PQS1 measurement purposes.

Contrary to what has been established for the regulation on quality applicable to the telephone service at a fixed location, the PQS1 applies only to analogue accesses.

II -Fault rate per access line (PQS2)

The “fault rate per access line” shall correspond, with the necessary adaptations, carried out below, to the respective parameter of quality of service defined in the regulation on quality applicable to the telephone service at a fixed location.

Along the lines of the definition presented in the regulation on quality applicable to the telephone service at a fixed location, the “fault rate per access line” (PQS2) corresponds to the number of valid fault reports made by consumers to the services of the universal service provider, for reasons of disrupted or degraded service attributable to the network of the universal service provider or any public network interconnected thereto, and involved in eligible communications for PQS2 calculation purposes.

For PQS2 measurement purposes and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, the services of the universal service provider undertaking shall mean the services intended for the report of faults on the part of consumers.

Following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, a fault report shall be deemed valid where the universal service provider: (i) is able to confirm the existence of the fault after a test is made; or (ii) has means to verify that the fault actually took place, even if it disappears when the test is carried out.

Moreover, for PQS2 measurement purposes, faults and accesses shall be accounted for evenly, even where they have been reported by the same consumer, and common faults, which affect several consumers, shall be accounted for by the number of consumer reports associated to each fault. Without prejudice to the latter aspect, until the fault has been repaired by the universal service provider, the reports on the same access shall be accounted for as a single report.

PQS2 measurement shall not consider: (i) reports concerning the physical state of public pay phones for the access to the telephone service at a fixed location; (ii) faults in the equipment on the side of the consumer; and (iii) network faults from the first terminal device for the consumer’s exclusive use, pursuant to legislation in force regarding telecommunication infrastructure in buildings. Without prejudice to the first situation mentioned above, reports on faults concerning communications made from public pay phones where the disrupted or degraded service is attributable to the network of the universal service provider shall be considered for PQS2 measurement purposes.

In the scope of the PQS2, the universal service provider shall provide information on the total number of faults reported during the reference period.

The PQS2 shall be calculated by dividing the total number of faults reported during the reference period by the average access park for the same period. For PQS2 measurement purposes, all analogue accesses (including public pay phones for the access to the telephone service at a fixed location) made available by the universal service provider shall be considered.

III - Fault repair time (PQS3)

The “fault repair time” shall correspond to the respective parameter of quality of service defined in the regulation on quality applicable to the telephone service at a fixed location.

Along the lines of the definition presented in the regulation on quality applicable to the telephone service at a fixed location, the “fault repair time” (PQS3) corresponds to the measurement of the time duration, in consecutive hours, from the instant a valid fault in the network of the universal service provider or in any public network interconnected thereto, involved in eligible communications for PQS3 calculation purposes, has been reported by the consumer to the services of the universal service provider, to the instant where the service has been restored to full normal working order.

For PQS3 measurement purposes, and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, the following definitions shall apply: (i) services of the universal service provider shall mean services intended for the report of faults on the part of consumers; (2) full normal working order shall mean the restore of the initial situation that existed before the fault occurred, that is, the resolution of the problem reported by the consumer, which corresponds to the moment of notification by the universal service provider to the consumer concerning the fault repair, this notification not being contested by the consumer within at the most 5 working days. Likewise, valid fault reports considered shall correspond to valid fault reports defined in the scope of PQS2.

For PQS3 measurement purposes, the instant in which the universal service provider is made aware of the fault for the first time, following a consumer report, shall be considered. This shall apply in particular in the case of faults reported more than once, whether or not by the same consumer.

The PQS3 measurement shall not take into consideration the time elapsed between the date, or hour, of a fault repair scheduled initially by the universal service provider and a later date, or hour, scheduled at the convenience of the consumer.

For PQS3 measurement purposes, all valid faults repaired within the reference period, regardless of the report date, shall be considered.

PQS3 measurement shall not consider situations where: (i) following a prior notice of the visit, it is impossible to restore the service to full normal working order for reasons imputable to the consumer; and (ii) the universal service provider provides a swifter repair service through the payment of an additional amount.

Information to be provided by the universal service provider in the scope of the PQS3: (a) time to repair faults of the local access network which correspond to 80% and 95% percentile values of the swifter repairs; (b) time to repair other type of faults, which correspond to 80% and 95% percentile values of the swifter repairs; (c) rate of repairs carried out within the repair time limit established by the universal service provider, intended to be offered to consumers. In the scope of the latter information, the universal service provider shall also provide information on the fault repair time limit it has established to be offered to the consumers for the reference period.

For PQS3 measurement purposes, and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, faults in the local access network shall mean those imputable to the connection between the first

concentration point of the concentrator of the universal service provider network and the first terminal device for exclusive use of the consumer, or in alternative, to the connection to the consumer's network, pursuant to legislation in force regarding telecommunications infrastructure in buildings. Likewise, "other repairs" shall mean those deemed not to be imputable to the local access network.

In the scope of the PQS3, the universal service provider shall also provide information numbers for access to services provided for fault report purposes.

IV - Response time for operator services (PQS4)

The "response time for operator services" shall correspond to the respective parameter of quality of service defined in the regulation on quality applicable to the telephone service at a fixed location.

Along the lines of the definition presented in the regulation on quality applicable to the telephone service at a fixed location, the "response time for operator services" (PQS4) corresponds to the measurement of time duration, in seconds, from the instant the calling signal is established to the instant the call is answered by the human operator, for the provision of the service effectively desired by the consumer.

For PQS4 measurement purposes, and following the considerations made in the regulation on quality applicable to the telephone service at a fixed location, operator services shall mean those services with specific access codes used for the establishment of any communications with assistant intervention, to be charged at the destination or not, and whether the destination network is fixed or mobile, intended to support difficulties in obtaining calls. Likewise, the time spent in going through the reply systems activated by voice or other means, up to the moment the call is actually taken by the human operator, shall be considered.

PQS4 measurement shall not consider: (i) Services provided wholly by automatic response systems; (ii) emergency services; (iii) time spent with the treatment of the request made by the consumer of the service effectively desired, namely the conversation time between the caller and the human operator.

Information to be provided by the universal service provider in the scope of the PQS4: (a) average response time for operator services; and (b) rate of calls for operator services taken within 20 seconds by the human operator.

For PQS4 measurement purposes, the full list of events occurred shall be considered for the reference period.

It should be noted that in case the universal service provider subcontracts a third entity to provide operator services, it remains responsible for submitting results associated to PQS4 to ICP-ANACOM, as well as for the fulfilment of performance targets applicable to PQS4.

V- Unsuccessful calls (PQS5)

Along the lines of the definition presented in version 1.1.1 of the document ETSI EG 201 769-1, "unsuccessful calls" (PQS5) correspond to the measurement of call attempts

to a valid number, properly dialled, where neither a busy tone, nor a ringing tone, is recognized within 30 seconds from the instant when the address information required for setting up a call is received by the network of the universal service provider.

Information to be provided by the universal service provider in the scope of the PQS5: (a) total number of eligible calls for PQS5 calculation purposes broken down by national calls and international calls; (b) proportion of unsuccessful calls in the case of national calls; and (c) proportion of unsuccessful calls in the case of international calls.

PQS5 measurement shall be carried out at the level of local switches, through the data collection for a representative sample of actual outgoing traffic (a week per month, seven days and twenty four hours a day), throughout the year.

PQS5 measurement shall not consider calls handed by the universal service provider to an indirect access provider.

VI - Call set-up time (PQS6)

Along the lines of the definition presented in version 1.1.1 of the document ETSI EG 201 769-1, the “call set-up time” (PQS6) corresponds to the measurement of time duration, in seconds, from the instant the address information required for setting up a call is received by the network of the universal service provider and until a busy tone or a ringing tone is received by the consumer.

Information to be provided by the universal service provider in the scope of the PQS6: (a) total number of eligible calls for PQS6 calculation purposes broken down by national calls and international calls; (b) necessary period of time to set up national calls which corresponds to 100% of calls and 95% of swifter calls; and (c) necessary period of time to set up international calls which corresponds to 100% of calls and 95% of swifter calls.

PQS6 measurement shall be carried out, as provided for in version 1.1.1 of the document ETSI EG 201 769-1, at the level of local switches, through the data collection for a representative sample of actual outgoing traffic. Following the considerations made in the Convention, data must be collected in the course of a week per month, seven days and twenty four hours a day.

PQS6 measurement shall not consider: (i) unsuccessful calls; and (ii) calls handed by the universal service provider to an indirect access provider that carries out the termination and charging of consumers. On the contrary, calls to ported numbers shall be accounted for.

VII - Response time for directory enquiry services (PQS7)

Along the lines of the definition presented in version 1.1.1 of the document ETSI EG 201 769-1, the “response time for directory enquiry services” (PQS7) corresponds to the measurement of time duration, in seconds, from the instant the a calling signal is established to the instant the call is answered by a human operator or an equivalent response system, activated by voice or any other means, for the provision of the information effectively desired by the consumer.

To measure PQS7, the directory enquiry services refer solely to the “118” service. As provided for in version 1.1.1 of the document ETSI EG 201 769-1, the periods of time spent by the consumer (i) because the human operator or an equivalent response system are busy, and (ii) in going through the equivalent systems activated by voice or other means, up to the moment the call is effectively taken by the human operator or an equivalent response system, shall be accounted for.

PQS7 measurement shall not consider the time spent with the treatment of the request made by the consumer for the information effectively desired, namely the conversation time between the consumer and the human operator or an equivalent response system, and the response time of a database used by the human operator or an equivalent response system.

Information to be provided by the universal service provider in the scope of the PQS7: (a) directory enquiry services mean time to answer; (b) Proportion of calls answered within 20 seconds by human operators or equivalent response systems.

For PQS7 measurement purposes, the total number of calls for directory enquiry services answered within 20 seconds by human operators or equivalent response systems services established within the reference period shall be considered, regardless of their origin.

It should be noted that in case the universal service provider subcontracts a third entity to provide directory enquiry services, it remains responsible for the fulfilment of performance targets applicable to PQS7, as well as for submitting results associated to PQS7 to ICP-ANACOM.

VIII - Proportion of coin and card operated public pay-telephones in working order (PQS8)

Along the lines of the definition presented in version 1.1.1 of the document ETSI EG 201 769-1, the “proportion of coin and card operated public pay-telephones in working order” (PQS8) corresponds to the measurement of time duration, in days, in the course of which public pay-telephones are in full working order.

For PQS8 measurement purposes, and following the considerations made in the document ETSI EG 201 769-1, a public pay-telephone is deemed in full working order where the consumer is able to make use of the services advertised as normally available. In this context, working order refers, in particular, to the physical conditions of the pay-telephone, the dialling tone, and call conclusion and due charge. A public pay-telephone is deemed not in full working order where it accepts coins and card as means of payment and only one means or both are not operational.

In the scope of the PQS8, the universal service provider must provide information on the total number of whole days during which public pay-telephones are in full working order within the reference period, and for this purpose, reliable and auditable registers must be kept on the commencement and duration of the public pay-telephones damage.

PQS8 shall be calculated by dividing the total number of whole days during which the public pay-telephones are in full working order by the potential number of operational days of the average public pay-telephones park.

IX - Bill correctness complaints (PQS9)

Along the lines of the definition presented in version 1.1.1 of the document ETSI EG 201 769-1, “bill correctness complaints” (PQS9) correspond to the measurement of the number of bills related to services comprised in the universal service claimed by consumers, on ground of alleged inaccuracy of amounts billed.

For PQS9 measurement purposes, all bills claimed which have been issued within the reference period shall be considered, regardless of the result of the assessment thereon and of the accounting period. Complaints on bill correctness shall not include requests for information on bills.

Complaints on bills concerning services comprised in the universal service issued by other entities, particularly in the scope of the subscriber line resale offer (SLRO) shall be only accounted for in case the complaint refers to data necessary to the billing and charging of services under consideration submitted by the universal service provider to other entities.

PQS9 measurement shall include complaints solved by telephone or in the presence of the consumer.

As a rule, each bill may only once be accounted for in the PQS9. The exceptions to this situation take place only in the case of bills which have been previously analysed and to which the universal service provider has already provided a response, reporting to new factors; these complaints may be accounted for as new complaints.

In the scope of PQS9 measurement, the universal service provider must provide information on the total number of valid complaints on bills related to services comprised in the universal service. This information shall be broken down according to whether bills under consideration are issued by the universal service provider or by other entities, particularly in the scope of the SLRO.

The PQS9 must be calculated by obtaining the proportion of bills claimed relatively to the total number of bills issued.

ANNEX 2
Quality of service measurement methods

Parameter	Measurement	
	Indicator	Method
Supply time for initial network connection (PQS1)	(a) Delay values in the supply of connections which correspond to 95% and 99% of the swifter installations, where the consumer does not define a target date (b) Rate of supply requests fulfilled up to the date agreed with the consumer, where the consumer defines a target date (c) Ratio between the number of initial connections supplied, the consumer having established a target date, and the total number of initial connections supplied	Total occurrences registered in the course of the reference period
Fault rate per access line (PQS2)	Total number of faults reported per access	Total occurrences registered in the course of the reference period
Fault repair time (PQS3)	(a) Time to repair faults of the local access network which correspond to 80% and 95% percentile values of the swifter repairs (b) Time to repair other type of faults, which correspond to 80% and 95% percentile values of the swifter repairs (c) Rate of repairs carried out within the repair time limit established by the universal service provider, intended to be offered to consumers	Total occurrences registered in the course of the reference period
Response time for operator services (PQS4)	(a) Average response time for operator services (b) Rate of calls for operator services taken within 20 seconds by the human operator	Total occurrences registered in the course of the reference period
Unsuccessful calls (PQS5)	(a) Total number of eligible calls for PQS5 calculation purposes broken down by national calls and international calls (b) Proportion of unsuccessful calls in the case of national calls (c) Proportion of unsuccessful calls in the case of international calls	Representative sample, at the level of local switches, of actual outgoing traffic (for a week per month, seven days and twenty four hours a day), throughout the year.
Call set-up time (PQS6)	(a) Total number of eligible calls for PQS6 calculation purposes broken down by national calls and international calls (b) Necessary period of time to set up national calls which corresponds to 100% of calls and 95% of swifter calls (c) Necessary period of time to set up international calls which corresponds to 100% of calls and 95% of swifter calls	Representative sample, at the level of local switches, of actual outgoing traffic (for a week per month, seven days and twenty four hours a day), throughout the year.
Response time for directory enquiry services (PQS7)	(a) Directory enquiry services mean time to answer (b) Proportion of calls answered within 20 seconds by human operators or equivalent response systems	Total occurrences registered in the course of the reference period
Proportion of coin and card operated public pay-telephones in working order (PQS8)	Proportion of whole days during which the public pay-telephones are in full working order relatively to the potential number of operational days of the average public pay-telephones park	Total occurrences registered in the course of the reference period
Bill correctness complaints (PQS9)	Proportion of bills claimed relatively to the total number of bills issued	Total occurrences registered in the course of the reference period

ANNEX 3

Performance targets

I - Supply time for initial network connection (PQS1)

Performance targets applicable to PQS1 are as follows:

Indicator	Target
(a1) Delay values in the supply of connections which correspond to 95% of the swifter installations, where the consumer does not define a target date	21 days
(a2) Delay values in the supply of connections which correspond to 99% of the swifter installations, where the consumer does not define a target date	43 days
(b) Rate of supply requests fulfilled up to the date agreed with the consumer, where the consumer defines a target date	85%

II - Fault rate per access line (PQS2)

Performance targets applicable to PQS2 are as follows:

Indicator	Target
Total number of faults reported per access	0,10

III - Fault repair time (PQS3)

Performance targets applicable to PQS3 must approach the following values:

Indicator	Target
(a1) Time to repair faults of the local access network which corresponds to 80% percentile value of the swifter repairs (hours)	72
(a2) Time to repair faults of the local access network which corresponds to 95% percentile value of the swifter repairs (hours)	165
(b1) Time to repair other type of faults, which corresponds to 80% percentile value of the swifter repairs (hours)	47
(b2) Time to repair other type of faults, which corresponds to 95% percentile value of the swifter repairs (hours)	108
(c) Rate of repairs carried out within the repair time limit established by the universal service provider, intended to be offered to consumers	80%

IV - Response time for operator services (PQS4)

Performance targets applicable to PQS4 are as follows:

Indicator	Target
(a) Average response time for operator services	11
(b) Rate of calls for operator services taken within 20 seconds by the human operator	80%

V - Response time for directory enquiry services (PQS7)

Performance targets applicable to PQS7 are as follows:

Indicator	Target
(a) Directory enquiry services mean time to answer (seconds)	5
(b) Proportion of calls to directory enquiry services answered within 20 seconds by human operators or equivalent response systems	95%

VI - Proportion of coin and card operated public pay-telephones in working order (PQS8)

Performance targets applicable to PQS8 are as follows:

Indicator	Target
Proportion of whole days during which the public pay-telephones are in full working order relatively to the potential number of operational days of the average public pay-telephones park	96%

VII - Bill correctness complaints (PQS9)

Performance targets applicable to PQS9 are as follows:

Indicator	Target
Proportion of bills claimed relatively to the total number of bills issued	0,04%