



**GOVERNMENT OF MONTENEGRO
MINISTRY OF TRANSPORTATION, MARITIME AFFAIRS AND TELECOMMUNICATIONS**

PROPOSAL

**REGULATION
ON PARAMETERS OF THE QUALITY OF SERVICES, MARGINAL VALUES AND METHODS
OF MEASURING PARAMETERS FOR USING THE SINGLE EUROPEAN EMERGENCY
NUMBER 112**

PODGORICA, 20 March 2009

Pursuant to Article 88 § 3 of the Law on Electronic Communications (*Official Gazette of Montenegro*, No. 50/08), the Ministry of Transportation, Maritime Affairs and Telecommunications issues the following

R E G U L A T I O N
ON PARAMETERS OF THE QUALITY OF SERVICES, MARGINAL VALUES AND METHODS
OF MEASURING PARAMETERS FOR USING THE SINGLE EUROPEAN EMERGENCY
NUMBER

Subject matter

Article 1

This Regulation prescribes parameters of the quality of services for the use of the single European emergency telephone number (hereinafter: No. 112), limits and methods of measuring those parameters.

Definitions

Article 2

Terms used in this Regulation have the following meanings:

- **time for establishing a connection with No. 112** is the period measured in seconds, with one decimal number, which passes from the moment when the public telephone network has transmitted all information necessary for establishing a connection with No. 112 until the moment when the caller receives a response, a ring sound or a busy signal;
- **unsuccessful call of No. 112** is a call correctly dialed after receiving a dial tone for which no busy signal or ring sound appears after 30 seconds from the moment when the network receives all information necessary for establishing a connection on the caller's access line;
- **indicator of unsuccessful calls to No. 112** is a percentage point ratio of unsuccessful calls No. 112 in the total number of calls to No. 112 in a specific time period;
- **indicator of faults on the OKC 112 access line** is a percentage point ratio of faults reported in a specific time period and the number of OKC 112 access lines in that period;
- **time-period for repairing faults on the OKC 112 access line** is the time in hours and minutes from the moment when a fault is reported to the operator's competent service until the fault is repaired and the situation normalised;
- **valid report of fault** is notification of interrupted or lower-quality connections due to a fault in an operator's public telephone network (excluding equipment faults on the customer's side of the network termination point).

Functioning of reserve lines

Article 3

In the event of a fault on OKC 112 access lines, operators are required to secure re-direction to reserve access lines and to give priority to repairing the fault.

Parameters of quality of service for using No. 112

Article 4

The following are parameters of the quality of service for using No. 112:

- 1) indicator of faults on the OKC 112 access line;
- 2) time for repairing faults on the OKC 112 access line;
- 3) indicator of unsuccessful calls to No. 112;
- 4) time of establishing a connection with No. 112;
- 5) time of transfer of information about the caller's number;
- 6) time of transfer of information about the caller's location.

Indicator of faults on the access line

Article 5

The indicator of faults on the OKC 112 access line in a single year may not exceed 5% per operator.

Time for repairing faults on the OKC 112 access line

Article 6

The time for repairing faults on the OKC 112 access line may not exceed four hours for repairing 90% of such faults per year per operator.

The indicator of unsuccessful calls to No. 112

Article 7

The indicator of unsuccessful calls to No. 112 may not exceed 5% per year.

The time of establishing a connection with No. 112

Article 8

The mean time of establishing a connection with No. 112 in a year may not exceed three seconds.

The time for establishing a connection with No. 112 in which 90% of all connections are established may not be more than eight seconds.

The time of transfer of information about the caller's number

Article 9

The time of transfer of information about the caller's number, as well as the time of transfer of information about the caller's location, is measured from the establishment of the call until the receipt of information, or data, in OKC 112.

The time of transfer of information about the caller's number may not exceed five seconds.

The mean annual time of transfer of information about the caller's number may not exceed two seconds.

The time of transfer of information about the caller's location

Article 10

The time of transfer of information about the caller's location is, in the event of technical incapacity of the operator, measured from the delivery of the OKC 112 request, where the operator proves technical incapacity to transfer data from the establishment of the call.

The mean time of transfer of information about the caller's location in one year may not exceed 10 seconds, and the time of transfer of information about the caller's location for 90% of all calls to No. 112 in one year may not exceed 20 seconds.

Information about the number and data on the caller's location

Article 11

Operators are required to forward information about the number and data about the caller's location to the OKC 112 area unit which receives calls to No. 112 via the data transfer network. The technical specifications of the data transfer network are issued by the OKC 112 which processes calls to No. 112.

By exception, data on the caller's location are, in the case of technical incapacity of the operator or OKC 112, forwarded to the OKC 112 area unit which receives emergency calls, at its request, where an operator proves technical incapacity to forward information about the establishment of the call, wherein the mean time to forward data on the call's location per year may not exceed half an hour in the working hour of the operator's technical service.

In the case of mobile users, operators are required to forward besides the location of the domicile connection also warnings to the mobile user about dangers in a specific area, provided it is technically possible. Operators are required to prove technical incapacity.

Processing of data on location

Article 12

The area of the location of a fixed telephony caller may not exceed 100 square metres, and for a mobile telephony caller may not exceed 50 square metres.

Fixed public telephony network operators are required to make available the installation address of the line from which No. 112 was called.

All location data must be accompanied with identification of the network from which the call started.

Operators process data about location in an indiscriminating manner. Discrimination between the quality of processing data of own subscribers and other public telephony network users is especially prohibited.

Operators' software applications used to process data about location must support all technologies for processing data on callers' locations, including: Cell Global Identity, Cell Global Identity with Timing Advance, Cell Global Identity with Round Trip Time, Enhanced Cell ID, Angle of Arrival, Uplink Time Difference of Arrival, Assisted Global Positioning System, Hybrid Location Solutions.

Methods of measurement of quality parameters

Article 13

In altering parameters of quality referred to in Article 4 of this Regulation, operators are required to apply definitions and methods contained in the ETSI EG 201 769 - 1, Annex E standard.

Obligation of submitting reports

Article 14

Operators are required to submit reports on the values of the parameters of quality of the service of using No. 112 to the Agency for Electronic Communications and Postal Activities (hereinafter: the Agency), no later than 1 April of every year for the preceding year, on a standard form attached to this Regulation as its constituent (Annex No. 1).

The Agency is required to publish data referred to in § 1 of this Article on its website.

The ministry in charge of electronic communications and the ministry in charge of protection and rescue affairs submit to the Government of Montenegro an annual report on the parameters of quality of the service of using No. 112 compiled on the basis of data referred to in § 1 of this Article.

Effectiveness

Article 15

This Regulation will come into effect on the eighth day from the date of its publication in the *Official Gazette of Montenegro*.

**MINISTRY OF TRANSPORTATION, MARITIME AFFAIRS AND
TELECOMMUNICATIONS**

**Annual Report on the Values of Parameters of using No. 112
(ANNEX E: ETSI EG 201 769 V1.1.2)**

Title of company - operator: _____

Data for period: _____ from _____ to _____

TABLE E.1

| Parameter | Measure | Statistic for services |
|----------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1.1 Time for establishing initial connection | Time for fastest 95% calls | days |
| | Time for fastest 95% calls | days |
| | % service supplied by agreed time | % |
| | Times for taking orders | from.....to..... on weekdays from.....to.....on Saturdays from.....to.....on Sundays |
| | Periods for appointments | from.....to..... on weekdays from.....to.....on Saturdays from.....to.....on Sundays |
| 1.2 Fault rate | faults/access line/year | reports per 100 lines for direct services reports per 100 lines for indirect services |
| 1.3 Fault repair time | Time to repair 80% of faults on access lines |elapsed hours for direct services |

| | | |
|-----------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| | Time to repair 95% of faults on access lines | elapsed hours for direct services |
| | Time to repair 80% of all other faults on access lines | elapsed hours (for direct and indirect services) |
| | Time to repair 95% of all other faults on access lines | elapsed hours (for direct and indirect services) |
| | % repaired on target date |% for direct services % for indirect services |
| | Time for submitting reports | from.....to..... on weekdays from.....to.....on Saturdays from.....to.....on Sundays |
| | Time for appointments | from.....to..... on weekdays from.....to.....on Saturdays from.....to.....on Sundays |
| 1.4 Unsuccessful call ratio | % for national calls | % Number of observations = |
| | % for international calls | % Number of observations = |
| 1.5 Call set-up time | Mean time for national calls |(Seconds) Number of observations = |
| | Time for fastest 95% calls |(Seconds) Number of observations = |
| | Mean time for international calls |(Seconds) Number of observations = |
| | Time for fastest 95% for international calls |(Seconds) Number of observations = |

Table E.2

| parameter | Measure | Statistic |
|--------------------------------------------|----------------------------------------------------------------------------|-------------------------------------|
| 1.6 Response times for operator services | Mean time to answer % answered within 20 sec | Secs , % , Number of observations = |
| 1.7 Response time OKC 112 | Mean time to answer % answered within 20 sec | Secs , % , Number of observations = |
| 1.8 Public pay-telephones in working order | Mean time to answer % answered within 20 sec % in full working order | Secs , % , Number of observations = |
| 1.9 Bill correctness complaints | % | % |

We hereby certify that these data are correct. We assume full criminal and substantive liability for the data and their accuracy.

Place, date:

Off. seal

Signature of resp. official