

Pursuant to Article 91, paragraph 1, sub-paragraphs 1 and 2 of the Law on Electronic Communications ("Official Gazette", No 40/13), the Ministry for Information Society and Telecommunications has adopted

## **THE RULEBOOK**

### **on the quality of Universal Service**

The Rulebook was published in the "Official Gazette of Montenegro", No 23/2014 of 05/30/2014.

#### **Subject**

##### **Article 1**

This Rulebook establishes the quality of service parameters for the Universal Service, their limiting values and measurement methods, as well as the content, form and manner of publication of data on the quality of providing these services.

#### **Definitions**

##### **Article 2**

The terms used herein shall have the following meanings:

- **data transfer speed** is the speed of data transfer that is reached between a remote website and a user's computer when downloading certain test files in incoming (download) and outgoing (upload) directions;
- **proper failure report** is a report on interruption, interference or degradation of service quality caused by a malfunction in the electronic communications network or other public communications network connected to that network, which does not involve the reporting of faults and malfunctions caused on the customer/subscriber terminal equipment;
- **unsuccessful call** is an attempt to make a call towards a correctly dialed valid number after a dialing tone where there is no busy tone, ringing tone, nor a response signal within 30 seconds from the time when the last digit of the called number was received in the network;
- **Universal Service operator** is a natural or legal person who provides one or more universal services in the entire territory of Montenegro, based on the decision of the Agency for Electronic Communications and Postal Services of Montenegro (hereinafter referred to as the Agency);
- **access line** is the link between a network connection point of the end-user and the access point of the ultimate exchange or remote concentrator, depending on which is closer to the end-user;
- **percentage of public payphones in full working order** is the percentage ratio between the number of public payphones that are in full working order and the total number of public payphones installed;
- **terminal network point** is a physical point in the network where the subscriber gains access to public electronic communications network;

- **frequency of faults on access line** is the percentage ratio between the number of proper fault reports at a certain period and the average number of subscriber access lines during the same period;
- **frequency of unsuccessful calls** is the percentage ratio between the number of unsuccessful calls and the total number of attempts to establish a call within a certain period of time;
- **frequency of bill correctness complaints** related to universal services is the percentage ratio between the number of grounded bill correctness complaints relating to universal services and the total number of bills issued for the universal services;
- **operator response time** is the time which elapses from the moment when the public communication network receives all information necessary to establish a call to the moment when the operator's contact person answers the call, in order to provide certain services;
- **response time of the Directory Enquiry Service** is the time which elapses from the moment when public communication network receives all information necessary to establish the call to the moment when the operator's contact person for the universal directory enquiry service, or equivalent automated voice system answers the call;
- **fault repair time** is the time that has elapsed since the filing of the proper report of faults to the operator's competent service until the moment of the fault repair, i.e. until the re-establishment of regular public electronic communications services;
- **call set-up time** is the time that has elapsed from the moment when public communication network receives all information necessary to establish the call to the moment when the user who initiated the call receives a busy signal, calling signal or response signal; and
- **service supply time** is the time that covers the period from the date of receipt of a proper request for the provision of certain public electronic communications services, in written or electronic form, to the day of connecting the user/subscriber terminal equipment to a public electronic communications network, which allows the user to use the service.

### **Quality of service parameters for the Universal Service**

#### **Article 3**

Quality of service parameters for the Universal Service are as follows:

- service supply time;
- frequency of faults on the access line;
- fault repair time;
- frequency of unsuccessful calls;
- call set-up time;
- operator response time;
- response time of the directory enquiry service;
- percentage of public payphones in full working order;
- frequency of bill correctness complaints relating to universal services; and
- data transfer speed.

#### **Service supply time**

#### **Article 4**

If the time of a service supply is not agreed in advance, the average time in which 95% of individual cases of service supply are successfully performed in one year must not be longer than eight days.

If the time of a service supply is agreed in advance, 97% of individual cases of the service supply must be successfully performed in one year, within the time of the service supply that is agreed in advance.

Notwithstanding paragraphs 1 and 2 of this Article, the time of the service supply may be extended up to 30 days in exceptional circumstances, which must be stated in the Minutes signed by the authorized person of the Universal Service Operator, and which shall be explained to the end-user.

### **Frequency of failures on the access line**

#### **Article 5**

Frequency of failures on the access lines in one year may not exceed 15% of the total number of access lines.

### **Fault repair time**

#### **Article 6**

Average fault repair time in one year may not exceed 24 hours for 80% of faults on the access line, or 12 hours for 80% of other faults on the public telephone network of the Universal Service Operator.

Notwithstanding paragraph 1 of this Article, fault repair time can be extended up to 96 hours in special circumstances, which must be stated in the Minutes signed by the authorized person of the Universal Service Operator, and which shall be explained to the end-user.

Identification and elimination of faults and failures on the access line to the 112 service for emergency calls has priority over all types of faults and failures, in accordance with a special regulation governing service 112.

### **Frequency of unsuccessful calls**

#### **Article 7**

The frequency of unsuccessful calls on electronic communications network of the Universal Service Operator may not exceed 2% of the total number of attempted calls in one year for calls to destinations in Montenegro.

The frequency of unsuccessful calls on electronic communications network of the Universal Service Operator may not exceed 5% in one year for calls to destinations outside Montenegro.

### **Call set-up time**

#### **Article 8**

The average call set-up time on electronic communications network of the Universal Service Operator in one year may not exceed three seconds for calls to destinations in Montenegro.

The average call set-up time on electronic communications network of the Universal Service Operator in one year may not exceed five seconds for calls to destinations outside Montenegro.

The call set-up time on electronic communications network of the Universal Service Operator within which 80% of all calls to destinations in Montenegro was set up in one year may not exceed five seconds.

The call set-up time on electronic communications network of the Universal Service Operator within which 80% of all calls to destinations outside Montenegro was set up in one year may not exceed eight seconds.

### **Operator response time**

#### **Article 9**

The average operator response time may not exceed 15 seconds in one year.

The percentage of calls to which operators answered within 20 seconds may not be smaller than 80% in one year.

### **Response time of Universal Directory Enquiry Service**

#### **Article 10**

The average response time of the Universal Directory Enquiry Service may not exceed 15 seconds in one year.

The percentage of calls to which the Universal Directory Enquiry Service answered within 20 seconds may not be smaller than 80% in one year.

### **Percentage of public payphones in full working order**

#### **Article 11**

The percentage of public payphones in full working order may not be less than 98% of the total number of public payphones installed and reported to the Agency in one year.

### **Minimum data transfer speed for Internet access**

#### **Article 12**

On at least 95% of the lines the upload and download data transfer speeds necessary for functional Internet access must be achieved.

### **Frequency of bill correctness complaints relating to universal services**

#### **Article 13**

The frequency of bill correctness complaints relating to universal services may not exceed 0.5% of the total number of issued bills in one year.

### **Measuring the quality of service parameters for Universal Services**

#### **Article 14**

The Universal Service Operator performs the measurement of quality of service parameters for universal service which it provides, in accordance with the definitions and measurement methods specified in the standards set out in Annex 1 which is an integral part of this Rulebook.

The Universal Service Operator is responsible for the accuracy of the measured values of the quality of service parameters for universal services.

The Agency may, if it has any doubts concerning the accuracy of the data submitted by the Universal Service Operator, authorize an independent controller who will evaluate this data.

If the control referred to in paragraph 3 of this Article confirms the accuracy of the information provided, the costs of the control shall be paid by the Agency. If the control determines that the data is inaccurate, the costs of control shall be paid by the operator.

### **Submission and publication of data on the quality of service parameters for the Universal Service**

#### **Article 15**

The Universal Service Operator submits to the Agency on quarterly basis the data on measured values of the quality of service parameters for universal services.

The Universal Service Operator shall publish information on the measured values of the quality of service parameters for universal services on its website, and it shall also submit to the Agency a report on the data no later than 31st January of the current year for the previous year.

The Agency shall publish on its website the submitted data on the measured quality of service parameters for universal services for each operator of the universal service individually, no later than 1st March of the current year for the previous year.

The report on data from paragraphs 1 and 2 of this Article is given in Annex 2, which is an integral part of this Rulebook.

### **Termination of validity**

#### **Article 16**

On the date of entry of this Rulebook into force, the Rulebook on the quality of universal services (Official Gazette of Montenegro, No 57/10) shall cease to be valid.

### **Entry into force**

#### **Article 17**

This Rulebook shall enter into force on the eighth day of its publication in the "Official Gazette of Montenegro".

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Podgorica, 19 May 2014

Prof. **Vujica Lazović**, PhD

Minister

m.p.

**QUALITY OF SERVICE PARAMETERS FOR UNIVERSAL SERVICE THAT ARE MEASURED**

Quality of service parameters for universal services that are measured are given in the following table:

Name of the quality of service parameters for universal services	Description of the quality of service parameters for universal services	Measurement method
Service supply time	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Frequency of faults on access line	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Fault repair time	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Frequency of unsuccessful calls	METI ETSI EG 201 769-1	METI ETSI EG 201 769-1
Call set-up time	METI ETSI EG 201 769-1	METI ETSI EG 201 769-1
Operator response time	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Response time of the Universal Directory Enquiry Service	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Percentage of public payphones in full working order	METI ETSI EG 201 769-1	METI ETSI EG 201 769-1
Frequency of bill correctness complaints relating universal services	METI ETSI EG 202 057-1	METI ETSI EG 202 057-1
Data transfer speed	METI ETSI EG 202 057-4	METI ETSI EG 202 057-4

## REPORT

## on the quality of service parameters for universal services

Name of the Universal Service Operator: \_\_\_\_\_

Service of the Universal Service: \_\_\_\_\_

Data for the period: \_\_\_\_\_

PARAMETER	LIMITING VALUES	STATISTICS
1. Service supply time	For 95% of supplied services in one year	
	For 99% of supplied services in one year	
	% of supplied services within the agreed time frame	
	Time for receiving requests	from ___ to ___ on working day  from ___ to ___ on Saturday  from ___ to ___ on Sunday
2. Frequency of faults on access line	Number of faults/ average number of access lines in one year	
3. Fault repair time	For 80% faults on access line in one year	
	For 95% of faults on access line in one year	
	For 80% of other faults	

	For 95% of other faults	
	% of repaired faults on the targeted day	
	Time for receiving fault reports	from ___ to ___ on working day  from ___ to ___ on Saturday  from ___ to ___ on Sunday
4. Frequency of unsuccessful calls	% of all national calls	
	% of national calls to fixed network of Crnogorski Telekom	
	% of national calls to fixed network of M:Tel	
	% of national calls to mobile network 067	
	% of national calls to mobile network 068	
	% of national calls to mobile network 069	
	% of international calls	
5. Call set-up time	Average time for all national calls	
	Average time for national calls to fixed network of Crnogorski Telekom	
	Average time for national calls to fixed network of M:Tel	



	Average time for national calls to mobile network 067	
	Average time for national calls to mobile network 068	
	Average time for national calls to mobile network 069	
	Average time for international calls	
	Time within which 80% of all national calls was set up	
	Time within which 95% of all national calls was set up	
	Time within which 80% of all international calls was set up	
	Time within which 95% of all international calls was set up	
6. Operator response time	Average response time in one year	
	% of answered calls within 20 seconds	
7. Response time of the Universal Directory Enquiry Service	Average response time in one year	
	% of answered calls within 20 seconds	
8. Percentage of public payphones in full working order	% in one year	
9. Frequency of bill correctness complaints relating to universal services	% in one year	

10. Data transfer speed (upload)	Maximum data transfer speed (upload) achieved in 95% cases, expressed in kbit/s	
	Minimum data transfer speed (upload) achieved in 5% cases, expressed in kbit/s	
11. Data transfer speed (download)	Maximum data transfer speed (download) achieved in 95% cases, expressed in kbit/s	
	Minimum data transfer speed (download) achieved in 5% cases, expressed in kbit/s	