

Pursuant to Arts. 8, para. 1, item 1), 23, para. 1 and 64, para. 6 of the Law on Electronic Communications (*Official Gazette of RS*, no. 44/10), Art. 12, para 1, item 1) and Art. 16, para 1, item 4 of the Statutes of the Republic Agency for Electronic Communications (*Official Gazette of RS*, no. 59/10),

the Managing Board of the Republic Agency for Electronic Communications, in its session held on 26 August 2011, passed the following

RULEBOOK

on minimum content, level of detail and manner of publishing reference offers

Article 1

This Rulebook shall stipulate in detail the minimum content, level of detail and manner of publishing of reference offers for interconnection, access and unbundled access to the local loop.

Article 2

The obligation of publishing the reference offer referred to in para. 1 herein shall apply to operators with significant market power with the obligation of publishing specific data and the obligation of non-discriminatory treatment in regard to the service provision in the relevant market (hereinafter: SMP operator) imposed on them by a decision adopted by the Republic Agency for Electronic Communications, set out by the Decision on designating relevant markets susceptible to *ex-ante* regulation (*Official Gazette of RS*, no. 59/11), pursuant to the Law on Electronic Communications (*Official Gazette of RS*, no. 44/10, hereinafter: Law) and this Rulebook.

Article 3

The terms used herein shall have the following meaning:

- 1) ***leased lines*** refers to a type of electronic communication service enabling a user-operator a transparent capacity of communication signal transmission between the network terminal points, where the user-operator cannot participate in the control of switching function;
- 2) ***user-operator*** is an operator providing electronic communication services, using wholesale services of an SMP operator;
- 3) ***call origination*** is a service of handing off a call from an end-user to the interconnection point where the call is taken over from an SMP operator by an operator which is a user of the wholesale call origination service and which forwards the call to the destination;
- 4) ***access point*** is a physical interface within the communication network of an SMP operator to which interconnection lines may be connected;

- 5) **demarcation point** is a physical point where the electronic communication network of an SMP operator is interconnected with the electronic communication network of a user-operator and it is a point of liability demarcation between the SMP operator and the user-operator;
- 6) **call termination** is a wholesale service of forwarding a call to a specific number in a specific network (fixed or mobile) provided by an SMP operator to a user-operator.

General Principles of the Reference Offer

Article 4

An SMP operator shall be required to provide the services from the reference offer in a non-discriminatory and transparent manner and to set the prices in the stipulated manner in case the obligation of price control and application of cost-accounting has been imposed on them by a decision of the Agency.

An SMP operator shall be required to provide the services from the reference offer to all operators using or intending to use these services at equal conditions as those applied to the services used for their own needs, the needs of the related entities and partners.

The reference offer shall be split into single components to a degree such as to enable an interested operator to select a specific component of the offer without the obligation to accept other component of the offer, which are not necessary for the service provision.

At the request of the Agency an SMP operator shall prepare their reference offer, publish it on their website and submit it to the Agency, within the timeframe stipulated by the Law.

The reference offer referred to in the previous paragraph shall be applied as of 30 days following its publication.

Content and the Level of Detail of the Reference Offer

Article 5

The reference offer shall include general provisions, technical and commercial terms and conditions and relevant appendices.

General provisions of the reference offer shall include the following:

- 1) name and address of the operator;
- 2) subject of the reference offer;
- 3) description and types of services;
- 4) publishing date and the beginning of the application of the reference offer;
- 5) conditions of the offer;
- 6) reference offer modification procedure;
- 7) application procedure, response timeframes and negotiation procedure;

- 8) conditions under which a request from a user-operator to use relevant services may be refused;
- 9) contract closing timeframe;
- 10) contract modification procedure and grounds for price modification;
- 11) complaint submission and resolution procedure and timeframes;
- 12) liability of both parties, liability demarcation and damage compensation procedure;
- 13) confidentiality and trade secret provisions;
- 14) dispute resolution procedure;
- 15) service provision termination;
- 16) intellectual property rights;
- 17) meaning of terms and abbreviations used.

The technical requirements of the reference offer include all technical information necessary for service realization (standards, interfaces, protocols, etc.) quality of service (QoS) parameters and the manner of modification of technical parameters.

The commercial conditions of the reference offer shall include the following:

- 1) price of a service form the reference offer;
- 2) payment security instrument;
- 3) compensation in case of service delivery delay;
- 4) discounts on specific services, if applicable, indicating the prices and pricing principles;
- 5) method of calculation, collection and payment security (security instruments), including timeframes, method of invoicing and billing error complaint procedure (refund claim);
- 6) breach of contract compensation.

The reference offer shall also include the following appendices:

- 1) confidentiality statement form;
- 2) text of bank guaranty or other payment security instrument;
- 3) contact information.

Reference Interconnection Offer (RIO) for Call Origination and Call Termination on Public Fixed Telephone Network

Article 6

Reference offer for wholesale call origination and call termination on public fixed telephone network shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The content of the reference offer general provisions referred to in para. 1 herein is regulated under Art. 5, para. 2 herein.

The reference offer referred to in para. 1 herein shall include the following technical requirements for call origination and termination services:

- 1) information on network and infrastructure necessary for interconnection:
 - 1.1. interconnection architecture;
 - 1.2. interfaces, signalling and protocols for all types of connection;
 - 1.3. synchronization;
 - 1.4. transmission systems;
 - 1.5. other technical requirements necessary for interconnection (equipment placement, transmission path, etc.);
- 2) interconnection set-up (access points, lines and interconnection procedure);
- 3) manner and conditions regarding the maintenance of the QoS and level of the service provided;
- 4) procedures in case of modifications in the communication network of the SMP operator.

The commercial conditions of the reference offer referred to in para. 1 herein are regulated under Art. 5, para. 4 herein.

The reference offer referred to in para. 1 herein shall include the appendices referred to in Art. 5 para. 5 herein, and also the following:

- 1) List and addresses of interconnection access points,
- 2) Request forms for negotiation and service cancellation,
- 3) Request form for malfunction/interference removal,
- 4) Request form for interconnection capacity planning.

Reference Interconnection Offer (RIO) for Call Termination Service on Mobile Networks

Article 7

Reference offer for service provision in the wholesale market for call termination on mobile network shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The content of the general provisions referred to in para. 1 herein shall be regulated under Art. 5, para. 2 herein.

The reference offer referred to in para. 1 herein shall include the following technical requirements for call termination service:

- 1) information on network and infrastructure necessary for interconnection:
 - 1.1. interconnection architecture;
 - 1.2. interfaces, signalling and protocols for all types of connection;
 - 1.3. synchronization;

- 1.4. transmission systems;
- 1.5. other technical requirements necessary for interconnection (equipment, placement, transmission path, etc.);
- 2) interconnection set-up (points and interconnection procedure);
- 3) manner and conditions regarding the maintenance of the QoS and level of the service provided.

The commercial conditions of the reference offer referred to in para. 1 herein are regulated under Art. 5, para. 4 herein.

The reference offer referred to in para. 1 herein shall include the appendices referred to in Art. 5 para. 5 herein, and also the following:

- 1) List and addresses of interconnection access points,
- 2) Request forms for negotiation and service cancellation,
- 3) Request form for malfunction/interference removal,
- 4) Request form for interconnection capacity planning.

Reference Unbundled Local Loop Offer (RUO)

Article 8

Reference Unbundled Local Loop Offer shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The reference offer referred to in para. 1 herein shall include the general provisions regulated under Art. 5, para. 2 herein, and also the following:

- 1) conditions under which a request by a user-operator to use relevant services may be rejected;
- 2) conditions for the transition of a user-operator from a full to a shared unbundled access to the local loop;
- 3) conditions for the using the infrastructure;
- 4) conditions for the access of the user-operator's staff;
- 5) notification procedures and synchronization of the operation in the event of planned network or infrastructure modifications;
- 6) rights and obligations of the operator in respect to the end-user;
- 7) description of the service of full and shared access to the local loop and/or sub-loop accompanied by a list of all elements, equipment and documentation related to the given service.

Technical requirements of the reference offer referred to in para. 1 herein shall include the following:

- 1) conditions for access and usage of the local loop accompanied by technical regulations pertinent to the full unbundled access which shall include the

- following: availability, transmission technologies, interfaces, physical prerequisites, usage of each connection, operational back-up, specific demarcation point of liability;
- 2) conditions for access and usage of the local loop accompanied by technical descriptions pertinent to the shared unbundled access which shall include the following: responsibility for technical equipment, interfaces, usage of higher frequencies for data transmission;
 - 3) conditions pertinent to the protection from harmful interference and EM compatibility;
 - 4) description and conditions pertinent to the access to information system so as to enable efficient service provision of the access to the unbundled local loop, whereby the system shall enable the user-operator to perform the following: send and track the requests, report interferences and have access to issued bills;
 - 5) procedures and conditions pertinent to interoperability testing;
 - 6) procedures and conditions pertinent to maintaining the QoS and the level of service provided;

The reference offer referred to in para. 1 herein shall include the commercial conditions regulated under Art. 5, para. 4 herein, and also the following:

- 1) prices of services with specified scope of work, list of all elements, equipment and documentation required for the provision of specific service;
- 2) prices for:
 - 2.1 one-off set-up fee for a single unbundled access to the local loop;
 - 2.2 monthly charge for unbundled access to the local loop;
 - 2.3 cancellation and disconnection;
 - 2.4 revocation of request;
 - 2.5 transition from shared to full unbundled access to the local loop;
 - 2.6 unjustified request for interference removal .

The reference offer referred to in para. 1 herein shall include the appendices pursuant to Art. 5, para. 5 herein, an also the following:

- 1) Request by an operator to close a contract on unbundled access to the local loop ;
- 2) Request form for a single access to the local loop;
- 3) Statement by a subscriber on the intention to close a contract with the user-operator;
- 4) Statement on the obligation to pay any outstanding debt to the operator that provided the services used;
- 5) Request form for malfunction/interference removal.

Reference Offer for the Services of Access to Network Elements and Associated Facilities

Article 9

Reference offer for the services of access to network elements and associated facilities (collocation and cable duct usage) shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The reference offer referred to in para. 1 herein shall include the general provisions regulated under Art. 5, para. 2 herein, and also the following:

- 1) conditions for collocation that may be physical, virtual or remote collocation;
- 2) conditions for the usage of the associated infrastructure;
- 3) rules for the usage of the collocation space;
- 4) access conditions for staff of the user-operator;
- 5) conditions for the commencement and termination of collocation service and the minimum time of duration;
- 6) conditions for the space allocation at the locations where the collocation space is limited and definition of alternative technical requirements for the access and usage of the local loops;
- 7) notification procedures and synchronization of the operation in the event of planned network or infrastructure modifications;
- 8) conditions for the installation and usage of cable ducts and possible limitations.

The technical requirements of the reference offer referred to in para. 1 herein shall include the following:

- 1) requirements pertinent to the protection from harmful interferences and EM compatibility;
- 2) procedures and conditions pertinent to maintaining the QoS and the level of service provided;
- 3) possible usage limitations in the collocation spaces;
- 4) human life and health protection measures;
- 5) compliance with the fire prevention requirements.

The reference offer referred to in para. 1 herein shall include commercial conditions regulated under Art. 5, para. 4 herein, and also the following:

- 1) prices of services with specified scope of work, list of all elements, equipment and documentation required for the provision of specific service;
- 2) prices of:
 - 2.1. one-off collocation set-up fee;
 - 2.2. monthly collocation charge;
 - 2.3. monthly cable duct charge.

The reference offer referred to in para. 1 herein shall include the appendices in accordance with Art. 5, para. 5 herein, and also the following:

- 1) Request for collocation service provision;
- 2) Request for cable duct lease.

Reference Offer for Leased Lines Services

Article 10

Reference offer for leased lines services shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The reference offer referred to in para. 1 herein shall include general provisions regulated under Art. 5, para. 2 herein and the procedures pertinent to the modification of type or capacity of a leased line.

The technical requirements of the reference offer referred to in para. 1 herein shall include the following:

- 1) characteristics of the leased line subject of the offer (digital line of specific bitrate between two points in the network of an SMP operator, through which the user-operator provides electronic communication service);
- 2) conditions pertinent to leased line set-up:
 - 2.1. geographic location of terminal points;
 - 2.2. testing procedure and conditions during a specified period;
- 3) procedure and conditions pertinent to the maintenance of QoS and the level of service provided, in particular maintenance, detection and removal of interferences, suspension and/or termination of service provision.

The reference offer referred to in para. 1 herein shall include commercial conditions regulated by Art. 5, para. 4 herein, and also the following fees and specified discounts pertinent to:

- 1) service set-up;
- 2) leased line usage;
- 3) terminal equipment lease;
- 4) relocation of leased line terminal points;
- 5) increase/decrease of the leased line capacity (bitrate);
- 6) leased line reconnection (after a temporary disconnection);
- 7) monthly charge.

The reference offer referred to in para. 1 herein shall include the appendices in accordance with Art. 5, para. 5 herein, and also the following:

- 1) Leased lines service specification:

- 1.1. tables containing technical characteristics of the leased lines which are subject of the reference offer;
- 1.2. tables containing type of interface for terminal equipment being leased to a user-operator;
- 2) Request to close a contract on leased lines service provision;
- 3) Request form for malfunction/interference removal;
- 4) Request form for leasing additional capacities and/or modification of bitrate of the leased capacities.

The reference offer for leased lines services shall include the capacities stipulated under general bylaw of the Agency regulating the volume and content of the minimum set of leased and the capacities up to 1 Gb/s regardless of technology.

Reference Offer for Broadband Services

Article 11

The reference offer for broadband services shall include general provisions, technical requirements and commercial conditions and relevant appendices.

The reference offer referred to in para. 1 herein shall include general provisions regulated by Art. 5, para. 2 herein, and also the following:

- 1) conditions for service commencement and provision;
- 2) possible reasons for the request denial and/or service provision termination;
- 3) procedure for migration of a user/operator from one service to another;

The technical requirements referred to in para. 1 herein shall include the following:

- 1) ways of broadband service realization;
- 2) access points for all types of broadband services;
- 3) types and description of all available interfaces and relevant protocols;
- 4) types of access lines;
- 5) reference level of service in regard to set-up of access and data transmission, data transmission and authentication;
- 6) conditions and the procedure for connecting the user-operator to electronic communication network of an SMP operator;
- 7) modification of technical parameters;
- 8) conditions for access to operation support systems, IT systems and data bases;
- 9) manner and conditions for the maintenance of the QoS and level of service provided;
- 10) reference conditions of the contract on broadband service usage including maintenance, interference detection and removal, suspension and/or termination of service provision.

The commercial conditions of the reference offer referred to para. 1 herein shall be regulated in accordance with Art. 5, para. 4 herein.

The reference offer referred to in para. 1 herein shall include the appendices in accordance with Art. 5. para. 5 herein, and also the following:

- 1) List of regional access points;
- 2) Service request;
- 3) Request form for the procedure of migration by a user-operator to another technology applicable to service provision;
- 4) Request form for malfunction/interference removal.

Reference Offer Authorization and Modification Procedure

Article 12

Should the Agency find that the reference offer has not been prepared and published in accordance with the Law, this Rulebook and other bylaws of the Agency, the Agency may request modification of the reference offer.

The reference offer shall be liable to modifications, in line with the technological and market changes.

An SMP operator shall be required to publish any modification of the reference offer on their website and to submit it to the Agency.

The modification of the reference offer referred to in the previous paragraph herein shall be applied 30 days following the day of its publication.

The Agency shall publish reference offers on its website.

Transitional and Final Provisions

Article 13

The day this Rulebook enters into force the Rulebook on general terms and conditions for interconnection of public telecommunications networks (*Official Gazette of RS*, no. 53/08) shall cease to be valid.

Article 14

The contracting parties, where at least one is an SMP operator, shall be required to align any closed contracts regulating interconnection, access and unbundles access to the local loop with the reference offers prepared in accordance with this Rulebook, no later than 30 days following the beginning of application of the relevant reference offer.

Article 15

This Rulebook shall enter into force on the eighth day following the publication in the *Official Gazette of the Republic of Serbia*.

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Chairman of the Managing Board

Belgrade, 26 August 2011

Prof. Dr. Jovan Radunovic