

Pursuant to article 17. paragraph 1. item 15. of Decision on the Establishment of IT and Communication Institution "Academic Network of the Republic of Serbia – AMRES" ("Official Gazette of the Republic of Serbia", No. 28/10, 35/12, 46/13), article 25. paragraph 1. item 13) Statute of IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES" ("Official Gazette of RS", No. 28/10, 35/12, 46/13) No. 022-31/2015 dated 1 April 2015 for which the Government gave consent by decision (Official Gazette of RS, No. 46/15) and article 7. of Policy on General Rules of Access to and Use of AMRES Services No. 022-30/2015/2 dated 01.04.2015, for which the Government gave consent by decision ("Official Gazette of RS", No. 33/15) Managing Board of IT and Communication Institution "Academic Network of the Republic of Serbia – AMRES", at the meeting held on # made

TERMS FOR PROVISION OF IDENTITY FEDERATION SERVICES - DRAFT

The Subject of Regulation

Article 1.

These terms, with their annexes, regulate more closely the way in which Identity Federation services, rights and liabilities of IT and Communication Institution "Academic Network of the Republic of Serbia – AMRES" (hereinafter referred to as: AMRES), Users and Partners of Identity Federation service are provided.

Meaning of Specific Terms

Article 2.

Specific terms used in these terms shall have the following meaning:

- 1) Decision on the Establishment of AMRES** is Decision on the establishment of IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES" ("Official Gazette of the Republic of Serbia", No. 28/10, 35/12, 46/13), i.e. the Government enactment whereby AMRES was established.
- 2) AMRES** is IT and Communication Institution "**Academic Network of the Republic of Serbia - AMRES**".
- 3) Acceptable Usage Policy** (available in the Appendix 1) is Policy on General Rules of Access to and Use of AMRES Services which, inter alia, regulate general rules and the way of using AMRES infrastructure and services provided by AMRES, connection of AMRES users to AMRES infrastructure, as well as what is considered to be prohibited, and what is considered to be permitted use of AMRES infrastructure and services provided by AMRES.
- 4) User of AMRES services** is every legal entity or natural person (physical entity) that can use the services provided by AMRES in accordance with Decision on the establishment of AMRES and all further modifications and amendments of that decision and Acceptable Usage Policy, as well as other legal and physical entities allowed by AMRES directly or indirectly to use AMRES resources.
- 5) AMRES User** is every User of AMRES services that has the capacity of legal entity and that has signed agreement on terms of using AMRES services in accordance with

Acceptable Usage Policy, and that uses AMRES services by direct, indirect, continuous or temporary connection to AMRES infrastructure.

- 6) **AMRES End Users** are users of AMRES services who are natural persons (physical entities) or who exercise their right to AMRES services via AMRES users in accordance with Decision on the establishment of AMRES.
- 7) **End Users** are AMRES end users to whom their institution has issued digital identity in capacity of Home organisation within the Identity Federation Service. Exceptionally, end users are also deemed to be end users of other federations with whom AMRES makes interfederation.
- 8) **Attribute** is any data about an End User that describes him/her, represents his/her characteristics or role at Home organisation. rsEdu attribute scheme is prescribed by AMRES and available on AMRES website is used within Identity Federation Service.
- 9) **Digital identity** is the set of attributes assigned to an End User.
- 10) **Identity Management** covers all processes which are included in registration and maintenance of digital identities.
- 11) **Authentication** is the process by which, based on credentials of an end user (e.g. user name and password), his/hers identity is confirmed.
- 12) **Authorization** is the process of granting or denying access to the service or assigning appropriate privileges to the end user who was previously authenticated.
- 13) **Home organisation** is AMRES user that performs identity management and authentication of its end users.
- 14) **Service Provider** is legal entity which provides services intended for all or for specific end users.
- 15) **Identity Federation Service or Identity Federation** is the AMRES service by which identity federation is realized for AMRES needs, and within which Home organisations and Service Providers cooperate with the aim of authentication and exchange of appropriate data about end users in order to enable use of service.
- 16) **Identity Federation User** is AMRES user who has signed the agreement for Identity Federation User. Identity Federation User may be in capacity of Home organisation and/or Service Provider.
- 17) **Identity Federation Partner** is a legal entity that does not have the status of AMRES user, and that has signed agreement for Identity Federation Partner. Identity Federation Partner may be exclusively in capacity of Service Provider.
- 18) **Identity Interfederation** is voluntary cooperation of two or several identity federations in order to enable the end user from one identity federation to use the service of Service Provider of the other identity federation.
- 19) **AMRES services within Identity Federation** are defined in accordance with appropriate use of Authentication and Authorization technologies. These technologies determine which types of shared services can be provided by means of AMRES services within Identity Federation, such as: wireless Internet access via the *eduroam* service, web services via the *iAMRES* service, etc.
- 20) **AMRES website** is official AMRES web page where Acceptable Usage Policy, news and other documents, information about AMRES services and other information of importance for AMRES users are published.

Identity Federation

Article 3.

Identity Federation enables and facilitates introduction of shared services for the needs of AMRES users and AMRES end users. Shared services which are enabled via AMRES services within Identity Federation are as follows: wireless Internet access via the *eduroam* service, access to shared web services via the *iAMRES* service, etc.

AMRES services within Identity Federation are realized by using technologies which enable expansion of digital identity provided to the user by Home Organisation to Service Provider's domain. These services are designed in such way that related types of shared services that require specific technical implementation of infrastructure for authentication and authorization rely on Identity Federation throughout. Terms of using individual AMRES services available within Identity Federation are described in their specific terms of use which are posted on AMRES website. Within Identity Federation, Home Organisations perform identity management and authentication of its end users. Additionally, within certain AMRES services in Identity Federation, Home Organisations may send certain attributes from digital identities of their end users to Service Providers.

Service Providers rely on Home Organisations to perform authentication of their end users via Identity Federation. Within AMRES services in Identity Federation, Service Providers may use the attributes from digital identity of end users in order to perform authorization of users, personalization of services or because they are necessary for proper functioning of services.

Eligibility

Article 4.

Identity Federation service is provided free of charge and in accordance with Acceptable Usage Policy, these terms, related annexes and other terms that regulate use of individual AMRES services in Identity Federation, appropriate instructions and technical characteristics which are available on AMRES website, with all their further modifications and amendments.

The governance of the Identity Federation is entirely allocated to AMRES.

Identity Federation Users and Partners

Article 5.

AMRES user who wants to become Identity Federation User files written application (hereinafter referred to as: user's application). Within the user's application, AMRES user highlights AMRES services in Identity Federation that he/she wants to use.

Identity Federation User may be in capacity of Home Organisation, Service Provider or simultaneously of Home Organisation and Service Provider, which is specified in the user's application.

With the user's application, AMRES user who wants to be in capacity of Home Organisation should submit information in which it describes the way in which identity management is performed. It is desirable to, within this information, include description of life cycle of digital

identity of end users, the process of creation, maintenance and removal of digital identities of end users, as well as administrative processes and technologies used during identity management. AMRES reserves the right to make this information available to other Identity Federation Users and Partners, upon their request if it is necessary for provision of their services.

Identity Federation User Agreement, as well as agreement for those AMRES services in Identity Federation that the AMRES user wants to use, will be made with such AMRES user fulfilling all the conditions from Decision on the establishment of AMRES, Acceptable Usage Policy and these terms.

The list of Identity Federation Users as well as AMRES services used within it are published on AMRES website.

Article 6.

Legal entity which does not have the status of AMRES user, and which wants to become Identity Federation Partner files written application (hereinafter referred to as: partner's application).

Identity Federation Partner may be only in capacity of Service Provider.

Legal entity with which AMRES has made Identity Federation Partner Agreement and agreement for certain AMRES services within Identity Federation, shall be deemed to be Identity Federation Partner.

The list of Identity Federation Partners and AMRES services used in Identity Federation, are published on AMRES website.

Article 7.

Legal entity may stop being User i.e. Partner of Identity Federation or certain AMRES service within Identity Federation if:

- it files written request to AMRES for termination of the status of Identity Federation User or Partner, or termination of use of certain AMRES service in Identity Federation;
- any basis, on which it gained the status of Identity Federation User or Partner is changed;
- it breaches terms of Identity Federation Services, or individual AMRES services within Identity Federation;
- it does not comply with rules on permitted and prohibited use of AMRES infrastructure and services provided by AMRES which are prescribed in Acceptable Usage Policy;
- the agreement is terminated.

Rights and Liabilities of Identity Federation Users and Partners

Article 8.

Identity Federation Users and Partners are obliged, inter alia:

- to proceed in accordance with these terms, all related annexes and other terms for individual AMRES services in Identity Federation that they use and all their further modifications and amendments;
- cooperate with AMRES and other Identity Federation Users and Partners in order to deal with incidents and problems related to the service;

- to ensure that their IT systems used for purpose of using individual AMRES services in Identity Federation are maintained in accordance with terms of their use and best practices and regulations related to security;
- to comply with regulations that regulate the field of IT security and the field of personal data protection.

Identity Federation Users which are Home Organisations are also obliged to:

- assign digital identities to persons who are their employees, associates, students or pupils, i.e. those persons who are affiliated to that institution;
- perform identity management of their end users in the way that correctly and accurately registers and keeps them up to date, as well as to follow recommendations in this field which are developed by AMRES, inter alia;
- notify AMRES about the changes in identity management process;
- notify their end users about their rights and liabilities in accordance with these terms and to make sure that those end users comply with them;
- provide support to their end users related to Identity Federation and AMRES services being used within it. Support should be available during working hours at minimum.

Identity Federation Users and Partners who are in capacity of Service Providers are also obliged to:

- report each of them separately to AMRES, if they offer several services;
- provide service via Identity Federation only for purpose and in the way reported to AMRES by them.

Article 9.

All Identity Federation Users and Partners have the right to report and it is recommended that they report incidents to AMRES in cases when those incidents may negatively affect the safety, reliability or reputation of AMRES or any other Identity Federation User or Partner. Those incidents may be related to: security violation, incorrect use or abuse of service, problems in service operation, and changes in access control (e.g. to allow or to deny access to certain user or to the entire institution).

Additionally, rights of Identity Federation Users and Partners are also all other rights arising from these terms and all related annexes and other terms for individual AMRES services in Identity Federation.

Rights and Liabilities of End Users

Article 10.

End users are liable for using their digital identities, issued by Home Organisation.

End users are obliged, inter alia:

- to give correct information to their Home Organisation, in order to obtain digital identity;

- to notify their Home Organisation in case of modification or observed incorrect information about their digital identity;
- to maintain confidentiality of credentials, i.e. data by which they prove their identity (e.g. user name and password), and not to share them with other persons to be used by them;
- to notify their Home Organisation in case their credentials are compromised;
- to use shared services available within Identity Federation in accordance with their terms of use and liabilities arising from annexes and relevant terms of use.

Article 11.

End users have the right to use all services available via Identity Federation, in accordance with access terms specified by related Service Providers.

Rights and Liabilities of AMRES

Article 12.

AMRES is obliged, inter alia:

- to provide planning, construction, maintenance, management and supervision of Identity Federation, AMRES services in Identity Federation and central services it provides within them, in a secure and reliable manner and in the way described in these terms and all related terms of use of AMRES services in Identity Federation;
- to implement Identity Federation and provide AMRES services in Identity Federation in continuity and in accordance with available technical and human resources, as well as to maintain their quality in accordance with availability of resources;
- to provide support to Identity Federation Users and Partners at the beginning of use of this service and in solving of operational problems related to use of Identity Federation and individual AMRES services in Identity Federation;
- to maintain relationship with national and international interest groups in the field of Identity Federation, e.g. for the purpose of implementation of interfederation and to work with other identity federations to ensure inter-operability;
- to disable Identity Federation User or Partner to use this or individual AMRES service in Identity Federation as soon as possible from the moment of losing of their status;
- to warn Identity Federation User or Partner in the case that it breaches terms of Identity Federation or certain AMRES services in Identity Federation;
- to make decision about applications for acquiring the status of Identity Federation User and Partner;
- to establish terms for provision of Identity Federation including technical and organizational rules, procedures and recommendations.

Article 13.

Within Identity Federation, AMRES reserves right, inter alia:

- to, temporarily or permanently, suspend the use of Identity Federation or individual AMRES services in Identity Federation to the Identity Federation User or Partner who

violates its secure and reliable operation or breaches its conditions. Suspension is imposed in accordance with these terms as well as with appropriate implementation of Acceptable Usage Policy;

- due to correction of defects, maintenance and construction, or due to overload of AMRES infrastructure to stop temporarily, partially or completely or to decrease quality of Identity Federation or AMRES services in Identity Federation;
- in order to promote Identity Federation, to publish the list of Identity Federation Users and Partners and AMRES services in Identity Federation being used;
- to cooperate with other identity federations by acceding to interfederations.

Article 14.

AMRES, Identity Federation Users and Partners are obliged to handle personal data, i.e. data sets of end users in accordance with current regulations of the Republic of Serbia.

AMRES has the role of intermediary between Home Organisation and Service Provider, and in this sense it is neither responsible for correctness of data about end users contained in the data sets of Home Organisation, nor for possible abuse of data committed by any Home Organisation or Service Provider.

AMRES is not liable for damage that end users, Identity Federation Users or Partners suffer via Identity Federation or AMRES services in Identity Federation, which includes but is not limited to decreased availability or unavailability of Identity Federation and AMRES service in Identity Federation, the services provided via them, damage arising from the act of other Identity Federation Users and Partners as well as any other problems arising in relation to Identity Federation.

Interfederation

Article 15.

In order to enable international cooperation, cooperation with other identity federations (interfederation) may be developed within Identity Federation. Details about the way (technical and administrative) in which Identity Federation User or Partner may participate in certain interfederation may be specified within individual AMRES services in Identity Federation.

Via interfederation, Identity Federation User and Partner may have interaction with organizations which are bound by regulations of other countries and their local identity federation terms which may be different from those within Identity Federation

Final Provisions

Article 16.

Acceptable Usage Policy shall be implemented to all issues not regulated by these terms.

Modifications and Amendments of Terms of Using Identity Federation Services

Article 17.

AMRES reserves right of modification and amendment of these terms and/or related annexes and terms of use which will be published on AMRES website. Identity Federation Users and Partners will be informed about modifications and amendments of these terms and/or related annexes in due time before they come into effect.

It shall be considered that identity Federation User or Partner agrees with modifications and amendments of these terms and/or related annexes and terms of use of AMRES services in Identity Federation, if he continues to have the status of Identity Federation User or Partner after receipt of notification.

Identity Federation User or Partner reserves the right to discontinue its status or use of individual AMRES services within Identity Federation in case that it does not agree with modifications and amendments of these terms and/or related annexes and other terms for individual AMRES services in Identity Federation.

Jurisdiction

Article 18.

All disputes between the contracting parties arising from the Agreement will be resolved by agreement (negotiation), and if no agreement is reached on the disputed issue, the dispute will be resolved by the competent court in Belgrade, or the competent court defined in the Agreement.

Coming into Force

Article 19.

These terms come into force within eight days from the date of their publication on AMRES notice board.

Number: #

Date: _____ 20____

APPENDIX 1

Pursuant to article 17. paragraph 1. item 14. of Decision on the Establishment of IT and Communication Institution "Academic Network of the Republic of Serbia – AMRES" ("Official Gazette of the Republic of Serbia ", Nos. 28/10, 35/12, 46/13), Managing Board of IT and Communication Institution "Academic Network of the Republic of Serbia" – AMRES, passed on 01 April 2015

ACCEPTABLE USAGE POLICY

-POLICY ON GENERAL RULES OF ACCESS TO AND USE OF AMRES SERVICES-

The Subject of Regulation

Article 1.

This Policy regulates general rules and the way of using AMRES infrastructure and services provided by IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES" (hereinafter referred to as: AMRES), connection of AMRES users to AMRES infrastructure, as well as what is considered to be prohibited and what is considered to be permitted use of AMRES infrastructure and services provided by AMRES, the mechanism of preserving their correct use, as well as other issues of importance for regulating the way of using AMRES infrastructure and services.

Meaning of Specific Terms

Article 2.

The terms used in this Policy shall have the following meaning:

- 1) **Decision on the Establishment of AMRES** is Decision on the Establishment of IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES" ("Official Gazette of the Republic of Serbia ", No. 28/10, 35/12, 46/13), i.e. Government Act by which AMRES is founded for purpose of construction, development, improvement and management of educational and scientific-research computer network of the Republic of Serbia, which is informatics and Internet infrastructure, i.e. computer network which provides to users of AMRES services, educational and scientific-research organizations and other users in the Republic of Serbia the access to and use of the Internet and information-communication services locally, connection with national and international network of this type, as well as for coordination of prevention and protection against safety risk in ICT systems in the Republic of Serbia at national level.
- 2) **AMRES** IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES".
- 3) **User of AMRES services** is every legal entity or natural person (physical entity) that can use the services provided by AMRES in accordance with Decision on the Establishment of AMRES and any further modifications and amendments of that decision, as well as other legal and physical entities allowed by AMRES directly or indirectly to use AMRES resources.
- 4) **AMRES user** is any User of AMRES service which has the capacity of legal entity and which has signed contract on terms and conditions of using AMRES services in accordance with this Policy and that uses AMRES services by direct or indirect, continuous or periodical connection to AMRES infrastructure.

- 5) **AMRES end users** are Users of AMRES services who are natural persons (physical entities) or who exercise their right to AMRES services via AMRES users in accordance with Decision on the establishment of AMRES.
- 6) **AMRES infrastructure** is scientific-research and educational computer network of the Republic of Serbia in functional and technical sense, together with external connections which connect it with the environment (Internet, GEANT, other providers, etc.) and server-computer infrastructure. It includes all devices owned by or rented by AMRES and all telecommunication links that AMRES owns or rents from telecommunication providers.
- 7) **AMRES services** are all information-communication services provided by AMRES to AMRES users who exercise their right, either directly or indirectly, via AMRES infrastructure.
- 8) **AMRES resources** include AMRES services, AMRES infrastructure, pertaining public and private IP address area, pertaining DNS domains, software resources, pertaining IT data, as well as personnel involved in management and maintenance of the said resources.
- 9) **AMRES site** is official AMRES web page where policies, news and other documents, information about AMRES services and other information of importance for AMRES users are posted.
- 10) **AMRES Managing Board** is AMRES body whose constitution and competences are established by Decision on the Establishment of AMRES.
- 11) **Communication hub** is the technical space at the location of AMRES, AMRES user or any third party at which communication links are terminated and at which communication and software equipment is located
- 12) **AMRES access point** is any location of AMRES infrastructure where communication devices connected to AMRES infrastructure are located by which at least two other AMRES users are connected. AMRES user assumes the role of AMRES access point when at least one more AMRES user is connected to AMRES infrastructure via communication hub of AMRES user.
- 13) **Agreement on temporary allocation of AMRES equipment with the aim of using AMRES network and services** is the agreement which regulates mutual rights and liabilities of the parties with regard to AMRES equipment and devices which are allocated in the premises of AMRES users as well as equipment to be allocated in future.
- 14) **Allocation of equipment** means handing over of equipment to AMRES user to be used by it, installation in the premises of AMRES user which provides technical conditions for accommodation of equipment, keeping of equipment and technical assistance during maintenance of equipment. Equipment is temporarily allocated in the premises of AMRES User. Allocation of equipment does not mean management of such equipment by User, unless AMRES decision stipulates otherwise.
- 15) **Area of responsibility** is the set of information-communication resources (communication devices and client equipment, software on these devices and connections between them) for correct operation of which certain institution is responsible.
- 16) **Demarcation point** is the point in communication infrastructure which separates the areas of responsibility of AMRES and AMRES users, i.e. the point where AMRES responsibility is finished, and where the responsibility of AMRES user for correct functioning of all devices and connections starts.
- 17) **Permitted use** is direct or indirect use of AMRES resources which is in accordance with provisions of this Policy.
- 18) **Prohibited use** is direct or indirect use of AMRES resources which is contrary to provisions of this Policy.

19) **AMRES traffic** is transmission of data across any part of AMRES infrastructure and it can be classified into the following categories:

Internal traffic is the traffic performed along its entire route within AMRES infrastructure (e.g. the traffic between devices of two AMRES users).

External traffic is the traffic performed along the part of its route within AMRES infrastructure, and partly via infrastructure of other providers and computer networks (e.g. the traffic between devices of AMRES users and devices in the network of an Internet provider), and which may be:

Local traffic is the traffic between devices connected by means of AMRES infrastructure and devices connected by means of any other network outside AMRES infrastructure in the Republic of Serbia, which does not go beyond the territory of the Republic of Serbia while it passes through communication links,

International traffic is the traffic between the devices connected via AMRES infrastructure and the devices connected via any other network outside the Republic of Serbia.

Transit traffic is the traffic which passes through AMRES infrastructure, and which is performed between computer network AMRES.

User of AMRES Services

Article 3.

The following legal entities may be users of AMRES services in accordance with Decision on the Establishment of AMRES:

- institutions established and accredited in accordance with regulations that regulate the area of education, upbringing and higher education which are founded by the Republic of Serbia, autonomous province, city and municipality, other legal or physical entity, irrespective of the way in which means for performing the activity are provided;
- accredited scientific-research organizations which are established in accordance with regulations that regulate the area of scientific-research activities;
- libraries;
- students' and pupils' dormitories;
- Serbian Academy of Sciences and Arts;
- Matica srpska;
- teaching hospitals for education in medicine;
- research-development units within the companies founded by the Republic of Serbia;
- other legal entities which are of special interest for the field of education, science and culture;
- state administration authorities when it is in the interest of AMRES development.

Physical entities may be users of AMRES services in accordance with Decision on the Establishment of AMRES.

AMRES User

Article 4.

AMRES user may use AMRES services if:

- it is a legal entity;
- it is user of AMRES services in terms of item 3. of this Policy, i.e. if it has the status of User of AMRES services in accordance with and in the way stipulated by Decision on the Establishment of AMRES and all further modifications and amendments of that decision;
- it has signed agreement on term for using AMRES services.

AMRES user cannot assign its right to use acquired based on this Policy and agreement made to any third parties.

Article 5.

AMRES user which wants to use AMRES services files written application (hereinafter referred as: application) with documents with which it proves that it complies with condition from article 3. paragraph 1. of this Policy.

Agreement on terms for using AMRES services shall be made with AMRES user which complies with all conditions from Decision and from this Policy.

AMRES End User

Article 6.

Physical entities may become AMRES end users if they have the status of employees, pupils, students or foreign researchers in organizations of AMRES users.

Article 7.

Special agreements are made for using of certain AMRES services. AMRES services for which special agreements have to be made are listed at AMRES website. Signing of these agreements is a pre-condition for using such services.

Article 8.

AMRES user may stop using AMRES services:

- at the request of AMRES user;
- by termination or dissolution of AMRES user as a legal entity, as well as termination of AMRES user as a legal entity in accordance with regulations that regulate the area of public services, public companies, public institutions, companies, education, upbringing and higher education and scientific-research activities;
- by change of activity, status change or change of legal form of AMRES user based on which legal entity which is not considered to be User of AMRES services in terms of Decision on the Establishment of AMRES was created;
- in cases of unacceptable use of AMRES infrastructure;
- if AMRES user does not proceed in accordance with provisions of AMRES services;

- by termination of agreement;
- by failure to meet any term from article 4. of this Policy, and such failure occurred after acquiring AMRES user status.

General Rules and the Way of Connecting to AMRES Infrastructure

Article 9.

AMRES users which have signed Agreement on Connection to AMRES infrastructure have right to be connected to AMRES infrastructure.

By connecting to AMRES infrastructure, mutual connection, connection with other academic, scientific-research and educational institutions in the Republic of Serbia, all over Europe and all over the world, as well as with the Internet, as well as using of services provided by AMRES are enabled to AMRES users.

Connection means physical or logical connection of computer-communication network of AMRES user to AMRES infrastructure. Connection of AMRES user is performed by full physical and logical realization of communication link from AMRES user to AMRES access point.

Connection of AMRES users to AMRES infrastructure means only connection of communication and computer devices belonging to the AMRES user or the AMRES end user of that AMRES user.

AMRES user cannot assign its right to connect to AMRES infrastructure to third parties - either physical and legal entities.

AMRES user connected to AMRES infrastructure must not connect to AMRES infrastructure, either directly or indirectly, provide or enable use of AMRES infrastructure or services or allocate rights of AMRES users, commercially or free of charge, to other legal or physical entities for which AMRES did not give approval that they may use AMRES resources and be connected to AMRES infrastructure.

Procedure of Connecting AMRES User to AMRES Infrastructure

Article 10.

AMRES user that wants to be connected to AMRES infrastructure files application for connection to AMRES infrastructure.

Elaboration of Technical Solution

Article 11.

Based on data contained in the application of the applicant, physical and logical topology, AMRES network, physical and technical capacity of access points of AMRES infrastructure, equipment and links, and in accordance with AMRES Financial Plan and Annual Programme of Maintenance, Organization and Functioning of IT and Communication Institution "Academic Network of the Republic of Serbia - AMRES" for the current year, AMRES will make proposal of technical solution for connection of AMRES users to AMRES infrastructure.

Article 12.

AMRES user undertakes, based on proposed technical solution for connection and the way of connection, to make decision whether it accepts the proposal of that solution and to inform AMRES about it.

If AMRES user accepts proposed technical solution, AMRES user and AMRES sign Agreement on Connection to AMRES Infrastructure which defines rights and liabilities of AMRES user in more details.

The stage of making Connection is started after signing of agreement from the previous paragraph of this article.

Connection of Additional Locations of AMRES Users

Article 13.

If AMRES user has several locations where business units of AMRES users are located, it has to file request, i.e. application for connection in accordance with previous articles of this Policy for every new location that AMRES user wants to connect to AMRES infrastructure.

Provisions that regulate the procedure of connection to AMRES structure are implemented to connection of new locations of AMRES user.

Annex to Agreement on Connection to AMRES Infrastructure is made about connection of new location of AMRES user to AMRES infrastructure.

Technical and Financial Conditions for Connection to AMRES Infrastructure

Article 14.

Technical conditions for connection to AMRES infrastructure comprise equipment with which logical and physical connection to AMRES infrastructure is made and communication links to AMRES infrastructures.

Equipment for Connection to AMRES Infrastructure

Article 15.

Equipment for logical or physical connection comprises at least rack tower of appropriate physical characteristics and active network device and possibly other elements (e.g. uninterrupted power supply units, convertors or signal amplifiers, multiplexers, etc) (hereinafter referred to as: equipment).

Equipment necessary for connection to AMRES infrastructure is generally procured by AMRES in accordance with funds allocated for that purpose in AMRES Financial Plan.

Equipment procured by AMRES is installed at the location of AMRES user and in this case Agreement on Temporary Allocation of AMRES Equipment with the aim of using AMRES network is signed.

Article 16.

If AMRES is not able to provide and to hand in the equipment of appropriate characteristics for use, AMRES user may provide appropriate equipment at its own cost in accordance with AMRES technical solution from articles 13. and 14. of this Policy.

AMRES user which provided equipment at its own cost is obliged, before connection to AMRES infrastructure, and upon AMRES request, to submit to AMRES data related to the device at which connection to that AMRES user is terminated – manufacturer, type, model, version of unit and its operating system and/or other pertaining elements (interfaces, transceivers, et).

AMRES user has to inform AMRES about change of any data referring to the device on which connection is terminated towards that AMRES user.

Article 17.

AMRES user bears operating costs of labour and maintenance of installed equipment at the location of AMRES user (electricity, air conditioning, physical-technical safety, fire protection, etc.).

Accommodation of Equipment

Article 18.

AMRES communication and server equipment necessary for connecting AMRES users and providing AMRES services is accommodated in the premises of AMRES users or in the collocation premises rented from the providers of collocation services.

AMRES user is obliged to enable accommodation in its premises of AMRES equipment necessary for connecting that AMRES user and/or connecting other AMRES users to AMRES infrastructure via location of that AMRES user.

AMRES user from paragraph 2. of this article is obliged to provide physical premises of appropriate characteristics, to enable accommodation and installation of rack tower in which optical access network is terminated, as well as accommodation and installation of active network equipment necessary for activation of physical and logical connections towards AMRES infrastructure.

Premises for accommodation of necessary equipment have to meet the following conditions:

- Access to the premises and equipment has to be controlled and enabled only to AMRES personnel, employees in charge of information-communication infrastructure of AMRES user at whose location the equipment has been located and employees of telecommunication provider that made connection to AMRES user.
- The premises must have sufficient room for smooth installation of rack tower for accommodation of equipment and for smooth opening of rack tower doors.
- They must have minimum two sockets for electric supply network (voltage 220V), for electric power supply of the equipment installed in the rack tower. The sockets must be located in close proximity to the area where the rack tower will be installed.
- They must have appropriate cable infrastructure for connection of local computer-communication network of AMRES user to the access device.
- The premises for accommodation of equipment should be air conditioned, with the temperature in the range from 15 to 29 degrees Celsius.

If the hub of AMRES user does not have the status of AMRES access point, is preferable for AMRES user to purchase and to install independently the unit for uninterrupted power supply of communication equipment necessary for connection to AMRES infrastructure.

AMRES user is obliged to provide fire protection in the premises for accommodation of equipment in accordance with regulations that regulate this area.

Any interventions on AMRES devices located in the premises of AMRES user are allowed only with AMRES approval (e.g. resetting, change of cable, connection of other units, etc).

Communication Links to AMRES Infrastructure

Article 19.

AMRES user may be connected to AMRES infrastructure in one of the following ways:

- **Type 1 connection:** connection of AMRES user to AMRES infrastructure where the costs of rental of communication link to AMRES infrastructure in accordance with allocated funds in Financial Plan are borne by AMRES or where the costs or rental are covered via special projects and grants.
- **Type 2 connection:** the way of connecting AMRES user to AMRES infrastructure where AMRES user bears the costs of rental of communication link to AMRES infrastructure.

The way in which AMRES user will be connected is determined by technical solution for connection.

Rights and Liabilities of AMRES Users

Rights and Liabilities of AMRES User connected by Type 1

Article 20.

AMRES user connected by type 1 undertakes to provide necessary permits and to enable works necessary for realization of optical or copper telecommunication network access or mounting of equipment for wireless connection necessary for implementation of physical or logical connection of AMRES user and other AMRES users to AMRES infrastructure.

Implemented telecommunication access cable or wireless network are used for connection of AMRES user in which it is built in, but it can be also used for connection of other AMRES users.

AMRES user connected with connection type 1 is obliged, at the request of AMRES, to allow connection of other AMRES users by using the connections by which this AMRES user is connected to AMRES.

AMRES user, via which other AMRES users are connected, gets the role of AMRES access point.

Article 21.

In AMRES access point AMRES attempts to provide and install active network device necessary for activation of connections to other AMRES users, as well as to install the uninterrupted power supply unit of appropriate power rating.

If AMRES is not able to provide devices from the previous paragraph of this article in AMRES access point, AMRES user which gets the role of AMRES access point should assign its network equipment for temporary use for purpose of connection of other AMRES users. In that case, network equipment of AMRES user is used till installation of AMRES device and it is fully managed by AMRES.

At the moment when AMRES provides necessary equipment for connection of AMRES user in AMRES access point, AMRES user is obliged to enable switching of connections towards other AMRES users to AMRES equipment.

Article 22.

AMRES user connected by type 1 undertakes, upon any AMRES request, to allow physical access to communication hub at the location of AMRES user: to authorized AMRES persons or to telecommunication service provider authorized by AMRES, for purpose of installation and

maintenance of connections, and only to authorized AMRES persons or equipment servicemen authorized by AMRES the access for purpose of installation and maintenance of AMRES network equipment, uninterrupted power supply units, etc.

Rights and Liabilities of AMRES User connected by Type 2

Article 23.

Connection by type 2 is generally used only for connection of the AMRES user which finances on its own connection to AMRES infrastructure.

AMRES user connected by type 2 which provided equipment for connection to AMRES infrastructure at its own cost can enable connection of other AMRES users if it wants so at the request of and with the consent of AMRES.

In case of the previous paragraph for connection of other AMRES users, active, network equipment of that AMRES user is temporarily used.

In case of paragraphs 2. and 3. of this article AMRES user is obliged to enable AMRES to replace its network equipment which is used in function of connection to AMRES infrastructure with AMRES equipment, when the need for temporary use of network equipment of that AMRES user terminates.

Article 24.

AMRES user connected by type 2 is obliged, during connection or at the request of AMRES, to submit data related to ownership over the link to AMRES access point, telecommunication provider of the link, link identifier, period of rental of link, link parameters, etc.

AMRES user connected by type 2 is obliged to enable to AMRES continuous contact with telecommunication provider and the possibility for AMRES to report problems to that provider and to monitor status of solving the problems of that connection.

In case of change of any data referring to access link to AMRES infrastructure, technical contact of AMRES user is obliged to report that change to AMRES.

Article 25.

AMRES user type 2 is obliged to enable receiving and sending of *ICMP* messages on the network device on which connection is terminated to AMRES infrastructure, and from and to AMRES system for supervision and monitoring of network performances and parameters. *ICMP* messages are used for monitoring of availability and quality of connection of AMRES user to AMRES infrastructure.

Termination of connection

Article 26.

AMRES has right to terminate certain access points. In case of termination of certain access point, AMRES will duly inform in writing AMRES user which has the role of access point, as well as AMRES users connected to that access point as soon as possible before termination of that access point.

In case from previous paragraph of this article AMRES will offer new technical solution for connection of that AMRES user to another access point and proposal of Annex to Agreement on Connection to AMRES infrastructure.

AMRES user can be disconnected from AMRES infrastructure if its status of AMRES user has been terminated, if it violates provisions of Agreement on Connection to AMRES infrastructure,

other agreements that AMRES user made with AMRES and provisions of other rule books adopted by AMRES.

Management, Control and Monitoring of IT and Communication Infrastructure

Article 27.

AMRES fully and without restriction manages independently, has full control of and supervision right over all networks, server and client devices it owns or rents, irrespective of where these devices are located.

AMRES has full control and exclusive right of use over all telecommunication links it has independently constructed, rented, obtained for use or which are rented by third parties for AMRES needs AMRES (e.g. SEELight project and similar).

AMRES user independently manages, has full control of and supervision right over all network, server and client devices owned by that AMRES user and used for the needs of AMRES user. AMRES user has control over the use of all connections it owns or rented by it independently for its own needs, and which connect information-communication devices of AMRES user.

Notwithstanding paragraph 3 of this article, AMRES has full control and exclusive right of use over communication devices located at AMRES access point and used for connection of AMRES users to AMRES infrastructure, irrespective of whether the same have been provided by AMRES user or AMRES.

Notwithstanding paragraph 4 of this article is the situation when several AMRES users share the same location (e.g. a building or a campus) and connection between them is made by local infrastructure owned by AMRES user. Then, one of AMRES users within the building, i.e. campus, may manage communication device by which AMRES users at that location are connected to AMRES infrastructure with written consent and authorization of all other AMRES users at the given location and with AMRES consent.

Notwithstanding paragraph 3 of this article, if device of AMRES user is used for connection of AMRES user which is not AMRES access point, AMRES user is obliged to enable passive supervision (e.g. receiving and sending of messages of *SNMP* protocol, etc.) on network device on which connection is terminated to AMRES infrastructure, from and to AMRES system for supervision and monitoring of network performances and parameters. *SNMP* messages are used for monitoring of availability and quality of the connection of AMRES user to AMRES infrastructure.

Notwithstanding paragraph 3 of this article, in case that AMRES user does not have qualified staff to make configuration, maintenance and supervision of its equipment for the needs of connection to AMRES, that activity can be assigned to AMRES only with previous agreement with AMRES, which is defined in more details by Agreement on Connection to AMRES Infrastructure, i.e. Annex to that agreement if the specified circumstances occur.

Demarcation Point

Article 28.

If AMRES has allocated communication device for connection of AMRES user to AMRES infrastructure and located it in the premises of AMRES user, demarcation point of responsibility between AMRES user and AMRES is the port on the AMRES device allocated to AMRES user via which local information-communication infrastructure of AMRES user is connected. AMRES is responsible for its own device allocated to AMRES user and for connection from appropriate

AMRES access point to it. AMRES user is responsible for physical connection from physical port of AMRES device to the remaining part of its local information-communication infrastructure and for its complete local information-communication infrastructure.

If AMRES user has provided on its own and independently manages the communication device for connection to AMRES infrastructure via telecommunication link rented or provided by AMRES, demarcation point of responsibility between AMRES user and AMRES is termination of telecommunication link (e.g. optical access network installed by provider, the block of copper twisted pair cables, etc.) by which AMRES user is connected to AMRES infrastructure AMRES user. AMRES is responsible for telecommunication link to the access network in AMRES user, and AMRES user for physical link from the access network to the device used for connection of AMRES user to AMRES, for the device itself and for complete local information-communication infrastructure of AMRES user.

If AMRES user has provided on its own the connection device for connection to AMRES infrastructure and telecommunication link to the nearest AMRES access point, demarcation point of responsibility is termination of telecommunication link (e.g. optical access network installed by provider, the block of copper twisted pair cables, etc.) by which AMRES user is connected to AMRES infrastructure and which is located in AMRES access point to which AMRES user is connected. AMRES is responsible for telecommunication device in AMRES access point and for connection to termination of telecommunication link of AMRES user being connected, and AMRES user for telecommunication link from AMRES user to AMRES access point and for complete information-communication infrastructure at the location of AMRES user.

If AMRES user has given AMRES control of its own communication device, in accordance with this Policy, demarcation point of responsibility between AMRES user and AMRES is the port on the device which AMRES user has given AMRES to control it, and via which local information-communication infrastructure of AMRES user is connected. AMRES is responsible for the given device and for connection from appropriate AMRES access point to it, and AMRES user for physical connection to that device and for complete local information-communication infrastructure of AMRES user.

General Rules and the Way of Using AMRES Resources

(prohibited and permitted use of AMRES resources)

Article 29.

Provisions of general rules and the way of using AMRES resources are implemented to and are obligatory for all AMRES users and third parties – users which make traffic with AMRES users or devices outside AMRES by means of AMRES infrastructure.

Provisions of general rules and the way of using AMRES resources are implemented in cases of internal, external or transit traffic, which at least partly passes directly through AMRES infrastructure or indirectly affects AMRES infrastructure and services.

Provisions of general rules and the way of using AMRES resources are implemented to use of all types of services provided by AMRES, unless special rule book which defines rules and the way of using that service otherwise has been adopted for certain services.

Article 30.

AMRES resources can be used strictly for achieving the goal for which AMRES was established, and especially for the needs of scientific-research work, education, science and culture. AMRES traffic generated for these purposes has higher importance and higher priority than all other traffic in the network.

Notwithstanding paragraph 1. of this article, AMRES users may use AMRES resources for performing other activities which contribute to development and improvement of scientific-research work and education, science and culture and which were undertaken to for that purpose.

AMRES users are obliged to use AMRES resources in accordance with paragraph 1. and 2. of this article and in the way which is allowed by this Policy.

AMRES will make efforts to provide services continuously and in accordance with available technical resources and personnel capacities as well as to maintain quality of services in accordance with technical abilities.

Prohibited Use of AMRES Resources

Article 31.

Prohibited use of AMRES infrastructure and services means behaviour and activities of AMRES users using AMRES infrastructure and services in the way contrary to article 32. of this Policy, and especially:

- 1) If it harms unhindered use of AMRES services, harms smooth operation and regular operation of AMRES infrastructure, harms and disrupts regular operation and safety of AMRES infrastructure and services, as well as resources of any other network or part of the Internet;
- 2) If it causes unjustified overload of AMRES resources or resources of other networks, as well as increased engagement of personnel on maintenance of these resources within AMRES, and especially for private purposes, except in cases which are in accordance with this Policy;
- 3) If criminal act or misdemeanour is committed by that in accordance with regulations of the Republic of Serbia;
- 4) If regulations that regulate copyrights and related rights are violated by that;
- 5) If it aims at unlawful acquisition of property;
- 6) If someone's personal rights are harmed or violated by that;
- 7) If it is contrary to regulations that regulate the area of personal data protection and confidentiality of data;
- 8) If this Policy, special rule books of individual services, if any, or agreements made by AMRES with AMRES users are violated by that;
- 9) If it is contrary to rules of any network by which or via which traffic is made by use of AMRES infrastructure and services;
- 10) If it causes child abuse via the Internet;
- 11) If distribution of unsolicited messages via email is performed by that;
- 12) If prohibited access, prohibited management and control, exploitation, modification, damage or destruction of resources or any data available within AMRES infrastructure



- or by using of AMRES infrastructure is made by using AMRES infrastructure and services;
- 13) if malicious software, such as viruses, worms, Trojan horses, etc. are spread knowingly or unknowingly by use of AMRES infrastructure;
 - 14) if AMRES user directly or indirectly connects to AMRES infrastructure, provides or enables use of AMRES infrastructure or services or assigns rights of AMRES users, commercially or free of charge, to legal or physical entities for whom AMRES did not give its consent that they can use AMRES resources;
 - 15) if it provides any IT services, which directly or indirectly include use of AMRES resources (e.g. hosting of servers and websites, email service, databases, transfer of data, etc.) for the needs of third parties which/who are not AMRES users, and which/who directly or indirectly use AMRES resources in this way, notwithstanding article 32. of this Policy;
 - 16) if it uses AMRES resources for advertising, promoting, representing or any other needs of legal or physical entities, political parties, religious organizations and other organizations or legal entities not related to scientific-research and educational work and culture;
 - 17) if it performs direct commercial activities aimed at making of profit, and which are contrary to article 32. of this Policy, such as selling of goods or services, advertising, betting, etc.;
 - 18) if it spreads national, religious, racial or sexual discrimination, hatred and intolerance, or other activities that insult, slander or disturb individuals or entire groups of people, such as threat, violation of religious, ethnical, political or other beliefs, etc.;
 - 19) if it creates, posts or resends insulting, slandering, violent, obscene or indecent pictures, data or other material, or any data which can be interpreted as such, except for legally permitted scientific-research, educational and cultural purposes;
 - 20) if it continues to use some AMRES resource or service after AMRES has asked to stop using them, in accordance with provisions of this Policy or special rule books of individual services, if any;
 - 21) if it does not proceed in accordance with warnings or decision of AMRES issued/made upon application or based on official duty.

Permitted Use of AMRES Infrastructures and Services

Član 32.

Any use of AMRES resources by AMRES user is allowed in cases not strictly prohibited by provisions of this Policy and current regulations of the Republic of Serbia.

It is allowed to use AMRES resources for posting or broadcasting of information contents of non-profit character, even if it is not directly related to scientific-research or education work, if it is in accordance with provisions of this Policy and if it does not harm functionality of AMRES resources.

It is allowed to use AMRES resources for private purposes (e.g. for private email traffic, etc.) if it is in accordance with provisions of this Policy.

Article 33.

AMRES may issue warning or make decision about suspension of certain services to AMRES users, i.e. use of AMRES resources, including the connection with AMRES infrastructure.

In emergency situations, in order to keep functionality and safety of AMRES resources, the warning may be issued subsequently, after suspension of service which is compromised.

AMRES user to whom some service is temporarily suspended due to violation of provisions of this Policy may contact AMRES to apply for re-establishment of the service.

Article 34.

AMRES is not liable for the damage suffered by AMRES users by using AMRES resources, unless it is the damage caused intentionally or by gross negligence of AMRES.

AMRES is not liable for the damage arising from works on maintenance and construction of network.

AMRES is not liable for the damage suffered by AMRES users due to reduced quality of traffic caused by interference, atmospheric conditions, physical obstacles or other reasons beyond control of AMRES, area coverage, reduced data flow in wireless transfer of data, temporary interruptions in network operation and Force Majeure.

If AMRES user uses in its network the device which is not compatible with AMRES network or is not adjusted for use on it or if it interferes with operation of AMRES resources, AMRES is not liable for inability to use AMRES resources.

Article 35.

AMRES is not liable for damage or violation of rights suffered by AMRES user due to prohibited actions in the sense of this Policy by that or by another AMRES user or a third party outside AMRES infrastructure.

AMRES is not liable to AMRES user or a third party for loss of data, unauthorized access of third parties to data of AMRES user and damage on the devices of AMRES user, resulting from a virus, etc. arising after connection of AMRES user to AMRES infrastructure or due to use of device contrary to manufacturer's instructions.

AMRES is not liable for damage or violation of rights suffered by a third party outside AMRES infrastructure due to prohibited actions in terms of this Policy by AMRES user.

AMRES is not liable for reduction of quality of AMRES services resulting from activity which is prohibited action in the sense of this Policy, as well as resulting from objective reasons which cannot be foreseen, avoided or overcome.

AMRES is not liable for information safety of the device controlled by AMRES user, including any possible damage on these devices due to prohibited use of AMRES resource.

AMRES users should keep and/or transfer data via the network taking into account limited safety. In any case, AMRES is not liable for any adverse events and for direct or indirect damage. AMRES is not liable for any possible damage of AMRES user arising from the use of any AMRES resource.

Article 36.

AMRES shall make efforts to prevent any activity which may prevent AMRES users from using AMRES services or in case of damage of AMRES resources, as well as to alleviate consequences of such possible harmful activities.

AMRES shall make efforts to prevent access of unauthorized users to infrastructure, services and/or information which are transferred or which are available via network.

AMRES users should keep and/or transfer data via the network taking into consideration the limited safety of information-communication infrastructure.

Transitional and Final Provisions

Article 37.

All legal entities which were connected to AMRES infrastructure till the date of entering of this Policy into force are obliged, after entering of this Policy into force, to file application for connection in accordance with this Policy and to proceed fully in accordance with this Policy.

Agreements on Temporary Allocation of AMRES Equipment with the aim of using AMRES network and services made till the date of entering into force of this Policy, remain effective after entering of this Policy into force.

Article 38.

Legal entities specified in Appendix 2 to this Policy, which were connected to AMRES infrastructure till the date of entering into force of this Policy, as well as all legal entities to which optical access network were made via SEELight project become AMRES users by signing the agreement without submission of application.

Article 39.

Persons who/which filed applications related to use of AMRES services till entry of this Policy into force, and for which decision was not made till the date of entry of this Policy into force, shall be invited to regulate their applications in accordance with this Policy.

Article 40.

Policy enters into force upon obtaining consent from the Government, within eight days from being posted on AMRES notice board.

No: 022-30/2015/2

Date: 01 April 2015

APPENDIX 2: List of legal entities and their locations that have the right to become AMRES users according to Article 38 of this Policy can be found in the Serbian version of the document: https://amres.ac.rs/dokumenti/amres/akti/pravilnici/pravilnik_o_pravilima_pristupa_i_koriscenja_u_sluga_amres.pdf