Terms of Reference

Request for Services

Expert support the upgrading of the IT tool for monitoring and reporting on the realization of the PAR Strategy in North Macedonia

1. Background

The Regional School of Public Administration (ReSPA) is an inter-governmental organization that enhances regional cooperation, promotes shared learning, and supports the development of public administration in the Western Balkans. ReSPA Members are Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia, while Kosovo* is a beneficiary. ReSPA aims to help regional governments develop better public administration, public services, and overall governance systems for their citizens and businesses and prepare them for membership in the European Union.

ReSPA establishes close cooperation with ministers, senior public servants, and unit heads in member countries. ReSPA also works in partnership with the European Union, precisely the Directorate General for Enlargement and Eastern Neighbourhood (DG ENEST), other regional actors such as OECD/SIGMA and Regional Cooperation Council (RCC), as well as agencies and civil society organizations. Since its inception, ReSPA, as an international organization and a key regional endeavour in Public Administration Reform, has contributed to capacity-building and networking activities through on-demand support mechanisms, peering and the production of regional research materials.

The European Commission (EC) provides directly managed funds to support the ReSPA activities (research, training and networking programmes) in line with the EU accession process.

ReSPA works primarily through regional networks that operate at three levels: Ministerial, Senior Officials, and networks/working groups of experts and senior practitioners. There are four regional thematic groups: (1) Policy planning, better regulation and coordination of Centre of Government, (2) European integration and accession negotiations; (3) Human Resources Management and Professional Development; (4) Service Delivery (digitalization and quality management).

The assignment described in these Terms of Reference will be funded under the ReSPA "on-demand support" instrument.

2. Problem statement and description of the assignment

The PAR Strategy (2023-2030) defines the strategic direction of the public administration reform in North Macedonia for this eight-year period. The coordination and monitoring of the implementation of the Strategy is a challenging task, as it involves around 40 institutions with specific responsibilities and engagement in the individual measures and activities of the Strategy's Action Plan.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and ICJ Advisory opinion on the Kosovo Declaration of independence.

The Ministry of Public Administration (MPA) is in charge for the operational monitoring of the implementation of the Strategy, while the PAR Secretariat, the PAR Council and the Government provide higher-level coordination and oversight. The MPA's PAR team provides regular reporting on the achieved progress on the Strategy to these higher-level instances, and furthermore to the interested public and other stakeholders.

During the previous monitoring cycles of the PAR Strategy, there have been a number of challenges:

- Data collection was not of the right quality.
- Using an Excel monitoring matrix has a lot of limitations and is very complicated to use.
- Historical data on inputs were not available for review.
- Data analysis was significantly difficult with such an amount of data and data sources.
- Drafting of monitoring reports was taking an extensive time.
- Getting the real-time implementation status was impossible to do easily.

Therefore, the MPA has implemented a software solution that supports, simplifies, and automates this process as much as possible.

This IT tool has the following benefits:

- Managing of the Action plan data
- Improving the data collection process by the contact points from the involved institutions
- Providing early-warning system for the responsibilities of the institutions during the monitoring process
- Providing a history of inputs and comparability
- Conducting large data processing
- Presenting various data visualizations of the collected and processed data
- Generating narrative monitoring reports.

Using the platform, the MPA administrators of the system manage the Action plan by defining priorities and specific goals, measures and activities linked to the priorities and goals, and setting various types of indicators to measure the level of achieved outputs, outcomes, and impact.

The contact points from the institutions provide inputs to indicators and activities where their institution is involved, in accordance with the defined monitoring methodology. These are subject to review by the MPA and can be returned to additional corrections. Based on the details of the inputs, the system processes the data and provides overview reports and dashboard-like visualizations on the overall and specific progress of the Strategy. In addition, the system generates real-time narrative reports in Microsoft Word format, which are to be further worked on and finalized by the MPA.

The system uses an advanced mail service that sends early-warning notifications to the contact points when their input is required, or when they are late with the provision.

Users are fully managed by the MPA administrator on the system, with 4 roles:

- Super administrator (has user management rights)
- Administrator (has full rights in the system without user management rights)
- Contributor (responsible for providing inputs for his/her institution)
- Monitor (can only view the data and information in the system).

The system was launched in January 2024. Following the initial training, the data was successfully collected for the first monitoring round. The system completely replaced the old data collection and monitoring process, with no institution providing data on another channel. Currently, 84 users from the institutions are responsible for activities and indicators in the PAR Strategy,

The conclusion from the work so far is that the data collection process has been much simplified, making it easier for the contact points to find their activities and indicators, reuse previous inputs, and set the current status. Great value comes from the generation of narrative reports, where the system makes advanced data processing and provides the report results in the required format.

However, this system is a closed system, meaning that access for the general public is restricted. In line with the need to achieve higher transparency and accountability of the Government, and even indirectly push for better implementation, there is a need to provide a web portal where these results can be made available to the citizens. Several new functionalities have been identified as needed for the current admin app as well, especially using AI tools to enhance the reporting process in the summarization of the provided narrative inputs.

The upgraded application should support the Ministry of Public Administration (MPA) in achieving higher transparency of the public administration reform, more efficient management of the Action Plan, and enhanced automation of reporting through the integration of new features. These enhancements include a citizen-facing web portal, improved administrative tools, and advanced AI functionalities to deliver a comprehensive, user-friendly, and impactful system.

These Terms of Reference are accompanied by an annex - Technical documentation of the existing system, provided in the original Macedonian language. For reference purposes, an unofficial English translation is included alongside the original version. Please note that the translation is provided for convenience only and does not carry official status. The Annex technically describes the existing system with already developed functionalities.

Key functionalities of the upgrade

1. Web portal for citizens

A new public-facing portal should be developed to provide interactive and transparent access to the Action Plan and progress of the Public Administration Reform Strategy.

Features:

- Interactive access to the Action Plan:
    - Citizens can browse through priorities, specific goals, measures, and activities.
    - Ability to view the current status and history of each activity, including updates and progress over time.
- Data visualizations:
    - Provide multiple visualization types (pie charts, bar charts, line graphs, etc.) for results categorized by priorities, goals, and measures.
    - Financial data visualization: Provide overviews of budgeted vs. spent amounts, categorized by activities and measures.

- Document management and access:
    - Public access to monitoring reports and relevant documentation.
    - Administrative functionality to manage and upload these documents efficiently.

2. Enhanced Action Plan management

Multiple Action plans should be created and managed with the system.

Features:

- Ability for administrators to add, edit, and manage multiple Action Plans to support future revisions of the Strategy.
- Easy switching between different Action Plans for users.
- Separate views and data processing for each Action Plan, ensuring clarity and accuracy.

3. History of the Approval Process on Activity Level

History log and overview should be implemented for approvals and rejections by administrators and contributors to enhance accountability.

Features:

- Detailed logging of actions:
    - Rejections by administrators with timestamps and reasons.
    - Approvals of changes and updates to activities and indicators.

- History overview accessible for both administrators and contributors on activity and indicator level, enabling transparency of the review process.

4. Excel report generation of the current status

Allow seamless exporting of the Action Plan and implementation details in Excel format.

Features:

- Include all relevant data fields, such as current implementation status, financial details, and progress indicators.
- Ensure exported files maintain structured and readable formatting for easy analysis.

5. AI reporting

Integrate AI capabilities to enhance the automation of narrative report generation.

Features:

- Automatic summarization
    - Summarize narrative inputs provided by contact points for inclusion of the summarizations in the reports.
    - Ensure the summaries are concise yet capture the essence of the inputs.

3. Tasks and responsibilities

Based on the main elements provided, the Expert sought with this ToR is expected to perform the following tasks:

1. **Requirement Analysis and UX Design (*3 days*):**

- Conduct meetings with MPA staff and relevant stakeholders to gather upgrade requirements
- Assess the current application's functionalities and limitations
- Design high-fidelity UX wireframes based on gathered insights

Deliverables:

- Requirement analysis report
- High-fidelity UX wireframes

2. **Development and Integration (*20 days*)**

- Develop and integrate a user-friendly web portal for citizens
- Enhance the admin system with:
    - Multi-action plan management
    - Approval history tracking
    - Excel export functionalities
- Integrate AI functionalities to automate narrative summarization in reports

Deliverables:

- Developed and functional citizen web portal
- Upgraded admin system with new features
- Integrated AI functionalities for improved report

3. **Testing and Deployment (*2 days*)**

- Create and execute a test plan to ensure all components function as expected
- Deploy the system on MPA's cloud infrastructure

Deliverables:

- Test plan with results
- Deployed software on MPA premises

4. **Training (*2 days*)**

- Develop a training plan for both end-users and administrators
- Conduct training sessions
- Produce a video tutorial for future reference

Deliverables:

- Training plan
- Video tutorial
- Trained end-users and administrators

5. **Documentation Delivery (*2 days*)**

- Prepare comprehensive technical documentation
- Ensure source code is securely stored on MPA premises
- Create user manuals for both administrators and end-users

Deliverables:

- Technical documentation
- Source code archived at MPA
- User manuals

6. **Presentation of the IT Tool (1 day)**

- Present the functionalities, advantages, and examples of successful usage of the IT tool.
- Demonstration of specific examples showing how the IT tool can improve efficiency and transparency in public administration.
- Participation in the panel with the topic: "Innovation and Digitalization in Public Administration: How IT Tools Are Transforming Public Services".

4. Necessary Qualifications, Experience and Skills

The expert needs to have a diverse but compatible experience related to design and implementation of various IT tools relevant for the development and implementation of public policies and/or strategies. More specifically, the expert shall possess the following profile:

Qualifications and skills:

- At least University Degree in Applied Computer Engineering, Electronic Engineering, Control Systems Engineering,
- A Master's Degree will be considered an asset.

General professional experience:

- At least 10 years of experience working in or with the public sector and related assignments/positions, as a public servant, consultant, expert, advisor, etc.

Specific professional experience:

- At least 5 years of experience with ICT tools for monitoring, and/or other relevant IT infrastructures and ICT systems;
- Experience in delivering training, workshops, and/or experience in preparation of Guidelines, methodologies.

Skills:

- Excellent written and oral communication skills in English;
- Knowledge of official language(s) of North Macedonia will be considered an asset;
- Ability to prepare and deliver well-structured presentations.

Note: The expert shall not be civil/public servant in any of the Western Balkans' administrations in the moment he/she applies for this assignment.

Other preferred knowledge and skills:

- Proficiency in programming languages (PHP, JavaScript);

- Proficiency in MySQL
- Proficiency in Docker, Gitlab
- Understanding of Moodle administration, and MySQL, PHP, and Moodle Schema
- Familiarity with Linux server
- Ability to analyze complex problems and develop efficient and effective solutions.
- Understanding of algorithms and data structures to design and implement efficient and scalable software solutions.
- Knowledge of software development methodologies such as Agile, Scrum, or DevOps;
- Understanding of object-oriented programming principles and design patterns for creating modular and maintainable code.
- Familiarity with web development technologies;
- Proficiency in database technologies, and experience with database design, querying, and optimization;
- Ability to write unit tests, perform integration testing, and debug software to identify and fix issues;
- Ability to create clear and concise technical documentation for code, APIs, and systems architecture;

5. Timing and Location

The assignment foresees work from home/office and on-site in MPA premises (Skopje, North Macedonia). In addition, MPA will provide the necessary logistics, print handouts, flip charts, and other logistics. The assignment will be performed during **June 2025 – November 2025.**

6. Remunerations

The assignment foresees engagement of up to **30 (thirty) expert days of up to 12.000,00 EUR.**

The payment will be made in one installment upon completion of the assignment. The final outputs will be subject to approval from ReSPA before the payment is executed.

Note: No other costs will be covered besides the expert cost per day. The expert cost per day comprises the expert's fee and (if needed) a lump sum covering related expenses, including travel, accommodation, local transport, meals and other incidentals.

7. Approach and Methodology

Proposals must include the approach and Methodology to be submitted by the applicant.
The written Proposal must include:

- Describe the proposed technical approach;

- Describe relevant previous experience in the field (List of similar projects made in the past with possible links);

- Describe professional/organizational capacities (in case of a team of experts: including the key project team members and relevant experts that will directly work on design, development, or content creation, if applicable);

- If the applicant will be a company, it must describe how it will address requirements listed in this TOR and provide a detailed description of the activities, reporting, and quality assurance mechanisms that will be put in place, while demonstrating that the

proposed methodology will be appropriate to the local conditions and context of the work. The company must provide the name(s), CVs and other supporting documents of the expert(s) that will be deployed for this assignment.

8. Reporting and Final Documentation

The expert/company will be requested to deliver the following documents before the payment is conducted:

Outputs

- Outputs of the meetings with the responsible units;
- Documentation for the system, including user manuals, source code stored on the beneficiary premises and technical documentation.

Documents required for payment

- Invoice (signed original);
- Timesheets (signed original);
- Final brief report on the assignment

ANNEX Technical documentation of the existing system

Техничка документација за системот за следење на спроведувањето на Стратегијата за РЈА 2023-2030

1 Вовед

Стратегијата за реформа на јавната администрација 2023-2030 која има за цел да ги постави стратешките насоки во насока на подобрување на услугите кои се нудат кон граѓаните и унапредување и модернизација на администрацијата заради нејзино приближување кон стандардите на Европската Унија.

Поради комплексниот процес на мониторингот на Страгегијата, веб апликацијата за следење на спроведувањето на Стратегијата за РЈА има за цел да го унапреди процесот на прибирање инпути, обработка на податоци и генерирање визуелизации и извештаи, а со тоа и подобрување на транспарентноста и степенот на имплементација на Стратегијата.

Корисници на апликацијата се претставници на државните институции кои се вклучени во спроведувањето на Стратегијата, и кои доставуваат инпути по реализацијата на различните активности и показатели. Од друга страна, главниот корисник е Министерството за информатичко општество и администрација кое ги спојува различните инпути, ги обработува податоците и изработува извештаи.

Целта на овој документ е да ги обезбеди техничките детали за веб апликацијата (во натамошниот текст: СРЈА апликација), претставувајќи ги техничките компоненти и упатствата за инсталирање, конфигурирање и одржување на апликацијата.

2 Корисници

Системот предвидува четири нивоа на кориснички улоги:

- **Супер администратор** – предвидена корисничка улога за администраторите од МИОА (вклучувајќи и управување со кориснички сметки). Овие корисници ќе имаат целосен пристап и привилегии во системот, вклучувајќи:
    - Управување со приоритетите, посебните цели, мерките и активностите, и показателите
    - Поднесување прогрес на активности и показатели
    - Генерирање извешти и управување со темплејти на извештаите
    - Испраќање и преглед на мејл нотификации
    - Управување со корисници и институции
- **Администратор** – предвидена корисничка улога за администраторите од МИОА (не вклучувајќи управување со кориснички сметки). Овие корисници ќе имаат целосен пристап и привилегии во системот, вклучувајќи:
    - Управување со приоритетите, посебните цели, мерките и активностите, и показателите
    - Поднесување прогрес на активности и показатели
    - Генерирање извешти и управување со темплејти на извештаите
    - Испраќање и преглед на мејл нотификации
- **Контрибутор** – предвидена корисничка улога за корисниците од институциите чија главна цел е поднесување информации за степенот на реализација на активностите и показателите. Нивната улога вклучува:

    - Преглед на приоритетите, посебните цели, мерките и активностите, и показателите
    - Поднесување прогрес на активности и показатели
- **Набљудувач** – предвидена корисничка улога за корисници кои имаат единствена цел само да го прегледуваат прогресот на спроведување на Стратегијата. Нивната улога вклучува:
    - Преглед на приоритетите, посебните цели, мерките и активностите, и показателите
    - Преглед на прогресот на показателите, мерките и активностите.

3 Технички осврт на апликацијата

3.1 Framework

CPJA апликацијата е изработена врз основа на Codeigniter 4 framework. Codeigniter е широко распространета PHP рамка за развој на веб апликации, позната по својата едноставност и флексибилност. Codeigniter се базира на MVC (Model-View-Controller) архитектура, овозможувајќи едноставна организација и управување со кодот.

3.2 Front-end околина

Апликацијата се базира на HTML, CSS и Bootstrap 5 framework за корисничкиот интерфејс.

Дополнително се користат следните библиотеки:

- jQuery 3.7.1
- Select2 4.1.0
- DataTables 1.13.6
- Toastr 2.1.4
- CKEditor 5
- CropperJS 1.6.1
- Chart JS 4
- HTML
- CSS
- Bootstrap 5
- PHPWord 1.2.0

3.3 Back-end околина

Софтверската архитектура користи различен сет на технологии за да испорача робустно и скалабилно решение.

На back-end се користи PHP 8.1 како server-side scripting јазик, за динамичко генерирање на содржини и интеракција со базата на податоци.

MySQL 8.0 се користи како систем за управување со релационата база на податоци.

Codeigniter 4 рамката ги оркестрира backend операциите, овозможувајќи MVC архитектура на апликацијата, вклучувајќи и функции како што се рутирање, валидација на податоци и управување со сесии. Моделите во CodeIgniter комуницираат со базата на податоци користејќи го Codeigniter Query Builder.

3.4 Клучни компоненти на апликацијата

Контролери

Контролерите ги управуваат HTTP барањата и ја спроведуваат соодветната логика. Тие комуницираат со моделите за да добијат и манипулираат со податоците и да ги пренесат процесираните податоци на прегледите за рендерирање.

Модели

Моделите ги претставуваат податочните структури и бизнис логиката на апликацијата. Тие комуницираат со базата на податоци за да спроведат CRUD операции.

Прегледи (views)

Прегледите за одговорни за презентирање на содржините на корисниците. Содржат HTML заедно со PHP код за динамичко рендерирање на содржините врз основа на податоците од контролерите.

Рути

Рутите ги дефинираат URL патерните и ги мапираат до соодветните методи во контролерите. Рутите се дефинирани во ‘app/Config/Routes.php’ фајлот.

3.5 Организација на директориумот на апликацијата

Организацијата на директориумот ја следи основата на Codeigniter 4:

- app: Содржи контролери, модели, прегледи (views), фајлови за конфигурација и други фајлови кои се специфични за апликацијата
- public: Содржи јавно достапни ресурси, вклучувајќи CSS, JavaScript, слики и документи.
- writable: Складирање на cache, логови и сесии
- vendor: Содржи Composer зависности
- system: Главните системски фајлови на Codeigniter.

4 Инсталација и deployment

4.1 Минимум барања

- Број на сервери – 1;
- Оперативен систем – Ubuntu 22.0

- Улога на серверот: веб сервер (Apache HTTP Server), база на податоци (MySQL), хост за апликацијата
- 1vCPU, SSD мин. 10GB, меморија мин. 4GB.
- Подршка за веб програмски јазик: PHP 8.1.x (PHP extensions: curl, intl, json, mbstring, mysqli)
- Систем за бази на податоци: MySQL 8.0x

4.2 Инсталација

Чекорите вклучуваат инсталација на Apache, MySQL и PHP со потребните екстензии, поставување на MySQL базата на податоци, деплојирање на апликацијата во root директориумот на Apache и конфигурирање на виртуелни хостови. Сите CLI команди и детали за конфигурација се вклучени.

4.3 Deployment

Deployment на апликацијата може да се направи на различни хостинг околини. FileZilla може да се користи за SFTP пристап и прикачување на апликациски фајлови на серверот. Може да се имплементираат continuous integration and deployment (CI/CD) pipelines користејќи алатки како GitHub Actions или Jenkins за автоматски deployment.

5 Пристап до апликацијата

5.1 VPN пристап

До интерната околина се пристапува преку VPN клиентот.

5.2 SFTP пристап

Протокол: SFTP

5.3 Репозиториум на кодот

Целосниот изворен код на апликација е лоциран во folder.

5.4 Пристап до базата на податоци

Connection method: Standard (TCP/IP)

5.5 Апликациски логови

Апликациските логови се наоѓаат на следната локација: ‘/var/www/srja/writable/logs/’.

5.6 Корисничко упатство

Упатството за користење на апликацијата од страна на крајните корисници се наоѓа на следната локација: ‘/var/www/srja/documents/upatstvo_srja.pdf’.

5.7 Кориснички пристап

Апликацијата е достапна на крајните корисници преку https://srja.mioa.gov.mk. Јавната IP адреса е: 95.180.140.110.

Technical Documentation for the System for Monitoring the Implementation of the PAR Strategy 2023–2030

1 Introduction

The Public Administration Reform Strategy 2023–2030 aims to define strategic directions to improve the services offered to citizens and to advance and modernize the administration to align it with the standards of the European Union.

Due to the complexity of monitoring the Strategy's implementation, the web application for monitoring the implementation of the Public Administration Reform Strategy (hereinafter: the PAR application) is designed to improve the process of collecting inputs, processing data, and generating visualizations and reports, thereby enhancing transparency and the level of implementation of the Strategy.

Users of the application are representatives of state institutions involved in the implementation of the Strategy, who submit inputs based on the implementation of various activities and indicators. The main user is the Ministry of Information Society and Administration, which consolidates the inputs, processes the data, and produces reports.

The purpose of this document is to provide technical specifications for the web application (hereinafter: the PAR application), presenting its components and offering instructions for installation, configuration, and maintenance.

2 Users

The system defines four levels of user roles:

- **Super Administrator** – intended for administrators from MISA (including user account management). These users will have full access and privileges, including:
    - Managing priorities, specific objectives, measures, activities, and indicators
    - Submitting progress reports on activities and indicators
    - Generating reports and managing report templates
    - Sending and reviewing email notifications
    - Managing users and institutions
- **Administrator** – for MISA administrators (excluding user account management). These users will have full access and privileges, including:
    - Managing priorities, specific objectives, measures, activities, and indicators
    - Submitting progress reports on activities and indicators
    - Generating reports and managing report templates
    - Sending and reviewing email notifications
- **Contributor** – for institutional users whose main role is to submit information on the implementation status of activities and indicators. Their role includes:
    - Viewing priorities, specific objectives, measures, activities, and indicators

    - Submitting progress reports on activities and indicators

- **Observer** – for users whose only role is to view the progress of Strategy implementation. Their role includes:
    - Viewing priorities, specific objectives, measures, activities, and indicators
    - Viewing progress reports on indicators, measures, and activities

3 Technical Overview of the Application

3.1. Framework

The PAR application is developed using the CodeIgniter 4 framework, a widely used PHP framework known for its simplicity and flexibility. CodeIgniter is based on the MVC (Model-View-Controller) architecture, which allows for organized and efficient code management.

3.2 Front-end Environment

The user interface is based on HTML, CSS, and Bootstrap 5. Additionally, the following libraries are used:

- jQuery 3.7.1
- Select2 4.1.0
- DataTables 1.13.6
- Toastr 2.1.4
- CKEditor 5
- CropperJS 1.6.1
- Chart.js 4
- PHPWord 1.2.0

3.3 Back-end Environment

The application uses PHP 8.1 as the server-side scripting language to dynamically generate content and interact with the database. MySQL 8.0 is used for relational database management. CodeIgniter 4 orchestrates backend operations via its MVC architecture and features such as routing, data validation, and session management.

3.4 Key Components

- **Controllers**: Handle HTTP requests and logic; interface with models and views.
- **Models**: Represent data structures and business logic; perform CRUD operations.
- **Views**: Present content to users using HTML and embedded PHP.

- **Routes**: Define URL patterns and map them to controller methods (configured in app/Config/Routes.php).

3.5 Directory Structure

The structure follows the CodeIgniter 4 model:

- app: Contains controllers, models, views, configuration files
- public: Public resources like CSS, JS, images, documents
- writable: Stores cache, logs, sessions
- vendor: Composer dependencies
- system: Core CodeIgniter system files

4 Installation and Deployment

4.1 Minimum Requirements

- Server count: 1
- OS: Ubuntu 22.0
- Roles: web server (Apache), database (MySQL), app host
- Specs: 1vCPU, min. 10GB SSD, min. 4GB RAM
- PHP: 8.1.x with required extensions
- Database: MySQL 8.0.x

4.2 Installation

Steps include installing Apache, MySQL, and PHP with required extensions, setting up the MySQL database, deploying the app to Apache root, and configuring virtual hosts. Full CLI commands and configuration details are included.

4.3 Deployment

Deployment can be carried out via various hosting environments. Tools like FileZilla (SFTP) or CI/CD pipelines (GitHub Actions, Jenkins) can be used.

5 Access to the Application

5.1 VPN Access

Access to the internal environment is provided through a VPN client.

5.2 SFTP Access

Protocol: SFTP

5.3 Code Repository

The complete source code of the application is located in the folder.

5.4 Database Access

Connection method: Standard (TCP/IP)

5.5 Application Logs

Application logs are located at the following path: /var/www/srja/writable/logs/.

5.6 User Manual

The user manual for end users of the application is located at: /var/www/srja/documents/upatstvo_srja.pdf.

5.7 User Access

The application is available to end users via https://srja.mioa.gov.mk. The public IP address is: 95.180.140.110.