TERMS OF REFERENCE

FOR

DESIGN OF SINGLE UNIFIED REGISTRY SYSTEM

Contents

1.   Consultancy Services Required

The Government of the Republic of North Macedonia has received a Loan from the International Bank for Reconstruction and Development, for implementing the Macedonia Social Insurance Administration Project (SIAP).

The Ministry of Labour and Social Policy is seeking the services of a Consultancy Company (Contractor) to support implementation of a key pillar within Component 1 of SIAP: **Development of a Single Unified Registry System (SURS)**

The Contractor is required to provide a team of experts with specific experience in modernizing state social security systems and in particular with experience in systems for registration of social contributions. The Contractor's team must bring empirical knowledge and best practice experience for registry and data system functions. The team will have in-depth understanding of the work and specifics of the North Macedonian public social insurance system and involved Agencies. The Contractor's services are required for a minimum of six calendar months (lapsed time).

2.   Background Information

The SIAP project activities will address specific functional and technical areas within the administration of social insurance. The project will support the Government's efforts to continue the process of improving the quality of services delivered by the social insurance administration. The SIAP project will make investments in:

(a) developing a central single unified registry of socially insured individuals (SURS)
(b) improving the Pension and Invalidity Fund's (PIOM) capacity and business processes
(c) establishing a Central Disability Certification Coordination Unit (CDCCU)
(d) revising the list of hazardous occupations eligible for early retirement with extended service period (ESP), and,
(e) supporting implementation of the legal and institutional framework for employment and professional rehabilitation of persons with disabilities.

The overall SIAP project will be organized into two main components, with a third component related to project management.

- **Component 1.** Improving the quality of the social insurance administration services

- **Component 2.** Strengthen the regulatory framework for people with disabilities and for hazardous occupations

- **Component 3.** Project Management

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This project is within Component 1 and will implement **'Subcomponent 1 - Establishment of Single Unified Registry System (SURS) for social insurance'**

3. Objectives of Assignment

The strategic objective of this reform to the social insurance administration system is to provide a more effective and efficient service to all clients of the social insurance system. This will be achieved through streamlining and unifying the functions of registration, data reporting, and contributor and individual contribution data recording. This new and reformed system will be managed by a new entity, and participating institutions will be freed up to concentrate on providing their core services (e.g. benefit payment, revenue collection, health benefits, employment services).

Within the present social insurance system the registration, data collection, and database management functions are spread amongst multiple institutions. In essence, the Employment Agency (AVRM) undertakes registration of employers and employees, and the Tax Administration (UJP) undertakes contribution and contribution data collection. In addition, both the Pension and Disability Insurance Fund (PIOM) and the Health Insurance Fund (FZO) also register other client categories (e.g. farmers, self-employed). The PIOM also intermediates in the collection of data and allocation of contributions for the Defined Contribution (Pillar 2) Pension, and transmits such funds and data through the Pillar 2 regulator (MAPAS) for onward transfer to the DC Pension Funds.

The Government of the Republic of North Macedonia has taken decisions to eliminate the fragmentation and data management weaknesses in the present system, and to streamline and simplify the registration, data collection and registry functions. This will lead to a more sustainable system that delivers a quality service to all its' clients. The Government has decided to establish a new single unified registry system (SURS), including a unified single individual contributor database as its' centre-piece. The collection of all social insurance contribution revenues will remain with the Tax Administration (UJP). However, the management of the SURS will be assigned to a separate new legal entity (SURS Agency) to be established under the Ministry of Labour and Social Protection (MLSP), and regulated through a new 'Law on SURS' and supporting by-laws.

3.1 Specific Objectives of the Assignment

The specific objectives of the assignment are to: (i) define and design the structure, role and responsibilities, functions and business processes, and operating procedures for a new Agency (SURS Agency); (ii) define and design the SURS System Business Operations Model including how the SURS System will operate in practice, and how each participating institution will adapt to participate in and connect with the SURS System; (iii) define the scope and functionality of the SURS ICT System (in sufficient detail to enable preparation of tender documentation for development and implementation of SURS ICT System); (iv) assess the SURS requirements (business and technical) of each institution that will participate

in the SURS System; (v) develop a Transition Plan to migrate from existing business systems and databases to the new SURS System; (vi) prepare a technical specification for development and implementation of the SURS ICT System.; and, (vii) prepare a requirements schedule (together with cost estimate) for procurement of hardware, software, licences, , operating system, network equipment, interconnection links , backup and recovery system, document management system, CRM and all needed ancillary equipment – to enable implementation of the SURS System.

3.2   SURS Agency - Key Functions and Features

The new SURS Agency, under the aegis of the MLSP, will have central responsibility and management authority over the operations of the SURS System. The SURS Agency shall be defined and designed in sufficient detail to enable it, on establishment, to manage the strategic and tactical operations of the new SURS System (including SURS ICT System). The SURS Agency shall be the central single national institution that will maintain a database and central software solution (SURS ICT system) of all entities participating in the social insurance system. The SURS Agency will gather, record, manage, update, and share social-insurance related data with all authorized participating institutions.

The SURS Agency will ensure that SURS System provides a high-quality public service to all persons and institutions that it serves. The SURS Agency will build and maintain public trust and confidence in the social insurance system of Republic of North Macedonia. To achieve this goal, the SURS Agency will be organized as a professional, modern public service organization.

The SURS Agency will be characterized by:

- a transparent and modern organization structure encompassing all the key responsibilities and administration functions needed to fulfil its mandate
- a strong governance system
- clear span of managerial control
- clear lines of reporting
- staff who are skilled and trained for their particular roles
- written standard operating rules and procedures for every task
- a fully functioning ICT Unit
- strategic plan setting out the management policy, high-level goals, and resources allocated for all key areas of responsibility
- business plans covering setting out operational activities for every function
- business continuity plan that will mitigate risks
- quality assurance plan that sets performance targets, and specifies quality measurement tools
- participative methodology that encompasses all key stakeholders in the social insurance system

3.3   SURS System - Key Functions and Features

Essential to the success of the new agency is the use of existing databases for social insurers to upgrade, integrate and improve them, as well as to create a single database of social security history that meets the needs of all key institutions.

The SURS System will have the full range of capabilities to enable it to provide a reliable, accurate, and high-quality service to all persons covered by social insurance and to all participating institutions.   It will perform a comprehensive suite of tasks, and include the following functionality and attributes, at least:

▪   Client Registration *(employees, employers, self-employed, voluntary, and all other categories of persons (legal and natural person) participating in social insurance)*
▪   Insurance record of physical persons will have national ID as the sole primary key
▪   Insurance record of legal persons will have Business Registry ID as the sole primary key
▪   Contribution Collection Recording *(update contributor and insured person records, with payments data)*
▪   Contributor Data Collection *(update contributor and insured person records, with business, employment, personal, and contribution related data)*
▪   Contributor History Management *(maintain integrated employment and insurability data history for each person registered within SURS)*
▪   Data Import/Export *(e.g. from/to participating institutions)*
▪   Reporting *(member account statements, institutional reports, management reports, systems performance reports etc.)*
▪   Account Reconciliation *(individual member accounts, employer accounts, suspense accounts etc.)*
▪   Management Accounting *(program data, performance data, service level data, various cost analyses etc.)*
▪   Produce aggregated and anonymized data for policy making, research, and quality control
▪   Control and Compliance *(internal audit support, desk and field control/inspection support, target analysis, trend analysis etc.)*
▪   Enquiry Management *(from user, client, and authorized institutions etc.)*
▪   Produce insured person social insurance contribution record on demand
▪   Produce employer social insurance contribution record on demand
▪   Record entry to Pillar 2 Pension program *(transfer membership registration and contribution data etc. to MAPAS)*

In addition to the above functionality, the SURS System will:

▪   Be the sole entry point for registration of all insured persons and contributors regardless of their employment status, professions, pension pillar membership, legal exemptions etc.
▪   Be a one stop social insurance participation and contribution support service for employees, employers, self-employed, farmers, traders, and other categories of contributors
▪   Merge existing separate registries into a single unified registry with common data model, common

data sets, and common data definitions

- Unify and standardize procedures and protocols for updating registry data (eliminating existing multiple, manual, and ad-hoc procedures)
- Re-design and rationalize existing business forms (e.g. M Forms, MPIN etc.), thereby removing data collection gaps and inconsistencies
- Make data flows and data access between and by institutions possible in real-time
- Adhere to the highest levels of data privacy and will operate in conformance with the national Data Protection legislation
- Have full business operations continuity capacity in the event of a catastrophic event that would cause systems (business or technical) failure
- Facilitate web-based registration, data reporting, and data access functions

4. Scope of Work

The Contractor shall work closely with representatives of Tax Administration (UJP), Pension and Disability Insurance Fund (PIOM), Health Insurance Fund (FZO), Agency of Employment (AVRM), Pillar 2 Regulator (MAPAS), MLSP (pension and disability insurance and social assistance), and other institutions to ensure their active participation. The Contractor shall particularly ensure that functionality and requirements of the new SURS Agency and SURS System are complete and fully serve the needs of participating institutions.

The Contractor's main tasks shall include (but not be limited to):

- Define in detail role, responsibilities, functionality, and business processes of new SURS Agency
- Define in detail the organizational structure, and responsibility reporting lines of each manager and administrative unit, of the new SURS Agency;
- Undertake SURS System business needs analysis for all participating institutions
- Define in detail the new SURS Business Operations Model
- Define the scope and functionality of the new SURS ICT System
- Prepare technical specification for development of SURS ICT System
- Define requirements for full Disaster Recovery and Business Continuity system
- Develop a Transition Plan to migrate to the new SURS System

Supporting tasks to be undertaken by the Contractor shall include:

- Develop job descriptions, person specifications, and key responsibility tasks for each job type in the SURS Agency;
- Develop standard operating procedures and rules for each function and key task within SURS Agency;
- Ensure that the SURS Agency organizational system is fully aligned with the requirements of the SURS Business Operations Model;

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- Identify changes (organizational, technical, functional) needed in participating institutions – to enable them to participate in SURS;
- Estimate the number and category of staff that could be transferred to SURS Agency from redundant processes in participating institutions
- Define in detail how the single unified registration approach will be implemented and work on a day to day basis, including giving details of data to be captured and stored to meet the needs of persons and institutions being served by the SURS System;
- Define the channels that will be made available for SURS clients (employers, employees, self-employed, farmers etc. and participating institutions) to use when undertaking their business with the SURS System;
- Describe in detail the data to be held by SURS System and how the SURS database will interact with operational databases to be held and linked at the key institutions;
- Develop a plan to enable institutions' existing data to be migrated to the new SURS database whilst ensuring that such data are stable, free from error or loss, and are securely transited;
- Develop a migration plan that enables institutions' migration data to be categorized (e.g. cohorts) and prioritized to enable a smooth and orderly transition that doesn't overload the SURS System;
- Define all formal protocols and methodologies required to be sued by institutions in their various interactions (electronic/automatic, and manual) with SURS System;
- Define a typical Service Level Agreement between the SURS Agency and those institutions that use data held by SURS (this agreement would include business, technical, and financial elements);
- Define the scope, technical, and functional specifications for the SURS ICT system;
- Define (including specifying key content) the SURS web portal requirements (to enable registration, data upload, data/information provision etc.). The modality of a strong authentication framework will be part of this definition;
- Analyse, propose and cost estimate the needed hardware, software, telecommunications, electronic document management system and CRM requirements of the SURS System, including presenting options for various proprietary solutions;
- Prepare technical specification for procurement of needed hardware
- Analyse Data Centre requirements for SURS ICT System. This will involve survey of MLSP's existing Data Centre, assessment of its suitability to host SURS ICT, estimation of works needed to host SURS ICT, and a plan (including costs) to implement any upgrade required;
- Analyse SURS Disaster Recovery Backup Data Centre options (including on-shore cloud-based solution if available), with recommendations.

5.   Deliverables

The Contractor shall submit the following key deliverables. The Contractor may also propose additional deliverables based on the Contractor's proposed approach and methodology.

1) **Project Inception Report and Project Plan**: Describes Contractor's approach to project; affirmation of project timeline, activities and outputs; mobilization of Contractor's team; project management;

identified risks and mitigation strategies; quality assurance plan; and a communications plan (for resolving project implementation issues) with MLSP Project Management Unit.

2) **SURS Target Environment Documents, comprising of**:

(i) **SURS Agency Design**: specifying details of new SURS Agency; defining roles and responsibilities; defining organizational structure; specifying job descriptions for key staff positions at each level; detailing business functions and processes; specifying procedural rules and standard operating procedures; detailed specification of resources required to make SURS functional (including – management/staff, skills, training, financial, logistical, accommodation, office equipment, telecommunications etc.).

(ii) **SURS Business Operations System:** specifying SURS business operations architecture; specifying SURS functions and processes; specifying the SURS information management model; defining all SURS workflows; defining the SURS roles and relationships between all participating institutions (including UJP, PIOM, FZO, AVRM, MAPAS, MLSP, MoF, MoH) and the SURS Agency and SURS System; defining SURS data requirements from each participating institution; and specifying SURS data upload, retrieval, and sharing functionality for each participating institution. A key requirement includes defining and detailing how the various workflows will be automated and digitized (including use of electronic document management system) to achieve maximum accuracy, efficiency, and cost-effectiveness.

3) **SURS ICT System Scope and Functionality Document, comprising of**: defined scope of SURS ICT system; defined and detailed description of functionality, processes, operations, workflows, user rights and procedural rules; defined and detailed systems architecture; data model (including semantic data model); data dictionary; data flows map; connectivity (including web-based) functionality enabling interoperability with institutions' ICT systems and access by authorised clients (e.g. insured persons, employers); and a systems development plan shows modules that should be developed as a priority (if necessary), and modules that could be developed at a later stage.

4) **SURS ICT Management Resource Document**: defining structure of SURS ICT Unit; identifying specialist/technical HR resources required (including job specifications); identifying SURS ICT Systems maintenance requirements.

5) **Draft Technical documentation for development of SURS ICT System:** including scope and functionality; recommended database management software; recommended business systems applications software; recommended web-services and applications program interface (API) software; identify training and skills transfer needs; estimate of skills and resources needed to implement engine software detailed enough to be published by MLSP; estimate cost of developing SURS ICT System (including software licenses, and including a minimum of three database management system options).

5.a) Based on draft technical documentation and recommendations the Consultant will provide inputs to developing the Bidding Document for SURS implementation in collaboration with the MLSP- SIAP Project IT officers and the Project's procurement manager.

6) **Draft Hardware and Technical Specifications Document** – identifying and describing the required hardware, database systems, operating system, network, firewall, antivirus software, database audit and database management systems to support the SURS ICT System. Estimating cost of procuring required equipment for production, developing/testing and DR location.

7) **Draft SURS Systems Continuity Plan:** detailed specification for a SURS disaster recovery plan (DRP) and a SURS business continuity plan (BCP).

8) **Draft Data Privacy Policy:** specifying data privacy protocols; data protection legislation conformance; data privacy security information and event management (SIEM) system.

9) **SURS Transition Plan**: detailed plan for establishing SURS Agency; staff recruitment, staff transfer from participating institutions; SURS offices (short-term and longer term offices); resource transfer; for setting up and establishing the new Agency as a working body including details of its interaction with other key institutions.

10) **Skills and Knowledge Transfer Plan**: Detailed plan to show how the Contractor will transfer key skills and knowledge to members of the SURS Workgroup.

11) **Quarterly Status Reporting** - Documents Contractor activities, application issues, risks, QA, update to implementation plan etc.

12) **Project Completion Report –** Documents the project activities, deliverables, finances and expenditure, and issues resolved.

The above reports should be sufficiently detailed for use by the Client and by a new Consultancy Company who may be contracted to develop and implement the new SURS ICT system, and to undertake follow-up work in relation to all other Deliverables.

The Contractor is expected to hold meetings, workshops and briefing seminars throughout the project when required and these should be determined within the proposed project work plan. These events should be used to gather and verify information, discuss existing problems and potential solutions, brief management and key staff in the participating institutions, and reach agreement on future solutions. The Contractor shall work closely with a special SURS Workgroup, comprising representatives of the key institutions, and shall use the opportunity to transfer skills and knowledge to help the SURS Workgroup.

6.   Reporting Arrangements

The Contractor will report on a regular basis to MLSP and MLSP's SURS Project Management Team to ensure work undertaken is delivered on schedule and to the quality expected. All written reports shall be available in English and Macedonian as shall any Consultants' presentations delivered at workshops or at meetings. All written reports should be discussed in full with the SURS Workgroup and this should be reflected within the final version of the report being written. The MLSP shall have a final approval with regards to document acceptance and any disagreements.

7.   Duration of Assignment

It is expected that this assignment will be undertaken over a minimum period of nine (9) calendar months, starting in 3rd quarter of 2020.   At least 90% of the work will be undertaken on-site in Macedonia. The Contractor shall start working after receiving notification from the Client.

8.   Resources Available to Contractor

The Client (MLSP) will provide the Contractor with all documents, reports, and laws related to the assignment.

The Contractor will also be provided with office space and telecommunication access for phone and email traffic.

For the duration of the contract, the Contractor is expected to provide all computers and necessary software etc., adequate health insurance cover, and accommodation for its' team members.   The Contractor will also be responsible for all international and local travel arrangements for its' team members.

The Contractor shall also be fully responsible for all interpretation and translation costs in respect of their tasks, and all such work required of the Contractor, in fulfilment of this project.

9.   Skill and Experience Requirements

The Client seeks a Consultancy Company (Contractor) with experience of undertaking similar projects in terms of sector, scope, size, and tasks. The Contractor will deploy a team of experts (international and local) with the required mix of skills, experience, and qualifications.   The Contractor shall clearly demonstrate strong practical work experience within the region, in particular with social security systems where successful modernization programs have been undertaken. Specific skills and experience in project management, business systems analysis and mapping, business process and design, designing organizational structures and systems, public administration reform, ICT database systems design (including detailed design at technical and functional level), and management and planning of mission-critical ICT systems are a basic requirement. Experience of developing terms of reference for large-scale ICT projects is also important.

It is expected that the Contractor's team will be comprised of: project manager/team leader, at least one business analysis expert, at least one business systems design expert, at least one ICT systems design expert, at least one ICT systems development expert, and at least one HR expert (organizational structure,

governance, function structure, and job specifications). The team will have deep experience with public sector modernization projects, and with the scope of functions within the social security administration sector.

The Contractor shall ensure that the team includes expert(s) with proficiency in Macedonian

All tasks will be carried out with counterpart North Macedonian staff as a way of building local capacity. The Contractor's work methodology will include training or sharing of knowledge and experience with appropriate counterpart management and staff.

The Team Leader should be expert in at least one of the areas covered by this ToR and shall coordinate the work of all experts and ensure that their schedules are coordinated. The Team Leader will also ensure the quality of reports, and that the work of Contractor's staff is coordinated with each other so that their outputs are consistent.

9.1   Consultancy Company Qualification Requirements

The Consultancy Company shall have (at minimum):

▪ ISO 9001 (version 2008 minimum, but preferably version 2015) quality certificate for consulting in the fields of information technologies, project management and business analyses.

▪ Should have performed at least one similar assignment in the Region in the past five years (name of the assignment, description, duration, contract amount, reference)

▪ Demonstrable and verifiable expertise (name of the assignment, description, duration, contract amount, reference) in (minimum):

1. unified e-services for public administration
2. business process analysis and business operations systems design
3. ICT systems analysis
4. ICT systems design
5. ICT systems strategy and management
6. database design
7. organisation systems design
8. governance systems design
9. data migration
10. project management life cycle

The Consultancy Company shall clearly show that they possess the following experience and knowledge:

▪ Considerable experience in social insurance or general tax revenue registration, collection and enforcement in similar environment
▪ Experience of social insurance projects in ex-Yugoslavia and/or the region will be considered an advantage

- Recent experience of working with development of large-scale relational database systems
- A good understanding of modern social security client registration and contributor database systems and
- A good understanding of contributor-related compliance and enforcement systems
- Financial management
- Human resources management
- Specifications of Integrated ICT system solutions
- Deployment of electronic Document Management Systems in multi-channel and high data-flow environment
- Considerable experience in business processes analysis and design
- Experience in projects preparing and migrating data from existing databases to new modern database for use by many organisations
- Experience in preparing terms of reference and technical specifications for procurement purposes
- Expertise in legal matters
- Expertise in data analytics
- Fluent English language capability
- Fluent Macedonian language capability

9.2 Skills, Experience, and Qualifications - Key Experts

The minimum required skill and experience profile of Contractors' proposed professional staff is:

Project Manager/Team Leader

- At least 10 years' experience in project management
- Relevant work experience and leadership in institutional and public projects (in the region and other developing economies)
- Knowledge of legal and economic requirements of social insurance systems
- At least 10 years' experience in preparation and evaluation of procedures and business processes
- At least 10 years' experience in projects for improvements of business processes with maximum benefits from automation and investment in modern technology
- Previous responsibility for decision-making at senior level in projects and organizations
- Excellent communication skills in English (oral and written)
- MS Office literacy (Word, Excel, PowerPoint, Visio, and Microsoft Project)

Business Systems Analysis and Design Experts

These experts will, between them, have:
- At least 10 years' experience in preparation and implementation of public sector reforms and institutional projects
- At least 10 years' experience in business systems analysis and documentation/mapping
- At least 10 years' experience of defining and designing new business processes

- MS Office literacy (Word, Excel, PowerPoint, Visio, and Microsoft Project), and other business process mapping software)

ICT Systems Design and Development Experts

These experts will, between them, have:

- Wide knowledge and experience of ICT solutions in public sector

- At least 10 years' experience in analysis and reform of IT systems and preparing functional and technical requirement and specifications for IT solutions
- At least 10 years' experience in database system design and development
- Relevant work experience in the development of web-portals and user access user protocols
- Experience in development of the tax or non-tax contributors systems (preferably in the region and in other developing economies)
- Experience in detailed documentation of new Integrated ICT solutions
- Excellent communication skills in English (oral and written)
- MS Office literacy (Word, Excel, PowerPoint, Visio, and Microsoft Project)
- Proven experience of database and applications design for use in e.g. Oracle, SQL, Java, .NET and similar technology environment
- Proven database administration experience with proprietary databases
- Knowledge of ICT operating systems (e.g. Windows, Linux, Unix)
- Experience of using CASE tools or similar methodologies
- Proven knowledge and experience of ICT network management
- University degree qualification (or technical equivalent) – preferably in ICT, engineering, mathematics, science, or business
- Proficiency in English is mandatory

Organisation Design and Institution Development Experts

These experts will, between them, have:
- Proven experience in preparation and implementation of public sector reforms and institutional projects
- At least 10 years' experience in designing and developing institutional structures, and competencies, in large service-oriented organizations
- At least 10 years' experience in administration unit design analysis and documentation/mapping
- At least 10 years' experience of defining and designing governance structures and systems
- MS Office literacy (Word, Excel, PowerPoint, Visio, and Microsoft Project, and business process mapping software)
- Proven experience in leading change management teams in the public sector
- Proven experience of work process and procedure design

10. Selection Method And Contract

The selection method is QCBS (Quality-and Cost-Based Selection) and the contract shall be Lump Based according to the World Bank Procurement Regulations for Investment Project Financing (IPF) Borrowers – Procurement in IPF of Goods, Works, Non-Consulting and Consulting Services, (Regulations) issued in July 2016, revised November 2017., and August 2018 *www.worldbank.org*