# Mongolia Emergency Relief and Employment Support Project (MERESP) IDA CREDIT# P174116

### SENIOR IT SPECLIALIST

# Technical assistance to Ministry of Labour and Social Protection for the Design and Implementation of LMIS Platform

#### 1. Background

The Ministry of Labour and Social Protection (MLSP) is implementing Mongolia emergency Relief and Employment Support Project (MERESP) with the soft loan and technical support from the World Bank. The project seeks to provide jobseekers and micro-entrepreneurs in Mongolia with improved access to labor market opportunities. MERESP has four distinct and interlinked components to achieve this objective. Component 1 supports a comprehensive realignment of the current public employment service system to serve greater numbers of employers and jobseekers in a more client-driven approach and in greater collaboration with private intermediation services. Component 2 will strengthen the design, relevance, and demand orientation of select active labor market programs. Component 3 plans to improve the quality and availability of labor market information and analysis to help institutional and non-institutional actors make informed decisions and provides support for strengthening M&E and management of the project. Component 4 provides temporary relief to the Social Insurance contributions of eligible workers and their employers. Such relief will ease financial burden and ensure uninterrupted SI coverage during crisis and prevent adverse consequences in the future for the workers and provides cash-at-hand for firms and can prevent job-losses and closures.

Under Component 1, the MERESP has planned to implement the following main activities: i) development and implementation of the streamlined work organization based on the recommendations from the functional reviews; ii) re-designing the LMIS and making the system functionality that is efficiently aligned with the business needs of the Ministry of Labour and Social Protection (MLSP) and General Office for Labor and Social Welfare Services (GOLSWS) labour market functions and facilitates process automation through standardized management information system, and an ICT-based job-matching tool (developed under the Korean ODA) for better synergy; iii) physical upgrading of the General Office for Labor and Welfare Services (GOLWS) office to house the improved LMIS and facilitate streamlined work organizations and training facilities; iv) capacity strengthening of public employment services (PES) through technical assistance and staff training; v) a functional review of private employment services' service standards, work processes, and performance measurement and (vi) improved links between public and private employment services through an expansion of shared job vacancy listings and other activities.

## 2. Objectives of this assignment

The main objective of the assignment is to hire a qualified Senior IT Specialist who could provide a top-line ICT support and technical guidance to the MLSP/GOLWS for the design and implementation of an integrated LMIS Platform.

#### 3. Collaboration with Korean IT firm and other entities

One of the key objectives of this assignment is to ensure a proper harmonization of eJob development efforts under *Mongolia Employment Support Project* (MESP) and *Korean Official Development Assistance* (*ODA*) support being provided to the MLSP by the Korean Government. A Korean IT firm (TG) is currently working with GOLWS for the design and development of online job platform. As of now, the system is currently under the testing phase and expected to be handed over to GOLWS in coming months. It is quite likely that this platform might have some level of similarity on the functionality that this assignment scope also demands mainly on the functions such as submitting an application for online job application, job search through online portal, matching of jobs with vacancies, employers registration and submission of vacancies demand among others. It is now the responsibility of the SI as a part of this scope to conduct a detailed gap analysis to determine the level of technical and functional compliance of this system taking into considerations of the following key aspects:

- Functionality compliance: evaluate the extent of functionalities developed by Korean
  IT firm and whether those functionalities are fully aligned with the business
  requirements of GOLWS; identify the functional gaps and what concrete steps are
  necessary to address those gaps and to ensure that the system can further be customized
  or modified and/or integrated with the proposed eJob platform to achieve the desired
  project objectives;
- 2. Technical compliance: evaluate the backend design architecture in terms of its useability and scalability including the e-government framework adapted by the IT firm to determine whether it is an open ended or flexible solution which can be well integrated as a unified eJob platform; review of the application source code files to evaluate whether the backend codes can be understood by SI team to further build upon if needed; evaluate the pros and cons of integrating with the Korean solution as opposed to developing new with the similar functionality on its own;

Based on the findings on above, the SI is expected to develop a gap analysis report that comprehensively evaluates above aspects and come out with a clear recommendation with action plan to mitigate the risk of duplication of efforts.

The Korean IT firm is expected to submit the following technical documents to GOLWS which shall be shared with the SI:

- 1. System functionality list;
- 2. System design document (SDD);
- 3. User manual;
- 4. Application source code files;
- 5. A complete list of hardware and ICT equipment;

Moreover, SRS phase is also expected to define the software development methodology between these two systems in terms of user interface standards, data exchange protocol, system navigation, single sign on procedures, among others. It is therefore important to have a close coordination between among the relevant agencies to ensure that there is no duplication of effort and both these systems operate seamlessly through a proper mechanism of data exchange or inter-operability established in a most secure and reliable manner.

Likewise, there are also few other systems or databases that become relevant in the context of LMIS design and implementation for data exchange. The SI is expected to collaborate and work closely with the agencies that are currently maintaining these systems with an aim to establish a secure and reliable means of data exchange with these systems with LMIS. The details of such data exchange functionality and its protocol shall be discussed and finalized during the SRS phase.

**Job matching technology (WorkNet):** WorkNet is a job-matching platform designed and developed under Korean ODA that is expected to have functionality to match jobs with job seekers and display the relevant outputs for the PES offices. Besides, the WorkNet is also expected to have functionality to registry online jobs for job seekers, employers to post jobs and search vacancies through an online portal etc.

**Data Exchange Platforms:** The National Data Center (NDC) has implemented a *XYP* (*Exchange Your Platform*) *platform* – a data exchange mechanism that enables exchange of data between multiple systems that are hosted in NDC. Likewise, *Decentralized Authentication Network (DAN)* is the platform that can operate with the other independent systems of public as well as private sector services and authenticate the customers to access those services easily. Using DAN platform, the citizens could access the public services anywhere using their own mobiles or laptops. This system creates the great impulse to intensify the mobile services all around Mongolia.

**National Civil Registry database:** is a national database designed and maintained by the Ministry of Justice and Internal Affairs (MoJIA). The system maintains the demographic information (including picture and biometric) of each individual citizens of Mongolia in a centralized manner that issues a unique ID. This system shall be used to validate uniqueness of LMIS beneficiaries and the job seekers.

**Social Insurance database:** maintains the database of social insurance beneficiaries and track the monthly contribution made by the beneficiaries and the job seekers.

MLSP databases: that maintains the databases of various social assistance programs being implemented by MLSP that includes programs such as elderly, child money program, food stamp program.

**Integrated Household Database:** maintains the household information and generates a poverty scorecard through a Proxy Means testing (PMT) method inbuilt for each household.

**Private sector databases:** these are essentially databases belonging to the external service providers, which have potential linkages with the proposed LMIS for data exchange. Such relevant databases are potentially the databases belonging to the payment service providers/financial institutions, private sector employers' database, training service providers' database etc;

# Scope of work and activities

The consultant will play an active role in ensuring a proper coordination of tasks between MLSP, GOLWS, Korean IT firm and the World Bank funded Mongolia Emergency Relief and Employment Support Project (MERESP) System Integrator (SI) to achieve the desired objectives. Specific tasks include:

- Provide technical inputs to the System Integrator (SI) firm and GOLSWS during the System Requirement Study (SRS) phase and the overall LMIS development phases, such as the finalization of Business Process Review (BPR), LMIS design, development, system integration aspects, user testing, training and deployment etc in close collaboration with the Korean IT team to ensure a smooth harmonization between LMIS development and Korean's system;
- Provide technical inputs during the SI's gap analysis of Korean's system;
- Take a stock of existing ICT infrastructure (existing systems, hardware, connectivity, human capacity) in terms of its readiness, usefulness and relevance in the context of the implementing an integrated LMIS through the MERESP and other broad based LMIS business needs for its user's such as: PES officials, other relevant officials at GOLWS and MLSP users;
- Understand the overall business process of the project implementation to analyze and map from the context of LMIS design and implementation;
- Review of the key documentation deliverables such as System Requirements Study document (SRS), System Design Document (SDD) with inclusion of data flow diagrams, Entity Relationship Diagram (ERD), system inter-operability design protocol and provide technical comments/feedback to ensure that the LMIS objectives are met as desired;
- Identify and document potential technical issues, challenges foreseen during the development and implementation period with clear recommendation and time bound action plan to mitigate such potential challenges for the higher management to take an appropriate resolution measure;
- Identify training and capacity building needs for the operational staff and relevant users at central and local levels to ensure longterm system sustainability with clear recommendations for its timely implementation;
- Take a lead role in timely resolution of any bugs or error encountered, troubleshooting and any other related technical matters during the implementation in coordination with the SI;
- Take a lead role in timely data backup and regular monitoring of the system;

- Perform tasks and duties as assigned by MLSP, GOLWS and the Project team and report to the Technical team on necessary measures;
- Actively participate in meetings/discussions with various line ministries and counterparts including the Korean IT team, World Bank project team, Asian Development Bank (ADB) team among others, and provide support to the project team during the technical meeting or discussion that may sometimes require language translation;

# Required expertise, qualifications and competencies.

## A. Qualifications

• B.Tech/B.E Degree in IT/Computer Science or in equivalent field; MCA/ME/M.Tech in equivalent field is preferred.

## **B.** Experience

- Eight years of professional work experience in the area of Information Technology (IT);
- Demonstrated experience of working as a System Analyst/Team Leader in at least 2 (two) MIS/IT development and implementation project of similar size and nature is must;
- Proven experience of system design, development and implementation, system testing, training of users, intersectoral database management, business automation system development;
- Specific work experience in IT development of public sector organizations (preferably human resources and social sector)
- Knowledge in the area of design and implementation of MIS for cash transfer programs, Labour information management system, Human Resource Management Information System, G2P Payment systems, Social Security or similar nature would be an additional advantage;

#### C. Skills

- Should have a strong knowledge of system analysis, RDBMS concepts and IT project implementation life cycle;
- Knowledge of technology such as PHP, ASP.Net, Windows applications, CSS, HTML, C#.net, MVC framework, Database (MySQL/Oracle/MS SQL);
- Strong inter-personal and communication skills;
- Experience in working with team and team building spirit;
- Ability to analyze business processes and provides technical solutions.
- Strong problem solving and analytical skills.
- Strong trouble shooting skills;
- Participate in project discussion/analysis.
- Learning and using new technologies Research & Development
- Good command in English language in written and oral is a must

Preference shall be given to the candidate experienced in similar job as mentioned in the Scope of Work;

Monitoring and progress control, including reporting requirements.	Consultant will develop action plan to perform tasks and performing the above-mentioned activities, the national consultant will work under the supervision of the MLSP and the World Bank team. The performance of the consultant will be evaluated based on the following indicators:  - Completion of tasks specified in the ToR;  - Monthly progress report;  - Compliance with the established deadlines for submission of deliverables;  - Quality of work
Periodic report and deadline:	Consultant will prepare a monthly report following the end of a personmonth. One person-month is equivalent to 30 calendar days or 22 working days.
Inputs / services to be provided by MESP PIU	Consultant can utilize MLSP and MESP PIU office space and equipment.
Deliverables and timeline	<ol> <li>The consultant will produce the following outputs:         <ol> <li>Monthly progress and activities report stating the work accomplished, issues and challenges, next steps, key recommendations and timeline for each activity identified.</li> <li>Technical inputs on the deliverables of IT firm (SRS, SDD etc);</li> <li>Provide technical support for the development of Business Process Review (BPR) document;</li> </ol> </li> <li>The consultancy period will be from July 16, 2021 on a full time basis. The total number of months for the consultancy is expected to 12 months over the course of the contract duration with possible extention.</li> </ol>
Reporting and payment	The consultant will report to the MLSP DG/MESP Project Director and World Bank IT specialist.  Payment will be made in a monthly basis.