

MIS Specialist

Background

Government of Sindh (GoS), through the Sindh Social Protection Authority (SPA), is implementing the “**Strengthening Social Protection Delivery (SSPD) System in Sindh**” project with the assistance of the World Bank to strengthen social protection service delivery system and enhance accessibility and utilization of mother and child health services in selected districts in Sindh.

The project will support three components, financed through an Investment Project Financing (IPF) instrument, with US\$200 million from the International Development Association (IDA) and US\$30 million from counterpart funding. The Project components are: (a) Strengthen Sindh Social Protection Service Delivery Systems to support the modernization of systems and processes to fully operationalize the newly established Sindh SP Authority and improve its institutional capacity by strengthening the administrative, operational, policy, and planning functions and capabilities, including the development of energy efficient/climate-smart information technology (IT) systems and capacity building through the provision of technical assistance; (b) Mother and Child Support Program (MCSP) focusing on birth and first 1,000 days where risks and needs are high but programmatic responses are weak; the main objective of this component is to create demand for Maternal and Newborn Child-Health (MNCH) services and promote behavioral change to increase uptake of the MNCH services focusing on the first 1,000 days of life through the provision of CCTs in selected districts; and (c) Contingent Emergency Response with zero allocation, providing the Borrower to gain quick access to Bank financing to respond to a crisis or emergency. As part of a comprehensive disaster risk management strategy, the Contingent Emergence Response Component typically provides support for immediate rehabilitation and reconstruction needs.

Objectives of the Assignment

In order to achieve the objectives of the project, SPA, being the lead implementing agency for SSPD, is in the process of putting in place the required technical staff under the Project Directorate based in SPA’s Headquarters at Karachi. To that end, SPA requires services of a “**MIS Specialist**” to perform the below mentioned roles and responsibilities. The position will report to Senior Specialist (IIS).

Scope of Functions

- a. Get well acquainted with all the strategic documents for the World Bank funded SSPD project, including Project Appraisal Document (PAD), Project PC-I, Project Operations Manual (POM), Project Procurement Strategy Document (PPSD) and the Environmental and Social documents, as well as with documents related to any other initiatives undertaken by the Sindh SPA, for better understanding of various project designs, respective implementation mechanisms and associated MIS requirements.

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- b. Consolidate and fully stabilize the “*Mamta*” MIS field application, compliances, enhancements and central integrations with support from SSPA technical team.
- c. Support IIS Specialist in interfacing with SPA management and various user wings viz. MIS related activities and all integrations. Also support IIS Specialist to maintain the consistency in technical design documentation & MIS work plan across all interventions and integrations (as needed).
- d. Liaise with IIS specialist for documentation consistency & approval. Lead the development of System Requirement Specifications (SRS), for supporting and maintaining the MIS for” (i) registry of beneficiaries of Social Protection programmes in Sindh; and (ii) core case management and automated data-sharing systems for SPA programmes, including SPSD interventions, based on the end user’s needs and other constraints, such as cost and schedule. Ensure that SRS are consistent, complete, correct and operationally defined.
- e. Liaise with IIS specialist for documentation consistency & approval; and lead the development of the System Design Document (SDD), with relevant modules, applications and related workflow for the registry of beneficiaries, and for at least, the following general operative processes for case management: (i) targeting, (ii) enrolment, (iii) compliance verification, (iv) payments, (v) appeals and grievances, (vi) household information updates, (vii) managerial information (indicators); and, (viii) payment module.
- f. Lead the MIS requirement gathering based on the user's needs and other constrains such as cost and schedule, do market research, and ensure that MIS requirements are consistent, complete, correct, and operationally defined.
- g. Gathering critical information from meetings with User Wings & various stakeholders and producing useful documentation on new requirements as well as updates/changes.
- h. Translate business requirements to detailed user, functional, and systems requirements. Write use cases.
- i. Completely able to independently develop application (Mobile / Web) design prototype, with technical team support on system architecture & design.
- j. Perform cost-benefit analyses, keeping in mind the long term, to determine whether requirements are best met by manual, software or hardware functions; making maximum use of commercial off-the-shelf or already developed components.
- k. Support the IIS specialist & MIS team in ensuring end to end architectural, functional and protocol consistency. Implement the management defined procedures of new requests, change management and all technology soft & hard assets addition/updates handling.
- l. Lead the preparation of the technical and user and source code manuals and other products such as sketches, models and prototypes, that can serve as guiding documents and ensure sustainability of MIS&IT architecture beyond project life.

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- m. Along with Quality Control, generate a set of acceptance test requirements/scheme, together with the IT team and MIS users, which determine that all high-level requirements have been met, especially for the computer-human-interface and data consistency.
- n. Support development of the required operational database procedures, ancillary processes as well as the procurement and operation of hardware systems to ensure an effective and efficient operation of SPA's database.
- o. Assist in developing policies and procedures for data security (such as strong passwords, two factor authentications, restricted data accessibility within controlled environment, CCTV monitoring), and data sharing mechanisms (especially APIs), including rules for approving/disapproving data requests and their compliances, maintaining log files and others associated functions.
- p. Help develop and implement disaster recovery policies/plans and procedures. that should essentially provide an appropriate back-up strategy (e.g. cloud servicing/offsite or inhouse back-up copies etc.) to protect data of all types (poverty/programmes/emails) as well as to ensure timely restoration of a system in case of a loss of network connectivity or data due to human error, hardware malfunction, malware or others.
- q. Assist in the development of the MIS training manual/module on key aspects e.g. data collection tools and templates, databases, field application use, grievance redress etc.
- r. Support in ensuring that relevant staff at the central and local offices is trained in the use of MIS on the basis of above.
- s. When required, assist in technical discussions with external stakeholders, such as, NADRA, PITB, BISP etc., to analyse and resolve issues and technical requirements as part of the day to day operations and service delivery to beneficiaries
- t. Assist in analysing and reviewing the interoperability of existing MIS deployed in the field, including the PPHI EMR system in Sindh.
- u. Assist in the design and development of the integration architecture of Health EMR system under the project, vis-à-vis other systems deployed in the field, enabling all systems in the field to converge in the medium to long-term; thereby ensuring simplicity, extensibility, scalability and traffic-controlled access to core service functionality.
- v. Work closely with a field resource (having a clear understanding of existing field processes, and their limitations at different health facility levels) in the development of the integration interface of the Health EMR, Support the design, install and maintain all current databases.
- w. Support IIS specialist in the development of service level agreements (SLAs) for various needs, especially cross government services (like with BISP, NADRA etc.).
- x. Able to make training material of developed systems & impart training to operational

users.

- y. Participate in technical pre-bid and negotiation meetings, as well as manage contracts on need basis. Help maintain software licensing and maintenance agreements.
- z. Perform any other task required for the successful implementation of the SSPD project.

Qualifications

Masters/Bachelors degree in any field of Computer Science, Computer Engineering, Software Engineering, MIS, Information Technology or any similar discipline from HEC-recognized reputed university.

Experience

- At least six (06) years of software design, development, and deployment experience in large-scale systems. Out of which at least 4 years should be in a Technical Lead position for development of software over latest technologies.
- Substantial experience and hands-on experience in software development.

Proffered Tools & Technologies

- NET Core, Microservices, MVC, ASP.NET, C#
- Angular, React
- SQL, NoSQL
- GIT, JIRA/DevOps
- RabbitMQ/Kafka
- Understanding of Flutter, Native App, PHP - Laravel, WordPress is a plus.

Skills

- Good presentation, communication and writing skills.
- Ability to liaise and coordinate with stakeholders at multiple levels;
- Capable of multi-tasking and ability to work in a multi-disciplinary team.

Selection Process

The selection will be made in accordance with the “World Bank Procurement Regulations for Investment Project Financing Goods, Works, Non-Consulting and Consulting Services” November 2020.