

Terms of Reference

DEVELOPMENT OF INTEGRATED WELFARE MANAGEMENT SYSTEM (IWMS)

1. BACKGROUND

Social Safety Nets Project (SSNP) is implemented under Ministry of Finance. The main objective of the Social Safety Nets Project is to establish equity, efficiency, transparency within the Social Safety programs in Sri Lanka, through the establishment of an effective and transparent mechanism for selecting, managing and graduating families supported by the various social welfare programs.

The ultimate objective is to ensure the selection, management and graduation of beneficiaries of the 23 social welfare programs currently operating in Sri Lanka. However, in the initial phase the project will focus on four of the social welfare programs. These programs are Samurdhi, Elderly Allowance, Disability Allowance and Chronical Kidney Disease Unknown (CKDU). SSNP is a five-year project funded by World Bank to support this initiative. One of the main tasks of this project is to assist the Welfare Benefits Board (WBB) established under Welfare Benefits Board Act to develop and implement a new Integrated Social Welfare System (IWMS).

SSNP has initiated developing an electronic data capturing system using a web /mobile based platform which is managed by Welfare Benefit Board (WBB). All ICT developments are undertaken in coordination with ICT agency (ICTA) of Sri Lanka.

A comprehensive Process Re-engineering Study was undertaken to define the processes of the Integrated Social Welfare Management System (IWMS). These re-engineered processes have envisioned the integration and simplification of the activities from selection and enrollment of beneficiaries across the various social safety net programs, to their on-going management, and finally, the graduation of the beneficiaries. This system will also facilitate the disbursement of welfare benefits to the enrolled beneficiaries as well as manage the grievance process. It is envisaged, in the future, to integrate all government social safety net programs through this system.

2. OBJECTIVE OF THE ASSIGNMENT

The objective of the assignment is to develop the Integrated Welfare Management System to facilitate the registration, selection, enrollment of beneficiaries, to the various social safety net programs, to facilitate the disbursement of benefits and the capture and monitor public grievances. The IWMS system proposes to integrate multiple social safety net programs in Sri Lanka onto a single platform. The proposed system is intended to support following processes;

- i. Applicant identification, verification and selection based on the Social Safety Net eligibility calibration and ranking and enrolment, and management of allocated fiscal space
- ii. Selection, Case Management, Enrolment, Progress Monitoring and Graduation of Registered Social Assistance Program Beneficiaries
- iii. Creating Distributors, Assigning Beneficiaries and Distribution of Benefits

iv. Grievance and Query Management

It is envisaged that the IWMS System will be accessed by the officers of the safety net programs at the national and divisional levels, while the district level officers could also be given access to review the information within the IWMS System. In addition, field level officers and distributors of benefits will also access the IWMS System based on desktop or mobile applications. It is envisaged that the beneficiaries will access the IWMS System via a mobile app.

3. SCOPE OF ASSIGNMENT

The specific TOR, specifies the scope of work related to each individual the SSNP intends to engage to provide expert inputs for developing the IWMS System. The collective objective of the selected resources to complete the development of the IWMS System within the specified time-frames and agreed cost structures. The selected organization will be required to undertake the tasks specified below;

#	Area of Responsibility	Role
1.	Study the process re-engineering report and validate and finalize the overall solution architecture	System Architect
2.	Based on the process re-engineering report, finalize the required annexures, forms, and formats identified within the process with the 'stakeholder validation team' ¹	Project Manager/ Business Analyst
3.	Build the overall Product Roadmap, produce user stories, maintain product backlog (Scrum), Prioritization of stories for production, Coordination between the various stakeholders, Gather any additional information/documentation required for the development and to Conduct regular stakeholder reviews	Project Manager/ Business Analyst
4.	Validate the non-functional specifications with the 'stakeholder validation team'	Project Manager/ Business Analyst
5.	Design the security standards for the software, Perform periodic security checks in architecture and coding levels, Document security check results, Perform load testing	Tech Lead
6.	Design UI according to the standards, convert design to HTML/CSS, add minor level validations in HTML, Provide HTML formats for development	Development Team
7.	Setup + maintain code repository, ensure code check-in on daily basis, resolve code level conflicts (system level), Detailed design for components, Integration testing, Sprint planning and review, Enforce Scrum, develop advance components and modules, manage other programmers and evaluate the developments.	Tech Lead
8.	Develop core components, Resolve code level conflicts (component level), Unit testing, Component testing, Facilitate Automated Testing	Development Team

¹ The stakeholder validation team will consist of representatives from the four social welfare programs selected for the piloting of the proposed IWMS System

9.	Develop Test Cases for Unit and Components, automate test cases (as much as possible), Perform manual testing (where needed), Monitor automated build/integration	QA Team
10.	Perform manual testing, Document QA results	QA Team
11.	Perform all the technical documentations related to the development	Technical Documentation Lead

4. DURATION OF THE PROJECT

1. The duration of the assignment is 8 months from the date of signing of the contract. The lead firm must be a registered business in Sri Lanka
2. Provide time line for the key deliverables specified in the below Section 5 key deliverables within the assignment period

5. DELIVERABLES

The deliverables of the assignment will be process based as mentioned in the Business Process Re-engineering Document of the Integrated Welfare Management System. The order of the processes to be delivered as follows;

1. *A. Receive Request, Verify and Register SSN-Eligible Households (SN-EH) including Fiscal Space Management.*
2. *B. Selection, Case Management, Enrolment, Progress Monitoring and Graduation of Registered SNAP Beneficiaries.*
3. *E. Creating Distributors, Assigning Beneficiaries and Distribution of Benefits*
4. *D. Grievance and Query Handling*

6. DEGREE OF EXPERTISE AND QUALIFICATIONS

No.	Key Staff	Qualifications	Experience
1	Business Analysis cum Project Manager (1)	Bachelor's degree or higher from a recognized university in Information Technology, Computer Science, Business Management or relevant field.	<ul style="list-style-type: none"> • 15 + Years of industrial experience in Business Analysis and 5 + Years of Project Management experience in the software industry. • Experience in understanding process documentation and preparing user stories. • Experience of communicating and coordinating with stakeholders. • Experience in managing the project backlog in scrum methodology. • Government sector systems analysis in Sri Lanka.
2	Solution Architect (1)	Bachelor's degree or higher from a recognized university in Information Technology / Computer Science / Software	<ul style="list-style-type: none"> • 15 + Years of experience in the Software Development Industry • Of which 5 + Years of experience as an Enterprise System Architect.

		Engineering or relevant field.	<ul style="list-style-type: none"> • Experience in designing enterprise level IT solutions and cloud development. • Experience in DevOps. • Experience in designing enterprise systems on the LGC will be an advantage
3	Tech Lead cum Programmer (1)	Bachelor's degree or higher from a recognized university in IT / Computer Science / Software Engineering with Professional Certifications in relevant technologies	<ul style="list-style-type: none"> • 6 + Years of industrial experience as a Tech Lead. • 5 + Years of experience as Senior PHP and/or Java developer. • Experience in PHP and/or Java, MySQL based Systems with Security Standards. • Ability to assess the velocity of the team members and assign work for the sprint. • Experience in deploying SW builds on the LGC and live environments. • Experience in Government Sector enterprise systems is an added advantage.
	Snr. Programmer (1)	Bachelor's degree from a recognized university in IT / Computer Science / Software Engineering with relevant professional certification.	<ul style="list-style-type: none"> • 4 + Years of industrial experience in Software Engineering. • Experience in advance PHP and/or Java / MySQL / Javascript / CSS / React technologies. • Ability to assess the velocity of the team members and assign work for the sprint. • Ability to maintain the development environment and manage the SW builds within the development environment
4	Programmer (2)	Bachelor's degree from a recognized university in IT / Computer Science / Software Engineering with relevant professional certification.	<ul style="list-style-type: none"> • 4 + Years of industrial experience in Software Engineering. • Experience in advance PHP and/or Java / MySQL / Javascript / CSS / React technologies.
5	UI Engineer (1)	Bachelor's degree from a recognized university in IT / Computer Science / Software Engineering with relevant professional qualifications in UI related technologies is an added advantage	<ul style="list-style-type: none"> • 4 + Years of industrial experience in User Interface designing. • Experience in HTML5 / CSS 4 / Bootstrap / Javascript / Basic React technologies. • Ability to adopt latest UI trends. • Experience in Government Sector enterprise systems is an added advantage.
6	QA Lead (1)	Degree from a Recognized University with relevant professional qualification in the QA domain	<ul style="list-style-type: none"> • 4 + Years of experience in Software Quality Assurance. • Ability to prepare comprehensive test plans for automated and manual testing based on User Stories. • Ability to set-up and use QA tracking and load testing software. • Ability to supervise a team of QA staff.

7	Technical Documentation Lead (1)	Bachelor's degree in Computer Science, relevant technical field.	<ul style="list-style-type: none"> • 2-4 years' industry experience as an effective technical writer • Proven ability to quickly learn and understand proposed system • Previous experience in writing system documentation, and user manuals for multiple audiences
8	Security Specialist (1)	Bachelors degree from a recognized university in IT / Computer Science / Software Engineering or relevant field. Professional qualifications in IT Security related technologies	<ul style="list-style-type: none"> • 8 + Years of industrial experience in IT Security. • Experience in automated / manual code reviews. • Experience in dynamic application security testings. • Experience in risk analysing.

7. OTHER CONDITIONS OF ENGAGEMENT

Social Safety Nets Project will take progress review meetings at the end of each week with the Project Manager to monitor the progress of the assignment and to resolve any outstanding issues.

The project office will facilitate a location and furniture for the development team in the premises of the Ministry of Finance. All key experts mentioned in Section 6 above will be required to report to the designation location assigned by the Ministry of Finance during normal government business hours for the duration of the assignment.

The project office will give the internet facility to the development team while team need to bring their own Computers (Laptops) and other accessories required for their tasks.

8. SUBMISSION OF PROPOSALS

The firm intending to undertake this assignment will be required to explain the prior experience in undertaking a project of similar nature and the detailed methodology the firm intends to follow during the execution of the project. The experience of the firm in undertaking similar projects and the proposed methodology, exposure to Agile/Scrum methodology will be given due consideration. The firm is also required to submit testimonials/citations from customers where similar development was undertaken.

The individual staff assigned to the specific role, must in addition to the detailed Curriculum Vitae provide a personal statement clearly explaining the specific work that he/she has undertaken that would contribute to the work that needs to be performed by the specific role. All consultants will be required to demonstrate their competency for the role prior to engaging the organization.

The firm will also be required to study the BPR document and provide a proposed time plan for undertaking and completing the assignment.

As the firm will be selected based on the expertise of the specific staff being assigned to the project, the selected staff will be required to be available for the entire period of the contract, except due to unavoidable circumstances. The firm is required to provide a declaration that the selected staff will be made available for the project and will not be substituted by other staff.

9. PROGRESS REVIEW

The Project Manager will be required to conduct stand-up meeting on a daily basis. Assigned officers of the SSNP may join these meetings as observers. All development will be undertaken in either 2 week or one-week sprints and there would be a sprint review with the SSNP and the ‘Stakeholder Validation Team’ at the end of each sprint. All user-stories for the subsequent sprint would also be discussed within the review meetings.

10. PAYMENT STRUCTURE

The payment for the services provided will be made in the following manner;

#	Deliverable	Percentage of Payment	Deadline
1.	Process A – User Stories	5%	2 weeks
2.	Process A – Development Completion	10%	7 weeks
3.	Process A – System Acceptance	10%	8 weeks
4.	Process B – User Stories	5%	10 weeks
5.	Process B – Development Completion	10%	15 weeks
6.	Process B – System Acceptance	10%	16 weeks
7.	Process E – User Stories	5%	18 weeks
8.	Process E – Development Completion	10%	23 weeks
9.	Process E – System Acceptance	10%	24 weeks
10.	Process D – User Stories	5%	26 weeks
11.	Process D – Development Completion	10%	31 weeks
12.	Process D – Systems Acceptance	10%	32 weeks

* Prior to ‘System Acceptance’ of each SW component, the builds must be deployed on the LGC, UAT completed, and documentation finalized.

11. PROCEDURES FOR REVIEW OF OUTPUTS

A ‘Deliverable Review Committee’ will be appointed by the Social Safety Nets Project consisting of 5 members in addition to the ‘Stakeholder Validation Team’.

The deliverable review committee will be reviewing the deliverables with the support of BPR consultant and against the BPR document. Any modification required to the BPR document must be approved in advance by the ‘Deliverable Review Committee’.

The ‘Deliverable Review Committee’ will incorporate their comment with the development team within 2 weeks the date of the release. When there are no more comments from the ‘Deliverable Review Committee’ it would be assumed that the relevant component of the IWMS System has been accepted. Payment shall be made after the recommendation of the review committee. The payment shall made after the recommendation of the deliverable review committee.

12. CLIENT INPUTS

The selected firm need to provide experts to work in the premises given by the client. Client will provide the physical space with furniture and Internet connectivity for the experts during the period of the assignment. Client will monitor the progress of the development as well as the attendance of the nominated experts.

13. OTHER CONSULTANT INPUTS

The selected firm need to provide all other equipment required to undertake the assignment, e.g., the development environment, including the personal equipment Laptops, PCs etc. required by the experts for the development.

14. EXPERTS’ ENGAGEMENT

Designation	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Business Analysis / Project Manager								
Solution Architect								
Tech Lead cum Programmer								
Snr. Programmer								
Programmer (2)								
UI Engineer								
QA Lead								
Technical Documentation Lead								
Security Specialist								