Terms of Reference
IT DEVELOPER (Individual) 6 months

A. Background

The Social Protection Act 2/2014 stipulates that the National Social Protection Agency (NSPA) shall develop necessary regulations and guidelines for the administration of the social protection programs mentioned in the Act. A number of the programs have been rolled out and about 15000 beneficiaries are now enrolled to receive cash transfers through NSPA.

The NSPA operates an offline Social Protection Information System (SPIS), into which beneficiary data are entered manually from paper forms collected at the time of enrollment. There is no process to update information once captured.

Given the geography of Maldives, NSPA has very limited capacity to physically reach the vulnerable populations to roll out these programs. It has only one citizen service center, in Male, and relies on Island Councils to enroll and manage the cases of beneficiaries outside Male. At present this is done through ad-hoc means (i.e. sending scanned application forms by email or via the Government e-Letter Management System). Hence, NSPA requires an online application system.

B. Objective

The purpose of this consultancy is to develop an online beneficiary portal for the existing SPIS for use by potential beneficiaries and frontline social workers at the Island Councils. The consultant will review the existing SPIS and develop a full stack complementary user interface and database for the beneficiary portal of the SPIS. The consultant will integrate this portal fully with the existing SPIS software. The consultant is expected to incorporate modules to conduct offsite registration, targeting, payment update, case management and monitoring of Social Protection Programs conducted by NSPA. This will include capabilities to capture GIS coordinates and verify identity based on National Identity Cards.

The conceptual system is laid out in the diagram below. Currently SPIS and ENSPA (document management system) have been developed and are being used on a daily basis. The beneficiary portal will be developed as part of this consultancy. The details are provided in Section 2, 6.1.1 and 6.2.2 of the BPR document (Since the document is confidential it will only be shared with shortlisted candidates upon request). The beneficiary portal need to be user friendly and accessible from commonly used web browsers and compatible with and enhanced for iOS and android systems.

The National Social Protection Agency is currently operating four programs via the SPIS and plans to roll out new programs in 2021. Hence a user-friendly beneficiary portal is needed to collect data, verify and push data to the existing SPIS (back-end). The smooth integration of the portal to SPIS and ENSPA is crucial. The Business Process Design for the SPIS has been done and the consultant is expected to develop the portal according to the specifications and document the necessary aspects in building the portal. The in-house developers of the SPIS will be the focal point from the agency and work with the consultant on the business process analysis and design phases to ensure the new portal is well integrated with the existing systems.

C. Scope of Services

The consultant will design, test and deliver a fully operational user interface and supportive database for the beneficiary portal as per guidance from the business process design of the SPIS and facilitate registration and institutional users. The consultant will report to the Lead developer at NSPA and work with NSPA IT team and in-house developers, under guidance of the Lead developer.
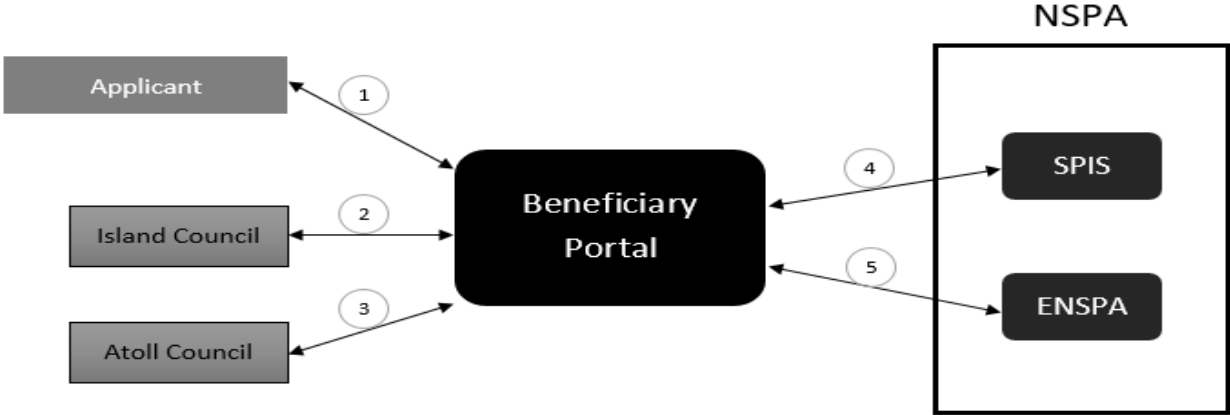
1 – Submit / Manage Applications at Individual level

2 – Manage / Update island level beneficiary lists

  - Submit applications

3 – Manage / Update atoll level beneficiary lists

  - Submit applications

4 – Send / receive data to SPIS on beneficiary status

5 – Lodge applications / receive updates on application status

**Identity verification and GIS log @ #1, 2 and 3

The consultant will also prepare the full stack documentation and familiarize NSPA team with the new portal. The consultant is responsible for developing a basic Operation Manual or User guide for the beneficiary portal.

The developed portal should be rigorously tested to ensure it is useable across platforms and is mobile enhanced. NSPA will provide assistance to test out the portal and the consultant will provide the technical assistance required for the launching of the service.

D. Reporting and work arrangements

The consultant will work as part of the development team of NSPA and report to the lead developer at NSPA. The consultant is not expected to develop in isolation and submit the completed portal, but rather expected to work with the lead IT developer on an agreed software development method to complete the deliverables with support from the NSPA IT team.

Physical attendance is not compulsory as payments will be made against completion and submission of deliverables scheduled and agreed with the consultant.

The work space and equipment required will be provided for the consultant at the NSPA office and off-site work arrangements can be facilitated if required by the consultant as well.

E. Timetable and Deliverables:

The duration of the assignment is 6 months and the following deliverables are expected as output of the consultant's tenure.

• Review existing System, assess its BPR documents and, confirm design and Prepare Basic documentation of the proposed beneficiary portal.	• Review of the existing System and finalize the design of the complementary portal in consultation with SPIS developers and NSPA team. • Initial documentation draft after 2 weeks review of existing system and mockup of the portal user interface and user workflow presented along with other supportive documentation. • Finalize basic documentation with designs, database structure, detailed timeline and send to get signed off by NSPA management within 3 weeks of start of assignment
• Develop and test the beneficiary portal	• Develop features for and associated database of the beneficiary portal for registration and form application. Within 6 weeks of start of assignment • Develop the features of the frontline users of islands to the beneficiary portal within 9 weeks of the assignment • Develop reporting tools for the portal within 12 weeks of the assignment • Testing of developed portal functions within 18 weeks of assignment
• Provide support to the mobile application for the beneficiary portal	• Provide advice for the development of the Mobile application for the portal within all weeks of the assignment
• Design and develop the operations manual.	• Prepare the Operations manual/user guide by 22 weeks of the assignment.
• Train portal management staff within NSPA to manage the portal	• Provide training to NSPA staff after a plan for training is developed and approved by NSPA no later than 23 weeks from start of assignment
• Support to the launching exercise	• Provide necessary technical support to launch the portal and rollout to at least three islands

F. Minimum Qualifications:

o Minimum 5 years of experience in IT field as Systems Engineer/Software Developer
o Consultant should have experience in design and implementation of web portals and at least 3 years' experience in the design and build of IT systems/websites/mobile applications.
o Experience in preparing operations manuals for IT systems will be an added advantage
o The consultant should have experience and familiarity with PHP (Laravel), Python, JavaScript (experience in Vue.js) and SQL (MySQL and PostgreSQL)