

TERMS OF REFERENCE OF SENIOR SOFTWARE ENGINEERS

1. Overview

1.1 Background

In February 2026, IPA signed a Memorandum of Understanding (MOU) with the Rwanda Ministry of Local Government (MINALOC), establishing a formal partnership to strengthen social protection systems in Rwanda.

This collaboration is anchored in the Government of Rwanda's National Strategy for Sustainable Graduation (NSSG), locally known as *Gira Wigire*, which was approved by the Cabinet on November 11, 2022. The strategy aims to enable poor and vulnerable households to achieve sustainable livelihoods and permanent economic independence, ultimately reducing their reliance on social protection support.

Under this partnership, IPA Rwanda, through the Embedded Lab model, will complement BRAC's ongoing efforts to implement the Graduation Strategy. The Graduation Lab within MINALOC will focus on **generating evidence and strengthening MINALOC's data systems by exploring opportunities for data linkage across platforms, strengthening MEL systems, and building institutional capacity to translate evidence into policy and data-driven decision-making.**

It is in this regard that we are **looking for a software engineer.** This consultant will collaborate with our policy team to advance the engagement with MINALOC and relevant stakeholders in establishing the Graduation Lab.

1.2 Scope

The Senior Software Engineer will provide technical assistance across the full software development lifecycle, ensuring quality, security, and interoperability. Key responsibilities include translating business requirements into scalable solutions, resolving performance and scalability constraints, conducting code reviews, ensuring data security compliance, and supporting knowledge transfer and capacity building within MINALOC. He/ She will also conduct user training, implement feedback iteratively, and monitor the post-deployment system.

1.3 Objectives

The objective of this contract is to strengthen the Social Registry and associated digital systems to support MINALOC in delivering more accurate, efficient monitoring, and interoperable social protection services in Rwanda. The consultants will diagnose systems, upgrade, test, and deploy key system features in alignment with the Government of Rwanda's National Strategy for Sustainable Graduation (*Gira Wigire*) and associated data systems.

2. Requirements

2.1 Tasks

1. Analyze the current MINALOC's data systems, identify gaps, suggest improvement opportunities, and develop roadmap for improvement (System Diagnostic Analysis)
2. Upgrade of the existing Social Registry Login page to accommodate MINALOC and LODA
3. Upgrade on the user roles and access level features
4. Development work on the analytical layer for data visualization and operational reports
5. Development work on Social Registry and PGMIS data integration & visualization
6. Data validation & Rollout, training and technical support to the system users
7. Monitoring the system usage and implementing the user feedback

8. Adjustment of Social Registry user manuals, training materials and the technical documentation of the system
9. Sharing knowledge with other software development team members and supporting the technical transition process

2.2 Deliverables

The below table shows the key deliverables and output linked with the defined tasks:

1	Diagnostic Analysis (In collaboration with former social registry developer consultant and lab team)	<ul style="list-style-type: none"> ● System Assessment Report A report identifying technical gaps, vulnerabilities, and prioritized recommendations for improvement. ● Integration & Interoperability Map: A mapping of existing and missing system integrations with proposed solutions ● User experience assessment ● Technical Roadmap: An actionable plan outlining the recommended sequence of upgrades and enhancements.
2	System features enhancement, based on diagnostic analysis and roadmap	<ul style="list-style-type: none"> ● Login and user managements are enhanced (permission and access levels) ● User guide is drafted and accessible to all users
3	Development of analytical layer and data visualization & operational reports (in collaboration with lab data analysts and MINALOC team)	<ul style="list-style-type: none"> - Important variables from Social Registry data are well visualized in graphs, maps, etc - Users are able to view based on their access levels, from national to local
4	Continuous data validation, rollout and training of users	features are rolled out, users are trained and the data quality is checked on regular basis and will follow the sequence of completed/added feature in the system
5	Continuous maintenance and technical support to users & Adjustment of documentations	The system portal and usage is maintained and users are getting technical support as needed
6	Knowledge transfer & transition process to the permanent IPA embedded team in CDO for long-term lab vision	<ul style="list-style-type: none"> - Hiring and onboarding support - Action Plan for transition is drafted with clear timeline and staff involved - Facilitation of the knowledge transfer sessions

2.3 Schedule

This contract will last 75 days. The detailed days by task/deliverable/who are highlighted in the above table of Deliverables section. The 75 days of consultancy engagement is structured as an interdependent period, meaning that each phase builds directly upon the outputs and progress of the preceding one. The 75 days are not consecutive calendar days but are distributed across different months within the contract period, in accordance with the sequencing of deliverables and the operational requirements of each phase.

3. Required Qualifications and Experience

The assignment requires a highly qualified and experienced Senior Software Engineer with demonstrated expertise in the development and management of large-scale information systems, particularly within the social sector.

- The candidate must hold a master's degree in computer science, Software Engineering, Information Technology, or a related field.
- The candidate must demonstrate strong proficiency in English, both written and spoken, while knowledge of Kinyarwanda will be considered an added advantage.
- A minimum of five (5) years of professional experience in developing robust and complex software systems is required.
- The candidate must have at least three (3) years of proven experience in the development of Social Protection Management Information Systems or similar IT systems for the social sector.
- The candidate should demonstrate solid experience in system interoperability and integration, as well as strong technical knowledge of relational database systems such as PostgreSQL, MySQL, or Oracle.
- Experience with modern web development frameworks, including Angular or React, and a strong understanding of APIs and web services are essential.
- Must possess strong analytical and problem-solving skills, excellent communication abilities, and the capacity to work effectively both independently and as part of a multidisciplinary team.

4. Skills and Competencies

- Strong problem-solving and analytical skills.
- Ability to work independently and deliver within deadlines.
- Excellent communication and teamwork skills.
- Commitment to confidentiality and data protection.

5. Application Process

Interested candidates should submit:

- An updated CV.
- A cover letter explaining their relevant experience.
- Technical and financial proposals.
- At least three references from previous similar assignments.

INTERESTED APPLICANTS MEETING THE POSITION REQUIREMENTS SHOULD SEND THEIR APPLICATION ON RWA_proposals@poverty-action.org

APPLICATIONS WILL BE CONSIDERD ON A ROLLING BASIS. APPLICATIONS SUBMISSION DEADLINE IS **May 11, 2026, no later than 5h00PM**. ONLY SHORTLISTED CANDIDATES WILL BE NOTIFIED.