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# GOVERNMENT OF RWANDA

## TERMS OF REFERENCE

The Government of Rwanda (GoR), through the Rwanda Digital Acceleration Project, implemented by the Rwanda Information Society Authority (RISA) under the Ministry of ICT and Innovation (MINICT), with financing from the International Development Association (IDA), is seeking to hire a consultancy (firm) to conduct a feasibility study to inform and select the implementation modality to be used to digitize and index civil registry archives located in cell, sector and district offices across the country and to support the GoR with the planning and procurement of the chosen implementation modality and technology solution recommended.

The digitalization of select paper archives will, inter alia, support identity proofing for the pre-enrolment of citizens and residents in a new digital identification (ID) system that is due to be rolled out and also support seamless delivery of key public services, in alignment with the Government's Zero-Trip Zero-Paper (ZTZP) e-government policy.

The consulting firm is expected to conduct a complete inventory and analysis of existing civil registry archives, map and benchmark a wide range of emerging technology solutions and global best practice approaches to advise government on the most practical, cost-effective, and impactful implementation modality and technology solution for undertaking the digitalization and indexing of paper-based civil record (CR) archives, including sites to be targeted. The firm is also expected to support more granular budgeting and planning of the implementation approach selected, including supporting the preparation of related procurement documentations to enable swift operationalization.

### I. BACKGROUND

#### *Country context*

Rwanda has a decentralized system of governance, comprising 5 provinces, including the City of Kigali, 30 districts, 416 sectors, 2148 cells and 14,837 villages. Rwandans speak Kinyarwanda, which is the country's first official language, followed by English, French and Kiswahili. Rwanda has a population that amounts to about 12.3 million, based on 2016 figures. The population is predominantly rural, with only about 16% living in urban centers. Around 43.4% of Rwanda's population is under the age of 16 years, making the population relatively young. Almost 95% (about 6.6 million) of eligible individuals, who are above the age of 16, have an ID as well as a unique identification number, as of 2016.

#### *Rwanda Digital Acceleration Project*

The GoR is set to receive financing from the World Bank (WB) and the Asian Infrastructure Investment Bank (AIIB) to accelerate country-wide digital transformation, as well as facilitate Rwanda's integration in the emerging regional digital market. The "Rwanda Digital Acceleration Project" project (henceforth referred to as the 'the Project') is expected to expand digital adoption, bringing more Rwandans online by addressing the major barriers that dampen demand for digital services, and spearhead a series of interventions that promote digital inclusion. The project will also support Rwanda to leverage critical enabling digital

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platforms and data-driven solutions to improve the efficiency of public service delivery and expand the adoption of digitally-enabled services. Finally, the Project will also increase Rwanda's capacity to support digital innovation and productivity gains, by strengthening the local digital innovation and entrepreneurship ecosystem, supporting tech firms to move from start-ups to growth and the adoption of digital technology in key sectors.

One of the key components of the Project is focused on supporting '*Digital Public Services Delivery*', which includes support for strengthening '*Digital identity verification and authentication services*' featuring the modernization of the existing identification ecosystem in Rwanda, including the digitization of civil records.

## **II. PROBLEM STATEMENT**

ICT is at the center stage of public service transformation in Rwanda. The GoR is looking to enable 24-hour self-service Government, in line with the national e-government agenda and related targets. Rwanda has set ambitious targets for supporting the complete digitization of public services, based on ZTZP, with 100% of Government services available online and citizen service satisfaction rates at 90% by 2024.

Today, Government's service portal, Irembo, offers over 99 Government-to-Person (G2P) and Government-to-Business (G2B) e-services, including those most frequently requested by services users. The Irembo Platform has greatly contributed to registered improvements in public service delivery, with better citizen engagement, transparency, efficiency, and informed decision-making derived from related business intelligence analytics.

Despite Government's increasing use of digital channels for service delivery, key public records are still not available in digital formats, which prevents the full end-to-end digitization of related services. Examples include legacy civil records, which still largely exists in paper form, but that contain valuable information needed as part of many key G2P services, including ID service, and that can also play an important role in central government social-economic planning or policy-making.

The digitizing and archiving of paper records will thus be essential to supporting further improvements in digital services delivery, but also critical in ensuring the secure long-term management of valuable personal information, due to the physical deterioration likely to impact paper-based and hand-written records. Digitization will also reduce the need for physical retrieval of related information, stored across the country, by services users that may be both time consuming and laborious, saving time and resources.

Meanwhile, GoR also intends to modernize the existing ID ecosystem and establish a Single Digital ID (SDID) system, as an inclusive and trusted digital identification and authentication framework to enable further roll-out of end-to-end digital services. This will be achieved by developing a data and digital authentication layer that both builds on and strengthens interoperability across the existing registers, including the national population registry (NPR), CRVS and foreigner registration systems and other authoritative data sources. Digitization of civil registry archives that are currently kept in sector offices in paper format will therefore, inter alia, accelerate and streamline the pre-enrolment process for the new SDID, enabling the verification (identity proofing) of information provided during pre-enrolment of citizens, residents and refugees.

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Although the exact number of civil registration records is not known, an assessment conducted in Gasabo district in 2017 revealed that there existed an estimated 1503 books of civil status records (in different formats and sizes) for that district alone, which has 15 sectors, and a population of 643,000 people. Those books were created from 1993 to 2017 and are kept at the sector level.

The GoR seeks an experienced advisory firm (“Consultant”) to support the design and prepare the implementation of the digitization of its civil registration records across the country, dating from the time of Rwanda’s independence in 1962 to the present.

### III. SCOPE OF WORK

The consultant (firm) is expected to perform the following key tasks, as part of the assignment:

- 1) **Undertake a complete inventory and analysis of existing civil registration archives and other paper-based records located in the same government offices, as a basis for the prioritization and selection of targeted sites.** The firm is expected to present a robust methodology for undertaking this inventory and analysis, including physically site inspections, which will include:
  - a) Mapping and analyzing the current paper-based civil registration records landscape in Rwanda, detailing the location, quality, volume, and completeness of existing paper archives. Records from other key national registries co-located at the same offices and kept in legacy paper formats should also be enumerated and assessed in regards to digitization readiness as part of the same exercise. Related analysis will need to indicate whether paper records would need to be manually transcribed or could be scanned and thus converted and indexed into digital formats.
  - b) Developing a digital map or similar visualization that reflects the location of paper-based records, as well as other relevant information to inform decision making in respect to the digitization of paper records exercise, and the prioritization of targeted sites.
  - c) Documenting insights and making recommendations related to the priority sector offices to be targeted for digitization. The prioritization and feasibility analysis undertaken should inter alia consider if the pre-requisite enablers are in place to facilitate the digitalization process in various locations, including supporting infrastructure (such as reliable broadband connectivity in the targeted sector offices), local labor and institutional capacity available to support implementation as well as local political support. It should also assess the expected impact of targeting different location, including the number of citizens and resident reliant on the records held in a given government office (with due consideration of both demographic, social and economic impact). The analysis and recommendations provided should also assess the feasibility of digitising other official paper-based records stored in the same locations, based on similarities/differences in record conditions, legibility, volume, etc., and also use this to inform the prioritization of targeted sites.
- 2) **Map and assess implementation modalities available, including technology solutions, that could be leveraged, as a basis for recommending the optimal implementation approach for Rwanda,** maximizing impact based on available Project financing. This will include:
  - a) Providing an overview and **benchmarking of best practice implementation approaches** deployed in other countries, including technology/software solutions used

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(particularly those featuring “off-the-shelf” and open-source solutions), highlighting lessons learned and their applicability to the planned digitalization of legacy civil registration (and potentially other paper-based) records in Rwanda. At least three viable solutions/options are to be identified and analyzed in greater detail, presenting the merits and drawbacks of each options considered, with the aim of identifying the best approach for Rwanda.

- b) Conducting a **technical analysis** of implementation approaches and technology solutions considered. The proposed implementation modality and technology solution selected is expected to enable interoperability with other government data bases and systems, including automated queries to the pre-enrolment module for SDID system to be deployed, as well as allow for future re-use of related data for the verification of identity attributes and preparation of new civil registration documents in the context of improved and digitized service delivery.
  - c) Conducting a comprehensive **financial and economic impact analysis** of implementation approaches and technology solutions considered. The firm should estimate the total costs associated with options considered, including a breakdown of upfront and recurring costs, and also highlight ways to minimize capital and operating expenses required, where possible, while ensuring that key objectives are met. This consolidated financial sensitivity analysis provided should clearly identify all unitary costs elements associated with options considered, and seek to maximize impact and coverage, based on available Project financing. The economic impact analysis undertaken should consider expected returns on investment, based on improvement to services delivery, related time and cost savings, and other positive impacts expected from the digitization of archive records.
  - d) Conducting a **social impact analysis** of implementation approaches and technology solutions considered, looking at how the various implementation modalities could generate additional positive externalities, such as prospects for local job creation for women, youth, and persons with disabilities, as part of the digitization process
  - e) **Recommending the most appropriate implementation approach and solution**, based on the technical, financial, economic and social impact analysis undertaken, locations targeted, as well as based on previous experience/lessons learned in Rwanda and globally. All recommended model(s) should be consistent with existing Government policy and legal frameworks, including the recently approved personal data protection and privacy law. As noted above, feasibility analysis of options should also consider enabling pre-requisites and be technical compatible with existing and future systems to be deployed, including the SDID system.
- 3) **Lead consensus-building and knowledge-sharing workshop, and conduct stakeholder consultation:** Findings and recommendations are to be delivered in writing and presented during a workshop. During the workshop, presentations by practitioners from at least two countries are highly encouraged. The consultants will be expected to support the government during necessary stakeholder consultations to inform and build consensus around the selected approach to digitalization. The firm is expected to support the documentation of related consultations with key stakeholders such as MoICT, NIDA, RISA, MINALOC, LODA and others that will feed into the Project’s wider stakeholder engagement plan.
- 4) **Prepare a detailed implementation plan, including a budget and M&E framework, for the implementation modality and technology solution(s) selected.** Once the most appropriate techno-economic solution and the model/structure to be followed has been

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adopted, the firm is expected to define a detailed work plan and budget for the phased digitization of the civil record archives, country-wide, noting the requirements, outputs and outcomes that are expected at different stages of implementation, including key indicators and metrics to be used to track progress. Consultants are expected to draw on other successful international exercises of records and registries digitization to inform this plan and prepare a detailed procurement plan to support implementation.

- 5) **Draft documentation needed to procure related goods and services required to support implementation**, based on the procurement plan drafted. The firm is expected to support preparation of procurement documentation, such as Request For Proposals (RFPs), including by providing detailed functional requirements, technical specifications and service-level parameters for the goods, services and systems needed to support the agreed implementation plan for digitalization of paper archives. To the extent possible with the contract period, the firm is also expected to assist, with tendering, evaluation and contract finalization of related goods and services to be procured. At a minimum, the firm should support pre-bid meetings and market sounding, helping to identify possible service providers, responding to clarifications and other queries related to procurement items proposed.

#### IV. LOCATION

The consultant must be available to work in Rwanda (e.g. through in-field missions), and is expected to support a physical inventory of sites where records are held. The firm must present a reasonable plan for how the assignment will be. Collaboration with local experts and/or having at least one expert based in Rwanda for the duration of the assignment is strongly encouraged, as this will also facilitate the collection of requisite inputs/data, knowledge of local context and support knowledge transfer, which are considered critical to the assignment.

#### V. DURATION OF THE ASSIGNMENT

The duration of the assignment shall be 6 months from the date of contract signature.

#### VI. EXPECTED DELIVERABLES, TIMELINES AND PAYMENT SCHEDULE

The following deliverables are expected from the consultants as part of this assignment, based on the timeline and payments schedule indicated below:

No.	Deliverable	Timeline	Payment Schedule
D.1	<b>Project inception report</b> , documenting the firm's approach to completing the assignment, with updated timelines	Within 2 weeks of contract effectiveness.	15 % of contract amount

D.2	<b>Complete inventory and analytical report of existing civil registration archives</b> and other co-located paper-based records to identify priority CR and other paper-based records to be digitized, including a visualization (such as digital map).	Within 8 weeks of approval of the inception report.	25% of contract amount
D.3	<b>Detailed assessment report, mapping and assessing implementation modalities options available</b> , including technology solutions, recommending the optimal implementation approach for Rwanda  <b>Consensus building and knowledge-sharing workshops and consultations</b> for the proposed options, which results in agreed project implementation and management plan	Within 4 weeks of approval of the record inventory and analytical report  Within 2 weeks of approval of the detailed assessment report of implementation modalities	20% of contract amount
D.4	<b>Detailed implementation plan</b> , including a budget and M&E framework, for the implementation modality and technology solution(s) selected.	Within 2 weeks of delivery of workshops and consultations.	20% of contract amount
D.5	<b>Procurement Documentation</b> , such as RFPs, to allow for procurement of related goods and services required to support implementation.	Within 3 weeks of approval of the implementation plan.	20% of contract amount

## VII. PROCEDURES FOR REPORTING

The consultant will submit all deliverables noted above to the Head of Single Project Implementation Unit (SPIU) at RISA and is also expected to submit short bi-weekly project updates to the assigned focal point in the SPIU. Daily guidance will be provided by Digital ID and Trust Services expert at RISA SPIU.

## VIII. QUALIFICATIONS: FIRM AND THE CORE TEAM

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The selected firm should be able to demonstrate the following qualifications and/or experiences:

- Proven experience of at least 5 years in the ICT / digital sector, trailblazing digital transformation in the developing world and supporting digitization of public systems and services, in particular.
- Prior experience of supporting projects related to digital record management, establishment of digital databases, and/or digital data-sharing is required, including support for both project design and implementation. Prior experience with digitalization of paper archives is considered to be a distinct advantage.
- Experience with the preparation of technical, cost-benefit and financial analyses for digital infrastructure and/or services investments is required.
- Strong track record of advising clients, developing evidence-based recommendations and detailed implementation plans.
- An understanding of emerging technologies and the ICT sector trends, digital record management, infrastructure development and other similar domains related to the ICT sector and the context of this assignment are needed.
- Experience working with the public sector and/or working with large international organizations strongly preferred.

The firm shall propose a team comprised at minimum - **Team Leader**, a **Technical Specialist**, a **Financial Specialist**, and other support staff as they deem fit for the exercise. Participation of local staff is highly encouraged. Minimum qualifications for each of these profiles shall be as follows:

The *Team Leader* shall have:

- A Master's degree in IT or similar field, at least 10 years' experience in the field of ICT across a range of developing countries, including in Africa.
- Experience leading digital transformation projects for at least 5 years, including in Sub-Saharan Africa countries.
- Strong technical knowledge of e-government and track record of planning and implementing projects that enable the digitization of government service delivery and advising public sector clients on large-scale and national e-government projects, including the successful completion of at least 2 similar assignments.
- Proven ability to engage effectively with different stakeholders in the ICT and public sector, and leading related stakeholder engagement and consultation.

The *Technical Specialist* shall have:

- At least a Bachelor's degree in ICT or similar field, with at least 7 years' experience in the ICT sector.
- At least 5 years of experience in supporting the design and implementation of digital transformation strategies, digital data management, and digitization of government service delivery.
- Strong technical knowledge and experience of providing technical advisory services in relation to e-government projects, including demonstrating ability to prepare underlying detailed technical assessment and implementation plans needed, featuring the successful completion of at least 2 similar assignments.
- Past experience related to the design and implementation of similar digitization of archive/paper records will be a major advantage.

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- Understanding of the business, financial and procurements models used in the digital sector.

The *Financial Specialist* shall have:

- A Master's degree in Finance, Economics or similar field, with at least 7 years of work experience of drafting/reviewing financial models for investment decisions, preparing of cost-benefit analyses and financial and business plans.
- Experience of preparing detailed optional budgets and financial plans/analysis for large-scale digital projects, including knowledge of related cost-structures.
- Previous participation in detailed feasibility studies and transaction advisory services is a pre-requisite, and prior support for e-government projects is preferred. Track record of completing at least one similar assignment is required.
- Prior work experience in developing countries, especially Africa, is preferred.

Credentials and client reference coordinates must be supplied for cited experience. All team members must be fluent in English.

## **IX. CLIENT'S AND CONSULTANT'S RESPECTIVE RESPONSIBILITIES**

The consultants shall be contracted by the SPIU of Rwanda Digital Acceleration Project housed at RISA within GoR.

The consultants must ensure that the tasks identified above are performed in a result-oriented manner with the objective of achieving outputs and outcomes expected from the assignment.

The clients shall provide the following to the best of their ability:

- All available public data and reports considered relevant for accomplishing and facilitating identified tasks.
- Access to key officials within the relevant Ministries, Department and Agencies, as applicable.
- Facilitate cooperation from other organizations, whose activities and programs may be considered relevant to this assignment, to enable the consultants to have access to the information necessary to carry out their work program.
- Ensure swift review and validation of submitted deliverables, targeting a 1-week turn-around time.
- Other logistical support to convene key workshops and consultations, as needed.