REQUEST FOR EXPRESSIONS OF INTEREST

(CONSULTING SERVICES – FIRMS SELECTION)

RWANDA

AI for Economic Transformation in Rwanda (P517443) — project preparation under the Grant Facility for Project Preparation

Grant No.: E6900-001

Assignment Title: Education Intelligence Centre

Reference No. (as per Procurement Plan): RW-RAIA-577935-CS-QCBS

The Government of Rwanda has received financing from the World Bank toward the cost of project preparation for the AI for Economic Transformation in Rwanda operation, through the Grant Facility for Project Preparation (GFPP), and intends to apply part of the proceeds for consulting services. The Government has appointed the Rwanda Artificial Intelligence Agency as the implementing entity for the GFPP and the institutional host of the Project Implementation Unit.

About the Rwanda Artificial Intelligence Agency

The Rwanda Artificial Intelligence Agency (RAIA) advances the responsible and inclusive use of Artificial Intelligence and other emerging technologies in support of Rwanda's national development priorities. The Agency brings public AI initiatives under one umbrella, covering AI deployment and government transformation, research, innovation and talent, governance, ethics and safety, industry development and investment, and international engagement. It was approved by Cabinet in June 2026 and continues the work previously carried out under the Centre for AI Policy and Innovation Ltd, trading as the Rwanda Centre for the Fourth Industrial Revolution.

About the consultancy

The GFPP intends to apply part of the funds for consulting services to deliver, within an existing institutional setting, a minimum viable product of the Education Intelligence Centre covering all five use cases prioritised by the Ministry of Education (MINEDUC), including predictive and prescriptive capability on five of them, together with a costed blueprint for establishing the Centre as a permanent ministerial capability.

The Ministry has prioritised five use cases:

1) **Teacher deployment, attendance and subject coverage** — real-time visibility of attendance, subject gaps and vacancies, enabling optimised teacher allocation and reduced coverage gaps.
2) **Enrolment, attendance, dropout and equity early warning** — tracking participation, absenteeism and dropout risk, supporting early intervention and inclusive education targeting.
3) **Learning outcomes and performance analytics** — monitoring examination results, learning loss and equity gaps, guiding evidence-based intervention and policy alignment.
4) **School infrastructure, budget and resource delivery** — tracking infrastructure status, facilities, classroom ratios, expenses and revenues, improving oversight, equity and transparency in investment.
5) **ICT in education and digital readiness** — monitoring connectivity, device usage and digital platform adoption in support of the Education Digital Transformation Strategy.

All five use cases are built under this assignment, to a standard which enables real-time oversight, predictive and prescriptive insights, and coordinated action across Rwanda’s education sector. Two further use cases — student welfare and inclusive services, and Polytechnic, higher education and graduate outcomes — are prepared but not built: the firm designs them, establishes what data and agreements they require, and costs them for the follow-on operation. Section 4 of the Terms of Reference sets out what this involves.

The implementation period is about eight months from an expected start in March 2027, with all final deliverables due by 1 November 2027. The assignment is structured in phases, as set out in the Terms of Reference. The contract will be milestone gated and priced by use case and by phase, with payments tied to the acceptance of deliverables at agreed milestone gates. The gate mechanics, acceptance criteria and payment schedule will be set out in the Request for Proposals.

Scope of the data and infrastructure

MINEDUC has completed a landscape assessment of the data required for these use cases, covering 162 data points across twelve domains. For basic general education and TVET, 115 are available in existing systems, most of them through documented application programming interfaces. This is therefore an integration assignment on systems already in place, not a data collection assignment. The assessment will be provided to shortlisted firms with the Request for Proposals.

Some of the source systems are held in the Education Data Centre, owned by MINEDUC, and others in the National Data Centre. The analytical environment of the Centre will run on the national compute platform provisioned under the GFPP, with cloud and AI model services available for non-sensitive workloads. The firm does not procure, price or provision any compute, hosting or storage infrastructure.

The Terms of Reference (TOR) for the assignment are attached to this Request for Expressions of Interest at Annex I.

Shortlisting criteria

The Rwanda Artificial Intelligence Agency now invites eligible consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The shortlisting criteria are:

- Core business in data analytics, AI-powered analytics or applied machine learning, education management information systems, or public sector decision-support platforms.
- At least three assignments of a similar nature and complexity completed in the last ten years delivering analytics, dashboards, predictive analytics or data-driven decision-support systems for government or comparable institutions, preferably in the education or another social sector.
- Demonstrated experience integrating with existing government systems, preferably in Rwanda, through application programming interfaces, and aligning with national data catalogue, metadata and interoperability standards.
- Demonstrated experience handling personal data, including classification, de-identification and access control; experience with data relating to children is an advantage.
- Technical and managerial capability of the firm, including organisational and management structure, and in-house capacity in data engineering, data science and predictive modelling, education sector planning, and visualisation.
- Capacity to deliver in Rwanda, and if an international firm partnering with a Rwandan firm or team, specify the role each party would play.

The Qualifications and Experience of Key Experts are not included in the shortlisting criteria. Key Experts will not be evaluated at the shortlisting stage, and curricula vitae are not required.

The shortlist will be at least five and no more than eight firms.

Expressions of interest should include:

- a cover letter;
- a firm profile stating core business;
- summaries of no more than ten relevant assignments completed in the last ten years, each stating the client, country, contract value, duration and year of completion, with a brief description of the services provided;
- a description of the firm's technical and managerial capability, including staff numbers by relevant discipline;
- evidence of legal registration; and
- where applicable, details of any proposed association and the role of each member.

Expressions of interest should not exceed 15 pages, excluding the cover letter and registration documents. Pages beyond this limit will not be considered.

Procurement terms

The attention of interested Consultants is drawn to Section III, paragraphs 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" September 2025 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest. In addition, the selected firm, and any affiliate, will not be eligible to provide goods, works or non-consulting services resulting from or directly related to this assignment, including the build-out or physical fit-out of the Centre.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners shall be jointly and severally liable for the entire contract, if selected.

A Consultant will be selected in accordance with the Quality and Cost-Based Selection (QCBS) method set out in the Procurement Regulations, with a technical to financial weighting of 80:20. The assignment will be carried out in English.

Further information can be obtained at the address Block 5, Norrsken House, 1 KN 78 St, Kigali - Rwanda or via email procurement@raia.rw during office hours 09:00 to 17:00 hours, Kigali time, Monday to Friday.

Expressions of interest must be delivered in a written form to the address; Block 5, Norrsken House, 1 KN 78 St, Kigali – Rwanda, in person by 05 November 2026 at 17:00 hours, Kigali time. The envelope subject line should read: “REOI — Education Intelligence Centre — RW-RAIA-577935-CS-QCBS”.

Procurement-related complaints. A Consultant that considers it has been harmed by an alleged breach of obligation in this procurement process may submit a procurement-related complaint in writing at complaints@raia.rw within the periods and following the procedures set out in Annex III (Procurement-Related Complaints) of the World Bank Procurement Regulations.

Annex I: Terms of Reference

Package 5 — Education Intelligence Centre

1. Background

The Government of Rwanda has received a Grant Facility for Project Preparation (GFPP) from the World Bank toward the preparation of the follow-on operation “AI for Economic Transformation in Rwanda,” which covers AI-ready data infrastructure, AI solutions in priority sectors, AI-ready digital skills, and project preparation and institutional capacity. The Government has appointed the Rwanda Artificial Intelligence Agency as the implementing agency.

Education decision-making in Rwanda depends on data that is fragmented across systems, delayed, and difficult to translate into timely action. The Ministry of Education (MINEDUC) oversees pre-primary, primary, secondary, TVET, polytechnic and higher education, generating large volumes of data through education management information systems, examinations, teacher management, school infrastructure, school inspections and digital learning platforms, without a single decision environment that brings them together.

The systems themselves are largely in place. MINEDUC's landscape assessment inventories 162 data points across twelve domains and records, for each, whether the data exists, in which system, at what frequency and whether an application programming interface is available. For basic general education and TVET, 115 of the 162 are available, most of them through documented APIs and in real time, across the School Data Management System (SDMS), the Teacher Management Information System (TMIS), student and teacher attendance tracking (KARAME), the Continuous Assessment Management Information System (CAMIS), Moodle eLearning and ICTE-MIS. SDMS, CAMIS and KARAME are held in the Education Data Centre, which is owned by MINEDUC and managed by BSC; TMIS, Moodle eLearning and ICTE-MIS are held in the National Data Centre. Both hold the legal cover required to host personal data. The constraint is not the absence of data but the absence of a single decision environment that applies shared definitions and turns data into timely action.

2. Objective

To deliver a minimum viable product of the Education Intelligence Centre within an existing institutional setting: a working capability across all five prioritised use cases, with predictive and prescriptive capability on five of them; and a costed blueprint for a sustained Centre, including the infrastructure, operating and financing requirements for the follow-on operation. The blueprint will be sector-agnostic in its design, so that it can inform other future sector intelligence centres.

3. Scope of services

Coverage

The assignment covers basic general education and TVET, and builds five prioritised use cases. The landscape assessment shows that the data for four of them is substantially ready; for the remaining one, MINEDUC is closing identified data gaps on the timetable in the table below. Extension to Polytechnic and higher general education will be scoped in the blueprint for the follow-on operation. In this document, TVET refers to technical and vocational education at basic level, and Polytechnic to the higher level.

The source systems remain where they are held today, in the Education Data Centre and the National Data Centre. The Centre's analytical environment — the integrated data store, pipelines, dashboards and model training — runs on the national compute platform provisioned under the GFPP, with secure connectivity to the source systems. Workloads involving identifiable learner, teacher or candidate records remain on that national infrastructure; workloads using institution-level infrastructure, financing and connectivity data may use the cloud and AI model services. The firm does not procure, price or provision any compute, hosting or storage infrastructure.

Use case	Scope	Data Availability
1. Teacher deployment, attendance and subject coverage	Build with predictive capability	14 of 21 workforce data points and 6 of 8 attendance points available in TMIS, SDMS and KARAME
2. Enrolment, attendance, dropout and equity early warning	Build with predictive capability	29 of 32 student data points available, 18 through APIs, mostly in real time
3. Learning outcomes and performance analytics	Build with predictive capability	Summative assessment marks, formative assessment marks and national examination marks are available on a termly and yearly basis; these are the data points the use case requires
4. School infrastructure, budget and resource delivery	Build with predictive capability	20 of 20 infrastructure points and 5 of 5 financing points available in SDMS. Items not held in ministry systems, including construction milestones and

Use case	Scope	Data Availability
		contractor performance, are out of scope for build and prediction
5. ICT in education and digital readiness	Build	3 of 11 connectivity data points available today. The MINEDUC is closing this gap, and will make the data available before the build phase

MINEDUC will confirm the availability of the assessment and connectivity data at the month 3.5 milestone gate. If either dataset is not available by then, the affected use case will be delivered as a validated design and specification, and the capacity released will be applied to depth on the remaining use cases.

Phase 1 — Inception and validated assessment (months 0–2)

- Validate the MINEDUC's landscape assessment against the live systems, and establish a data quality baseline for each source: completeness, accuracy, update frequency, identifiers and known defects.
- Agree with MINEDUC which data quality remediation is within the firm's scope and which is carried out by the institutions holding the data.
- Map the priority decisions each use case must support, with the business owner for each, and define the indicators and their calculation rules.
- Agree acceptance criteria for every subsequent deliverable, and the milestone gates at which the project may proceed.
- Confirm the allocation on the national compute platform against the requirements of the five use cases: storage and its growth, compute for pipelines and model training, backup and recovery, and the security controls applicable to the data classifications in use. Confirm the network path and access arrangements to each source system, including those held in the National Data Centre, and report any shortfall or risk to the timetable in the inception report.

Phase 2 — Design (months 2–3.5)

- Design the five use cases: data pipelines, indicator definitions, dashboards, alerting rules and four predictive capabilities, with user journeys for ministerial, directorate, district and school-cluster users.
- Design the target architecture, data model, governance and access framework, aligned with the National Data Governance Framework, the National Data Classification and Access Guideline, and the national data catalogue and metadata standards.
- Design the architecture so that further AI capabilities can be built on it without significant rework.
- Classify every data domain in use, set the suppression threshold for analysis and publication, and complete a data protection impact assessment before any work on identifiable records.
- Confirm the data prerequisites for the ICT readiness use cases, and agree the point at which their data must be available for the build to proceed.

Phase 3 — Build (months 3.5–6.5)

- Build the data pipelines, dashboards and alerting for all five use cases, with access control, audit logging and automated data quality checks, to a standard the Ministry can use in day-to-day management.
- Build and evaluate four predictive capabilities, one on each of four use cases, with the specific models confirmed with the Client at inception against the data available. Report precision and recall against observed outcomes, with results disaggregated so that performance is not reported only for the best-served schools.
- Deploy the first wave on the national compute platform provisioned under the GFPP, drawing data from the source systems in the Education Data Centre and the National Data Centre. Workloads using institution-level data may run on the cloud and AI model services. Development and testing on masked or synthetic data begin on the cloud services, so the build does not wait on the platform's acceptance date; identifiable records are processed only on national infrastructure. The firm does not procure or price infrastructure. If the national compute platform is not available by phase 3, non sensitive workloads will migrate to the cloud services, while work that includes identifiable personal data proceeds on an environment approved by RAIA, MINEDUC, and NCSA. The firm will not be liable for schedule delays caused by unavailability of the national compute platform.

Phase 4 — Validation, blueprint and handover (months 6.5–8)

- Validate with Ministry leadership, planning department, Education inspectors and district focal points, measured against agreed criteria for accuracy, timeliness and usefulness.
- Produce the Centre blueprint: institutional and operating model, staffing and skills, technology, data governance, physical and virtual environment requirements, phased implementation plan, and financing options. The blueprint should be sector-agnostic: the institutional and operating model, architecture, data governance and financing

approach should be documented so that they can inform future intelligence centres in other sectors, with a short annex identifying what is education specific and what be reused for other sectors
- Produce the costed infrastructure plan described in section 6.
- Deliver training, standard operating procedures, documentation, the transition pack and handover, with source code, pipelines and configuration delivered progressively to a Client-controlled repository, and complete the successor readiness review described in section 5.

Out of scope

- Building the student welfare, the polytechnic, higher general education and graduate outcomes capabilities. These are to be designed and costed under section 4; they are not built under this assignment.
- Procurement or pricing of compute infrastructure.
- Physical fit-out of the command environment, which is costed in the blueprint but not financed by this contract.

4. Preparing the two follow-on use cases

MINEDUC has identified two further use cases that complete the picture of a learner's journey but are not built under this assignment. The firm prepares them to the point where the follow-on operation can commission them without repeating discovery work. For each, the firm will produce the design, the data requirements, the institutional arrangements needed, and a cost estimate, as a defined part of the blueprint.

Student welfare and inclusive services.

- **Purpose:** to track the education-linked services that influence participation, safety and inclusion, so that support reaches the learners who need it.
- **Indicative indicators:** school feeding coverage; bursary and scholarship coverage; psychosocial support provision; disability inclusion measures; gender-sensitive sanitation; school safety incidents; and health-related absenteeism signals where appropriate.
- **Questions it would answer:** which schools lack key inclusion or welfare services; where feeding, bursary or psychosocial programmes are underperforming; whether girls and learners with disabilities receive equitable support; and where safety incidents are rising.
- **What the firm must establish:** which systems hold each indicator and whether they are accessible; the data sharing agreements required, including with institutions outside MINEDUC such as those responsible for child welfare and social protection; the classification and safeguards that apply, given that these are among the most sensitive records relating to children; and the cost of building it.

Polytechnic, higher general education and graduate outcomes.

- **Purpose:** to track post-secondary performance, relevance and pathways into employment, extending the Centre from basic education into skills and employability.
- **Indicative indicators:** enrolment by trade or field; certification and completion rates; graduate tracer outcomes; internship and industry partnership data; trainer availability and infrastructure readiness; and labour-market alignment.
- **Questions it would answer:** which polytechnic trades are growing or underperforming; whether graduates find employment in relevant sectors; which institutions have the strongest enterprise linkages; and where labour-market mismatches are emerging.
- **What the firm must establish**: the state of the data, where the landscape assessment is incomplete — data points remain to be confirmed at Rwanda Polytechnic and the University of Rwanda; the API layer each would require; the linkage to employment and labour-market data held outside the education sector; and the cost of building it, including the assessment work that must precede a build.

Deliverable. The design, data requirements, institutional arrangements and cost estimate for both use cases form a named part of the draft and final blueprint (D6 and D8). They are prepared to the same standard as the design of the five use cases being built, so that the follow-on operation can commission them directly.

5. Continuity and handover

The firm that delivers this assignment will not implement the production system that follows it. Every deliverable must therefore be capable of being taken forward by another team without rework. The following requirements apply throughout the assignment and are tested at acceptance.

- **Ownership.** All code, models, prompts, data models, configurations, test data and documentation vest in the Client on creation. RAIA may modify them and permit others to do so, without restriction. No deliverable may depend on a licence, subscription or service that only the firm can provide or renew.

- **Progressive delivery**. Code, pipelines and configuration are committed to a RAIA or government designated repository from the first sprint, not at handover, with RAIA holding administrative rights throughout.
- **Reproducible environment.** Infrastructure defined as code, containerised services, dependency manifests with pinned versions, and a documented build that a third party can run from a clean environment.
- **Open standards.** Open formats for data exchange, documented interfaces, standard database engines and portable model formats. Where a commercial service is used, the deliverable states what would be required to substitute an alternative.
- **Documentation.** Architecture and data flow; data model and dictionary; interface specifications; operational runbooks; a decision log recording each significant design choice and the options rejected; and a register of known issues and technical debt.
- **Tests.** An automated test suite covering the pipelines and the models, with evaluation harnesses and benchmark datasets, so that a successor can make a change and know whether it has broken anything.
- **Training and shadowing.** Named RAIA and MINEDUC staff work alongside the team through the build, with scheduled knowledge transfer sessions and recorded walkthroughs. Acceptance requires those staff to perform defined operational tasks unaided.
- **Transition pack.** A single document setting out what exists, where it runs, what it depends on, what is incomplete, what a successor should do first, and the costed plan to take the work to production.

6. The costed infrastructure plan

Infrastructure for work under the GFPP is provided by RAIA: an allocation on the national compute platform, with the cloud and AI model services available for non-sensitive workloads, and the source systems remaining where they are held today. These arrangements end with the grant. The blueprint must therefore contain a costed infrastructure plan, specific enough for RAIA to procure from, covering the Centre in steady state and at scale. It will set out:

The servers, storage and network capacity the Centre requires in steady state and at the scale implied by extension to the additional use cases, stated as a specification and quantity; whether each element is best hosted in the Education Data Centre, on the national compute platform or on cloud based services; and the terms and estimated annual cost of each option.

The recurrent cost over a three to five year horizon, including hosting, support, licences and the hardware refresh cycle.

- Production compute and storage once the first wave is live and in daily use, distinguishing workloads that must run on national infrastructure from those that may run on cloud based services, under the classification rule applied in this assignment.
- The additional capacity implied by extension to the two additional use cases.
- Software, licences and tooling for analytics, visualisation, pipelines and monitoring, with licence models and renewal cycles. Open source tools are preferred for sustainability.
- The physical command environment: displays, workstations, room fit-out and audio-visual equipment.
- Annual recurrent cost — hosting, cloud consumption, support and hardware refresh — expressed as a yearly figure with a three to five year projection.

7. Deliverables and indicative timing

Deliverable	Due (indicative)
D1 Inception report: confirmed data sharing arrangements, data quality baseline, agreed acceptance criteria and milestone gates	Month 0.5 — Mar 2027
D2 Validated assessment: landscape assessment confirmed against live systems, decision map and indicator definitions	Month 2 — Apr 2027
D3 Product design: all five use cases, dashboards, alerting rules and the four predictive capabilities, with acceptance criteria per use case	Month 3.5 — Jun 2027
D4 Target architecture, data model, governance and access framework, with data classification, suppression threshold and data protection impact assessment	Month 4 — Jul 2027
D5 Working minimum viable product across the five use cases, with access control, audit logging, data quality checks and evaluation of the four predictive capabilities	Month 6.5 — Aug 2027
D6 Draft Centre blueprint, including the costed infrastructure plan	Month 7 — Sep 2027
D7 Validation report with end users	Month 7.5 — Oct 2027
D8 Final blueprint, standard operating procedures, training, handover and final report	Month 8 — Nov 2027

All deliverables are subject to written acceptance within ten business days of submission, against the acceptance criteria agreed at inception, which include the continuity and handover requirements in section 5. All final deliverables

must be submitted no later than 1 November 2027, so that they can be reviewed, accepted and paid before the grant closes; services performed after 31 December 2027 cannot be financed by the grant. The schedule will be re-based from the actual date of contract signature, but the final deadline will not move. Payments will be linked to the acceptance of deliverables at the milestone gates. The payment schedule will be finalised in the Request for Proposals.

8. Key Experts

The following Key Experts will be evaluated at the Request for Proposals stage, not at shortlisting. Firms may propose additional non-key experts.

Position	Minimum qualifications and experience
Team Leader / Data and Analytics Lead	Degree in data science, statistics, computer science, engineering or a related field, or equivalent demonstrated experience. At least 7 years of professional experience, including 3 years leading delivery of data or analytics products, at least one of which supported institutional or organisational decision-making.
Education Data Specialist	At least 5 years working with education data or education management information systems, including indicator definition and data quality. Direct experience of Rwandan education systems or data is an advantage.
Data Scientist, predictive modelling	At least 5 years building and evaluating predictive models in production, with demonstrated attention to evaluation, bias testing and monitoring. Experience in a social sector is an advantage; it is not a requirement.
Data Engineer / Integration Specialist	At least 3 years building data pipelines and integrating systems through APIs, including handling of authentication, scheduling and data quality checks.
Visualisation and User Experience Specialist	At least 3 years designing data products or dashboards used by non-technical decision-makers, with evidence of user testing or iteration.
Data Protection and Privacy Specialist	At least 3 years in data protection or privacy practice, with demonstrable familiarity with Rwanda's law on the protection of personal data and privacy. Experience with children's data and algorithmic fairness is an advantage.

Combining positions. One individual may be proposed for more than one Key Expert position where their experience satisfies the requirements of each. The Data Scientist and the Data Engineer positions may be combined on this basis. The Data Protection and Privacy Specialist may not be combined with any position responsible for building or modelling, so that the review of children's data remains independent of the work it reviews.

9. Data and services to be provided

- **Data and documentation**. The landscape assessment, API documentation and access to the source systems, under data sharing agreements between MINEDUC and its affiliated agencies.
- **Data protection arrangements**. A data processing agreement under which the firm processes personal data on behalf of MINEDUC, together with written confirmation of the lawful basis and the purpose of processing. The firm remains responsible for any registration required of it under Law 058/2021 on the protection of personal data and privacy; RAIA and MINEDUC will support its application.
- **Governance.** A steering committee chaired by MINEDUC, and a named lead for each use case.
- **Hosting and infrastructure.** An allocation on the national compute platform provisioned under the GFPP sufficient for the five use cases, with backup and snapshot capacity and secure connectivity to the source systems, and access to the cloud and AI model services for non-sensitive workloads.
- **Outstanding datasets**. The connectivity datasets, available before the build phase begins.
- **Validation.** Nominated sector focal points, available for the validation phase.

10. Reporting and management

The firm reports to the PIU Project Director, with strategic direction from MINEDUC and in consultation with the RAIA's management. Progress meetings will be held at least monthly, and every two weeks during the build. Firms will be required to price the assignment by use case and by phase, so that proposals are comparable and the blueprint carries real unit costs.