

Terms of reference (For individual Consultants Only)

Supporting the roll-out of a Quality Apprenticeship Pilot in Rwanda for Software Developers

The Boosting Decent Jobs and Enhancing Skills for the youth in Rwanda's digital economy Project

Dar es Salaam Country Office

1. Background

Rwanda's long-term economic vision—[Vision 2050](#)—targets the country's transformation into a high-income economy. Rwanda is aiming to rapidly position itself as a digital hub in East Africa, with a strong focus on digital skills development, innovation, and ICT-driven economic transformation. The Government of Rwanda has made significant strides towards this objective through initiatives such as the [Smart Rwanda Initiative](#), investments in digital infrastructure, the [Rwanda digital talent policy](#), and the National Digital Skills Framework (NDSF)¹, which sets standardized benchmarks for digital literacy and workforce readiness.

Becoming a regional digital hub indeed requires the development of a skilled and dynamic workforce to meet the increasing demand for digitally competent staffs. However, skills shortages and mismatches remain key constraints, limiting business growth, investment, and the country's transition to a knowledge-based economy.

To address these challenges, the Global Initiative on [Decent jobs for Youth](#) is implementing the [Boosting Decent Jobs and Enhancing Skills for Youth in Rwanda's Digital Economy project](#). This four-year partnership, funded by the Government of Luxembourg and implemented by the International Labour Organization (ILO) is supporting the Government of Rwanda, employers' and workers' organizations, and young people to contribute to the country's structural transformation and digitalization agenda.

More specifically, it aims to empower young women and men (aged 18–30) in Kigali and secondary cities to access decent employment and entrepreneurship opportunities in the digital economy. The project is part of a broader ILO/ITU/AU Joint Programme spanning several African countries, focusing on:

- ▶ Job creation and entrepreneurship in the digital economy
- ▶ Digital skills development for young people
- ▶ Facilitating the transition to decent work in the digital economy

Under **Outcome 2**, the project focuses on promoting work-based learning approaches in Technical and Vocational Education and Training (TVET), including through the implementation of **quality apprenticeship programmes** aligned with labour market needs. To this end, the ILO seeks to engage a consultant/ service contract to support TVET and digital skills stakeholders and the ILO in the updating relevant software development curricula (equivalent to RTB's Level 3, 4 & 5 Software development curricula²) with "coding with AI elements" and adapt the teaching delivery to a quality apprenticeship model, the view of roll-out of a **Quality Apprenticeship Pilot in Coding in Rwanda**.

The [One Million Rwandan Coders](#) initiative is a flagship national programme designed to equip Rwanda's current and future workforce with foundational digital skills essential for thriving in the global digital economy. The programme delivers Levels 1 and 2 of the Rwanda TVET Qualification Framework (RTQF)³ for ICT through self-paced, online courses in areas such as programming, data science, and Android

¹ Not yet published. The PDF will be provided by the ILO upon completion of the recruitment process.

² To be confirmed through consultations with Rwanda's TVET and digital skills stakeholders

³ In terms of international equivalency, it aligns roughly with European e-Competence Framework (e-CF) levels 1 to 2 or SFIA (Skills Framework for the Information Age) levels 1 to 2, which cover entry-level roles in software development and digital literacy.

development. These courses are designed to be completed within six to eight weeks, providing accessible entry points into the digital skills ecosystem. Over the next five years (until 2030), the initiative aims to train one million Rwandans in basic coding and digital competencies.

To build on this momentum and strengthen the pathway from foundational skills to employment, the Quality Apprenticeship Pilot will focus on the next stage of learning—supporting entry-level coders in acquiring Level 3 competencies⁴, including skills related to coding with AI. This pilot will serve as a stepping stone between the introductory training provided through the One Million Coders programme and more advanced, hands-on learning experiences. By integrating AI-related content into the existing national software development curriculum and combining it with real-world practice in the workplace, the apprenticeship pilot aims to improve the relevance and quality of training and better prepare young Rwandans for jobs in the digital economy.

2. Objective

This initiative responds to the growing demand for software developers equipped not only with core coding competencies but also with the ability to work alongside AI tools and systems. As part of the implementation of the ILO Quality Apprenticeship Recommendation, 2023 (#208) in Rwanda, the objective of this consultancy is to support Government of Rwanda's TVET and digital skills stakeholders and the ILO in leading technically (1) the co-development of new competency standards for software developer with employers' and workers' representatives, (2) the development of inclusive related training materials and assessments tools; and (3) the capacity building of instructors and in-company trainers for the same.

3. Output & deliverables

1. Level 3⁴ "Software Developer" competency standards are revised with a focus on AI integration (5 days)

- ▶ Lead technically the review and revision of the Level 3⁴ "Software Developer" competency standards, in a co-creation approach with TVET experts and industry experts and in consultation with employers' and workers' representatives under the Rwanda TVET Qualifications Framework (RTQF);
- ▶ Ensure the adequate integration of (a) foundational AI competencies – including those related to the ethical use of AI (b) other relevant core skills as per the ILO [Global framework on core skills for life and work in the 21st century](#) and [Work Wise Youth](#);
- ▶ Facilitate validation of the revised standards with employers' and workers' representatives, in consultation with Rwanda's TVET and digital skills stakeholders and industry representatives.

2. Software development curriculum training materials and assessments are revised and validated, based on the new competency standards (10 days)

- ▶ Update the corresponding curriculum and training materials in a modular approach with learning outcomes that integrate AI and relevant core work skills - including
 - instructors' manual with training plans, exercises, presentations, industry relevant case studies,
 - In company trainers' manual with the same to support the work-based learning part
 - apprentices training logbooks;
- ▶ Update the online components of the various training modules;

⁴ To be confirmed with TVET and digital skills stakeholders

- ▶ Update database of tests for formative and summative assessments for the identified competencies (no less than three tests per competency);
- ▶ Ensure an inclusive, learner centred approach is adopted including with specific guidance for instructors and in-company trainers on how to attract retain and support women and learners with disabilities;
- ▶ Validate the above with the Coordination Committee

3. TVET Instructors, in-company Trainers and assessors have improved capacity to implement the new modules (15 days)

- ▶ Develop three draft TOT modules for in-company trainers, instructors and assessors with a focus on
 - a. New contents and didactic learner centred approaches for instructors;
 - b. Existing ILO competency based training for in-company trainers
 - c. New tests and innovative assesment approaches for assesors;
- ▶ Conduct TNA to inform designand scope of the capacity development of trainers and assessors
- ▶ Finalise the three TOT modules taking into account the results of these assessments;
- ▶ Deliver Training of Trainers (TOT) sessions and final tests for TVET instructors, in-company trainers assors to support the effective implementation of the new curriculum,
- ▶ Provide instructors, in-company trainers and assesors with related resource materials and tools.

4. Duration and indicative timeline

The consultancy will be carried out over approximately **4 months**, starting in **June 2025** and concluding in **October 2026**. The assignment will be structured into the following phases:

The consultancy will be carried out over approximately **4 months**, from **June to October 2025**, with the following indicative phases:

1. **June-July 2025**
 - Review and revise Level 3 competency standards
 - Develop AI-integrated curriculum
 - Draft training materials and apprenticeship tools
2. **August 2025**
 - Validate revised standards and curriculum with stakeholders
 - Finalize training manuals, logbooks, and apprenticeship plans
3. **September-October 2025**
 - Deliver ToT for TVET instructors
 - Train in-company trainers using ILO didactic tools

5. Payment schedule

- ▶ Payment of Professional Fees will be made in four instalments:
- ▶ 1st payment of 25% upon submitting the inception report.
- ▶ 2nd payment of 25% upon implementing and validating Deliverable 1 and submitting the deliverable report.
- ▶ 3rd payment of 25% upon implementing and validating Deliverable 2 and submitting the deliverable report.
- ▶ 4th payment of 25% upon implementing and valdiating Deliverable 4 and submitting the deliverable report.
- ▶ 100% of DSA once all relevant receipts, boarding passes are submitted.

- ▶ All reimbursement cost items need to reflect the ILOs commitment to using the most economical, direct, and standardized fares.

6. Selection criteria

The consultant will be selected based on the following criteria:

A. Relevant Technical expertise and experience (maximun mark: 40)

- ▶ Demonstrated experience in developing and revising competency-based TVET standards and curricula, particularly in the field of software development or digital skills.
- ▶ Proven ability to integrate emerging technologies such as Artificial Intelligence (AI) into skills training frameworks and curricula, including knowledge of prompt engineering, AI ethics, and debugging of AI-generated code.
- ▶ Experience in designing and delivering training materials, including teacher manuals, apprenticeship training plans, logbooks, and AI-integrated use cases.
- ▶ Proven track record in conducting Training of Trainers (ToT) sessions for TVET instructors and capacity building for in-company trainers.
- ▶ Experience adapting international organisations tools to national TVET systems.
- ▶ Prior work with the ILO, employers', workers' organisations, training institutions, and government bodies in a multi-stakeholder environment; experience in Rwanda or a similar context is a strong asset.
- ▶ Experience with skills initiatives, as well as experience in gender equality and social inclusion in education and training systems, are a plus.

B. Pedagogical and training skills (maximun mark: 15)

- ▶ Strong understanding of competency-based education and training (CBET) and blended learning models.
- ▶ Experience in designing and delivering interactive, practice-oriented ToT sessions.
- ▶ Familiarity with training needs assessment and capacity development approaches for both TVET instructors and workplace trainers.
- ▶ Ability to develop user-friendly training resources, including practical tools for industry partners.
- ▶ Familiarity with Apprenticeship training method will also be an added advantage

C. Proposed approach to deliver the ToR's scope of work

- ▶ Applicant demonstrates (via submitted technical proposal) their expertise the areas of skills development in Rwanda. The technical proposal includes a realistic workplan and technical assistance approach. The evaluation will assess the understanding of scope, objectives and completeness of response (maximun mark: 30).
- ▶ Quality of the sample report suggests that the applicant(s) possess the required level of knowledge and analytical skill (maximun mark: 15).

NOTE:

- ▶ Total for Section A (40 Points), Section B (15 Points) and Section C (45 Points) is 100
- ▶ Minimum Acceptable Score for the Financial Proposal to be reviewed, 60

7. Application

Interested international consultants must submit an Expression of Interest (EOI) including the following:

a) Cover Letter (maximum 2 pages)

- ▶ Brief statement on motivation and suitability for the consultancy.
- ▶ Overview of experience in AI skills integration, curriculum development, and apprenticeship models.
- ▶ Availability for the proposed duration (May–September 2025).

b) Technical Proposal (maximum 5 pages)

- ▶ Understanding of the assignment objectives and deliverables.
- ▶ Proposed approach and methodology to achieve:
 - AI integration into competency standards and curriculum
 - Development of training tools, materials and assesment tools
 - ToT and industry engagement activities
- ▶ Stakeholder engagement and validation process.
- ▶ Draft timeline and work plan by project phase (aligned with indicative phases above).
- ▶ Risk mitigation and quality assurance strategy.

c) Curriculum Vitae (CV)

- ▶ Detailed experience in curriculum development, digital skills training, and ToT.
- ▶ Specific roles in similar assignments (with indication of country, client, and responsibilities).
- ▶ Contact details for at least two references.
- ▶ **d) Financial Proposal** Daily rate (in USD), number of estimated working days, and total consultancy cost.
- ▶ Any anticipated reimbursable costs (e.g., travel, accommodation).

ID	Activity Deliverables	Consultancy Fee	Total Activity Deliverable Days	Total Number of Mission Days	Total Deliverable Cost*
IMPORTANT NOTE: First activity below is provided as an example. Please ensure that this template table includes <u>ALL</u> activities detailed in the Key Deliverables section above. Also ensure that the <u>last row is dedicated for Total Activity Days and Costs</u> as shown below in the example.					
1	Level 3 "Software Developer" competency standards are revised with a focus on AI integration (5 days) <ul style="list-style-type: none"> ▶ Lead technically the review and revision of the Level 3 "Software Developer" competency standards, in a co-creation approach with TVET experts and industry experts and in consultation with employers' and workers' representatives under the Rwanda TVET Qualifications Framework (RTQF); 				
.	Please provide breakdown for each activity in the Key Deliverables section above.				
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Totals Activity Days and Costs					

Note: The following Table has been prepared to assist the Consultant in reporting their respective financial offers. Some deliverables have been reflected in the table **as an example**. However, all deliverable are to be reflected in the table.

***Deliverable Activity Cost = Daily Professional Fees X Total Activity Deliverable Days + Travel cost (mission days X DSA) + flight/travel cost**

e) Annexes / Supporting Documents

- ▶ At least **two examples of previous work** (e.g., revised curricula, training modules, reports).
- ▶ **Two references** (with contact information and description of working relationship).

f) Submission Instructions

All application materials must be submitted **electronically in PDF format** to:

rwaprocurement@ilo.org

The subject line should read:

“Technical and Financial Proposals – consultancy – software development curricula – Rwanda”

Deadline for submission: **10/June/2025, 23:59 CET**

Only shortlisted applicants will be contacted. Incomplete or late applications will not be considered. Interviews may be held with shortlisted organizations.

▶ Note to Consultants

- All CVs submitted should include the Date of Birth and Nationality of the Consultant;
- Consultant should quote in USD prices and/or using prices calculated using the Official UN Exchange Rates for the country;
- Candidates should be prepared to submit a copy of their national Passport upon Notification of Award;
- Candidates planning field visits, movements, and/or DSA travel dates are required to completed the UN BSAFE security training course upon Notification of Award. Failure to complete the course will prevent the finalization of contracting between the Consultant and the ILO;
- Professional Fees should include all costs associated with the Activity Deliverable;
- Consultants are responsible for arranging their own travel arrangements to project sites;
- Consultants agree to be paid based upon compliance with UN Harmonized DSA rates set for the country;
- Consultants agree that all mission costs will be based upon the most economical direct fares AND that any travel-related costs cannot exceed those payable to an ILO official on the same itinerary;
- All mission cost days will be paid based upon actual receipts paid by the Consultant and actual travel/mission dates;
- Consultants are not to add the VAT to their financial offer unless they are a VAT Registered Individual with the Sudanese VAT Authority;
- Consultants should be aware that all intellectual property rights arising from the contract are vested with the ILO however authorship will be acknowledged by the Organization; and
- Consultants will bear all charges levied by their own bank in receiving of managing funds transferred by ILO.