

**Terms of Reference**

**Consultancy services to develop trainers’ and trainees’ manuals for plumbing technology and public works TVET curricula**

**Activity code: 2.1.2**

1. **CONTEXT/PROJECT**
2. **Context and justification of the need:**

The Government of Rwanda and Agence Française de Développement (AFD) signed 5 years grant/loan agreements on 8th March 2023 to implement AFTER II Project (*Appui à la Formation Technique et l'Emploi au Rwanda*). AFTER Il aims to improve technical and vocational education and learning conditions in order to strengthen the skills of youth in line with labor market requirements.

Project management will be provided by two contracting authorities: Rwanda Polytechnic (RP) for colleges-related interventions, and Rwanda TVET Board (RTB) for TVET schools-related interventions, through their respective Single Projects Implementation Unit (SPIU).

Expertise France will provide technical assistance to the project implementation. Short and long-term expertise are mobilized on the basis of a technical offer validated by AFD, with the agreement of the Rwandan party.

On RP side, the beneficiary sites are Karongi and Kitabi colleges located in Karongi and Nyamagabe Districts respectively. On the side of RTB, the beneficiary sites are Muhororo and Cyanika TVET Schools located in Karongi and Nyamagabe Districts respectively.

1. **Objectives of the project:**

The main objective of AFTER II project is to reinforce the employability of youth and increase the number of TVET students in Nyamagabe and Karongi districts.

AFTER II project is divided into 4 main components and 2 cross-cutting components:

* Component 1: The IPRC Kitabi and Karongi and TVET schools of Cyanika and Muhororo campuses are expanded, modernised and environmentally friendly
* Component 2: The training offer in the IPRC Kitabi and Karongi and TVET schools of Cyanika and Muhororo is strengthened and more attractive
* Component 3: The link between TVET providers and the private sector is strengthened, and employment and entrepreneurship support mechanisms are more efficient
* Component 4: The quality and leadership of RP and RTB as institutions in the TVET sector are reinforced
* Cross-cutting component 5: The TVET programs are more gender-responsive and inclusive and specifically address dropouts of the general education
* Cross-cutting component 6: Greening TVET – TVET programs provide youth with green skills and competencies for sustainable economic growth
1. **Progress of the activity concerned by the ToR**

In line with the implementation of AFTER II project, the project has supported the development of Level 5 curriculum in plumbing technology and public works.

The next step after the development of curricula is the elaboration of training manual for each module identified in the approved curriculum.

The project aims to develop manual for level 3, Level 4 and level 5 of plumbing technology and public works as one of the trades supported at Muhororo TSS.

These manual will support both trainers and trainees by ensuring standardization of the training, consistency, efficiency and effective training

1. **OBJECTIVE AND EXPECTED RESULT OF THE MISSION**
2. **General objective**

The main objectives of the assignment are the development of different trainers’ and trainees’ manuals for plumbing technology and public works that aligns with the RTB approved TVET curricula.

1. **Specific objective**

Specifically, the following number of manual will be developed:

* To develop **67** trainees' manuals (modules) that provide clear, concise, and user-friendly instructions for participants undergoing training programs in Level 3,4, and 5 for Plumbing Technology and Public Works trades.
* To develop **67** trainers’ manuals (modules) that equip trainers with the necessary methodological guidance and information to effectively deliver the training curriculum in level 3,4, and 5 Plumbing Technology and Public Works trades.

**Note:** A list of selected modules is presented in Annex 1 to this document.

1. **Anticipated results**

The following anticipated result are expected at the end of the assignment:

* 67 trainees’ manual (modules) have been developed based on approved curricula of RTB
* 67 trainer’s manual (modules) have been developed on approved curricula of RTB
1. **Description of the assignment and Scope of work**

Expertise France is supporting Rwanda TVET Board in the AFTER II project implementation. In this framework, Expertise France will recruit a consultancy company to support the development of trainers’ and trainees’ manuals for plumbing technology and public works based on the approved TVET curricula of Level 3, Level 4 and level 5

In line with the objective of this assignment, the consulting firm will work in a close collaboration with RTB department in charge of curriculum and instructional materials development and will:

1. Participate in an initial kick-off meeting with key stakeholders to discuss the curriculum, objectives and expectation
2. Conduct a detailed review of the approved curriculum and existing material like format of the manual
3. Develop 67 trainees’ manual (modules) for specific, general and complementary competencies for TVET level 3,4, and 5 for Plumbing Technology and Public Works curricula;
4. Develop 67 trainer’s manual (modules) for specific, general and complementary competencies for TVET level 3,4, and 5 for Plumbing Technology and Public Works curricula;
5. Incorporate visual aids, charts and diagrams where necessary
6. Provide regular progress updates and submit the draft manual for review
7. Perform Iterative refinement of the manual based on the feedback from RTB
8. Finalise and submit the completed training manual developed

**Note:** The consultancy firm shall comply with RTB acceptable formats for training manuals development and Designs.

1. **Place, duration and terms of performance**

This assignment can be performed at any place. In case of face to face meeting, the place shall be at RTB offices in Kigali or any other place defined by RTB

a. **Implementation period:** 1 October 2024 to 30 June 2025

b. **Start date:** 1st October 2024

c. **End date:** to be defined later

d. **Effective duration per assignment:** 1 year

**e. Schedule/programme**: to be defined later based on agreed work plan

1. **Assignment reports**

The hired consulting firm will report to RTB through the Head of Curriculum and Instructional Material Development and Expertise France and will provide periodic briefings during the execution of the assignment.

1. **REQUIRED EXPERTISE AND PROFILE**

The consultancy firm should have at least 2 years of proven experience in the development of competency-based curricula and Training manuals.

The consultancy team should consist of at least the following team members:

1. **A Team leader:** Responsible for overall project coordination
* At least a Master’s degree in Education Science, Curriculum and instructions or a related field
* At least 5 years of experience in competency-based curriculum development and training material development, especially in the TVET sector
* Proven experience of 2 years in conducting similar assignments
* Writing skills, leadership skills and organisational skills
1. **Content experts/ Author:** In charge of developing the core material of the manual
* At least an advanced diploma in the field
* At least 3 years of experience in the field
* Experience with 2 similar assignments in training material development
* Proficiency in English language, very good writing skills and word processing skills
1. **Reviewers:** In charge of evaluating the content for accuracy, relevance and comprehensiveness
* At least an advanced diploma in the related field
* At least 3 years of experience in the related field
* Experience of 2 similar assignments in training material development
* Proficiency in English language and very good writing skills and word processing skills
1. **Editors:** In charge of refining the text for clarity, coherence and correctness and ensure consistency in style and format
* At least a Master’s degree in English or other related qualifications
* Have experience in editorial work proven by 2 certificates of completed services
* Very good spelling and grammar and very good writing skills and skills in word processing
1. **Illustrators:** In charge of creating visual elements that enhance the manual’s usability
* At least an Advanced diploma in Graphic design or other related qualifications;
* At least 3 years of Experience in Illustrations design of Educational Materials such as training manuals or study texts books;
* At least 3 years proven experience in working with publishers related assignments
1. **Graphic Designers:**
* At least an Advanced diploma in Graphic design or other related qualifications;
* At least 3 years of Experience in designing of Educational Materials such as training manuals or study texts books;
* At least 3 years proven experience in working with publishers related assignments.

**Note**: The number of people to be mobilised shall be clearly indicated in the application

1. **DELIVERABLES AND TIMELINE**

The consulting firm is expected to deliver the following:

|  |  |  |
| --- | --- | --- |
| **#**  | **List of deliverables**  | **Timeframe**  |
| 1 | Participation in kick off meeting  | 5 days After the signing of the contract  |
| 2 | **Inception report**containing the methodology, a detailed work plan and other details for the assignment  | 10 working days after the kick off meeting  |
| 3 | **Draft version** of 134 training manuals (67 trainees’ manuals + 67 trainers’ manuals) developed | Maximum of 6 months from the approval of the inception report **Note:** Each Manual developed will be submitted once finished to receive feedback  |
| 4 | **Final version** of 134 training manuals (67 trainees’ manuals + 67 trainers’ manuals) developed in both pdf and word document  | Maximum of 3 month from the reception of recommendation from RTB  |
| 5 | 1. **Final Report** providing all outputs, list of participants, description of process and the achievements, as well as recommendations for implementation
 | Two weeks from the reception of validation of all the manual  |

It will be noted that:

* The reports and training manuals shall be submitted officially to RTB through the Head of Curriculum and Instructional Material Development and expertise France
* All written deliverables submitted to RTB shall be in English.
* The final version of manuals approved will be submitted in hard and soft copy (PDF and Word).
* The consulting firm is expected to submit the deliverables on or before the agreed-upon deadlines. Approved deliverables shall be the basis for payments under this assignment.
* RTB reserve the right to reduce the number of manual to be developed before the start of the assignment
1. **COORDINATION**

The consultancy firm shall nominate a contact person for project implementation purposes

For the side of Rwanda TVET Board, all the communication shall be addressed to

Mr Aimable Rwamasirabo,

Head of department Curriculum and Instructional Material Development

Email: arwamasirabo@rtb.gov.rw

Tel: +250788546636

For the side of Expertise France, all the communication shall be addressed to

Mr Kiba Muvunyi,

Component manager for TVET and Institutional development

Email: kiba.muvunyi@expertisefrance.fr

Tel: +250788355036

Close collaboration must take place with the contact persons from assignment preparation right up to completion. Furthermore, regular exchanges must take place with the contact persons on assignment progress and any difficulties that may be encountered.

1. **SUBMISSION OF OFFER**

**Technical Proposal:**

* A cover letter expressing your interest in this assignment
* Technical proposal with a brief description of why you would be considered as the most suitable for the assignment, relevant expertise, and a detailed, clear methodology, your approach to complete the assignment
* Company registration certificate
* Proof of successful completion of related assignments.

**Financial Proposal:**

Since the number of trainees and trainer’s manuals to be developed are indicative and subject to change based on the budget, the financial offer of applicants shall indicate:

* A unit cost per one Trainee’s manual (module)
* A unit cost per one trainer’s manual (module)

The financial offer will be calculated based on man-days (see table below to be filled)

**Cost for Trainee’s manual (module)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Position** | **Description of tasks** | **Number of experts** | **Number of ma-days per expert** | **Total man-days** | **Unit cost per man-day** | **Total cost (currency)** |
| Team leader  |  |  |  |  |  |  |
| Content expert/ Authors |  |  |  |  |  |  |
| Reviewers  |  |  |  |  |  |  |
| Editors  |  |  |  |  |  |  |
| Illustrators |  |  |  |  |  |  |
| Graphic designs  |  |  |  |  |  |  |
| **Total cost per one trainee’s manual (module)** |  |
| **Total cost of 67 manuals to be developed**  | **xxxxxx** |

**Cost for Trainer’s manual (module)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Position** | **Description of tasks** | **Number of experts** | **Number of ma-days per expert** | **Total man-days** | **Unit cost per man-day** | **Total cost (currency)** |
| Team leader  |  |  |  |  |  |  |
| Content expert/ Authors |  |  |  |  |  |  |
| Reviewers  |  |  |  |  |  |  |
| Editors  |  |  |  |  |  |  |
| Illustrators |  |  |  |  |  |  |
| Graphic designs  |  |  |  |  |  |  |
| **Total cost per one trainer’s manual (module)** |  |
| **Total cost of 67 manuals to be developed**  | **xxxxxx** |

**Note:**

* The cost related to travel and accommodation will follow Expertise France procedures
* Other costs (except travel cost and accommodation) to be mentioned as well
* All cost must be tax inclusive
1. **HOW TO APPLY**

For interested candidates, apply through the link below **before** **20th October 2024**:

<https://www.expertisefrance.fr/en/on-recrute?redirected=2#page-11904---1---trainers-trainees-manuals-after-ii-h-f---en_US>

**ANNEXES 1: SELECTED MODULES**

* + - 1. **LIST OF COMPLEMETARY AND GENERAL MODULES FOR PLUMBING TECHNOLOGY AND PUBLIC WORK TRADES (21 Modules)**

|  |  |  |
| --- | --- | --- |
| **Level 3 modules** | **Level 4 modules** | **Level 5 modules** |
| **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** |
|  | GENKK302 | Kutumia Kiswahili Wastani |  | CCMFT402 | Exprimer des opinions en français élémentaire |  | CCMOB502 | Organise a Business |
|  | GENAM301 | Apply Algebra and Trigonometry |  | GENFA402 | Applied Mathematics |  | CCMIW502 | Apply ICT at Workplace |
|  | GENBC301 | Demonstrate Basics of Chemistry |  | GENMP402 | Applied Physics |  | CCMKN502 | Gukoresha ikinyarwanda cy’ intyoza |
|  | GENPY301 | Apply general physics |  | GENAC402 | Applied Chemistry |  | CCMEN502 | Use upper-intermediate English at workplace |
|  | CCMOL302 | Describe the occupation and learning process |  | CCMKS402 | Kutumia Kiswahili katika mawasiliano ya kawaida |  | CCMFT502 | Echanger les idées en Français élémentaire |
|  |  |  |  |  |  |  | CCMKK502 | Kutumia Kiswahili katika mawasiliano ya kazini |
|  |  |  |  |  |  |  | CCMPE502 | Apply Proffessional and multiclutural ethics at workplace |
|  |  |  |  |  |  |  | CCMCZ501 | Develop attitudes of living together in harmony |
|  |  |  |  |  |  |  | GENAP502 | Apply Mathematical Analysis, Statistics and Probability |
|  |  |  |  |  |  |  | GENDM502 | Apply dynamics and mechanical waves |
|  |  |  |  |  |  |  | GENAC502 | Demonstrate basics of Analytical Chemistry |

* + - 1. **LIST OF CORE MODULES FOR PLUMBING TECHNOLOGY TRADE (19 Modules)**

|  |  |  |
| --- | --- | --- |
| **Level 3 modules** | **Level 4 modules** | **Level 5 modules** |
| **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** |
|  | PLTBE302 | Perform basic Electricity |  | PLTPW401 | Plumbing basic welding |  | GENBH501 | Apply basics of Hydraulics |
|  | PLTSA302 | Install sanitary appliances |  | PLTTD401 | Basic technical drawing and AutoCAD |  | GENRS501 | Apply basics of REVIT MEP software |
|  | BDCIA302 | Integrate the workplace |  | PLT WD 401 | Installation of water distribution networks |  | PLT IA502 | Integrate the workplace |
|  |  |  |  | PLTGS 401 | Fuel gas system installation |  | PLTWI501 | Install water treatment system |
|  |  |  |  | PLTFF 401 | Firefighting system installation |  | PLTWW501 | Install wastewater treatment system |
|  |  |  |  | PLTPS401 | Pumping system Installation |  | PLTWF501 | Install water features system |
|  |  |  |  | PLTHW401 | Hot water system installation |  | PLTHI501 | Install hydronic system |
|  |  |  |  | PLTHW401 | Integrate the workplace |  | PLTII501 | Install irrigation system |

* + - 1. **LIST OF CORE MODULES FOR PUBLIC WORKS TRADE (27 Modules)**

|  |  |  |
| --- | --- | --- |
| **Level 3 modules** | **Level 4 modules** | **Level 5 modules** |
| **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** | **SN** | **Module Code** | **Module Title** |
|  | PWOTD301 | Basic Technical Drawing |  | PWOTD401 | Apply Technical drawing |  | PWOSS501 | Conduct Site Supervision of Public Works |
|  | PWOSH301 | Public Works Hygiene and Safety Precautions |  | PWODM401 | Perform Drainage system maintenance |  | PWOAC501 | Apply Auto - CAD Civil 3D Software |
|  | PWORS301 | Establish Road Signs, Marking and Crush Barriers |  | PWOCS401 | Perform Surveying data collection and setting out |  | PWOBC501 | Construct bridges |
|  | PWOMW301 | Perform masonry works  |  | PWOSW401 | Perform steel bar works |  | PWOAP501 | Construct asphalt pavement |
|  | PWOPR301 | Describe Public Works Resources |  | PWOAT401 | Perform Aggregates’ Tests |  | PWOWS501 | Construct spring water supply and sewerage structures |
|  | PWORW301 | Construct Retaining walls |  | PWOCW401 | Perform Cement concrete works |  | PWOCE501 | Estimate cost in public works |
|  | PWOIAP301 | Integrate the Workplace |  | PWOST401 | Perform Full soil identification and insitu dry density test |  | CCMIA502 | Integrate the workplace |
|  |  |  |  | PWONB401 | Perform Non bituminous pavement construction |  |  |  |
|  |  |  |  | PWOPM401 | Perform non-bituminous pavements maintenance |  |  |  |
|  |  |  |  | PWOCT401 | Perform cement tests |  |  |  |
|  |  |  |  | PWOCO401 | Perform Concrete tests |  |  |  |
|  |  |  |  | PWODT401 | Apply Do-nou technology in earth road maintenance |  |  |  |
|  |  |  |  | PWOIA402 | Integrate the workplace |  |  |  |

Annex 2: RTB template for Trainee’s manual development

<https://docs.google.com/document/d/19Ozq0gZhJNBMPtUbMVdEzt7yQJLDLNpq/edit?usp=drive_link&ouid=105826802186331939862&rtpof=true&sd=true>

Annex 3: RTB template for Trainer’s manual development

<https://docs.google.com/document/d/1eVzNuPYApoZ6b9gnissPYljACnU1i7sf/edit?usp=drive_link&ouid=105826802186331939862&rtpof=true&sd=true>

Annex 4: RTB curricula

* Level 3 plumbing technology curriculum: <https://drive.google.com/drive/folders/1wTu3KZkdivAmsbXu0ViLB9PcByR36zrC?usp=sharing>
* Level 4 Plumbing technology curriculum: <https://drive.google.com/drive/folders/1AZ_JutrrbHEJTDDv8PZ2S1A6bNvp2Pgs?usp=sharing>
* Level 5 plumbing technology curriculum: <https://drive.google.com/drive/folders/1SpWiqkyYz-tAaY1Js--9-6cCykDQ_jYi?usp=sharing>
* Level 3 public works curriculum: <https://drive.google.com/drive/folders/1-Okr5bxm_ZyOqv5fvHaik-IIwNu-7ehC?usp=sharing>
* Level 4 public works curriculum: <https://drive.google.com/drive/folders/1Ku-OoGERcZhSr8qCmFR2wC3r73A4Z-Aq?usp=sharing>
* Level 5 public works curriculum: <https://drive.google.com/drive/folders/16-o772G86HS4T54A_G7JGLnK2l4mOTy0?usp=sharing>