**TERMS OF REFERENCE**

**Consultancy services for**

**the development of an IT system to support the management of the grants scheme**

**of the RAPID Project**

1. Background

Romania has received a loan from the International Bank for Reconstruction and Development (IBRD) to support the implementation of the Rural Pollution Prevention and Reduction Project (RAPID Project).

The Romania Rural Pollution Prevention and Reduction Project is an initiative aimed at addressing environmental challenges in the rural areas of Romania. Focused on mitigating pollution and promoting sustainable practices, this project seeks to safeguard the country's rural landscapes, preserve natural resources, and enhance the overall well-being of local communities.

The Loan 9505-RO for the Project was ratified by Romania by the Law no. 332/2023 on November 7th 2023 and it became effective on December 13th, 2023. The project closing date is June 30th, 2028.

The objectives of the project are to strengthen the institutional capacity of selected public entities, monitor pollution in agriculture, and transfer knowledge on agricultural pollution reduction to participating farmers. The project consists of three components:

1. **Modernization of Public Institutions:** Enhance the institutional capacity of the Ministry of Environment, Waters, and Forests (MMAP) to monitor, evaluate, and report investments, including those related to environmental aspects of the National Recovery and Resilience Plan (NRRP). This involves increasing the national capacity for monitoring, prevention, and reduction of pollution from agricultural sources in rural areas, including the National Administration "Romanian Waters" (ANAR), the National Phytosanitary Authority (ANF), and the Directorate for Land Consolidation and Land Fund (DÎFFF) within the Ministry of Agriculture and Rural Development (MADR).
2. **Knowledge Exchange and Awareness:** Facilitate knowledge exchange, awareness, and information/innovation transfer to participating farmers. This includes establishing role model farms to promote best agricultural practices for pollution prevention and reduction, farms that will be supported by the RAPID Project through grants. The project also involves creating national knowledge transfer networks and conducting information and awareness campaigns for the public regarding project activities, including other environmentally-focused interventions funded under NRRP.
3. **Project Management:** Ensure effective project management to oversee and coordinate the various components and activities outlined in the project.

The project aims to create a comprehensive framework for addressing agricultural pollution in Romania, involving institutional capacity building, knowledge dissemination, and active participation of farmers in adopting sustainable practices.

At the basis of the knowledge transfer and awareness campaign will stay the champion farmers, who have the capacity to demonstrate good practices. Through a grants scheme, RAPID Project will support the modernization of existing farms through investments in their environmental infrastructure, aiming at setting-up a network of at least 70 demonstration farms. The selection of the farms that will receive grants will be made on competitive basis. This will require an IT system for the management of the grants scheme, including various modules necessary to process the grants during the implementation of the grants scheme procedural steps, such as:

* submission of the financial requests,
* evaluation,
* selection,
* contracting,
* management of the Grants financing contracts,
* environmental and social management plans preparation and monitoring,
* procurement,
* payments,
* reporting, etc.

Under the present assignment, the Ministry of Environment, Waters and Forests, as the implementing institution, through the Project Management Unit for the "Prevention and Reduction of Pollution in Rural Areas Project" (PMU "RAPID") (named hereafter **The Client**), intends to contract specialized consultancy services of a Consultant for developing the IT system for the management of grants scheme.

The Client is the Ministry of Environment, Waters and Forests through the PMU RAPID.

The Consultant will be selected, based on the present Terms of Reference, to support the PMU with all the digitalization related activities for the management of the grants scheme.

**Definitions of terms:**

RAPID – Romanian Rural Pollution Prevention and Reduction Project

The Project – represents the Rural Pollution Prevention and Reduction Project, referred to as the "RAPID" Project

MEWF – Ministry of Environment, Waters and Forests

PMU – Project Management Unit – represents the unit established within the Ministry of Environment, Waters and Forests, that manages the implementation of the Rural Pollution Prevention and Reduction Project

Applicant – any farmer with a submitted financial request under the RAPID Project Grants Scheme

Beneficiary – any applicant selected for financing under the RAPID Project Grants scheme

ESMP – Environmental and Social Management Plan to be elaborated for each beneficiary

1. Objectives of the assignment

Key objective of the consultancy services is to develop the IT system for the management of the grants scheme of the RAPID Project, for a smooth implementation of all the procedural steps.

1. Scope of the Services

The Consultant will have to develop a cloud-based IT system for the management of the grants scheme, which will include at least the following IT modules and functionalities:

1. **Online Submission of Project applications** shall allow the submission of the financing request, together with its scanned annexes and information about the applicant and its financing request, as follows:

* Intervention area (1, 2 sau 3),
* Agricultural sub-sector (drop list),
* The proposed investment includes construction works (yes or no),
* Pre-score value of the submitted project,
* Total value of the contract (value, in euro, 2 decimals),
* Total eligible value (value, in euro, 2 decimals),
* Value of the public support per intervention area (1, 2 or 3), per climate change and biodiversity conservation (value, in euro, 2 decimals),
* Name of the beneficiary (text),
* Street name and number (text),
* Commune (text/drop list),
* County (drop list),
* Gender of the applicant: of the authorized individual in case he/she holds the status of sole associate/majority associate or administrator on the date of the release of the Grant Manual in public consultation (F/M),
* Farmer organisation affilition (text),
* Email address (text),
* Mobile number (number),
* Other info, as necessary.

The IT module shall perform various validations, including if the declarations (as part of the financial request) are endorsed (ticked) by the applicants and if the mandatory annexes of the financial requests are submitted.

The total value of the requested public support per intervention will be automatically counted and visible to all applicants. The IT module should be able to stop the submission of the apllications in case the scoring system is under a certain value or in case the total value of the public support from all the submitted projects is reaching a certain value. In these cases, automatic messages shall be generated.

1. **Request for additional information** – it should be possible (as text prepared by the PMU). The IT module should generate prefilled templates (based on the information already existent in the system), to be automatically linked with the emails of the applicants in order to be submitted, once finalized (after the text is added by the PMU). For the applicants receiving requests for additional information, the module should allow the upload of scanned documents (by the applicants) in a given period.
2. **Evaluation Reports** – PMU should be able to upload the scan of the evaluation grids and .xls files and scan of the evaluation reports (intermediary and final evaluation reports).
3. **Selection Reports** – PMU should be able to upload .xls files and scan of the selection reports (intermediary and final selection reports).
4. **Information letters on selection -** PMU should be able to draft information letters using prefilled templates (based on the information already existent in the system), letters to be automatically linked with the email of the applicants, in order to be submitted, once finalized.
5. **Appeals –** applicants submission of the appeal and other scanned documents.
6. **Contracts and contracts amendments** – PMU shall be able to register the number of the contracts and of their amendments, scanned documents of contracts and contracts amendments and their annexes, total value of the contracts, total eligible value of the contracts (or as amended) and value of the public support (all values in euro, with 2 decimals). Further on, the PMU shall be able to include in calendar (for each beneficiary, based on the information provided by the beneficiaries as annexes to the contracts), the envisaged period for carring-out the procurement procedures (with information about the envisaged goods / construction works to be procured and their estimated value) and the envisaged period for submitting the payment requests (with information on the total value of the public support to be requested).
7. **ESMP / ESMP check-lists** – PMU shall upload the scanned documents for ESMPs/ESMPs check-lists and photos, while the ESMPs/ESMPs designated supervisers shall upload the reports with their photos.
8. **Procurement** – the Consultant that will be contracted to support the management and monitoring of the Grants scheme shall introduce details on the value of the bid and type of procurement (goods / services / construction works) and shall upload scanned documents for each procurement procedure and the scanned Consultant’s verification list, together with Consultant’s conclusion of the verification list as ticked box: endorsed (Yes or No), with justification in case of No, as well, PMU’s endorsement (Yes, No, Not applicable), with justification in case of No.
9. **Payment requests submission** – while the number of the installments will be automatically generated (allowing up to 3 payment requests to be submitted), the beneficiary shall be able to upload the scanned documents as needed for the payment request and to fill-in the following values per installment: value of the eligible expenditure, value of the requested financial public support. The PMU shall upload the verification lists (as scan), to update a status of the payment request - endorsed or not, as well to reduce values (with comments as text) and to include a value of ineligible expenditure and the total value paid (all values in euro, with 2 decimals).
10. **Reporting** – beneficiaries shall be able to upload (as scanned documents) semiannual reports and pictures.

The IT application shall automatically generate various reports, graphics and maps with status for each of the modules above and for each of the applicant / beneficiary, based on the data included in the databases.

The following IT functionalities will be ensured by the Consultant:

* + - * The modules will be integrated in a web-based platform owned by the PMU;
      * Access to the application shall be based on user and passwords, with designated roles and access (God, Admin, PMU user, applicant / beneficiary, Procurement Consultant etc.) and with an integrated solution for password auto-recovery, including, possible, through RoeID;
      * Validation mechanisms, where possible, will be introduced for the collected data to reduce the risks of error and non-uniform data entry: lists with pre-filled data, numeric, alphanumeric fields, date type, as appropriate;
      * All data will be cloud stored. The cloud storage solution and the needed cloud credits will be indicated by the Consultant, with arguments, as part of the technical proposal. The Client will reimburse to the Consultant the value of the Cloud credits.

Any deviation/alternative solution from/for the requirements presented in section 3 can be accepted by the Client based on arguments clearly presented in the progress reports by the Consultant, with prior approval / request by the Client.

The Consultant will deliver analysis and design documentations, internal tests reports, as well as commented source codes for all the deliverables.

For each IT module, the Consultant will deliver a friendly illustrative user manual / video tutorials and will offer initial assistance/training to the PMU staff for the use of the IT application.

Furthermore, for each module, access to cloud services and technical assistance will be provided for a minimum of 12 months from the Client's acceptance. Any error/ blockage will be resolved by the Consultant, free of extra-charge, depending on the severity:

- Critical (the functionalities of the module have been compromised: documents cannot be uploaded, users cannot log in with username and password, fields in the interface cannot be accessed) - max 8 hours;

- Major (major validations do not work or reports do not generate the information correctly) – max 2 working days.

- Minor (text color, page fit) - max 5 working days.

The Consultant will provide technical support for the IT system, for a period of at least 12 months from the Client's acceptance.

The cost of developing the modules should be proportionate in relation to its functionalities. For this, the IT Consultant is expected to propose a simple and clear software architecture, efficient work procedures and to recommend a software platform/technology adapted to the volume of data that will be processed by the software (around 200 applicants and around 100 beneficiaries).

1. Consultant’s Profile

The services will be carried out by a Consultant with general experience in providing advice/consultancy for the development of development of IT systems, preferably including for funding schemes managed by public institutions.

The consultant must have developed at least 3 institutional development projects (IT systems) for private or public institutions during the last 5 years, proven with recommendations. Previous experience in working for or with public institutions represents an advantage.

The consultant must present a team adapted to the fulfilment of the requests from the terms of reference within the proposed deadlines, but which will be composed of at least 3 key experts with proven experience, as follows:

1. **Team Leader**, having the following qualifications and experience:

* *Education and general experience:* 
  + Higher education completed with bachelor’s degree;
  + 7+ years of hands-on software development experience;
  + 3+ years of experience leading technical teams;
  + Proven track record of successfully developing and delivering at least 3; medium to large-scale software development projects;
  + Experience in managing the development of IT software solutions for grants applications represents an advantage.
* *Specific experience in:* 
  + Modern software architecture principles and cloud-native systems development;
  + Expertise in cloud-based development (e.g., AWS, Azure, GCP or other);
  + Relevant/proposed programming languages (e.g., Java, C#);
  + Database design and management (SQL and potentially NoSQL) and experience with relevant/proposed database management system(s) (DBMS);
  + Web development frameworks (e.g., React, Angular, Vue.js)
  + Secure software development principles. Experience in developing ISO/IEC 27001:2008 certified IT systems represents an advantage;
* *Soft skills:*
  + Excellent communication and interpersonal skills, including client facing experience;
  + Ability to mentor and guide team members;
  + Project management experience to manage timelines and budgets effectively.

1. **Business analyst**, having the following qualifications and experience:

* *Education and general experience:*
  + Bachelor’s Degree;
  + 3+ years of experience as a business analyst in software development projects;
  + Experience gathering and documenting complex business requirements for at least 3 systems of similar complexity;
  + Experience in developing technical and functional specifications for similar software applications, will be considered an advantage;
  + Experience in grant management domain will be considered an advantage.
* *Specific experience in:*
  + Elicitation techniques, requirements management (e.g., Jira, Enterprise Architect) and process modeling tools (e.g., BPMN, UML);
  + Data modeling.
* *Soft skills:*
  + Excellent written and verbal communication skills.
  + Experience in working directly with the client.
  + Ability to bridge communication gaps between technical and non-technical stakeholders.

1. **Software developer**,having the following qualifications and experience:

* *Education and general experience:*
  + Bachelor’s Degree;
  + 3+ years of software development experience;
  + Experience in building cloud-based solutions;
  + Experience in developing similar software applications will be considered an advantage.
* *Specific experience:*
  + In the proposed programming languages and frameworks;
  + In cloud architecture principles;
  + With version control systems (e.g., Git);
  + In API development and integration;
  + With security best practices for cloud solutions would be an advantage;
  + In DevOps principles and practices and CI/CD (continuous integration/continuous delivery) pipelines would be an advantage.
* *Soft skills:*
  + Ability to work collaboratively;
  + Strong attention to details.

1. **Software tester**, having the following qualifications and experience:

* *Education and general experience:*
  + 2+ years of experience in software testing;
  + Experience in developing test cases, test plans, and test scripts;
  + Experience in grant management domain would be an advantage.
* *Specific experience in:*
  + Testing methodologies (e.g., unit testing, integration testing, functional testing);
  + Test automation tools (e.g., Selenium, Cypress) would be an advantage;
  + Experience with performance and security testing would be a strong advantage;
  + CI/CD (continuous integration/continuous delivery) pipelines.
* *Soft Skills:*
  + Attention to detail;
  + Strong problem-solving abilities;
  + Excellent communication and reporting skills.

During implementation, Consultant team may be complemented with non-key experts, as necessary.

1. Duration of the assignment

The services under this Contract shall be provided until 31st of March, 2028, or any subsequent date, as agreed in writing by the Parties through a contract amendment.

The Consultant is expected to commence performance of the services preferably within 10 working days after contract signing.

1. Reporting

During this Assignment, the Consultant shall deliver progress reports per each IT module, having the following indicative deadlines:

* Report 1: the 1st IT module (Online Project Submission application) - within 3 months from the commencement of the services under the contract;
* Report 2: The IT modules on Request for additional information, Evaluation reports, Selection reports - within 2 months as from the reception of the previous module;
* Report 3: Appeals, Contracts and Contracts amendments - within 1 month as from the reception of the previous modules;
* Report 4: ESMPs/ESMPs check-lists and Procurement - within 2 months as from the reception of the previous modules;
* Report 5: Payments requests submission and Reporting - within 2 months as from the reception of the previous modules.

For each of the IT modules, the Consultant will deliver, at least, the followings: business analysis reports, internal testing reports (together with the testing scenarios), source code, installation and configuration guide (including disaster recovery procedures), users` guides per roles etc.

The value of the credits for the cloud may be requested together with any of the reports, as necessary and as previously agreed with the PMU.

PMU-RAPID will receive the access code of the IT system and the right to further modify/develop it, according to implementation needs.

While the Consultant should allocate appropriate human resources for the development of the IT modules in due time, in response and in correlation with the deadlines for the management of the grants scheme as set at the level of the PMU, other time schedule for advance or later submission of the reports will be accepted, as agreed with the PMU’s representatives.

All the Progress Reports shall be transmitted to the PMU in one copy, in Romanian language, signed by the Consultant, together with the electronic versions (electronic mail/memory stick).

All the Progress Reports that need approval shall be submitted to the authorized representative of the Client, for analysis and approval by the Acceptance Committee nominated by the Client.

The Consultant shall consolidate the Progress Reports as requested by the Client / Acceptance Committee, within maximum 2 working days as from receiving such requests or within a longer period as agreed by the Consultant and the Client’s authorized representative, if the circumstances require.

The Acceptance Committee shall decide upon the acceptance of the activities and deliverables provided by the Consultant.

Based on the acceptance document of the final version of each of the Progress Reports, issued by the Acceptance Committee, the Consultant shall issue the invoice and the Client shall pay, according to the Contract provisions.

1. Institutional arrangements, Data, Local Services, Personnel and Facilities to be provided by the Client

The Client (Ministry of Environment, Water and Forests, through the PMU-RAPID) will nominate a representative as Client’s Coordinator. The coordinator will be responsible for coordinating the activities under this assignment and for receiving and submitting the reports and other materials/documents/deliverables for their acceptance by the Client’s nominated acceptance committee.

The Consultant:

* Will work under the supervision of PMU-RAPID and will work closely with the designated Client’s Coordinator;
* Will keep all the parties involved generally informed of all issues related to the quality and status of the assignment. Will liaise with RAPID Project beneficiaries and other contracted consultants, as needed;

All documentation and deliverables prepared by the Consultant during the course of the assignment will remain the absolute property of the Client. The Consultant will deliver all such documentation to the Client, including the source code of the IT system with full administration/modification rights.

The Client shall provide to the Consultant all the information necessary, concerning the scope of this Assignment, which will reasonably be requested by the Consultant in order to carry out and complete the tasks and activities under this Assignment.

Thus the Client will provide access to all relevant information, including documents and stakeholders’ contact points to facilitate the implementation of the activities under this assignment, PMU server / network resources.