

Terms of Reference and Scope of Work for the Information Systems and Automation Expert to support the SUE "Center for Digitalization and Advanced Training of Agricultural Workers" under the Ministry of Agriculture (MoA) of the Republic of Tajikistan.

State Institute “Agriculture Entrepreneurship Development” Project Management Unit " The Strengthening Resilience of the Agriculture Sector Project "

1. General information about the Project

The "Strengthening Resilience of the Agriculture Sector” Project (SRASP) in Tajikistan aims to enhance climate resilience and promote sustainable agricultural development by enhancing the capacity of the Ministry of Agriculture to collect, analyze and monitor real-time data through the development of the **Agriculture Management Information System (AMIS)**. Under subcomponent 3.1 of the project, it is planned to establish the **AGRIDATA Stack** system as part of AMIS, combining data on land use, crop conditions, and climate impacts through digital tools such as dashboards and remote sensing technologies. This system is to be managed by the **AGRIDATA Technology Group (ATT)** and the **Advisory Body (AAB)**, which will oversee the management and harmonization of data. Agrometeorological information services will be expanded with new weather stations, ICT infrastructure and a digital farmer alert system, including weather, crop and pest messages available via SMS or mobile apps. To ensure the effective use of this system, the project places special emphasis to digital literacy and targeted training for MoA employees, local agencies and dehkan farms. Key risks such as stakeholder coordination, data sharing, technical challenges, and digital literacy deficiencies are addressed through strategies such as information programs, secure data transfer protocols, and enhanced community engagement. This comprehensive system supports data-driven decision-making to improve agricultural resilience and respond to crises across Tajikistan. The main customer of AMIS is the Ministry of Agriculture represented by the SUE "Center for Digitalization and Advanced Training of Agricultural Workers" and the **State Institute “Agriculture Entrepreneurship Development” Project Management Unit (AED PMU)**.

2. General information

Reporting directly to the Deputy Director of the State Institution "AED" PMU, the Information Systems and Automation Expert will be primarily responsible for supporting the Customer in planning and implementing activities related to the

implementation of subcomponent 3.1., particularly the implementation of the AMIS Information System. Digital technologies will be implemented in accordance with the project Guidelines of the State Institution "AED" PMU, the Charter of the SI "AED" PMU, the current legislation of the Republic of Tajikistan, and the orders of the Director of the SI "AED" PMU.

3. About the role of an Expert in Information Systems and Automation. The Information Systems and Digitalization Expert plays a key role in developing the Information System for the agricultural sector, ensuring that the system meets the requirements of the customer, stakeholders, and end users. The main tasks of the Information Systems and Automation Expert include the formation and management of the product vision, the creation and prioritization of tasks, working with stakeholders and stakeholders performers, determining acceptance criteria, collecting and analyzing feedback, as well as monitoring the progress of development. Together with the Customer, the Information Systems and Automation Expert determines the goals of the system, manages the list of requirements, organizing it by priority depending on its importance and value for the Customer. He interacts with key stakeholders, involved consulting and technical implementers, and end users to agree on changes and clarify requirements, constantly checking whether the information system being developed meets their expectations and goals. The Information Systems and Automation Expert also sets quality and acceptance criteria to ensure that tasks are completed at the proper level, analyzes feedback to make improvements, and participates in regular meetings with the team, monitoring the progress of development and adjusting the course if necessary.

4. The main tasks of the Information System and Automation Expert are:

4.1. Formation and Management of the AMIS Information System Vision

The Information Systems and Automation Expert needs to clearly understand the Client's strategic goals, key stakeholders and end-user needs in order to develop an information system vision. He is responsible for ensuring that this vision is communicated to the development team, including consulting and technical executors, explaining what exactly needs to be achieved with the product. This includes determination of goals, user values and long-term prospects for the use of the system.

4.2. Creation and prioritization of the requirements list:

the Information Systems and Automation Expert is primarily responsible for creating and prioritization the requirements list for the Information System. It is a list of tasks, requirements and functional elements that need to be implemented to achieve the vision of the software product. He organizes and prioritizes these elements depending on their importance, cost and expected benefit for the Customer. on creating the features that provide the most value to users and key stakeholders.

4.3. Stakeholder Engagement

The Information Systems and Automation Expert actively engages with stakeholders to collect their requirements, expectations and comments. He participates in regular meetings and presentations where the goals and plans for improving the information system are discussed. It is important that the Information Systems and Automation Expert coordinates all changes with stakeholders and takes into account their opinions, without losing focus on the core vision and goals of the project.

4.4. Definition of acceptance and quality criteria One of the important aspects of the work

of an Information Systems and Automation Expert is the establishment of acceptance criteria for tasks and functions. He is responsible for determining what requirements and qualities must be met in order for the work to be accepted.

4.5. Feedback and Iterative Improvement

The Information Systems and Automation Expert must constantly analyze feedback from users, stakeholders and the team in order to improve the software product. Based on this information, he can change priorities in the task list, clarify requirements or add new features, which allows the product to be more adapted to changing conditions and needs.

4.6. Monitoring progress and coordination

The Information Systems and Automation Expert needs to monitor the progress of development and make changes in time. He must manage the scheduling of meetings with stakeholders, performers to keep abreast of current tasks and adjust the course of the project if necessary.

4.7. Training & Education

The Information Systems and Automation Expert is required to work closely with the development team in the preparation of a training program for the

staff of the Digitalization Center at the Ministry of Agriculture and other partners, stakeholders. The Expert accompanies and supervises the process of conducting the trainings, and is also obliged to be aware of the training plans to ensure that the training results are in line with the agreed plan, strategy and design of the Project.

5. Skills and qualities important for an Expert in Information Systems and Automation:

- **Communication:** An Information Systems and Automation Expert needs to communicate effectively with the team, key stakeholders, consulting and technical performers in order to communicate the requirements, expectations and vision of the AMIS software product.
- **Analytical Thinking:** An Information Systems and Automation Expert must be able to analyze data, draw informed conclusions, and make decisions that lead to the successful achievement of product goals.
- **Flexibility:** An Information Systems and Automation Expert must be able to respond quickly to changes and adapt to new conditions to ensure that the project to remain relevant and useful.
- **Understanding of Technical Aspects:** An Information Systems and Automation Expert should be an expert in the development phases of Information Systems, possess a basic knowledge of programming and technical processes and constraints to better understand the capabilities of the technical team.

6. Eligibility Requirements

- 6.1. **Education:** A minimum university degree in computer science, mathematics, or a related field. A diploma or certificate in digitalization or agricultural management is an advantage.
- 6.2. **Work experience:** at least 3 years of proven experience in the field of Information Technology implementation and automation of business processes, software development. Experience in IT project management is preferred. Additional experience in agricultural projects is an advantage.

7. Reporting Relationships and Obligations:

- 7.1. The Information Systems and Automation Expert will report directly to and work under the supervision of the Deputy Director/Project Coordinator of the

SRASP, the Director of the SI "AED" PMU and the Component 3 Coordinator.

8. Languages

8.1.A digital expert must be fluent in Tajik, Russian and English. Documents should be prepared in English and Tajik (and, if necessary, in Russian).

9. Quest Duration

9.1.The appointment will begin in December 2024 and will initially last until December 31, 2025, including a 3-month probationary period. The decision to extend the contract will be made by the SI "AED" PMU in agreement with the World Bank.