

Terms of Reference (TOR)

Senior GIS Mapping Specialist

1. Position Details

Position Title: Senior GIS Mapping Specialist

Position Type: Deliverables (lump-sum) based contract (30 days total workload but the actual working days could vary based on business needs)

Planned Period: 6 months from the date of contract signing, with a possible extension of another 6 months based on business need.

Duty Station: Moldova, Chişinău (with regular field missions to project sites)

2. Background

The World Bank/Global Environment Facility (GEF)-supported project, Moldova: Restoring Ecosystems for Marine Pollution Prevention (RE-MAP, P505546), is currently under implementation. This initiative addresses land-based nutrient pollution in the Dniester River Basin through ecosystem restoration and sustainable landscape management. The project employs nature-based solutions to enhance the capacity of forests, wetlands, river corridors, and silvopastoral landscapes to retain nutrients, regulate water flows, protect soils, and support biodiversity. RE-MAP integrates institutional capacity development and stakeholder engagement with restoration planning and interventions in selected landscapes. The National Office for Environmental Projects Implementation (NOEPI), under the Ministry of Environment, serves as the institutional platform for project implementation and coordination.

Additionally, the Moldova Green Shield: Enhancing Resilience through Ecosystem-based Adaptation (P516908) is a proposed operation aimed at enhancing ecosystem services and reducing climate vulnerability in selected areas of Moldova. This project focuses on climate-vulnerable production landscapes in southern Moldova, including the Lower Prut basin, degraded forest-steppe areas, and agricultural landscapes exposed to drought, land degradation, and water stress. The proposed design includes institutional capacity development, data-driven planning, and climate-resilient ecological infrastructure restoration in production landscapes.

The GIS Mapping Senior Specialist will support the implementation of the RE-MAP project and the preparation of the Green Shield project through geospatial database management, site validation, spatial analysis, and technical inputs to restoration planning and cost estimation. The Specialist will work under the guidance of the RE-MAP Project Coordinator and the Director of NOEPI.

3. Objectives

The primary objective of this assignment is to provide geospatial expertise to support the implementation of the RE-MAP project and the preparation of the Moldova Green Shield project. The GIS Mapping Senior Specialist will ensure the development and maintenance of geospatial databases, validate selected sites, conduct spatial analyses, and provide technical inputs for restoration planning and cost estimation. The Specialist will also contribute to project documentation and reporting.

4. Scope of Work

The assignment comprises two distinct workstreams reflecting the different stages of the projects: implementation support for RE-MAP and preparation support for Green Shield. The Specialist will perform the following tasks:

1. RE-MAP Implementation Support:

- Validate selected sites and update the RE-MAP database with accurate geospatial information.
- Conduct field verification and update baseline assessments for selected sites.
- Prepare and update maps and spatial analyses to support restoration and silvopastoral planning.
- Provide GIS inputs for restoration cost estimates, including spatial quantities and assumptions.
- Maintain and update geospatial records and prepare progress and final technical reports.
- Contribute to RE-MAP implementation documents, including technical specifications and updates to the Project Operations Manual (POM) and Project Procurement Strategy for Development (PPSD).

2. Green Shield Preparation Support:

- Design and establish a dedicated Green Shield geospatial database.
- Identify and map potential restoration and ecosystem-based adaptation areas.
- Conduct spatial prioritization and support climate-informed planning.
- Provide spatial inputs for preliminary investment cost estimates.
- Maintain and update the Green Shield database and prepare progress and final technical reports.
- Contribute to Green Shield preparation documents, including proposed restoration plans and relevant POM and PPCSD inputs.

5. Deliverables

The Specialist will deliver the following outputs:

1. RE-MAP Deliverables:

- Validation register for selected sites, updated RE-MAP database, and corrected site boundaries.
- Updated Site Baseline Assessment (SBA) records and site information fiches.
- Restoration and SPMP maps, site-specific recommendations, and stakeholder feedback.
- Site-specific cost estimates and breakdowns for subcomponent 2.3.
- Progress inputs and final technical report with updated GIS layers and field records.
- GIS and technical contributions to RE-MAP implementation documents.

2. Green Shield Deliverables:

- Dedicated Green Shield geospatial database with organized datasets and metadata.
- Mapped inventory of candidate restoration areas and preliminary site profiles.
- Spatial prioritization maps and analyses supporting climate-informed planning.
- Mapped intervention quantities and site information for preliminary cost estimates.
- Progress inputs and final technical report with GIS layers and metadata.
- GIS and technical contributions to Green Shield preparation documents.

6. Expertise Required

The Specialist shall meet the following minimum qualifications:

- A master's degree or higher in GIS, geography, environmental science, forestry, natural resources management, or a related field.
- At least 10 years of relevant professional experience in GIS, spatial analysis, and mapping, including geospatial database development and management.
- Experience in site validation, field-based baseline assessments, and spatial planning for ecosystem restoration or sustainable land management.
- Ability to coordinate geospatial inputs from technical specialists, engage with local authorities and land users, and undertake field visits to project sites.
- Proficiency in preparing clear technical reports and presenting GIS results in Romanian and/or Russian; knowledge of English is an advantage.

7. Reporting and Coordination

The GIS Mapping Senior Specialist will report directly to the RE-MAP Project Coordinator and the Director of NOEPI. The Specialist will coordinate with the RE-MAP implementation team, the Green Shield preparation team, relevant technical specialists, and the World Bank teams. Progress and final reporting will identify activities, outputs, outstanding data needs, and issues separately for each project. NOEPI will coordinate priorities and review the Specialist's contributions.