

**REQUEST FOR EXPRESSIONS OF INTEREST  
(CONSULTING SERVICES - FIRMS SELECTION)**

**Republic of Moldova**

**Strengthening Moldova's Disaster Risk Management and Resilience Project**

Loan No.: **9720-MD**

Assignment Title: **Consulting services for the preparation of a Feasibility Study for new and re-developed meteorological infrastructure, new hydrological observing infrastructure, and associated engineering works**

Reference No. (as per Procurement Plan): **MD-OEAPM-552717-CS-CQS**

The Government of the Republic of Moldova has received financing from the World Bank toward the cost of the Strengthening Moldova's Disaster Risk Management and Resilience Project, and intends to apply part of the proceeds for consulting services.

The consulting services ("the Services") include the preparation of a *Feasibility Study for new and re-developed meteorological infrastructure, new hydrological observing infrastructure, and associated engineering works* for Public Institution – Meteorology and Environmental Monitoring Authority (IP AMM).

The Terms of Reference (TOR) for the assignment are attached to this request for expressions of interest.

The P.I. "Office for External Assistance Programs Management" (OEAPM) Project Implementation Unit (PIU) now invites eligible consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. Shortlisting criteria are as follows:

- a) Legal entity/consortium with a minimum of 5 years of experience in providing consultancy services (feasibility studies and/or technical-economic studies and/or design/technical analyses) for infrastructure investments and/or technical systems, including field assessments and technical reports – at least 3 contracts signed within the last 5 years;
- b) Proven experience in measurement/observation systems and/or sensor-based equipment and data collection (e.g., observation stations, sensors, instrumentation, telemetry, data loggers, communications, data platforms) – at least 1 contract within the last 5 years;
- c) Proven capacity to prepare technical specifications for similar goods/equipment and systems (essential technical parameters, compatibility/interoperability requirements, commissioning/acceptance) – at least 1 contract within the last 5 years;
- d) Experience working with the public sector and/or projects financed by international organizations (e.g., World Bank, EIB, EBRD, United Nations Development Programme, FAO, etc.) – at least 1 contract during the period 2021–2025;
- e) Capacity of the proposed team, comprising the following key experts:
  - Team Leader / Feasibility Study Specialist: Master's degree in economics, finance, or related fields; at least 7 years of professional experience in managing similar internationally or nationally financed projects, including coordination of multidisciplinary teams and stakeholder engagement; competencies in leading multi-stakeholder initiatives, preparation of feasibility studies including technical and economic-financial analyses, institutional and managerial assessments, social and environmental impact assessments, and risk analysis;
  - Hydrometeorology Expert: University degree in meteorology, hydrology, geography, or Earth sciences; at least 5 years of professional experience in hydrometeorological monitoring network infrastructure projects, financed internationally or nationally; full knowledge of WMO regulations and recommendations regarding network design is essential;
  - Technical Specialist 1: University/postgraduate degree in civil engineering, architecture, or related technical fields; strong knowledge of national legislation, standards, and regulations

- relevant to the construction sector; strong knowledge and extensive experience in the use of cost estimation and budgeting software similar to WinSmeta;
- Technical Specialist 2: University/postgraduate degree in ICT or related technical fields; experience in information technologies, telecommunications, and measurement/monitoring systems involving sensor equipment and data collection (monitoring stations, sensors, instrumentation, telemetry, data loggers, communications, data platforms).

Key Experts will be evaluated at the shortlisting stage.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" September 2023 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

A Consultant will be selected in accordance with the „Consultant's Qualification-based Selection" described in the Procurement Regulations and to be specifically set out in the Request for Proposals.

The Expression of Interest shall clearly state the name of the Consultant (individual Firm, Joint Venture or sub-consultancy). The Consultant shall provide relevant references (assignment name, Client, time frame, the role of the firm (main Consultant/Partner in JV/sub-consultant, contract amount, tasks performed etc.) to confirm its experience and qualifications.

Further information can be obtained at the address below during office hours 08:30 to 17:30 hours.

Expressions of interest must be delivered in a written form to the address below (in person, or by mail, or by e-mail) by **17:30 local time, June 15, 2026.**

Attn: **Ms. Raisa CANTEMIR**

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## **TERMS OF REFERENCE**

**Consulting services for the preparation of a Feasibility Study for new and re-developed meteorological infrastructure, new hydrological observing infrastructure, and associated engineering works**

## **SUMMARY**

**Terms of Reference (TOR): Consulting Services for the preparation of a feasibility study for new and re-developed meteorological and hydrotechnical infrastructure of the Public Institution - Meteorology and Environmental Monitoring Authority (IP AMM), including:**

- (i) providing guidance on the siting/location of the new and re-developed infrastructure, in accordance with WMO regulations;
- (ii) providing technical specifications for all new meteorological and hydrological equipment required for the new and rehabilitated meteorological and hydrological infrastructure;
- (iii) providing TORs for the design services of construction works and cost estimates for newly installed stations, including automated hydrometric measuring stations;
- (iv) providing economic and financial assessments, legal evaluations and institutional arrangements associated with the proposed infrastructural developments, in accordance with Annex 1 to the Regulation on Public Capital Investment Projects, approved by Government Decision (GD) No. 684/2022.

## **CONTEXT AND OBJECTIVES OF THE PROJECT**

### **Background**

1. The Government of the Republic of Moldova is implementing the Strengthening Disaster Risk Management and Climate Resilience Project (SMORE), financed by the World Bank. The Project aims to improve the Republic of Moldova’s preparedness and response to natural disasters and climate shocks and, in the event of a relevant crisis or emergency, to respond promptly and effectively.
2. The IP AMM in cooperation with the Ministry of Environment (MoE), is implementing Component 2, “Improvement of Hydrometeorological Services,” of the SMORE Project. In 2025, the World Bank prepared a roadmap entitled “*Strengthened and Fit-for-Purpose State Hydrometeorological Service in the Republic of Moldova*” as part of SMORE Project. The roadmap identifies critical gaps, challenges, and opportunities in the observation infrastructure in order to strengthen the IP AMM capacity to provide fit-for-purpose services supporting the protection of life, property, livelihoods, and the country’s sustainable social and economic development.
3. Under Component 2 of the SMORE Project, the IP AMM intends to modernize its infrastructure, strengthen technical capacities, upgrade operational capabilities, and improve its capacity to collect and disseminate climate data and information. To achieve these objectives, consultancy support will be required for the design of meteo and hydrological observation infrastructure in accordance with the recommendations of the World Meteorological Organization (WMO).
4. Observation network design is a complex, user-driven process involving the establishment of new stations while existing stations are rehabilitated and modernized as priorities and funding evolve. In the case of the IP AMM, many existing stations, particularly within the hydrological network, require rehabilitation through repairs and automation.
5. Although the current number of stations in both the meteorological and hydrological networks is considered adequate, it should be increased to fully meet national needs. Therefore, the IP AMM

observation networks must be expanded to include new Automatic Weather Stations (AWS) to fill gaps in the existing meteorological network, including the renovation and operationalization of premises and infrastructure for new hydrological stations and associated hydrotechnical structures, in accordance with local needs and WMO recommendations.

## Objectives

6. The objectives of the consultancy under the proposed TOR are to provide the IP AMM with substantial technical assistance for:
  - a) reviewing the proposed positions/locations for the re-developed meteorological stations in Comrat and Bravicea, ensuring compliance of plans for new and upgraded meteorological equipment with WMO regulations;
  - b) Reviewing existing and propose new locations for hydrometric monitoring sites and posts to improve and augment the hydrological observing network of IP AMM, and specify the equipment that will be required to upgrade existing observation posts and be placed in new monitoring sites;
  - c) providing TORs for the design works of new meteorological and hydrological infrastructure, aligned with local needs and WMO requirements (**Annex 1**);
  - d) preparing, validating, and presenting technical specifications for hydrological stations, including monitored parameters, data storage/transmission solutions, power supply, installation requirements, maintenance, data management, and cost estimates, while ensuring compatibility with the existing network;
  - e) conducting technical analysis, economic-financial analysis, and managerial assessment, as well as social and environmental impact and risk analysis for each specific location;
  - f) assisting during the stakeholder consultation process (Local Public Authorities (LPAs), landowners, Apele Moldovei Agency, State Road Administration, etc.) for the validation of locations, field study conclusions, and the approvals required for the construction and installation of new meteorological and hydrological stations, as well as associated hydrotechnical stations and infrastructure.

## Scope

7. The scope of work shall include the following:
  - a) Feasibility Study, Including the associated meteorological and hydrotechnical infrastructure, aimed at improving climate services and the quality of data used in multi-hazard forecasting and warning systems, which shall include:
    - *recommendations on the siting of new meteorological instrumentation in the new locations identified for the renovation of the observing stations in Comrat and Bravicea;*
    - *assessment of the representativeness and territorial coverage of the hydrological observation network, as well as identification of gaps in relation to local needs and World Meteorological Organization (WMO) recommendations, based on the principles of accessibility, reliability, standardization, interoperability, compatibility, sustainability, durability, and measures related to social and environmental impact;*
    - *conclusions and recommendations regarding infrastructure, including premises for 2 renovated meteorological stations, hydrological infrastructure including 3 renovated hydrological stations, 14 new hydrometric posts and 11 renovated posts, with modular buildings and associated meteorological and hydrotechnical infrastructure, ensuring coverage that is as uniform as possible and adapted to regional peculiarities (climatic zones, river basins, terrain and natural conditions, social/environmental factors), infrastructure protection against extreme events, and long-term maintenance;*
  - Note:** *If any discrepancies arise regarding the locations proposed in the existing study, alternative locations compliant with the established requirements shall be identified and proposed (within a radius of 5km, at similar altitudes, landforms and conditions, Guide to Meteorological Instruments and Methods of Observation, WMO No. 8)*

- public capital investment project identification and evaluation form, in accordance with the Regulation on Public Capital Investment Projects (Government Decision No. 684/2022) **(Annex 2)**.
- b) Recommendations and guidance on associated hydrotechnical infrastructure and automated hydrometric measuring stations, which shall include technical specifications and solutions for the required equipment for new and rehabilitated hydrotechnical observation stations, and related systems.
- c) Provide support and specialized expertise for the preparation and submission of permitting documentation (opinions, approvals, authorizations, etc.) required for the validation of identified locations and confirmation of preliminary requirements. Organization of introductory field visits regarding the project's advantages and benefits for local authorities and landowners **(Annex 3)**.
- d) The Feasibility Study shall determine, on an indicative basis, the number of planned new hydrometric stations, exact locations (including coordinates), land tenure status and ownership arrangements, and shall include budget estimates for each site (equipment cost + installation cost).
- e) More specifically, the Feasibility Study shall be prepared in accordance with the requirements of the World Bank **(Annex 4)** and WMO recommendations, and shall explicitly take into account potential environmental and climate risks (e.g., locations in protected areas, flood-prone areas, or areas with disputed land use) and, where applicable, shall propose appropriate mitigation measures.

#### **EXPECTED RESULTS AND CALENDAR**

8. The contract shall have a total duration of **4 calendar months, including 80 effective working days**, according to a detailed work schedule, with the possibility of extension depending on performance and project needs.
9. All draft reports and final reports/studies/assessments shall be submitted to the IP AMM for review and approval.
10. Within 5 working days, the Beneficiary (IP AMM) shall review the submitted reports and either approve them or return them for completion/revision.
11. The consultant's reports shall include the names, titles, delivery address, submission date, team composition, tasks and subcomponents, deadlines, implementation status, conclusions, issues, recommendations, and corrective actions undertaken.
12. Reports shall be submitted in both Romanian and English. All deliverables/reports, including documents, information, working files, databases, tables, and other related data, shall also be provided to the IP AMM.
13. The consulting team shall work under the guidance of the State Hydrometeorological Service. The Beneficiary (IP AMM) shall provide the consulting team with all relevant available documents and institutional information, including specialized support (statistical data, climate data, analytical reports, previous studies, and consultations) necessary for organizing and conducting the feasibility study.
14. The consulting team shall provide the PI AMM with information regarding progress achieved and planned future activities and/or report any issues that may arise in order to avoid unforeseen delays.
15. The consulting team shall perform the assignment in accordance with the applicable national environmental and social legislation and regulations, and in compliance with the requirements of the applicable World Bank Environmental and Social Standards (ESS).
16. In order to achieve the objectives established in the TOR, the consulting team shall carry out the following key activities:

(working man- days)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |          |          |          |            |          |
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| <b>1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b>   | <b>7</b> |
| <b>1. Initial report, methodology and work plan for</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5        | -        | -        | -        | 5 (2,5%)   | 5 day    |
| <b>2. Feasibility Study, in accordance with Annex 5 which shall include the following sub-deliverables:</b><br>a) an assessment report of the existing hydrological observation network, indicating its density, territorial coverage, and gaps in relation to local needs and the recommendations of the World Meteorological Organization (WMO) <sup>1</sup> .<br>b) Conclusions and recommendations regarding the placement of new meteorological infrastructure at existing sites, including 2 meteorological stations, 3 hydrological stations, 14 new hydrometric posts, and 11 existing posts, with modular buildings and associated meteorological and hydrotechnical infrastructure.<br>c) a filled out Public Capital Investment Project Identification and Evaluation Form, which shall include the project summary, technical analysis, economic and financial analysis, legal and institutional assessment, impact assessment.<br>d) A section on social and environment assessment for each location, elaborated in accordance with Annex 4. | 20       | 30       | 5        | 5        | 60 (25%)   | 30 day   |
| <b>3. TOR for the procurement of design works for newly installed stations, including associated hydrotechnical infrastructure, as follows:</b><br>a) TOR for the design and operationalization of premises and related infrastructure for 2 <u>meteorological</u> stations (Comrat and Bravicea) <sup>2</sup> ;<br>b) TOR for the design and operationalization of premises and related infrastructure for 3 <u>hydrological</u> stations (Ungheni, Costești, and Criuleni) <sup>3</sup> ;<br>c) TOR for the design of hydrotechnical infrastructure for 14 new hydrometric posts, in accordance with the identified locations;<br>d) TOR for the design of hydrotechnical infrastructure for the reconstruction and rehabilitation of infrastructure at 11 existing hydrometric posts.                                                                                                                                                                                                                                                                   | 5        |          | 20       | 5        | 30 (12,5%) | 45 day   |

<sup>1</sup> The assessment report of the existing hydrological observation network shall be prepared based on the studies on the improvement of the meteorological and hydrological observation network, carried out with the support of international experts under the National Adaptation Planning Project on Climate Change (NAP-2), implemented by the United Nations Development Program (UNDP).

<sup>2</sup> The project envisages the design and construction of new meteorological stations for the relocation of the premises and infrastructure of existing stations to new locations, due to the lack of representativeness of the existing stations.

<sup>3</sup> The design and construction of new hydrological stations shall be carried out according to the respective river basins. Currently, the premises of the existing hydrological stations are located outside the monitored water bodies and do not have separate facilities with the necessary infrastructure.

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|------------|--------|
| <b>4. Technical specifications for equipment and related systems to be installed at observation stations, Including:</b> <ul style="list-style-type: none"> <li>▪ <i>observation components and parameters;</i></li> <li>▪ <i>hardware/software solutions for data collection, storage, and transmission;</i></li> <li>▪ <i>equipment integration and protection;</i></li> <li>▪ <i>installation and connection requirements;</i></li> <li>▪ <i>warranty period, maintenance, and sustainability;</i></li> <li>▪ <i>staff training for operation and maintenance;</i></li> <li>▪ <i>data management mechanisms, quality control, and reporting;</i></li> <li>▪ <i>compatibility and integration with the existing network.</i></li> </ul> | 5  |    | 5  | 30 | 40 (15%)   | 60 day |
| <b>5. Introductory field visits regarding the advantages and benefits of the project for local authorities and landowners. Approvals and authorizations required for site validation and for initiating procedures to confirm preliminary requirements, in accordance with Annex 3 <sup>4</sup>.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | 30 | 30 | 30 |    | 90 (35%)   | 75 day |
| <b>6. Final report summarizing the content of all the work done and of Reports, as described under points 2-5 above.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 | 5  | 5  | 5  | 25 (10%)   | 80 day |
| <b>TOTAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 75 | 65 | 65 | 45 | 250 (100%) |        |

## QUALIFICATIONS AND EXPERIENCE

| <b>Qualification criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Score</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 1. Legal entity/consortium with a minimum of 5 years of experience in providing consultancy services (feasibility studies and/or technical-economic studies and/or design/technical analyses) for infrastructure investments and/or technical systems (including field assessments and technical reports) – at least 3 contracts signed within the last 5 years.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>10</b>    |
| 2. Proven experience in measurement/observation systems and/or sensor-based equipment and data collection (e.g., observation stations, sensors, instrumentation, telemetry, data loggers, communications, data platforms) – at least 1 contract within the last 5 years.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>30</b>    |
| 3. Proven capacity to prepare technical specifications for similar goods/equipment and systems (essential technical parameters, compatibility/interoperability requirements, commissioning/acceptance) – at least 1 contract within the last 5 years.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>30</b>    |
| 4. Experience working with the public sector and/or projects financed by international organizations (e.g., World Bank, EIB, EBRD, United Nations Development Programme, FAO, etc.) – at least 1 contract during the period 2021–2025.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>10</b>    |
| 5. Capacity of the proposed team: relevant key experts for the assignment, as follows:<br><b><u>Team Leader / Feasibility Study Specialist</u></b> (institutional and managerial assessment, technical analysis, economic-financial analysis, social and environmental impact, risk analysis)<br>a) <u>Qualifications: Master's degree, University degree in economics, finance, or related fields.</u><br>b) <u>Experience: At least 7 years of professional experience in managing similar internationally or nationally financed projects, including coordination of multidisciplinary teams and stakeholder engagement.</u><br>c) <u>Competencies: Leading multi-stakeholder initiatives, mission coordination, preparation of feasibility studies, including technical and economic-financial analyses, institutional and managerial assessments, social and environmental impact assessments, and risk analysis.</u> | <b>20</b>    |

<sup>4</sup> The IP AMM specialists shall assist the project team in the process of validating site locations and shall ensure the completion of the process in accordance with their institutional competencies and prerogatives.

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| <p><b><u>Hydrometeorology Expert</u></b> (network analysis, with recommendations regarding the expansion and placement of new infrastructure in relation to local needs and WMO recommendations):</p> <p>a) <b><u>Qualifications:</u></b> University degree in meteorology, hydrology, geography, or Earth sciences.</p> <p>b) <b><u>Experience:</u></b> At least 5 years of professional experience in managing similar projects (hydrometeorological monitoring network infrastructure), financed internationally or nationally.</p> <p>c) <b><u>Competencies:</u></b> Mission coordination, preparation of specialized analyses and studies, including institutional and management assessments related to social and environmental impact. Ability to communicate effectively and build meaningful partnerships with all stakeholders. <u>Full knowledge of WMO regulations and recommendations regarding network design is essential.</u></p> <p><b><u>Technical Specialist 1</u></b> (design of meteorological and hydrotechnical infrastructure, etc.):</p> <p>a) <b><u>Qualifications:</u></b> University/postgraduate degree in civil engineering, architecture, or other related technical fields.</p> <p>b) <b><u>Experience:</u></b> Strong knowledge of national legislation, standards, and regulations relevant to the construction sector. Strong knowledge and extensive experience in the use of cost estimation and budgeting software similar to WinSmeta.</p> <p>c) <b><u>Competencies:</u></b> Ability to deliver expected results in a dynamic working environment. Demonstrated interpersonal skills and the ability to communicate effectively and build meaningful partnerships with all stakeholders. Responsibility, flexibility, punctuality, and the ability to meet deadlines and prioritize multiple tasks.</p> <p><b><u>Technical Specialist 2</u></b> (design of observation systems, equipment, data/telemetry/IT systems):</p> <p>a) <b><u>Qualifications:</u></b> University/postgraduate degree in ICT or other related technical fields.</p> <p>b) <b><u>Experience:</u></b> Information technologies, telecommunications, and measurement/monitoring systems involving sensor equipment and data collection (monitoring stations, sensors, instrumentation, telemetry, data loggers, communications, data platforms), with extensive technical expertise in IT solutions.</p> <p><b><u>Competencies:</u></b> Ability to deliver expected results in a dynamic working environment. Proven interpersonal skills and the ability to communicate effectively and establish meaningful partnerships with stakeholders. Initiative and ability to work independently.</p> |            |
| <b>TOTAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>100</b> |

**MINIMUM REQUIREMENTS**

**for the Premises and Infrastructure of New Meteorological and Hydrological Stations, and Associated Hydrotechnical Stations and Structures, in Accordance with Local Needs and World Meteorological Organization (WMO) Recommendations**

| Name                                                                                                    | Number of stations | Estimated location according to previous studies                                                                                                                                           | Buildings                                                                                                                                                                                                                                                       | Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Systems                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>I. METEOROLOGICAL STATION – MODULAR CONTAINER-TYPE STRUCTURE ON PILLARS – 90 m<sup>2</sup></b>       |                    |                                                                                                                                                                                            |                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                              |
| Construction of the building and municipal infrastructure at the Regional Meteorological Station Comrat | 1                  | Comrat Municipality, outside the built-up area                                                                                                                                             | <ul style="list-style-type: none"> <li>- 7 office rooms</li> <li>- 1 kitchen</li> <li>- 1 sanitary unit (restroom)</li> <li>- 1 equipment storage room</li> <li>- Offices to be furnished and equipped.</li> </ul>                                              | <ul style="list-style-type: none"> <li>- Access road (from the main road) – 200 linear meters</li> <li>- Utility networks (electricity, water supply, sewage)</li> <li>- Protective fence – 400 linear meters</li> <li>- Station area – 1 ha</li> <li>- Meteorological platform (26 × 26 m) – 104 m<sup>2</sup></li> <li>- Gate (3.5 m × 1.55 m) – 1 unit</li> <li>- Small gate (0.9 m × 1.55 m) – 2 units</li> <li>- Paved surfaces with curbs (courtyard, sidewalks) – 250m<sup>2</sup></li> <li>- Information board</li> </ul> | <ul style="list-style-type: none"> <li>- 8–10kW photovoltaic system</li> <li>- Heating system</li> <li>- Air conditioning system</li> <li>- Water supply system / well</li> <li>- Sewage system / septic tank</li> <li>- Video surveillance system</li> <li>- Fire protection system</li> <li>- Security system</li> <li>- Street lighting</li> </ul>        |
| <b>II. METEOROLOGICAL STATION – MODULAR CONTAINER-TYPE STRUCTURE ON PILLARS – 54 m<sup>2</sup></b>      |                    |                                                                                                                                                                                            |                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                              |
| Construction of the building and municipal infrastructure at the Bravicea Meteorological Station        | 1                  | <b>Bravicea Village, Călărași District</b>                                                                                                                                                 | <ul style="list-style-type: none"> <li>- 4 office rooms</li> <li>- 1 kitchen</li> <li>- 1 sanitary facility (restroom)</li> <li>- 1 equipment storage room</li> <li>- Offices to be furnished and equipped.</li> </ul>                                          | <ul style="list-style-type: none"> <li>- Access road (from the main road) – 200 linear meters</li> <li>- Utility networks (electricity, water supply, sewage)</li> <li>- Protective fence – 400 linear meters</li> <li>- Station area – 1 ha</li> <li>- Meteorological platform (26 × 26 m) – 104 m<sup>2</sup></li> <li>- Gate (3.5 m × 1.55 m) – 1 unit</li> <li>- Small gate (0.9 m × 1.55 m) – 2 units</li> <li>- Paved surfaces with curbs (courtyard, sidewalks) 150m<sup>2</sup></li> <li>- Information board</li> </ul>   | <ul style="list-style-type: none"> <li>- 6–8 kW photovoltaic system</li> <li>- Heating system</li> <li>- Air conditioning system</li> <li>- Water supply system / well</li> <li>- Sewage system / septic tank</li> <li>- Video surveillance system</li> <li>- Fire protection system</li> <li>- Security system</li> <li>- Street lighting</li> </ul>        |
| <b>III. HYDROLOGICAL STATION – PREFABRICATED MODULAR STRUCTURE ON PILLARS – 36 m<sup>2</sup></b>        |                    |                                                                                                                                                                                            |                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                              |
| Construction of buildings and hydrotechnical infrastructure at Regional Hydrological Stations           | 3                  | <b>Prut River</b><br><b>1. Costești Town, Rîșcani District;</b><br><b>2. Ungheni Town, Ungheni District.</b><br><b>Nistru River</b><br><b>3. Criuleni Town</b><br><b>Criuleni District</b> | <ul style="list-style-type: none"> <li>- 2 office rooms</li> <li>- 1 kitchen</li> <li>- 1 sanitary facility (restroom)</li> <li>- 1 boat storage room – 18 m<sup>2</sup> (metal / corrugated sheet)</li> <li>- Offices to be furnished and equipped.</li> </ul> | <ul style="list-style-type: none"> <li>- Access road (from the main road) – 50 linear meters</li> <li>- Utility networks (electricity)</li> <li>- Protective fence – 60 linear meters</li> <li>- Station area – 0.02–0.03 ha</li> <li>- Gate (3.5 m × 1.55 m) – 1 unit</li> <li>- Small gate (0.9 m × 1.55 m) – 1 unit</li> <li>- Paved surfaces with curbs (courtyard, sidewalks) – 50 m<sup>2</sup></li> <li>- Information board</li> </ul>                                                                                     | <ul style="list-style-type: none"> <li>- 5 kW photovoltaic system</li> <li>- Heating system</li> <li>- Air conditioning system</li> <li>- Water supply system / well</li> <li>- Sewage system / septic tank</li> <li>- Video surveillance system</li> <li>- Fire protection system</li> <li>- Security system</li> <li>- Platform street lighting</li> </ul> |
| <b>IV. NEW HYDROLOGICAL POSTS</b>                                                                       |                    |                                                                                                                                                                                            |                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                              |

| Name                                                                                                                                   | Number of stations | Estimated location according to previous studies                                                                                                                                                                                                                                                                            | Buildings | Infrastructure                                                                                                                                                                                                                                                                                                                                                                  | Systems                                        |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Construction of hydrotechnical infrastructure and installation of hydrometric measurement equipment at new hydrological stations       | 14                 | 1)Reservoir lake Dubăsari<br>2)Leușeni<br>3)Congaz<br>4)Taraclia<br>5)Ciumai<br>6)Hâncești<br>7)Pelinei<br>8)Buciumeni<br>9)Cobani<br>10)Pociumbăuți<br>11)Zâmbreni<br>12)Tătărești<br>13)Climăuții de jos<br>14)Cucuruzeni                                                                                                 | -         | - Access road (from the main road) – 50 linear meters<br>- Riverbed section works and concrete lining<br>- Concrete steps<br>- Level benchmarks (gauging markers)<br>- Suspended bridge<br>- Landscaping of the adjacent area<br>- Information board                                                                                                                            | -Video surveillance system<br>-Street lighting |
| <b>V. EXISTING HYDROLOGICAL POSTS</b>                                                                                                  |                    |                                                                                                                                                                                                                                                                                                                             |           |                                                                                                                                                                                                                                                                                                                                                                                 |                                                |
| Construction and installation of hydrotechnical infrastructure and hydrometric measurement equipment at existing hydrological stations | 12                 | 1)HP Șirăuți r.Prut<br>2)HP Leova r.Prut<br>3)HP Brânza r.Prut<br>4)HP Trinca, r.Draghiște<br>5)HP Bălți, r.Răut<br>6)HP Cubolta, r.Cubolta<br>7)HP Telenești, r.Ciulucul Mijlociu<br>8)HP Goian, r.Ichel<br>9)HP Balasinești, r.Vilia<br>10)HP Brânzeni, r.Racovat<br>11)HP Merenii Noi, r. Bâc<br>12)HP Căușeni, r. Botna | -         | Type and volume of works according to the proposals of the Feasibility Study specialists, up to the following standard:<br>- Access road (from the main road) – 50 linear meters<br>- Riverbed section works and concrete lining<br>- Concrete steps<br>- Level benchmarks (gauging markers)<br>- Suspended bridge<br>- Landscaping of the adjacent area<br>- Information board | -Video surveillance system<br>-Street lighting |

**FORM**  
**for the Identification and Evaluation of Public Capital Investment Projects**

**Section A:**

**Summary of the Submitted Information**

**Project Title:**

**Total Cost (thousand MDL):**

**Implementation Period:**

**Authority:**

**Institution:**

**Section B:**

**Information Regarding Project Feasibility**

- 1. Project Summary**
  - 1.1. Project Goal
  - 1.2. Strategic Framework
  - 1.3. Beneficiaries
  - 1.4. Location
  - 1.5. Possible Funding Sources
- 2. Technical Analysis**
  - 2.1. Technical Specifications and Resources
  - 2.2. Required Technology
  - 2.3. Operational/Functional Assessment
- 3. Economic and Financial Analysis**
  - 3.1. Case Study (Project Rationale)
  - 3.2. Financial Study (Project Costs and Benefits)
  - 3.3. Cost-Benefit Analysis / Cost-Effectiveness Analysis
- 4. Legal Assessment**
- 5. Institutional and Management Assessment**
- 6. Social Impact Assessment**
- 7. Environmental Impact Assessment**
- 8. Risk Analysis**

**Permits and authorizations required for each site validation and confirmation of preliminary requirements**

For each identified and analysed location, the provider shall deliver permitting documentation models sufficient for launching the design of future works and obtaining the construction permit.

The permitting documentation (models of documents prepared and drafted by experts) shall include the documents described in the Urban Planning and Construction Code of the Republic of Moldova (Articles 104 and 105), as follows:

1. Landowner permission letter for the land where construction will take place (Local Public Authorities (LPAs), landowners, Apele Moldovei Agency, State Road Administration, etc.).
2. Environmental authorization issued by the Environmental Agency of the Ministry of Environment.
3. Concept of planned works (general design scheme of the modular building or concrete riverbed structure).
4. Urban Planning Certificate for Project issued by the LPA (or a letter of acceptance for continuation of construction works without an Urban Planning Certificate).

The Feasibility Study shall be prepared in accordance with the requirements of the World Bank (**Annex 4**) and WMO recommendations and shall explicitly take into account potential environmental and climate risks (e.g., locations in protected areas, flood-prone areas, or areas with contested land use) and, where applicable, shall propose appropriate mitigation measures.

## **Environmental and social impact assessment requirements to be addressed in the Feasibility Study**

The feasibility Study will assess specific environmental and social aspects for each location described in Annex 1.

### **1. Environmental vulnerabilities and natural hazards**

The study should identify site-specific risks that may affect the integrity of the new buildings:

- a) Seismic impact: assessment of the seismic hazard zone and rock category according to seismic zoning maps (especially for locations where modular buildings are planned).
- b) Flood and erosion risks: identification of areas prone to flooding (especially for hydrometric stations located on river banks) and areas at risk of soil erosion or landslides (for new buildings).
- c) Logistical vulnerability: analysis of access routes (public, local, regional roads) to future construction sites; the existence of electrical networks, water supply, sewage.

### **2. Biodiversity and protected areas**

Even if the risks are estimated as moderate, it is mandatory to check the following:

- a) Proximity to protected areas: check if the location is inside or near protected areas or nature reserves.
- b) Proximity to forest resources: check if the location is inside or near forest resources.
- c) Proximity to Emerald and/or Ramsar sites.
- d) Impact on vegetation: identify the need to cut trees or shrubs and plan "greening" (replanting) measures after completion of the works.

### **3. Biodiversity and Aquatic Ecosystems**

- a) Assessment of the habitat disturbance: Analysis of whether concreting on the mentioned and analysed rivers affects spawning grounds or habitats of migratory waterbirds (especially in the Dniester and Prut basins).
- b) Work schedule: the assessment should suggest best periods for works in the riverbed to be carried out during periods of low water level or when the river is dry, to minimize impact. Also, periods of official fishing prohibition or migration of protected species should be avoided.

### **4. Waste and toxic substance management**

This is a critical component that must be analysed in detail from the feasibility phase:

- Environmental pollution: presence or absence of sewage networks and assessment of the need to install autonomous wastewater treatment systems (septic, septic tank at the new meteorological stations etc.).
- 

### **5. Social and gender vulnerabilities**

The Study will contain an analysis of the social (human) context of construction activities:

- a) Vulnerable populations: identification of marginalized or high-risk groups in neighbouring communities that could be affected by the works – for example, owners of land adjacent to the construction site, who may be affected by noise, dust, heavy vehicle traffic.
- Community safety: assessment of the impact of construction material transportation and noise, dust and vibration on communities: hospitals, schools or nearby residential areas.



## Feasibility Study Table of Contents

The final version of the Feasibility Study shall represent the consolidating document in which all collected and processed information will be presented. The study will include technical analysis, economic-financial analysis, management assessment, as well as social, environmental impact assessment and risk analysis.

For ease of reading, the report shall include interactive graphical presentations and annexes with statistical data, presenting relevant quantitative and qualitative information collected and compiled throughout the implementation period.

This stage is the final one of the 5 activity blocks established under paragraph 17 of the present TOR and involves the compilation of all information gathered in previous stages. The proposed structure<sup>5</sup> of the Feasibility Study is as follows:

- I. INTRODUCTION - General information about the applicant's area, such as region, locality, main geographic and climatic data, distance from main cities and regional centers, status of the applicant (formal association, informal producer group, local authorities, etc.), population directly and indirectly benefiting from the proposed investments, and other relevant information.
- II. PROJECT CONTEXT, which shall include:
  - a) detailed presentation of the proposed project, including its description;
  - b) physical-geographical characteristics, main climate risks and their impact
  - c) organizational analysis, service status and functions, operating model, organizational structure,
  - d) assessment of the existing observation network, indicating density and territorial coverage;
  - e) assessment of infrastructure and observational data requirements;
  - f) assessment and identification of gaps, challenges, and needs for improving the observation network in relation to local needs and World Meteorological Organization (WMO) recommendations.
- III. PROPOSED SOLUTIONS FOR NETWORK EXPANSION, which shall include:
  - a) design principles and conceptual framework for network evolution and expansion in line with WMO standards;
  - b) automated observation systems – principles of operation and network maintenance;
  - c) proposed observation stations;
  - d) data recording and transmission requirements;
  - e) specific equipment requirements and basic characteristics;
  - f) energy supply requirements, energy efficiency, and renewable resources;
  - g) system operationalization, ensuring integrity and compatibility with existing systems;
  - h) conclusions and proposals;
  - i) annexes, maps, diagrams, cartograms.
- IV. TECHNICAL FEASIBILITY - Details on the technical feasibility of the project, including description of technology, required resources, and potential technical obstacles. Assessment of technical capacity to implement the project.
- V. FINANCIAL ANALYSIS - Estimates of initial and ongoing project costs, including development investments, procurement, staffing, and other relevant expenses. Projections of expected revenues and long-term profitability, calculation of economic indicators according to the requirements specified in the Terms of Reference.

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<sup>5</sup> The structure may be modified depending on the specific requirements of the Beneficiary.

- VI. ENVIRONMENTAL IMPACT ASSESSMENT - Analysis of the infrastructure's vulnerability to climate change and development of measures ensuring resilience to adverse weather phenomena caused by climate change (this section will be carried out in accordance with Annex 4)
- VII. RISK ANALYSIS - Identification and assessment of potential risks associated with the project. Proposal of strategies and plans for managing or minimizing these risks. Special attention shall be given to climate-related risks.
- VIII. CONCLUSIONS AND RECOMMENDATIONS - General summary of evaluation results and conducted analyses. Recommendations regarding project viability and next steps.
- IX. ANNEXES.