

## TERMS OF REFERENCE

<b>Job Title:</b>	National technical consultant for supervising the installation of agro-meteorological and hydrological monitoring equipment.
<b>Service station:</b>	Chisinau, Moldova
<b>Project reference:</b>	Enhancing human security in Moldova through agri-food resilience to intensifying external and climate shocks.
<b>Contract type:</b>	Individual Contract (IC)
<b>Contract duration:</b>	60 days for the duration September 2024 - February 2025

### 1. FUNDING:

Agriculture, the mainstay of Moldova's economy, accounts for 12% of GDP, employs 30% of Moldova's population and provides livelihood opportunities for more than half of the country's population. It is, however, severely affected by the worsening post-war crisis in Ukraine, as well as by worsening trends in the frequency and severity of weather hazards (droughts in 2020 and 2022, late frosts, severe storms and hail in 2023) due to climate change, which, without concrete measures to build resilience, will continue to undermine the country's food security and increase the risks of conflicts over land and water use.

Therefore, improving the adaptation of the country's agri-food system in the face of intensifying climate and disaster risks is a prerequisite for eliminating hunger and protecting livelihoods and productive assets for food security.

The measures proposed by this project will help reduce agricultural and economic losses caused by natural hazards and are a step towards meeting the country's commitments under the Sendai Framework (2015-2030).

Ultimately, the country will be better prepared for the upcoming food security crisis, contributing to the achievement of local and global food security goals adopted during the 2023 G7 Summit in Japan.

These terms of reference have the overall aim of strengthening the country's agri-food security in the context of the current multidimensional crisis resulting from intensifying climate threats and disasters, by:

- 1) Enhance climate and disaster risk management in the country by improving the agro-meteorological and hydrometric monitoring system and data analysis.
- 2) establishing a solid basis for the implementation of climate change adaptation and disaster risk reduction measures and budget.

### 2. OBJECTIVE:

To provide support in project activities that focus on the extension of the existing meteorological, agrometeorological, and hydrometric monitoring network managed by the State Hydrometeorological Service for enhance hydrometeorological and climate services.

### 3. SCOPE OF WORK AND EXPECTED OUTPUTS

The project aims to explore and test local agrometeorological monitoring system and hydrological observations in the most affected physic-geographical area of the Republic of Moldova - the Bugeac steppe. Under the supervision of the Project Manager, the Consultant will:

- 1) **Develop location schemes for at least 4 automatic meteorological stations (mini-AWS) with soil moisture sensors, and at least 4 automatic hydrological stations in selected locations.**
  - Conduct on-site surveys for each of the 4 - 6 sites to gather geographical and environmental data.

- Assessment of the suitability of each location based on criteria such as accessibility, environmental conditions, and data relevance.
  - Develop detailed location scheme map showing the precise coordinates of each monitoring station, including important landmarks and reference points for easy identification.
  - Prepare site layout plans for each monitoring station, detailing the placement of equipment and infrastructure.
  - Ensure that the location scheme is in line with the national requirements and World Meteorological Organization (WMO)
  - Develop and submit the report for approval summarizing the findings and justifications for the selected sites, incorporating feedback from relevant parties.
  - Organize stakeholder meetings to inform local public authorities and stakeholders and to validate the conclusions of the inspection studies carried out by the teams of hydrologists and meteorologists on site selection.
- 2) Report on site installation of at least 4 hydrometric monitoring stations.**
- Coordinate permits and secure the necessary approvals for the installation of the stations with local authorities and stakeholders.
  - Installation supervision of at least 4 hydrometric monitoring stations.
  - Commissioning works of at least 4 hydrometric monitoring stations.
- 3) Report on site installation of at least 4 mini-AWS with soil moisture sensors.**
- Coordinate with local authorities and landowners to obtain the necessary permits and approvals for the installation of automated weather stations (mini-AWS) with automated soil moisture monitoring systems.
  - Overseeing the installations of at least 4 mini-AWS with automatic soil moisture monitoring systems.
  - Commissioning works for at least 4 mini-AWS with automated soil moisture monitoring systems.

The mission will be carried out in close consultation and cooperation with the State Hydrometeorological Service.

**Expected Deliverables of the Technical Consultant:**

1.1	Location schemes of agri-meteorological monitoring stations in at least 4 selected locations	10 w.d.	October 2024
1.2	Location schemes of hydrometric monitoring stations in at least 4 selected locations	10 w.d.	October 2024
1.3	Report on site installation and mounting of at least 9 mini-AWS of which 4 with agrometeorological sensors	20 w.d.	February 2025
1.4	Report on site installation and mounting of at least 7 hydrological monitoring stations	20 w.d.	15 February 2025
			<b>Total 60 days</b>

**4. ORGANIZATIONAL SETTING:**

The National Consultant will work in a team with an international consultant under the direct supervision of the UNDP Project Manager. The consultant should work in close cooperation with the State Hydrometeorological Service.

The consultant\ will provide deliverables in English in electronic copies and according to the timeframe from the deliverables table. The Project Manager should approve the deliverables.

## **5. QUALIFICATIONS AND SKILLS REQUIRED:**

### I. Academic Qualifications:

- Specialized studies in engineering, metrology, information systems or another relevant area.

### II. Years and sphere of experience:

- Proved experience in site installation of hydrometric and/or meteorological monitoring stations.
- Experience in working with national-level authorities especially with SHS.

### III. Competencies:

- Demonstrated knowledge of hydrometeorological monitoring network, types of monitoring sensors and data flows.
- Demonstrated knowledge of the State Hydrometeorological Service activities.
- Demonstrated knowledge of requirements for site installation of hydrometric and/or meteorological monitoring stations.
- Fluency in Romanian is required for this assignment, English and Russian will be an asset.

Proven commitment to the core values of the United Nations respecting differences of culture, gender, religion, ethnicity, nationality, language, age, HIV status, disability, and sexual orientation, or other status. **Please mention in CV if you belong to the group(s) under-represented in the UN Moldova and/or the area of assignment.**

UNDP Moldova is committed to workforce diversity. Women, persons with disabilities, Roma and other ethnic or religious minorities, persons living with HIV, as well as refugees and other non-citizens legally entitled to work in the Republic of Moldova, are particularly encouraged to apply.

## **6. APPLICATION PROCESS**

Interested individual consultants must submit the following documents/information to demonstrate their qualifications:

1. Proposal, explaining why he/she is most suitable for the work, including past experience in similar assignments, providing a brief information on above qualifications and methodology on how he/she will approach and conduct the work (if applicable).
2. Signed and filled-in Offeror's letter to UNDP confirming interest and availability for the individual contractor (IC) assignment, incorporating financial proposal in Annex 2 (in USD, specifying a total requested amount per working day, including all related costs, e.g. fees, phone calls etc.). Annex 2 to the Offeror's letter, incorporating the Financial Proposal, shall be filled in mandatorily and includes the detailed breakdown of costs supporting the all-inclusive financial proposal.
3. CV with at least three names for a reference check.

### **Important notice:**

The applicants who have the statute of Government Official / Public Servant prior to appointment will be asked to submit the following documentation:

- i. a no-objection letter in respect of the applicant received from the Government, and;
- ii. the applicant is certified in writing by the Government to be on official leave without pay for the entire duration of the Individual Contract.

A retired government official is not considered in this case a government official, and as such, may be contracted.

## 7. FINANCIAL PROPOSAL

### Lump sum contracts

The financial proposal shall specify a total **lump sum amount**, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in instalments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including fees, taxes, travel costs, accommodation costs, communication, and number of anticipated working days) (see Annex 2 of the Offeror's Letter Confirming Interest and availability).

### Travel

All envisaged travel costs (if applicable) must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging, and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

## 8. EVALUATION

Initially, individuals will be **short-listed** based on the following minimum qualification criteria:

- Technical College in engineering, metrology, information systems or another relevant area.
- At least 2 (two) records of previous experience in site installation of hydrometric and/or meteorological monitoring stations.
- Citizen of the Republic of Moldova

The short-listed individual consultants will be further evaluated based on the following methodology:

### Cumulative analysis

The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/ compliant/ acceptable, and

b) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

\* Technical Criteria weight – 60% (300 pts);

\* Financial Criteria weight – 40% (200 pts).

Only candidates obtaining a minimum of 210 points would be considered for the Financial Evaluation.

Criteria	Scoring	Maximum Points Obtainable
<b><u>Technical</u></b>		
Technical college in engineering, metrology, information systems or another relevant area.	Technical College – 10 pts; Bachelor – 20 pts	20

At least 2 previous site installation of hydrometric monitoring stations and experience on hydrological monitoring.	2 site installation – up to 40 points, each additional – 5 points, up to max. 60 pts	60
Experience in working with national-level authorities especially with SHS.	Yes – 20 No – 0	20
<b>Subtotal desk review Scoring – 100 pts.</b>		
<b>Interview</b> (demonstrated technical knowledge and experience; communication/ interpersonal skills; initiative; creativity/ resourcefulness). <b>Only the first 4 applicants that have accumulated the highest technical score shall be invited to the interview.</b>		
<b>Competencies:</b>		
Demonstrated knowledge of hydrometeorological monitoring network, types of monitoring sensors and data flows.	Limited knowledge – up to 20 pts, satisfactory – up to 35 pts, extensive – up to 50 pts	50
Demonstrated knowledge of the State Hydrometeorological Service activities.	Limited knowledge – up to 20 pts, satisfactory – up to 40 pts, extensive – up to 60 pts	60
Demonstrated knowledge of requirements for site installation of hydrometric and/or meteorological monitoring stations.	Limited knowledge – up to 20 pts, satisfactory – up to 35 pts, extensive – up to 50 pts	50
Fluency in Romanian is required for this assignment, English and Russian will be an asset	Romanian – max 10 pts English – max 5 pts Russian – max 5 pts	20
Belonging to the group(s) under-represented in the UN Moldova and/or the area of assignment*	No – 0 pts, to one group – 10 pts, to two or more groups – 20 pts	20
<b>Subtotal Interview Scoring – 200 pts.</b>		
<b>Maximum Total Technical Scoring</b>		<b>300</b>
<b>Financial</b>		
Evaluation of submitted financial offers will be done based on the following formula: <b><math>S = F_{min} / F * 200</math></b> S – score received on financial evaluation; Fmin – the lowest financial offer out of all the submitted offers qualified over the technical evaluation round; F – financial offer under consideration		<b>200</b>

#### Winning candidate

The winning candidate will be the candidate, who has accumulated the highest aggregated score (technical scoring + financial scoring).

Demonstrated technical knowledge of the State Hydrometeorological Service.