

TERMS OF REFERENCE

Job title:	Air Quality Technical Specialist to Support the Development of Moldova's Air Quality Monitoring System.
Contract type:	Individual Contract (IC)
Duty station:	Chisinau
Reference to the:	„Enabling an Inclusive Green Transition in the Republic of Moldova” Project
Payment arrangements:	Lump sum contract (payments linked to satisfactory performance and delivery of outputs)
Contract Duration:	June 2025 – November 2026, up to 179 working days

1. PROJECT OBJECTIVES AND EXPECTED RESULTS

On 23rd of June 2022, the European Council granted the Republic of Moldova the status of EU candidate country which is a substantial achievement, but which comes with great responsibilities and obligations. One of such obligations is the “Green Agenda and Sustainable Connectivity” which includes Chapters of the environment and climate change acquis. In this sense, meaningful reform is expected in view of European Green Deal targets.

The proposed Green Transition Project takes due account of this endeavor. Hence, it will put in place the enabling conditions for a green transformation in Moldova through a combination of cross-sectorial decision-making in joint stakeholder platforms, capacity building measures, general education and awareness raising, dissemination of best policy practices, information sharing and networking, as well as pilot-testing green-transition related solutions and other activities, to ensure that the green transition concept is well understood and implemented.

The established enabling conditions and the investments into green-transition solutions will respond to the key development challenges that the country is currently dealing with such as climate change, environmental pollution and the energy crisis.

It is well acknowledged that Moldova is highly vulnerable to climate change, given the limited resources and institutional capacities to address the climate change impacts. It is also due to the heavy reliance on the agricultural sector, water scarcity and other geographical factors. Currently the country is advancing with the national adaptation planning, including in the agricultural sector, aimed at putting in place proper institutional, technical and budgeting capacities in the context of climate change, however significant gaps remain in embarking of the sectors into achievement of the long-term adaptation targets.

Environmental degradation is also posing a major threat to Moldova's development agenda as its economy relies greatly on natural resources which leads to their overexploitation and pollution. Inadequate waste management practices and outdated practices and technologies in the key sectors of the economy also contribute to environmental degradation and pollution. Mainstreaming of the green agenda into the country's economic activities is taking place slowly.

Moldova is in line with the global trend of continuously growing urbanization, with the proportion of the population living in urban areas expected to rise from 47% in 2010 to 60% in 2030 (UN Habitat). Cities are increasingly and significantly contributing to the main drivers of global environmental degradation. The municipalities have the greatest impact on air quality and are responsible for more than 50% of total air pollution in Moldova.

From energy security perspective – Moldova is highly dependent on imported energy sources and rely mostly on the use of fossil fuels. In addition, inefficient energy supply and consumption across all sectors exacerbates the situation. Until recently being 100% dependent on Russian gas import, the country is actively seeking diversification of energy supplies after the war of aggression in Ukraine. Improvements both in energy efficiency and in the development of domestic resources – including renewable energy resources – for strengthened sustainability, competitiveness, and energy security rank high on the political agenda. The energy sector is also the main source of GHG emissions in the country.

Against this background, the Green Transition Project aims to support the Government of Moldova to engage sustainably in a transformative green agenda by enhancing awareness, building capacities and encouraging investments into low-emission and resource efficient economy.

The target areas of the project are resource efficiency, green and circular economy, cleaner and sustainable energy, and mobility.

The Project is being implemented under the following three specific components:

1. Socio-economic framework for a gender-responsive and inclusive green transition enabled.
2. Capacity and awareness on the inclusive green transition increased among key stakeholders.
3. Additional funding attracted by promoting and piloting investments in green and innovative technologies, while evidence-based decision-making for green transition is improved by deploying a reliable air quality monitoring system.

The implementation period of the project is 48 months, and the total budget is 10 mln EUR.

2. OBJECTIVES OF THE ASSIGNMENT

In April 2022, the Parliament of the Republic of Moldova adopted Law No. 98/2022 on air quality, marking a significant step towards aligning national environmental legislation with the European

Union's regulatory framework. This law transposes into Moldovan legislation key EU directives in the field of air quality, most notably Directive 2008/50/EC on ambient air quality and cleaner air for Europe, and Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel, and polycyclic aromatic hydrocarbons in ambient air. The adoption of Law 98/2022 represents a foundational legislative advancement aimed at enhancing Moldova's institutional and technical capacity to assess, monitor, and manage air quality in a systematic and EU-compliant manner.

Under the provisions of Law 98/2022, the monitoring of air quality across the national territory is ensured through the National Air Quality Monitoring Network. This network is composed of air pollution monitoring stations dedicated to both national and cross-border air quality assessment and management. The network includes the necessary technical infrastructure for the continuous collection, processing, and transmission of air quality data, thereby enabling the authorities to make informed decisions based on reliable and real-time environmental data.

Further advancing the regulatory framework, the Government of the Republic of Moldova approved in February 2025 the Regulation No. 63/2025 on the monitoring and management of atmospheric air quality. This regulation builds on the provisions of Law 98/2022 and provides a structured and comprehensive framework for air quality management. It establishes two integrated systems that form the backbone of national air quality governance: the National System for the Inventory of Atmospheric Pollutant Emissions and the National System for Integrated Monitoring and Management of Air Quality. The latter is designed to operate through a network of specialized monitoring stations that facilitate both domestic and cross-border air quality assessments. This system is managed by the Environment Agency and should be supported by modern equipment capable of capturing, processing, and disseminating high-quality air monitoring data.

At present, Moldova's air quality is assessed using a legacy network of 17 static monitoring stations, which were originally installed between 1970 and 1978. These stations continue to operate on a fixed schedule, conducting air sample collections three times per day—at 07:00, 13:00, and 19:00. They measure a range of pollutants including particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), nitrogen oxides (NO_x), soluble sulfates, phenol, and formic aldehyde. The stations are geographically distributed across five key industrial areas of the country: Chisinau (6 stations), Balti (2 stations), Bender (4 stations), Tiraspol (3 stations), and Ribnita (2 stations), providing a foundational but increasingly outdated basis for air quality monitoring.

To address gaps in territorial coverage and improve the technical robustness of the monitoring network, a recent assessment has been conducted to determine Moldova's full needs for the establishment of a modern, EU-compliant air quality monitoring system. This assessment was carried out under the EU-funded Twinning project "Air Quality and Environment" and concluded that the country requires between 10 to 12 modern air quality monitoring stations, including background, traffic, and industrial types, to ensure comprehensive national coverage in accordance with the requirements of Law 98/2022 and Regulation 63/2025. The final results of this assessment are expected to be published by the end of April 2025.

In support of these national efforts, the United Nations Development Programme (UNDP) through its Green Transition Project, will contribute to the establishment of a modern and EU-aligned air quality monitoring system. This support includes the financing, delivery, and installation of 10 advanced monitoring stations, each equipped with high-precision measuring and calibration instruments. This intervention is expected to unlock additional opportunities for technical assistance, capacity building, and future investments related to emissions inventory, air quality assessment, and evidence-based environmental policymaking.

Furthermore, in response to the identified needs, the analytical laboratory of the Environmental Agency will undergo targeted upgrades. These upgrades will enhance the laboratory's ability to conduct advanced air quality analyses, focusing on pollutant detection, air composition studies, and evaluation of associated health and environmental risks. This upgrade is likewise informed by the ongoing needs assessment led by the Twinning project, with results expected by July 2025.

In this context, UNDP Moldova is currently seeking to recruit a qualified Air Quality Technical Specialist to advise on the further development of the Air Quality Monitoring Network in line with the EU requirements. This role will be critical to ensuring that the delivered infrastructure is fit-for-purpose, installed in accordance with international best practices, and integrated effectively into the broader National System for Integrated Monitoring and Management of Air Quality.

3. SCOPE OF THE WORK, DUTIES AND RESPONSIBILITIES

The objective of the assignment is to provide technical guidance and oversight in support of the implementation of Moldova's Green Transition Project, with a focus on strengthening national air quality monitoring and management capacities. Specifically, the assignment will involve support for effective procurement, delivery, installation, and integration into operation of 10 air quality monitoring stations. All activities will be carried out in alignment with EU standards, relevant national legislation (Law No. 98/2022 and Regulation No. 63/2025), and international best practices in air quality monitoring and environmental data management.

Being supervised by the Policy and Legal Development Manager, and in close cooperation with the representatives of the Ministry of Environment and Environmental Agency, as well as with representatives of the Twinning Project "Air Quality and Environment", the Air Quality Technical Specialist is expected to perform the following tasks*:

1. Develop a report on detailed Work Plan, Risk Monitoring and Management Plan, and stakeholder coordination framework. The report will identify potential technical, institutional, and operational risks, propose mitigation measures, and outline the methodology for delivering all planned outputs.
2. Considering the proposed by the Twinning Project locations where the stations need to be installed, conduct the calculation of the wind rose and propose the concrete 10 geolocations of the AQ monitoring stations.

3. To agree the location with LPA, participate within the discussion with LPA representatives and facilitate obtaining of the LPA Council Decisions which proved the permission to instal the stations.
4. Examine the proposed locations of all 10 stations, evaluate and present the list of specific necessities for each 10 AQ monitoring stations (e.g. access road, electricity connection, internet connection, security needs, other needs).
5. Considering the needs identified as per task #3, facilitate obtaining of the following permitting acts (but not limited to): Authorization for connection to electricity, permit for placing of the traffic-type stations on the roadside, along streets or at intersections, the station location scheme as part of the urban planning; authorization from the Traffic Police Directorate; authorization from the State Protection and Guard Service.
6. Examine, review and confirm the technical specification of the 10 AQ monitoring stations presented by the Twinning project. If needed and justified, the technical specification will be adjusted. Technical specifications will be part of the procurement process.
7. Participate within the pre-bidding meeting and addressing all technical questions addressed by the bidders. Additional, to address all technical questions that will be received via the Quantum portal from bidders.
8. Conduct technical evaluation of the proposals. The technical evaluation will be part of the evaluation process.
9. Supervising the delivery and installation of the 10 AQ monitoring stations.
10. Lead the testing process of the 10 AQ monitoring stations.
11. Sign the handover-receipt acts for 10 AQ monitoring stations.
12. Facilitate operation trainings for 10 monitoring stations.
13. Provision of advisory support on further development of the air quality monitoring system.

4. EXPECTED DELIVERABLES, TENTATIVE TIMEFRAME, AND OTHER ARRANGEMENTS

The Air Quality Technical Specialist is expected to deliver the following outputs as per the below-identified timeline and anticipated workload:

No.	Deliverables	Tentative timeframe
1	Deliverable 1: Inception Report including a detailed Work Plan, Risk Monitoring and Management Plan, and stakeholder coordination framework (<i>as per task #1 above</i>) (5 WD)	By early-June 2025
2	Deliverable 2: 10 wind rose calculated and 10 geolocations established, coordinated and accepted by the Environmental Agency/Ministry of Environment. (<i>as per task# 2 above</i>). (10 WD/1 day per each wind rose)	By mid-June 2025
3	Deliverable 3: LPA Council Decisions which proved the permission to install 10 AQ monitoring stations obtained (<i>as per task #3 above</i>)(15 WD/1,5 day per each LPA Council Decision)	By mid-November 2025

4	Deliverable 4: Evaluation of necessities, including the list of specific needs for each of the 10 stations (<i>as per task #4 above</i>) (15 WD/1,5 day per each station)	By end-June 2025
5	Deliverable 5: 10 Authorizations for connection to electricity; 4 permits for placing of the traffic-type stations on the roadside, along streets or at intersections; 10 the station location schemes as part of the urban planning; 4 authorizations from the Traffic Police Directorate; 4 authorizations from the State Protection and Guard Service (<i>as per task #5</i>) (48 WD/1,5 day for each permissive act)	By mid-December 2025
6	Deliverable 6: Technical specifications (10) for 10 AQ monitoring stations, as part of the procurement process, developed (<i>as per task #6 above</i>) (10 WD/1 day per each technical specification).	By early-July 2025
7	Deliverable 7: A report on provided responses to all technical questions from bidders received during the pre-bid meeting and via the Quantum platform (<i>as per task #7 above</i>). (3 WD)	By end-July 2025
8	Deliverable 8: 1 Report on technical evaluation of the proposals conducted as per UNDP requirements and templates. Technical evaluation report will be part of the overall evaluation process (<i>as per task #8 above</i>). (7 WD)	By mid-September 2025
9	Deliverable 9: Delivery acceptance Report on quantitative and visual check of 10 stations signed – 1 WD; Report on installation and commissioning of 10 stations signed – 20 WD/2 WD per each report; Report on testing and technical verification of 10 stations signed – 10 WD/1 WD per each station; Handover-Receipt Act of 10 stations signed – 10 WD/1 WD per each station (<i>asper tasks # 9, 10 and 11</i>) (41 WD)	By end-May 2026
10	Deliverable 10: Completion report for 10 operational training sessions on the use and maintenance of the air quality monitoring stations (<i>as per task #12</i>) (15 WD/1,5 day per each training)	By early-September 2026
11	Deliverable 11: A comprehensive technical advisory report outlining recommendations for the further development and optimization of the national air quality monitoring system (<i>as per task #13</i>). (10 WD)	By early-November 2026

The timeframe for the work of the consultant is planned for June 2025 – November 2026.

5. MANAGEMENT ARRANGEMENTS

The Consultant will work under the direct supervision and guidance of the Policy and Legal Development Manager of the „Enabling an Inclusive Green Transition in the Republic of Moldova” Project.

Performance evaluation: The Consultant’s performance will be evaluated against such criteria as timeliness, responsibility, initiative, communication, accuracy, and quality of the products delivered. This will serve as a basis for a decision regarding the extension of the contract.

Language of the deliverables: All deliverables shall be submitted in English or Romanian as communicated prior by the Component Manager.

The UNDP will provide administrative and logistical support in the organization of the travels related to this assignment. Additionally, all travels envisaged by IC associated with examination of the locations missions must be discussed and agreed upon in advance by the Individual Contractor (IC) with the Project team. The Project staff will then organize and cover the costs of these missions.

6. QUALIFICATIONS AND SKILLS REQUIRED

Qualifications:

- Bachelor’s degree in environmental engineering, environmental science, chemical engineering, meteorology or other relevant fields is required.

Experience:

- At least 7 years of proven professional experience in environmental monitoring, including the design, implementation, or evaluation of air quality monitoring systems or the networks.
- At least 7 years of experience in developing or supervising the installation and operation of ambient air quality monitoring equipment and stations, including familiarity with data quality assurance/quality control (QA/QC) protocols and calibration procedures in line with CEN and national standards.
- Experience of working with local public authorities and state institutions (e.g. environmental agency, ministry of environment, others).
- Experience in implementing or advising on projects funded by international organizations (e.g. EU, UNDP, UNEP, WB, others) is an advantage.

Competencies:

- Excellent knowledge on the air related legal framework (Law No. 98/2022 on air quality, Regulation No. 63/2025 on the monitoring and management of atmospheric air quality).
- Knowledge of international best practices and trends in air quality monitoring, including data reporting to the European Environment Agency (EEA) or integration into regional/national air quality databases, is desirable.

- Strong interpersonal and communication skills, ability to work with the public sector, demonstrated by previous assignments.
- Fluency in Romanian and English. Knowledge of Russian will be an asset.

The United Nations in 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.

7. PAYMENT MODALITIES

The Consultant will organize and facilitate the implementation of all activities as described above; his/her payment will be lump sum amount based, disbursed in several installments, upon submission and approval of deliverables and certification by the UNDP Moldova Project Coordinator that the services have been satisfactorily performed.

8. APPLICATION PROCESS

Applicants shall submit the following documents:

- Offeror's letter to UNDP confirming interest and availability for the individual contractor (IC) assignment, incorporating financial proposal in Annex 2.

Upload the signed version of the filled in Offeror's letter to UNDP confirming interest and availability for the individual contractor (IC) assignment. 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.

The Financial Proposal shall be additionally submitted directly in the system. Please ensure there are no mathematical errors and that amounts from Offeror's Letter to UNDP Confirming Interest and Availability match with your offer in the system.

- CV, including information about experience in similar assignments, including at least 3 references
- Proposal (Motivation Letter): explaining why they are the most suitable for the work including previous experience in similar Projects (please provide brief information on each of the above qualifications, item by item, including information, links/copies of documents for similar comprehensive studies);

Important notice:

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

- a no-objection letter in respect of the applicant received from the Government, and;
- 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.

9. EVALUATION

Individual consultant will be short-listed based on the following minimum qualification criteria:

- Bachelor's degree in environmental engineering, environmental science, chemical engineering, meteorology or other relevant fields is required.
- At least 7 years of proven professional experience in environmental monitoring, including the design, implementation, or evaluation of air quality monitoring systems or the networks.
- 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
<u>Technical</u>		
Bachelor's degree in environmental engineering, environmental science, chemical engineering, meteorology or other relevant fields is required	Bachelor's degree – 10 pts., Master's Degree – 15 pts.	15
At least 7 years of proven professional experience in environmental monitoring, including the design, implementation, or evaluation of air quality monitoring systems or the networks	7 years – 40 pts, each additional year – 5 pts, up to 55 pts	55
At least 7 years of experience in developing or supervising the installation and operation of ambient air quality monitoring equipment and stations, including familiarity with data quality assurance/quality control (QA/QC) protocols and calibration procedures in line with CEN and national standards.	7 years – 40 pts, each additional year – 5 pts, up to 55 pts	55

Experience of working with local public authorities and state institutions (e.g. environmental agency, ministry of environment, others).	<i>Each assignment 5 pts, up to 20 pts.</i>	20
Experience in implementing or advising on projects funded by international organizations (e.g. EU, UNDP, UNEP, WB, others) is an advantage.	<i>Each assignment - 5 pts, up to max 10 pts.</i>	10
Subtotal Technical Scoring		155
<p align="center"><u>Interview evaluation criteria</u></p> <p><i>Only the first 5 applicants that have accumulated the highest technical score shall be invited to the interview.</i></p>		
Excellent knowledge on the air related legal framework (Law No. 98/2022 on air quality, Regulation No. 63/2025 on the monitoring and management of atmospheric air quality).	<i>(strong knowledge – up to 55 pts, satisfactory – up to 30 pts, limited – up to 10 pts, no – 0 pts)</i>	55
Knowledge of international best practices and trends in air quality monitoring, including data reporting to the European Environment Agency (EEA) or integration into regional/national air quality databases.	<i>(strong knowledge – up to 55 pts, satisfactory – up to 30 pts, limited – up to 10 pts, no – 0 pts)</i>	55
Strong interpersonal and communication skills, ability to work with the public sector, demonstrated by previous assignments.	<i>(strong – up to 15 pts, satisfactory – up to 10 pts, no – 0 pts)</i>	15
Fluency in Romanian and English. Knowledge of Russian will be an asset.	<i>(5 pts per language –15 pts total)</i>	15
Belonging to the group(s) under-represented* in the UN Moldova and/or the area of assignment	<i>No – 0 pts, to one group – 2,5 pts, to two or more groups – 5 pts)</i>	5
Total Interview Scoring		145
Maximum Total Technical Scoring		300
<u>Financial</u>		
<p>Evaluation of submitted financial offers will be done based on the following formula:</p> <p><u>$S = F_{min} / F * 200$</u></p> <p>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.</p>		200

** Under-represented groups in UN Moldova are persons with disabilities, LGBTI, ethnic and linguistic minorities, especially ethnic Gagauzians, Bulgarians, Roma, Jews, people of African descent, people living with HIV, religious minorities, especially Muslim women, refugees and other non-citizens. **Please specify in CV, in case you belong to the group(s) under-represented in the UN Moldova and/or the area of assignment.***

Winning candidate

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

ANNEXES TO THE TOR

- 1) UNDP General Terms and Conditions for Individual Contractors
- 2) Offeror's letter confirming interest and availability, including a financial proposal (template).
- 3) Statement of Health - Individual Contractors