



Funded by
the European Union

EU4Environment
Water and Data in Eastern Partner Countries

EU4Environment – Water Resources and Environmental Data

TERMS OF REFERENCES FOR LOCAL CONTRACTOR

DEVELOPMENT OF AN API FACILITATING ACCESS TO DATASETS ON WATER USE IN GEORGIA AND THE DRAFT OF TECHNICAL SPECIFICATIONS FOR DEVELOPMENT OF AN ONLINE APPLICATION INCLUDING FORMS, PRODUCTION OF INDICATORS AND VISUALISATION OF WATER USE

APRIL 2024

1. Financing

European Union (ENI/2021/424-550)

Co-financing by Austria (Austrian Development Agency) and France (Artois Picardie Water Agency)

2. Procedure

Single tender procedure

3. Contracting Authority

International Office for Water (OiEau) - France

4. Nature of contract

Service contract

5. Time period of implementation

MAY 2024 – JULY 2024

6. Contract amount (optional)

Maximum amount: 9 000

7. Background information

The Programme “EU4Environment – Water Resources and Environmental Data” (hereinafter - the Programme) aims to operationalise several key mechanisms to preserve natural resources, enabling countries’ green growth in line with the European Green Deal and a post-COVID-19 green recovery. This will contribute towards longer-term environmental, climatic, and socio-economic resilience, and improved human health and wellbeing, as well as the achievement of the Sustainable Development Goals (SDGs).

The Programme’s specific objectives are:

- Specific Objective 1 “Water resources management”: Water policies and practices support more sustainable use of freshwater resources and help reduce the adverse impacts of human activities on water quality and ecosystems.
- Specific Objective 2 “Environmental statistics and open data”: The use of sound environmental statistics by the partner countries is extended and improved, and better availability of policy-relevant data to decision-makers and citizens is ensured.

The Programme, primarily financed by the European Union and co-financed by Austria and France, is implemented by three Member State agencies: Umweltbundesamt GmbH (also called “UBA” or “Environment Agency Austria”), Austrian Development Agency (ADA) and International Office for Water (OiEau, France) as well as two international organisations (OECD and UNECE). These 5 organisations are the Implementing Partners.

8. Scope of work and deliverables

8.1 Scope of work

The consultant will be responsible for the following tasks concerning access to water use data in conformity with the letter of agreement signed by the beneficiary National Environmental Agency (NEA) of the Ministry of Environmental Protection and Agriculture of Georgia and the International Office for Water:

1. API Development and implementation allowing access to datasets through authentication process when needed
2. Draft of technical specifications for the following future developments* :
 - a. development of Accounting Forms on Water Use following the needs of the beneficiary
 - b. production of indicators and outputs expected by the beneficiaries

** Future developments will be based on these technical specifications and will be implemented in separate contract if EU4Env program will be officially extended.*

8.2 Deliverables & format

The list of deliverables can be found here after (API specifications to be validated by the Ministry of Environmental Protection and Agriculture of Georgia)

Component 1 : API Development

API Development and implementation allowing access to datasets through authentication process when needed. Service provider is requested to prepare and put available on a swagger platform, 4 APIs facilitating access to data on: permits, intake-discharge-points, authorized water intake, authorized water discharge

These APIs should be formulated such as in the example here after in which:

- bbbbbb= basin name
- yyyy= year

At minimum, the first 2 APIs should be public, depending on the needs the 2 others might be available through an authentication process

API1: list of permits in one basin for one year

<http://water.use.ge/api/v1/permits/bbbbbbbb/datawaterintake/yyyy>

Which would return an xml file including the list of permits into the basin “bbbbbbb”, for the year “yyyy” with the following attributes:

- IDcode of the permit
- Basin name= “bbbbbbb”
- Year = “yyyy”
- ID/ name/ domain of activity of the organization having permission
- ID / name/ production domain / XY of the production unit using/discharging water
- Type of water use: intake, discharge

API2: list of intake and discharge points authorized in one basin

<http://water.use.ge/api/v1/intake-discharge-points/bbbbbbbb/>

Which would return an xml file including the list of intake and discharge points into the basin “bbbbbbb”, with for each intake/discharge point, the following attributes:

- IDcode of intake-discharge point
- Basin name= “bbbbbbb”
- ID/ name/ domain of activity of the organization having permission on this point
- XY of the intake-discharge point
- Name of the water source where is taken (or discharged) the water at this intake point (ex: name of the river)
- Type of water use: intake, discharge

API 3: data on water intake

<http://water.use.ge/api/v1/intakepoint/bbbbbbbb/datawaterintake/yyyy>

Which would return an xml file including the list of all water intake points existing into the basin “bbbbbbb”, with for each intake point, the following attributes:

- Basin name= “bbbbbbb”
- ID/ name/ domain of activity of the organization
- ID / name/ / production domain / XY of the production unit using water XY of the intake point
- Name of the water source where is taken the water at this intake point (ex: name of the river)
- Year = “yyyy”
- Total quantity of water used in year “yyyy” at this intake point
- Unit of water intake value of total quantity

API 4: data on water discharge

<http://water.use.ge/api/v1/dischargepoint/bbbbbbbb/datawaterdischarge/yyyy>

Which would return an xml file including the list of all water discharge points existing into the basin “bbbbbbb”, with for each discharge point, the following attributes:

- Basin name= “bbbbbbb”
- ID/ name/ domain of activity of the organization
- ID / name/ / production domain / XY of the production unit using water
- XY of the discharge point
- Name of the water source where is discharged the water at this discharge point (ex: name of the river)
- Year = “yyyy”
- Total quantity of water discharged in year “yyyy” at this discharge point
- Unit of water discharge value of total quantity

Service provider is requested to organize training about use and maintenance of the API.

Component 2: Draft of technical specifications for the future developments

Service provider is expected to make a draft with the technical specifications for the following tasks:

- Development of the Accounting Form for Water Use Accounting Forms on Water Use following the needs of the beneficiary
- Production of indicators and outputs expected by the beneficiaries:
 - Main indicators of water use according to the business activities and sectors;
 - Main indicators of water use according to administrative-territorial units;
 - Main indicators of water use according to basins;
 - Main indicators of water use according to basin districts;
 - Main indicators of water use according to water management districts;
 - Water abstraction data by months (according to business activities);
 - Water abstraction data by months (according to administrative-territorial units);
 - Water abstraction data by months (according to water management district);
 - Pollutant substances, discharged with wastewater according to business activities and sectors;
 - Pollutant substances, discharged with wastewater according to administrative-territorial units;

- Pollutant substances, discharged with wastewater, according to water management units;
- Discharge of wastewater into natural surface water objects by the types of treatment (according to business activities);
- Discharge of wastewater into natural surface water objects by the types of treatment (according to administrative-territorial units);
- Discharge of wastewater into natural surface water objects by the types of treatment (according to water management districts);

9. Implementation modalities

9.1 Meetings & trainings

The following meetings will be held and organised by the service provider:

- Start-up meeting for questions and answers
- Midterm meeting, for presentation of the progresses
- Closing meeting with presentation of results.

9.2 Schedule

Duration of the assignment will be up to **31st July 2024** and is expected to start on the date when it is signed by both parties.

Payment for the deliverables shall be considered only when the work is accepted by the Implementing Partners on behalf of the country Beneficiaries.

Summary of the work schedule

Deliverables	Languages of deliverables	Due date for draft version	Finalization after comments
Swagger link with API	English and Georgian	15th June 2024	30 th June 2024
Training about use and maintenance of the API	English and Georgian		30 th June 2024
Draft of technical specifications on the development of Accounting Forms on Water Use and Tools for visualization of indicators and outputs	English and Georgian	01 st July 2024	30 th July 2024

9.4 Attributes required

Works shall be implemented by a Georgian expert or company, group of NGO(s), university, research institution, etc. that are not representing the Programme Beneficiaries. The studies will be closely coordinated, assisted and monitored by the Programme team (OiEau, UBA and the Programme Representative) and the Beneficiary the National Environmental Agency (NEA). Close coordination shall be ensured with the Beneficiaries who will take full ownership of products.

Technical issues as data description (producers, availability, quality, scales, collection frequency, etc.), related difficulties to collect them, data formatting requirements, methodological aspects, etc. will be discussed regularly with the Implementing Partners.

10. Contact details

National Programme Representative of the Programme “EU4Environment - Water Resources and Environmental Data” in Georgia:

Zurab Jincharadze, z.jincharadze@eu4waterdata.eu

Responsible thematic leader:

Paul Haener, International Office for Water (OiEau), p.haener@oieau.fr

12. Participation to the tender

Interested parties (individual and legal persons) are invited to inquire the full tender dossier containing instructions and further information about the tender procedure from Ms Ilke CICEKOGLU (email address : i.cicekogl@oieau.fr), Project Assistant, International Office for Water (OiEau) and Mr Paul HAENER (email address : p.haener@oieau.fr), Thematic Leader, International Office for Water (OiEau).

Deadline for submission of the technical and financial offer is 10 May 2024 at 6 P.M.CET