



Terms of Reference

Development of a Project Document for the implementation of Nature-Based Solutions for Wastewater Treatment in two Rural Areas in the Drin River Basin

In the framework of the project

***“Promoting the Sustainable Management of Natural Resources in South-eastern Europe,
through the use of the Nexus approach”***

funded by the Austrian Development Agency (ADA),

implemented by the Global Water Partnership-Mediterranean (GWP-Med)
in partnership with the United Nations Economic Commission for Europe (UNECE)

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1. Introduction & Background

The Water-Energy-Food-Ecosystems Nexus (“Nexus”) approach has been introduced in the natural resources management agenda in order to enhance water, energy, and food security, while preserving ecosystems and their functions. The Nexus approach provides for an integrated and coordinated approach across sectors, with a view to reconciling potentially conflicting interests as they compete for the same scarce resources, while capturing existing opportunities and exploring emerging ones.

The Nexus approach is quite pertinent in South-East Europe (SEE), especially given the Region’s rich water and forest resources, the high share of hydropower in the energy mix, the key role of agriculture and the many pristine natural areas, as well as the commitment of the Economies in the Region towards sustainable development and integrated management of natural resources.

The overall aim of the “**SEE Nexus Project**”¹ is to introduce the Nexus approach in and catalyse action for its adoption and implementation in SEE. With activities focusing on the transboundary basins of the Drin and Drina rivers and in Albania, the Project facilitates Nexus Dialogue Processes involving a broad range of stakeholders, and the development of technical Nexus Assessments exploring cross-sectoral interlinkages, while enabling conditions for financing actions to address issues of priority.

Aiming to maximise its usefulness for the beneficiaries and lead to tangible outputs, the SEE Nexus Project supports the preparation of full Project Documents for the implementation of solutions addressing Nexus-related issues/challenges with cross-sectoral benefits. The individual issues have been identified in consultation with key institutions and stakeholders in the respective areas of focus, and based on the findings of the Nexus Assessments as well as on key strategic policy documents and action programmes.

More information on the Project and its activities is available at <https://gwp.org/seenexus>

2. Objective of the Assignment

To prepare a full Project Document -as described in detail below- for the implementation of Nature-Based Solutions for Wastewater Treatment in two small/medium settlements in the Drin River Basin, which will also be exploring synergies for nutrient recovery, energy extraction and water reuse. Viable opportunities for financing should also be identified.

As agreed by the DCG at its 22nd meeting on 25 November 2021, the Project will eventually be implemented in 2 pilot settlements, one in Albania and one in Kosovo*². The exact settlements will be selected in coordination with national representatives from the two Riparians.

3. Background, scope and aims of the proposed Project

3.1 The Drin coordinated action process and the Strategic Action Programme

Coordinated action for the sustainable management of the Drin Basin is driven by the related Memorandum of Understanding that was signed in 2011 by the Ministers of the water and environment management competent ministries of the Drin Riparians. The Drin Core Group (DCG), a joint body comprising of representatives of Water-related Ministries and Institutions of the Riparians

¹ Funded by the Austrian Development Agency (ADA) and implemented by the Global Water Partnership-Mediterranean (GWP-Med) in partnership with the United Nations Economic Commission for Europe (UNECE)

² This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

has the mandate to coordinate actions for the implementation of the MoU. The DCG also serves as the Steering Committee for the activities of the SEE Nexus Project in the Drin basin.

The Strategic Action Programme (SAP) for the sustainable management of the Extended Drin Basin³ was endorsed on 24 April 2020 by Ministers and High-level representatives from the Drin Riparians. The development of the SAP, which comprises over 100 agreed policy and technical actions, was supported by the Global Environment Facility (GEF) “Drin Project”, which was designed to realize the 2011 MoU.

The proposed Project is aligned with Goal 5 of the Drin SAP “Decrease nutrient pollution deriving from untreated or poorly treated wastewater discharges and unsustainable agricultural practices” and its Objective 1 “Reduction of untreated wastewater discharge from urban areas by 2030”, and will be implementing these in two areas in the Drin Basin.

3.2 Rationale and scope of the proposed Project

Both Albania and Kosovo* face significant challenges regarding the uncontrolled discharge of untreated wastewater from urban and rural settlements and wastewater treatment remains at an early stage in both countries. Albania has today 12 wastewater treatment plants, that cover 13.8 % of the total population, while Kosovo* has 2 treatment plants. All these treatment plants serve urban areas, while rural areas are currently out of the focus of investment plans regarding wastewater treatment, mainly due to the fact of limited resources and the priority needs which remain the urban areas with denser populations. In most rural areas, there is no sewerage network and wastewater is being disposed on site, without standard septic tanks. Given that a large part of the population that lives in the Drin River Basin in both countries is rural, as well as the difficult terrain of this area, the use of decentralized solutions seems to be the most feasible and efficient one when it comes to wastewater treatment.

The proposed Project should describe the development in 2 rural areas in the Drin Basin of a decentralized, low-cost and high-efficiency nature-based solution for wastewater treatment suitable for small settlements, to address localized pollution-related pressures and minimize subsequent effects to the biodiversity and human health. Further to this, a novel view should be taken, of wastewater as a resource -and not just a useless waste which has to be treated and disposed- that will allow capturing cross-sectoral opportunities from a Nexus perspective⁴.

The desired basic **elements and dimensions** of the nature-based solution to be described in detail in the Project Document are listed below. The nature-based solution should have such characteristics that will lead -at the level that it is feasible- to the maximum number of the results listed below. The cost of the solution is a parameter that should be taken into consideration while choosing the nature-based technology to be used.

- The treatment solution should be nature-based and not a conventional technical one. There is a growing body of evidence that constructed treatment wetlands⁵ are a simple and robust solution, especially appropriate for rural areas, with low operation and maintenance

³ The Drin SAP is available here: <http://drincorda.iwlearn.org/gef-supported-drin-project/the-drin-strategic-action-programme>

⁴ Valuable information is available at the Background Paper “Beyond utility reach? How to close the rural access Gap to wastewater treatment and sanitation services” for the Rural Wastewater Treatment Workshop (19-20.01.2021) organized by the World Bank Danube Water Program and the International Commission for the Protection of the Danube River (ICPDR), available at: https://www.iawd.at/files/File/events/2021/RWWT_Webinar/2021_RWWT_Workshop_Report.pdf

⁵ Constructed wetlands (CWs) are engineered systems that have been designed and constructed to utilize the natural processes involving wetland vegetation, soils, and the associated microbial assemblages to assist in treating wastewaters. They are designed to take advantage of many of the same processes that occur in natural wetlands but do so within a more controlled environment.

requirements, and achieve the same and in some cases better treatment performance when compared to technical solutions. Such “blue-green” infrastructure can also provide additional living space and a retreat for fauna and flora and thus support ecosystem adaptation and resilience.

- Treated wastewater contains valuable nutrients (e.g., phosphorus, nitrogen, potassium) and should be reused for irrigation of agricultural areas nearby the treatment location.
- Valuable resources and elements (such a phosphorus) found in the sludge should be recovered -to the extent possible- and the sludge offered to be used as a fertilizer in nearby farms or plantations.
- The cost of the energy used by water utilities is typically their major cost component and a critical factor for their financial viability. An approach integrating water-energy considerations aims at making the water supply and sanitation energy-neutral while maximising water- and energy-efficiencies. In this context, options should be explored for recovering energy from wastewater, and/or generating energy on-site by renewable sources such as photovoltaics and solar thermal units, biomass use, hydropower including from generation integrated into water conveyance infrastructure, wind power, etc.
- Finally, the project should enhance capacities and awareness of all related stakeholders, experts and professionals and facilitate knowledge and experience sharing.

3.3 Components of and activities for the preparation of the Project Document

The Project Document to be prepared under this Assignment should address the following components/activities for **each** of the pilot cases (the consultant is expected to enrich and appropriately clearly define these as part of the Inception Report):

1. Assessment of **existing situation and site conditions** in terms of:
 - a. Geography, topography, climate conditions, soil structure, landscape and ecosystem characteristics
 - b. Population, households, economic activities, water supply system (current and projected quantities and types of use), wastewater collection infrastructure (current and projected)
 - c. Wastewater quantities generated and wastewater quality analysis
2. Determination of the **type/technology of the nature-based solution** to be designed (e.g. a Constructed Wetland) and of any other accompanying technical dimensions, in order to meet the desired *elements and dimensions* listed under 3.2 *Rationale and scope of the proposed Project*, above. The determinations should take into account (not exhaustive):
 - a. Appropriateness for pollution reduction in line with the local socio-economic and environmental conditions
 - b. Effectiveness, maintenance costs, labour requirements, other social benefits
3. Development of a **Techno-economic Note** detailing the technical and economic characteristics of the proposed nature-based solution, including on (list not exhaustive):
 - a. Required surface area
 - b. Technical requirements (including engineering and construction ones, e.g. hydraulic parameters, excavation needs, components and materials, types and quantities of plants, energy consumption etc.), accompanied by a Bill of Quantities and related cost parameters.
 - c. Operational and maintenance procedures
 - d. Potential for groundwater exchange and/or irrigation
 - e. Potential for nutrients recovery
 - f. Potential for energy recovery and/or on-site renewable energy installations

- g. Requirements for the Environmental Impact Assessment

4. Methodology and tasks

For the preparation of the Project Document, the consultant is expected to perform the following tasks:

Task 1: Policy review, identification of stakeholders and potential financing sources, finalisation of structure of Project Document – Inception Report

The consultant will:

- a. identify and review all national policy documents, strategies and action plans that are related to the issue to be addressed by the project proposal, including on potential priority areas/settlements
- b. identify all the key stakeholders and beneficiaries from all related sectors, at all levels that need to be engaged and/or consulted for the development of the Project Document
- c. suggest the type/technology of the nature-based solution to be designed in the 2 locations
- d. identify key financing sources and instruments, including International Financing Institutions (IFIs), that could finance the proposed Project; explore their prerequisites in the context of an application for financing and suggest potential restructuring or supplementary materials in the content and structure of the Project Document (Annex 1) in order to fully align it with the specific requirements of the financing source/instrument
- e. suggest potential restructuring of the content and structure of the Project Document (Annex 1) as well as potential provision of supplementary materials, as necessary to address any needs arising from the technical nature of the project, and which are currently not covered in Annex 1.

The above will be captured in an **Inception Report** which will include among others:

- the information collected under (a) and (b) above
- identification of the type/technology of the nature-based solution to be designed, based on an assessment of available options
- a description of the approaches/methods to be followed for the development of the Project Document
- list of stakeholders to be consulted and draft plan of consultations
- information gaps that were identified and suggestions to overcome them
- key relevant financing sources and instruments
- suggestions to restructure the content and structure of the Project Document (Annex 1)
- detailed work plan for the preparation of the Project Document.

GWP-Med can assist in the identification of related policy documents, projects and/or stakeholders.

Task 2: Consultations and development of Concept Note

The consultant is required to plan and conduct consultations (physical or virtual) with the key stakeholders identified under Task 1. The first aim of the consultations is to identify the exact locations/settlements in the Drin basin (one in Albania and one in Kosovo*) for which the facilities will be designed, also based on related national priorities. Overall, the consultations will assist the consultant to harvest and understand the needs and expectations of the stakeholders and beneficiaries related to the project proposals, so as these are reflected in the Project Documents to be prepared.

Key stakeholders to be engaged in the consultations include:

- The respective Municipalities and their water utilities
- The Ministries and National Agencies responsible for Water Supply and Sanitation and/or Water Resources Management
- The National Associations of Water Utilities
- Academic and Research Institutes

Based on the outcomes of these consultations, as well as on the findings of activities under Task 1, a **Concept Note** will be prepared outlining how the Project Document will address the **components and activities** mentioned in Section 3.3 “Components of and activities for the preparation of the Project Document” above, and will have in an Annex a report on the consultations. The Concept Note will then be discussed with the beneficiaries and GWP-Med. Once finalised, it will be the basis for the development of the full Project Document (see next task).

Travel costs associated to the missions will be covered by the consultant (to be included in financial offer) at no additional expenses to the contractor.

Task 3: Development of the full Project Document, of Techno-economic Note and of a Note on Potential financing and partnership mobilisation

Based on the results from Tasks 1 & 2, the consultant will draft the full Project Document. It should follow the required content and structure of the **Annotated Table of Contents for the Project Document (Annex 1 to the ToR)**. It should also include as Annexes **the LogFrame, the Workplan and the Budget** of the eventual Project. Templates for these are available as **Annexes 2-4** to the present ToR. Note that as indicated under Task 1, the documents included in Annexes 1-4 may be restructured, or supplementary materials may be included, following a related proposal of the consultant and agreement with GWP-Med.

The draft Project Document should be accompanied by a draft **Techno-economic Note** for each of the proposed solutions in the 2 locations, as described in section 3.3 “Components of and activities for the preparation of the Project Document” above.

The draft Project Document and accompanying material will be submitted to the beneficiaries for comments. The final Project Document and accompanying material should address all comments that may be received.

In parallel, the consultant will develop a **Note on Potential financing and partnership mobilisation**. In this Note, the consultant should:

- i. identify the most relevant available sources and instruments of financing (public, blended and private) which could support the eventual implementation of the Nature-based solution to be described in the Project Documentation
- ii. propose viable partnerships with relevant technical and/or developmental institutions and organizations

For each of the key sources or instruments of financing identified under (i), the following information should -the least- be provided: Name/title, Structure, Objectives and Programmatic scope, geographic scope, selection criteria, Programme cycle, available budget, recent relevant projects, application procedure and requirements, identification of gaps in terms of eligibility and/or required documentation.

In the Note, reference should also be made to relevant public-private partnerships (PPP) experience in the countries of focus, including on business support programmes.

5. Deliverables/Outputs

The deliverables/outputs of this assignment are:

1. **Inception report**, as described under Task 1 above
2. **Concept Note as a result of the desk study & consultations**, as described under Task 2 above, including as Annex the reports of the consultation meetings
3. **Draft full Project Document** as per the requirements described in Task 3 above, for commenting purposes.
4. **Note on Potential financing and partnership mobilisation**, as described under Task 3 above.
5. **Techno-economic Notes** describing in detail the information mentioned in section 3.3.3 above for each of the proposed solutions in the 2 locations, and any other related information suggested by the consultant
6. **Final version of the full Project Document** where comments are fully addressed.

6. Contract price, duration, schedule of deliverables and payments

The maximum fee for this assignment is **50,000 EUR**. This amount includes all other costs, income taxes and any other amount payable or cost that may be required for the completion of the work/service, including VAT.

The overall duration of the contract will be for a maximum of **6 months** after contract signature.

Payments will be made upon acceptance and verification of the related deliverables, as laid out in the table below.

Table: Schedule of deliverables and payments

Tasks	Deliverables	Deadline	Payment Schedule
1. Desk studies and identification of stakeholders – Inception Report	D1. Inception Report (See under “4. Methodology and tasks” for details)	1 month after contract signature	Tranche 1: 20%
2. Consultations and formulation of a concept note	D2. Concept Note, including reports of consultations (See under “4. Methodology and tasks” for details)	2 months after contract signature	Tranche 2: 30%
3. Development of the full Project Document and of a Note on Potential financing and partnership mobilisation	D3. Draft Project Document and Techno-economic Notes	4 months after contract signature	Tranche 3: 50%
	D4. Note on Potential financing and partnership mobilisation	4 months after contract signature	
	D5. Final Project Document D6. Final Techno-economic Notes	5 months after contract signature	

7. Selection Criteria (pass / fail)

Successful participant (Natural or Legal Person or Entity):

- Must have a record of minimum 4 projects over the last 10 years of comparable budget, nature and degree of complexity relevant to those required for this Contract.
- Must have a record of minimum 1 project in the last 5 years related to the design of a nature-based solution for wastewater treatment plant (e.g. constructed wetland)
- Must be enrolled in one of the official professional or trade register kept in their country of registration.
- Their average annual turnover for the last three financial years must be at least equivalent to the maximum amount of this call.

8. Qualification and Experience

Participants in the call are required to have solid experience in developing and managing complex projects in the field related to the tasks described in the ToR. This needs to be demonstrated in the **Technical Offer** to be submitted as part of the application.

The Technical Offer Form consists of the following sections:

- Section 1: Expertise and work experience
- Section 2: Approach and Methodology

Regarding Section 1: Expertise and work experience:

The scope of work requires an interdisciplinary team of skilled experts with previous experience in activities similar to those that this assignment entails.

The required and desired qualifications for all experts, including the Team Leader, to be engaged in this assignment are presented in Table 1 below. The inclusion of experts so as the team responds to every area of expertise defined in the table below is mandatory. Qualifications additional to the minimum requested per category will receive additional score under the evaluation process as described in the section Evaluation Process and Awarding Criterion. In addition, the Participant may propose -as they deem appropriate- additional experts covering other specific areas of expertise.

Failure to provide the minimum required qualifications is considered ground for disqualification.

Table 1 – Required and desired qualifications for the Team of Experts

Expert #	Qualifications
1. Team Leader	<ul style="list-style-type: none">○ At least University diploma (MSc or equivalent) in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management) (Required)○ Minimum 10 years of professional experience and 3 assignments / projects related to the design or construction of wastewater treatment plants. (Required)○ Minimum 1 assignment / project directly related to the design or construction of a nature-based solution for wastewater treatment. (Required)

2. Expert 1	<ul style="list-style-type: none"> ○ At least University degree in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management) (Required) ○ Minimum 7 years of professional experience related to the design or construction of wastewater treatment plants. (Required) ○ Related experience in Albania or Kosovo* (Desired)
3. Expert 3	<ul style="list-style-type: none"> ○ At least University degree in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management) (Required) ○ Minimum 7 years of professional experience related to the design or construction of wastewater treatment plants. (Required) ○ Related experience in Albania or Kosovo* (Desired)

9. Evaluation Process and Awarding Criterion

The Award criterion is the most economically advantageous tender on the basis of best price / quality ratio.

Offers qualified in terms of exclusion grounds and selection criteria will be further evaluated on the basis of the requirements presented under section “Qualification and Experience”, as follows:

(1) Criterion	(2) Weighting (w)	(3) Points of criterion (c)	(4) Score = (2) x (3)
Section 1: Expertise and work experience	75% total		
Team Leader			
(Required) At least University diploma (MSc or equivalent) in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management).	5		
(Required) Minimum 10 years of professional experience and 3 assignments / projects related to the design or construction of wastewater treatment plants.	15		
(Required) Minimum 1 assignment / project directly related to the design or construction of a nature-based solution for wastewater treatment.	15		
Expert 1			
(Required) At least University degree in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management)	5		
(Required) Minimum 7 years of professional experience related to the design or construction of wastewater treatment plants.	10		

(Desired) Minimum 2 number of projects directly relevant to wastewater treatment plants in Albania or Kosovo*	5		
Expert 2			
(Required) At least University degree in a field relevant to the Assignment (e.g. Civil Engineering, Environmental engineering, Water resources management, Natural resources management)	5		
(Required) Minimum 7 years of professional experience related to the design or construction of wastewater treatment plants.	10		
(Desired) Minimum 2 number of projects directly relevant to wastewater treatment plants in Albania or Kosovo*	5		
Section 2: Approach and Methodology	25% total		
Approach to the requested Assignment: detailed description of the methodology how the Participant will achieve all objectives and tasks and deliver all outputs as described in the Terms of Reference of the assignment, keeping in mind the appropriateness to local conditions.	20%		
Risks / Mitigation Measures: description of the potential risks for the implementation of this assignment that may impact achievement and timely completion of expected results as well as their quality. Describe measures that will be put in place to mitigate these risks.	5%		

Failure to provide the minimum required qualifications is considered ground for disqualification.

Scoring for each evaluated section will be made as following:

Section 1 – Expertise and work experience: For Section 1 score starts at 100 points (when minimum requirements are met) and can reach 150 points depending on the description of the participant and the number of projects implemented in excess of those required as a minimum. (100p Base +10p for extra criteria over base up to 50 additional points)

Section 2 – Approach and Methodology: For Section 2, score starts at 100 points and can reach 150 points depending on the length, detail, depth, and structure of the information provided.

Each Section/evaluation criterion is evaluated autonomously. The final scoring of each evaluation criterion is the outcome of its scoring multiplied by the corresponding weighting factor. The overall score of the technical offer is the sum of the final scoring of all the Sections/evaluation criteria.

The overall score of the technical offer is calculated on the basis of the following formula:

$$B_i = w_1 \times c_1 + w_2 \times c_2 + \dots$$

For the overall score which will determine the ranking of offers, technical evaluation will be weighted with 80%, and the financial offer with 20%.

The final listing of the most advantageous offers will be made on the basis of the following formula:

$$\lambda_i = 0.8 * (B_i/B_{max}) + 0.2 * (K_{min}/K_i).$$

Where:

- Bmax: the max score received by the best of the technical offers received
- Bi: the score of the technical offer
- Kmin: The cost of the financial offer with the minimum price offered.
- Ki: The cost of the financial offer

The most advantageous offers is the one with the greater value of Λ .

In case of equality of overall scores, the winning proposal is the one whose corresponding technical proposal received the highest rating.

10. Monitoring and Progress Controls

Mr. Tassos Krommydas, Senior Programme Officer and Mr. Mevis Struga, Programme Officer at GWP-Med, will be providing oversight and guidance from the side of the Project Team. Coordination calls between the consultant and the Project Team will be held at least monthly, to monitor the progress with regard to the workplan submitted with the Inception Report.

Services will be rendered to the Senior Programme Officer Mr. Tassos Krommydas and will be considered completed upon approval of the deliverables by the Senior Programme Officer and the Project Coordinator.

11. Place of Performance

This assignment is home based, with possible field missions for consultations. The tasks will be carried out from a place of the Consultant's preference.

12. Terms and Conditions

- *Language*

The language of the deliverables/outputs is English.

- *Data and information*

GWP-Med can assist in the identification of related policy documents, projects and/or stakeholders.

The consultant is responsible to collect all additional information and data necessary for the completion of this assignment. Missing information (from any side) would not be considered as eligible reason for not completing the tasks.

- *Submission of data, reports and other material produced*

All primary data, reports, and other documentation produced during this assignment shall be made available to the Project Team in electronic format. All data acquired, and products developed during the assignment will be in the ownership of the SEE Nexus Project and cannot be used by the Consultant and its team without prior written permission.

- *Cooperation requirements*

The Consultant is expected to work closely with the Project Team and the beneficiaries (visited during the field missions).

- *Review and quality assurance*

Review of the work carried out by the Consultant throughout the implementation of the assignment as well as review of the deliverables may be carried out by an independent external expert or expert team.

Review of the project final deliverables may be carried out by relevant experts or Expert Working Groups of the beneficiaries.

All relevant comments and suggestions made by the reviewer(s) will have to be taken into consideration by the Consultant and integrated in the final versions of the deliverables.

- *Public consultations / meetings*

The responsibility for organizing any required workshops or working meetings will be shared between the Consultant and the Project Team. The Consultant shall be responsible for: preparation of working material invitations, agenda, technical specifications etc. ensuring participation of the key team members as required, preparation of minutes etc. The Project Team will be responsible for: distributing the invitations and enabling participation.

13. Annexes

Annex 1 – Annotated Table of Contents of the Project Document

Annex 2 – LogFrame Matrix template (for the Project Document)

Annex 3 – Workplan template (for the Project Document)

Annex 4 – Budget template (for the Project Document)