



Enabling
& Transboundary Cooperation
& Integrated Water Resources Management
in the extended **DRIN RIVER BASIN**



**Terms of reference:
*International Expert contributing in
the preparation of the
Thematic Report on Pollution***

In the framework of:

Memorandum of Understanding
for the Management of the Extended Transboundary Drin Basin

GEF Project “Enabling Transboundary Cooperation and Integrated Water
Resources Management in the Extended Drin River Basin”

10 April 2017

The Coordinated Action for the implementation of the Memorandum of Understanding for the management of the Drin basin (Drin CORDA) is supported by the GEF Drin Project. The latter is implemented by the United Nations Development Programme (UNDP) and executed by the Global Water Partnership (GWP) through GWP-Mediterranean (GWP-Med), in cooperation with the United Nations Economic Commission for Europe (UNECE). GWP-Med serves as the Secretariat of the Drin Core Group, the multilateral body responsible for the implementation of the Memorandum of Understanding.

Disclaimer: The document adheres to the UN rules and policies regarding the names and international status of countries and/or other geographical areas etc. The use of characterizations, names, maps or other geographical statements in this document in no way implies any political view or positions of the Parties which are executing and implementing the Project.

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Introduction - Background

The Drin Memorandum of Understanding

Coordinated action at the Drin Basin level has been absent until the development of the Shared Vision for the sustainable management of the Drin Basin and the signing of a related Memorandum of Understanding (Tirana, 25 November 2011) by the Ministers of the water and environment management competent ministries of the Drin Riparians i.e. Albania, The Former Yugoslav Republic of Macedonia, Greece, Kosovo* and Montenegro. This was the outcome of the Drin Dialogue coordinated by the Global Water Partnership Mediterranean (GWP-Med) and UNECE.

The main objective of the Drin MoU is the attainment of the Shared Vision: *“Promote joint action for the coordinated integrated management of the shared water resources in the Drin Basin, as a means to safeguard and restore, to the extent possible, the ecosystems and the services they provide, and to promote sustainable development across the Drin Basin”*.

The **ultimate goal** of the work in the Drin Basin is to reach a point in the future where the scale of management lifts from single water bodies to the hydrological interconnected system of the Drin Basin, eventually leading from the sharing of waters among Riparians and conflicting uses, to the sharing of benefits among stakeholders.

The Drin Coordinated Action

A process called the “Drin CORDA”, Drin Coordinated Action for the implementation of the Drin MoU, was put in place after the signing of the latter.

Following the provisions of the Drin MoU an institutional structure was established. It includes:

- The **Meeting of the Parties**.
- The **Drin Core Group (DCG)**. This body is given the mandate to coordinate actions for the implementation of the MoU.
- Three **Expert Working Groups (EWG)** to assist the DCG in its work:
 - Water Framework Directive implementation EWG.
 - Monitoring and Information exchange EWG.
 - Biodiversity and Ecosystem EWG.

The **DCG Secretariat** provides technical and administrative support to the DCG; Global Water Partnership – Mediterranean (GWP-Med) serves by appointment of the Parties through the MoU as the Secretariat.

An Action Plan was prepared to operationalize the Drin CORDA. This has been subject to updates and amendments in accordance with the decisions of the Meeting of the Parties to the Drin MoU and the DCG. The DCG and its Secretariat guides the implementation of the action plan while its implementation is currently being supported by the Global Environment Facility¹ (GEF); see below.

The GEF Drin Project

The GEF supported Project “Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin” (GEF Drin Project) is aligned in content, aims and objectives with the Action Plan and the activities under the Drin CORDA.

¹ www.thegef.org

The objective of the project is to *promote joint management of the shared water resources of the transboundary Drin River Basin, including coordination mechanisms among the various sub-basin joint commissions and committees*. Albania, The Former Yugoslav Republic of Macedonia, Kosovo and Montenegro are the Project beneficiaries.

The GEF Drin Project is structured around five components:

- Component 1: Consolidating a common knowledge base
- Component 2: Building the foundation for multi-country cooperation
- Component 3: Institutional strengthening for Integrated River Basin Management (IRBM)
- Component 4: Demonstration of technologies and practices for IWRM and ecosystem management
- Component 5: Stakeholder Involvement, Gender Mainstreaming and Communication Strategies

The Project is implemented by the UNDP and executed by the Global Water Partnership (GWP) through GWP-Mediterranean (GWP-Med) in cooperation with the United Nations Economic Commission for Europe (UNECE); GWP-Med is responsible for the realization of the Project. The Drin Core Group is the Steering Committee (SC) of the Project.

It is managed by a Project Coordination Unit (PMU), based in Tirana, Albania; staff is stationed also in Podgorica, Ohrid, Pristina, and Athens. The duration of the Project is four years.

Thematic report on Pollution in the Drin Basin

Description of the Assignment

The GEF Drin Project within its Component 1: “Consolidating a common knowledge base” will carry out a Transboundary Diagnostic Analysis (TDA), to identify and assess transboundary basin management issues -including those related to water and other natural resources- assess the environmental impacts and socio-economic consequences and, identify the immediate and underlying causes of these issues.

The TDA shall provide the necessary information that will enable Drin Riparians to discuss and decide on the issues that will be addressed with priority, negotiate and formulate a Strategic Action Programme to address the causes and drivers.

In addition, the TDA shall assist in enhancing the knowledge basis of the Drin Riparians regarding the state of the natural and anthropogenic environment in the basin and preparing for the development of a Drin Basin Management Plan in the future.

The **GEF TDA-SAP methodology** will be used for the development of the TDA (<http://iwlearn.net/manuals/tda-sap-methodology>). Provisions of the **EU Water Framework Directive** (EU WFD) in relation to the characterization of the basin and the sub-basins will be adhered to as part of the TDA development process. The “**Situation Analysis – Management of the Extended Drin Basin**” (Drin Situation Analysis - DSA) serves as a starting point for the development of the Drin TDA. The DSA represents a comprehensive attempt to identify the transboundary issues in the Drin basin and their causes; it was prepared by GWP-Med and national experts in the framework of the preparation of the Drin Project.

Six domains will be assessed under the TDA. **Pollution is one of them**; the rest are the following: (i) Biodiversity and Ecosystems; (ii) Hydrology/Hydrogeology; (iii) Institutional and Legal Setting; (iv) Nexus; (v) Socioeconomics. A Thematic Report for each one of these domains will be prepared. A Synthesis report will synthesize the findings of the thematic reports into a comprehensive analysis of pressures, state, issues and their underlying causes.

One *National Expert* in each of the Drin Riparians has been contracted by the Project to collect pollution and water quality related information and data that is already available in the Riparians. Further, the *Project Management Unit* (PMU) is collecting information from national institutions and institutes that hold related information and data.

Specifications have been developed to enable the structured collection and storage of information and data and ensure that this is done in harmonized way by all National Experts for all Drin Riparians. The specifications define among others the following pollution related information (the list is not exclusive): format, units, time series, locations etc. A **Datasheet** has been prepared to enable the collection and storage of information.

Surveillance Monitoring is being realized to improve the understanding of the present baseline water quality conditions of the Drin Basin and more specifically, to amend and the existing data and information and fill the data and information gaps. A *monitoring expedition* (collection and analysis of samples) on selected surface and groundwater bodies was organized in December 2016. A second one will be organized on June 2017.

Objective

The objective of this assignment is to provide scientific advice to the PMU regarding issues related to water quality and contribute to the development of the Thematic Report on Pollution for the Drin Basin.

Input to be provided by the Project Management Unit (PMU)

The PMU will provide:

- i. Specifications and Datasheet developed.
- ii. Available background information (geochemical, socioeconomic, sources of pollution etc.) regarding the Drin Basin.
- iii. Data on water quality and pollution collected by the National experts.
- iv. Data on water quality developed through the monitoring expedition of December 2016.
- v. ToR for the Monitoring Expeditions.
- vi. Draft Table of Contents of the Thematic Report on Pollution (Pollution ToC).

Requested Services

The International Expert (hereinafter “Consultant”) will:

1. Review the Specifications and the Datasheet, and advice regarding their possible adjustment with the aim to improve the structured collection and storage of information and data.
2. Review the Pollution ToC and provide advice/input for their improvement if necessary. Provide assistance to the Project Officer that is responsible for the development of the Thematic Report on Pollution to prepare annotated table of contents.
3. Provide appropriate scientific advice/input for the planning of the monitoring expedition (collection and analysis of samples) to be implemented in June 2017. This should include -but not restricted to- reviewing of the following to make sure their appropriateness and suitability for the assessment of the water quality in surface and underground water bodies:
 - a. Monitoring Network (location of sampling points) used for the December 2016 monitoring expedition.
 - b. List of parameters analysed for each country and monitoring stations.

Propose adjustments to the above if necessary.

To perform the above: (i) review the results of the monitoring expedition of December 2016; (ii) take into consideration the existing information regarding the geochemical and socio-economic background and situation; (iii) take into consideration and use the provisions of the EU WFD.

4. Based on the above, review the ToR regarding the monitoring expedition of December 2016 and provide advice to the PMU for the preparation of the ToR to be used by the institutions and experts that will perform the collection and analysis of samples during the monitoring expedition of June 2017.
5. Scientifically oversee the implementation of the monitoring expedition of June 2017; participate in the collection of samples (as the consultant deems appropriate).
6. Review the results of the monitoring expeditions of December 2016 and June 2017 to assess the water quality of the surface and underground water bodies of the Drin Basin for the respective periods.
7. Prepare the part of the Thematic Report related to the overall assessment of water quality of the surface and underground water bodies of the Drin Basin. Use in this regard the water quality data from the monitoring expeditions of December 2016 and June 2017 as well as the water quality data collected by the PMU and the National Experts.
8. Assist the Project Manager/International Hydrologist Expert to perform the preliminary delineation of the Water Bodies (in accordance to the EU WFD) in the Drin Basin.

9. Provide guidance to the GIS expert for the preparation of maps.
10. Identify and describe the water quality related data and information gaps for the preparation of thorough assessment of the quality water in the Drin Basin.
11. Provide advice to the Project Officer responsible for the drafting of the Thematic Report on Pollution including on the content of the report and the presentation of data and information in appropriate tables and graphs.
12. Provide support to the Project Officer responsible for the drafting of the Thematic Report on Pollution; perform the following and draft the respective parts of the Thematic Report:
 - a. Identification of point and diffuse pollution sources and estimation of pollution loads;
 - b. Assessment of the chemical-physicochemical and the chemical status of (in accordance to the EU WFD) of surface waters, groundwater, transitional and marine waters.
 - c. Apply “expert judgment” for the assessment of the status of surface water sites and/or water bodies that lack adequate information by using pressure criteria and field investigations
13. Review the draft Thematic Report on Pollution.
14. Review and comment the draft Transboundary Diagnostic Analysis report.
15. Participate in the experts’ meetings and the consultation meetings.

Deliverables

1. Adjusted Specifications and Datasheet.
2. Adjusted (if necessary) annotated table of contents for the Thematic Report on Pollution.
3. Adjusted Monitoring Network and List of Parameters (if necessary) to be monitored during the June 2017 monitoring expedition.
4. Commented ToR of the monitoring expedition of December 2016 and written advise to the PMU for the preparation of the ToR to be used by the institutions and experts that will perform the collection and analysis of samples during the monitoring expedition of June 2017
5. Report regarding the data interpretation and overall assessment of water quality of the surface and underground water bodies of the Drin Basin Part. The report should be in a form that becomes part (as a chapter/subchapter) of the Thematic Report on Pollution.
6. Contribution for the preliminary delineation of the Water Bodies (in accordance to the EU WFD) in the Drin Basin.
7. Reports regarding the following; these should be in a form that becomes part (as a chapters/subchapters) of the Thematic Report on Pollution:
 - a. Point and diffuse pollution sources;
 - b. Estimation of pollution loads;
 - c. Estimation of pollution pressures to the ecosystems and threatened/endangered species;
 - d. Assessment of the chemical-physicochemical and the chemical status of (in accordance to the EU WFD) of water bodies (surface waters, groundwater, transitional and marine waters).
8. Guidance to the GIS expert for the preparation of maps.
9. Comments and input on the draft Thematic Report on Pollution.
10. Comments and input on the draft Transboundary Diagnostic Analysis report.

The deliverables will be in prepared in English.

Contract Price

The fee for this assignment is 12,000 USD. 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.

An advance payment of 20% is planned upon contract signature and 40% upon delivery of all outputs.

All other payments shall be upon reception and acceptance/verification of the deliverables, as laid out in the table below. Claims for payment will be made through an invoice accompanied by proof of delivery.

Responsibility and Communication

The Consultant will be working in cooperation with the Project Officer responsible for the preparation of the Thematic Report on Pollution. She/he will report to the Project Manager and the work under the overall guidance of the Project Coordinator/Chief Technical Advisor.

Monitoring and Progress Controls

The activity will be delivered under the lead and guidance of the PMU. Deliverables will be verified by the **designated staff of the PMU** for integrity, comprehensiveness and quality.

The Consultant may be asked to travel to participate in working and/or consultation meetings. The Consultant is expected to arrange directly traveling to the places the meeting will take place at. Travel costs to participate in meetings will be covered separately by the GEF Drin Project.

The consultancy will commence work on April 2017 and continue until completion but no later than 28 February 2017. The consultancy may be extended if further work is required or unexpected delays occur.

Schedule of Activities, Deliverables and Payment

Deliverables	Deadline	Expert working days	Payment
	Upon contract signature		20%
1. Adjusted Specifications and Datasheet. 2. Adjusted (if necessary) annotated table of contents for the Thematic Report on Pollution.	10 May 2017	3	
3. Adjusted Monitoring Network and List of Parameters (if necessary) to be monitored during the June 2017 monitoring expedition. 4. Commented ToR of the monitoring expedition of December 2016 and written advise to the PMU for the preparation of the ToR to be used by the institutions and experts that will perform the collection and	15 May 2017	3	

analysis of samples during the monitoring expedition of June 2017			
5. Report regarding the data interpretation and overall assessment of water quality of the surface and underground water bodies of the Drin Basin Part. The report should be in a form that becomes part (as a chapter/subchapter) of the Thematic Report on Pollution.	31 August 2017	7	20 %
6. Contribution for the preliminary delineation of the Water Bodies (in accordance to the EU WFD) in the Drin Basin. 7. Reports regarding the following; these should be in a form that becomes part (as a chapters/subchapters) of the Thematic Report on Pollution: a. Point and diffuse pollution sources; b. Estimation of pollution loads; c. Estimation of pollution pressures to the ecosystems and threatened/endangered species; d. Assessment of the chemical-physicochemical and the chemical status of (in accordance to the EU WFD) of water bodies (surface waters, groundwater, transitional and marine waters).	31 August 2017	7	20 %
8. Guidance to the GIS expert for the preparation of maps.	30 October 2017	1	
9. Comments and input on the draft Thematic Report on Pollution.	31 January 2017	2	
10. Comments and input on the draft Transboundary Diagnostic Analysis report.	28 February 2017	2	40 %

Duration of the Contract

The overall duration of the contract will be 11 months.

Location and Language of the Assignment

The location of the assignment will be the location that the Consultant lives. The language for all documents and reports as well as for all communication is English.

Qualification and Experience

a. Education

An advanced university (PhD) degree in chemistry or water pollution, environmental management or

equivalent is required.

b. Work Experience

The Consultant is required to have:

- Minimum 10 years of professional experience in the environmental or water sector, with emphasis on water pollution aspects.
- Proven scientific experience on: establishing monitoring networks; monitoring and analysis of samples; assessment of water quality of water bodies; preparation of related reports.

c. Key Competencies

The Consultant should have:

- Very good understanding of the EU Directives related water resources and environment management.
- Excellent written and spoken English.