



**Montenegro**

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**Ministry of Spatial Planning  
and Environment**

**REQUEST FOR EXPRESSIONS OF INTEREST  
(CONSULTANT SERVICES)**

***ALBANIA/MONTENEGRO Lake Skadar-Shkoder Integrated Ecosystem  
Management Project (LSIEMP) – TF091939 (Montenegro)***

***Development of Predictive Hydrological Model for Skadar-Shkoder Lake  
basin area***

***Contract No: MNE-LSIEMP-TF091939-QCBS-PHM-CS-10***

***General***

The World Bank is implementing agency for a GEF Grant to the Governments of Montenegro and Albania focused on Strengthening Joint Cooperation for Management of the Lake Skadar-Shkoder Ecosystem. The project complies with the strategy for bilateral cooperation on Skadar-Shkoder Lake defined in the Agreement for the protection and sustainable development of the Skadar-Shkoder Lake, signed by the Ministry of Spatial Planning and Environment (MSPE) of Montenegro, and by the Ministry of Environment, Forestry, and Water Administration (MEFWA) of the Republic of Albania.

According to the Agreement the two Governments shall work to assure equal and integrated protection for the Skadar-Shkoder Lake, and sustainable development according to the norms and standards of the European Union. The Project Development Objective is to help establish and strengthen institutional mechanisms for transboundary cooperation through joint efforts to improve sustainable management of Skadar-Shkoder Lake. The Global Development Objective is to maintain and enhance the long-term value and environmental services of Lake Skadar-Shkoder and its natural resources.

***Objectives of assignment***

The objective of this consultancy is to develop a ***predictive hydrological lake and lake basin model*** to analyze existing and expected impacts of development activities and proposals. The model will take into account the complexities of multiple sources of water and potential transport routes for pollutants into the lake, including the complex

underlying karstic systems and the interconnections among the lake, its tributaries, and groundwater.

### ***Scope of work***

Taking into account the nature of the hydrologic system affecting Lake Skadar-Shkoder, the consultant is expected to develop a predictive hydrological lake and lake basin model, with associated software, licenses, documentation, applications, and training. In particular, the model should be capable of simulating, on a monthly time step, the flow in the main tributaries of the lake, the groundwater flow in the upper, alluvial aquifer of the Zeta Plain system, the flow from underground springs discharging into the lake, the level of the water in the lake, the outflow of water from the lake, the flow in the Buna/Bojana River below the outlet, and the flow in the Drin River from the outlet of the last dam to the confluence with the Buna/Bojana River. It is intended that the model should be capable of simulating the recent conditions in the lake system as well as future developments that are proposed for the basin.

### ***Activities under this assignment***

- **Data collection;**
- **Conceptual model development;**
- **Software selection;**
- **Progress report**, detailing the activities in Tasks (1), (2), and (3) and recommendations for model development, including available data and recommended software.
- **Model development;**
- **Model calibration and validation;**
- **Model testing;**
- **Model documentation;**
- **Draft final report and training;**
- **Final report**, which includes model, software (with three licenses), and training materials.

**Implementation period should be 9 months.**

The assignment will need up to 12 person working months and will be completed within a time frame of 9 months from the contract signing.

**Technical Services Unit (TSU) for World Bank Projects under Ministry of Finance of Montenegro** now invites eligible consultants to indicate their interest in providing the services. Interested consultants must provide information indicating that they are qualified to perform the services:

1. Documents defining the constitution or legal status, place of registration, and principal place of business of the Consultant;
2. General qualifications; (Core business and years in business);
3. Consultants' organization and capacities (Technical and managerial organization of the firm);

4. Experience in similar projects (for every listed project please submit the following information: name of project, donator/investors, contract value, realization data, and contact info from donor/investor side);
5. Other documents (brochures, description of similar assignments, letters of recommendations, etc.).

Consultants may associate to enhance their qualifications. The associations should clearly indicate the form of the association (Joint-venture or sub-consultancy; member in charge; other member/s and or sub-consultants). Joint ventures should submit letters of intent indicating their intent to form a joint venture if awarded the contract and shall provide the above mentioned information for each member of the joint venture.

Evaluation criteria for short list will be as follows:

- ✚ General qualifications (Core business and years in business) – 20 points;
- ✚ Consultants' organization and capacities (Technical and managerial organization of the firm) – 20 points;
- ✚ Experience in similar projects (for every listed project please submit the following information: name of project, donator/investors, contract value, realization data, and contact info from donor/investor side) – 60 points.

A consultant will be selected following the Quality and Cost - Based Selection (QCBS) method in accordance with procedures set out in the World Bank's *Guidelines: Selection and Employment of Consultants by World Bank Borrowers* (May 2004).

Interested consultants may obtain further information at the address below during office hours **09.00 to 17.00 hours local time**.

Expressions of interest must be delivered to the address below by **February 15, 2010**.

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