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# BACKGROUND INFORMATION

## Partner country

Republic of Serbia

## Contracting authority

Provincial Secretariat for Urban Planning and Environmental Protection, Bulevar Mihajla Pupina 16, 21201 Novi Sad, Republic of Serbia

## Country background

Protected area Landscape of exceptional features "Karas - Nera" (LEF "Karas - Nera") is located in the northern part of Serbia", in the southeastern part of Vojvodina, just along the border with Romania. It territorially belongs to the South Banat District in the municipality of Bela Crkva. This Danubian border and flatland municipality extends to 353km2. Although it has a specific position, Bela Crkva is well connected with neighboring municipalities, and about 95km away from Belgrade, the capital and the most important center. On a relatively small area that includes the municipality of Bela Crkva, there are numerous natural values, such as SNR "Deliblatska peščara", Ramsar area Labudovo okno, as well as the protected area of LEF “Karas – Nera”. In the immediate vicinity of the Municipality of Bela Crkva there are several protected natural resources: Djerdap Nature Park, National Park Klisura Nera - Beusnica, Semenik National Park - Klisura Karas, National Park Domogled - Dolina Černe. In addition to ecological values, the area of LEF Karas-Nera has a favorable position for establishing ecological connectivity in the region and its practical and efficient implementation. The ecological network is one of the most important instruments for effective protection and has significant political support from many European countries, as well as Serbia. National ecological network is prescribed by the Nature Protection Act ("Official Gazette of RS", No. 36/09) and includes interconnected or spatially close ecological areas of national and international importance. LEF "Karaš-Nera" is a protected natural good of importance on the national and international level (IBA, Ramsar), the river Nera represents an ecological corridor of international significance, which runs along the border of Serbia and Romania, connecting the Carpathians and the Pannonian plains, a habitat known as "Small Sand" is a priority for protection in Central Europe. The area of the Bela Crkva in geomorphological terms is characterized by a specific Banat sandstone, the largest accumulative form of the eolian sand of the south-eastern part of the Panonian Basin. A sandstone with powerful deposits of eolian sand and expressed dune relief is a geomorphologic phenomenon not only in Vojvodina, but also in Europe, thanks to it the name "European Sahara". It represents habitats for many species of flora and fauna, which represent natural rarities in European and world proportions. The richness of the flora is reflected in the existence of about 900 species of higher plants, many of which are relics and rarities. Due to the presence of a large number of bird species, many of which are rare and endangered, this area is included in the most important bird habitat in Europe - the IBA area.

## Current situation in the sector

Not applicable.

## Related programmes and other donor activities

Not applicable.

# OBJECTIVES& EXPECTED OUTPUTS

## Overall objective

The overall objective (Impact) to which this action contributes is:

- Developing a Joint Water quality monitoring system.

- Developing the Joint Air quality monitoring system.

## Specific objective(s)

The contract should support the Provincial Secretariat for Urban Planning and Environmental Protection in the process of Specialised Analysis of air quality and water in the framework of project "Green-Path”, financed under INTERREG IPA Romania-Serbia 2021 – 2027 Programme.

## Expected outputs to be achieved by the contractor

The expected outputs of this contract are as follows:

* Output 1: Water pollution monitoring system.
* Output 2: Air pollution monitoring system.

All services provided under this contract must be in accordance with INTERREG-IPA CBC Romania-Serbia Programme visibility requirements.

# ASSUMPTIONS & RISKS

## Assumptions underlying the project

Not applicable.

## Risks

Not applicable.

# SCOPE OF THE WORK

## General

### Description of the assignment

The assignment under this contract should support the Provincial Secretariat for Urban Planning and Environmental Protection in the process of Specialised Analysis of air quality and water in the framework of project "Green-Path”, financed under INTERREG IPA Romania-Serbia 2021 – 2027 Programme.

### Geographical area to be covered

Republic of Serbia, South Banat District and in the INTERREG ROM SRB Programme area.

### Target groups

General public.

## Specific work

For professional implementation of the Specialised Analysis Service for project Green-Path, the Contracting Authority reserves the right to make minor changes regarding the task description of this ToR, as not all details can be known at this stage of preparation. Any changes will be communicated to the Consultant at the latest 7 days prior to the date of the event.

The service should include the following tasks:

**TASK 1: Developing a Joint Water quality monitoring system.**

Development of a joint water quality monitoring system. Monitoring will be carried out on both sides of the border. Sampling will be carried out at 3 points on the Nera River and 3 points on the Karaš River, and additional water samples from the Apa Mare River and the Sacinez Wetland area will be provided by Excelsior and processed and analysed by external experts in accordance with established procedures related to safety and sample collection procedures with appropriate equipment. Storage will be carried out in dark bottles under controlled conditions, not above 4°C for more than 30 minutes after the actual sampling from the river until measurement. Samples will be georeferenced and time-stamped. Analyses will be carried out using optical analysis methods for ppm level detection, designed to work with real samples for rapid assessment of pollution levels. The parameters to be measured are: oxygen demand (HPK), heavy metals such as lead, chromium, cadmium, zinc, copper, manganese, molybdenum, along with nitrates, nitrites, cyanides, sulphates, sulphides, organic acids, total hardness, phenolic index, ammonia, fluorine, chlorine oxide, total free chlorine, pH value, toxicological analyses of water and atrazine. Such an in-depth analysis will examine almost all possible sources of urban and industrial origin, in the range of levels that do not pose a problem or require urgent measures, in accordance with regulations.

The samples to be taken for analysis, the data to be processed, and the database to be created by experts. These data will be used to identify sources of pollution, classifying those that come from industry, urban areas or may occur naturally as a result of floods, soil/biological activities or natural disasters, prioritize lists of pollutants for optimized monitoring based on regulations related to the prescribed laws of both countries, assess the effect of implemented measures to improve water quality, build a synchronized basis for the development of reliable prediction models in the cross-border area.

**TASK 2: Developing the Joint Air quality monitoring system.**

Air quality monitoring system will include air quality monitoring at the two phases. The database will include measures from different kinds of mobile monitoring systems (from the mobile automatic station). Data gathering and managing data with the Air pollution monitoring station, for: a continuous measure of SO2, continuous measures of N-oxides, continuous measures of CO, continuous measures of O3, continuous measures of PM10 and PM2.5. Comparative data will include the data obtained through different monitoring systems and need to be compared in common parameters that will be used to review the overall state of air quality. Prepared information for the online interface for the general public. Monitoring results will be promoted in on future project events, the project websites, and project social network platforms (Facebook).

All activities must comply with the latest version of the Visual Identity Manual of the INTERREG ROM SRB Program (available at: Visibility – Interreg IPA Romania – Serbia Program 2021 – 2027 (romania-serbia.net)) if relevant.

The service will be contracted for approx. 11 months period of project implementation (from contract signature until project closure).

## Project management

### Responsible body

Provincial Secretariat for Urban Planning and Environmental Protection, Bulevar Mihajla Pupina 16, 21201 Novi Sad, Republic of Serbia.

### Management structure

The responsible person for implementation of the tasks related to this contract, in the Contracting Authority is Legal representative of the Provincial Secretariat for Urban Planning and Environmental Protection.

### Facilities to be provided by the contracting authority and/or other parties

Not applicable.

# LOGISTICS AND TIMING

## Location

Tasks related to this contract will be implemented in Republic of Serbia, South Banat District and in the INTERREG ROM SRB Programme area.

## Start date &period of implementation of tasks

The intended start date is the date of signature of the contract by both parties and the period of implementation of the contract will be 11 months from this date (from contract signature until project closure). Please see Articles 19.1 and 19.2 of the special conditions for the actual start date and period of implementation.

# REQUIREMENTS

## Staff

Note that civil servants and other staff of the public administration of the partner country, or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

### Key experts

Key experts are defined and they must submit CVs and signed statements of exclusivity and availability.

All experts who have a crucial role in implementing the contract are referred to as key experts. The profiles of the key experts for this contract are as follows:

**Key expert 1:** Expert for water analysis and environmental impact of pollution

Qualifications and skills

• University degree in Environmental sciences/engineering, environmental chemistry or environmental engineering;

• Computer skills – Windows, Office and Internet;

• Serbian and English language fluency.

General professional experience

• Min. 3 years, and preferably 5 years of general professional experience.

Specific professional experience

• Professional experience in quantification of water pollution and estimation of impact on the environment, data manipulation and evaluation of results with relevant standards for water quality: min. 2 years, preferably 4 years.

**Key expert 2:** Expert for air quality analysis and environmental impact of pollution

Qualifications and skills

• University degree in natural sciences;

• Computer skills – Windows, Office and Internet;

• Serbian and English language fluency.

General professional experience

• Min. 3 years, and preferably 5 years of general professional experience.

Specific professional experience

Professional experience in collecting and processing data obtained through the analysis of data from automated devices and evaluation: min. 2 years, preferably 4 years.

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

### Other experts, support staff & backstopping

CVs for experts other than the key experts should not be submitted in the tender but the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles. The contractor shall select and hire other experts as required according to the needs. The selection procedures used by the contractor to select these other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience.

The costs for backstopping and support staff, as needed, are considered to be included in the tenderer's financial offer.

## Office accommodation

Office accommodation for each expert working on the contract is to be provided by the Consultant.

## Facilities to be provided by the contractor

The contractor shall ensure that experts are adequately supported and equipped. In particular, it must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion.

## Equipment

**No** equipment is to be purchased on behalf of the contracting authority / partner country as part of this service contract or transferred to the contracting authority / partner country at the end of this contract. Any equipment related to this contract which is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

# REPORTS

## Reporting requirements

The Consultant will submit the following reports in English and Serbian in one original and 2 copies:

* **Interim reports** shall be submitted in December 2025 – January 2026 and May - June 2026. The approval of interim reports will be the basis for issuing respective interim payments as indicated in the Special Conditions. The interim reports must be provided along with the corresponding preform invoice.
* **Final report** at the end of the contract, upon all contract results have been achieved. The approval of the final report by the Contracting Authority will be the basis for issuing final payment as indicated in the Special Conditions. The final report must be provided along with the corresponding invoice.

## Submission and approval of reports

The report referred to above must be submitted to the Contracting Authority identified in the contract. The Contracting Authority is responsible for approving the reports.

# MONITORING AND EVALUATION

## Definition of indicators

Services provided in timely, quality and quantity manner, as required in these Terms of Reference.

## Special requirements

Not applicable.