Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

# GROUNDWATER MANAGEMENT, USE AND PROTECTION PROGRAMME (GWP) IN NORTH MACEDONIA

## Phase 1
## January 2024 – December 2027

# Development of GIS Water Information System for Vardar River basin Management Planning and Upgrade of the Groundwater Database Management System (GWDBMS)

## RFP-02-2026

## Request for Proposal

## July 2026

SKAT Partners for Impact

Point Pro Consulting

# Table of Contents

*Invitation form* ..... 3
*Description of requirements* ..... 5
*Annex 1: Term of Reference* ..... 7
*Annex 2: Bidder Submission Form* ..... 18
*Annex 3: Bidder Information Form* ..... 19
*Annex 4: Qualification Form* ..... 20
*Annex 5: Technical Proposal Form* ..... 21
*Annex 6: Financial Offer Form* ..... 23
*Annex 7: Evaluation Criteria* ..... 25
*Annex 8: General Terms and Conditions for Contracts* ..... 28

## Invitation form

| | |
|---|---|
| **Programme title:** | Groundwater Management, Use and Protection Programme (GWP) in North Macedonia – Phase 1 |
| **Reference:** | **Development of GIS Water Information System for Vardar River basin Management Planning and Up-grade of the Groundwater Database Management System (RFP-02-2026)** |
| **Internal code:** | *Activity 3.2-4 Creating monitoring and GIS datasets and upgrading the water information system.* |
| **Type of contract:** | Contract for Consultancy Services |
| **Duty station:** | Skopje, North Macedonia / Home office |
| **Duration of contract:** | 7 months |
| **Announcement date:** | 2 June 2026 |
| **Submission deadline:** | 16 June 2026 16.30 CET |

Dear Sir / Madam:

The "Groundwater Management, Use and Protection Programme (GWP)" (hereinafter the Programme or GWP) kindly invite you to submit your Proposal in MKD (VAT excluded) for **Development of GIS Water Information System for Vardar River basin Management Planning and Up-grade of the Groundwater Database Management System**. The proposal must be submitted electronically before 16.30 CET on 16 June 2026 to the following dedicated email:

**northmacedonia@skat.ch**

Please note that technical and financial offers must be submitted electronically to the dedicated email.

**Please use the following e-mail subject: Development of GIS Water Information System for Vardar River basin Management Planning and Up-grade of the Groundwater Database Management System (RFP-XX-2026)**

**The technical offer must be submitted in one PDF document. The financial offer must be submitted in one file as well and encrypted with a password. The financial offer shall be DIGITALLY signed or signed and scanned in the .pdf format.**

**Max. size of uploaded files (per document) must not exceed 20 MB**

**Password for Financial Offer shall be provided to GWP ONLY upon conclusion of the deadline and required by e-mail[1].**

Companies failing to meet this requirement will be disqualified. Your Proposal must be valid for a minimum period of 60 days, after the deadline of the submission of the proposals.

[1] Password protection of a PDF document can be done by using free software, such as Adobe Reader for example. Open the PDF and choose Tools > Protect > Encrypt > Encrypt with Password. Companies that will pass the technical evaluation will be approached by GWP to share the passwords to the financial offers.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the email address above on or before the deadline. Proposals that are received after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of this procurement.

Any discrepancy between the unit price and the total price shall be re-computed by the GWP Programme, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on GWP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by the GWP after it has received the Proposal. At the time of Award of Contract or Purchase Order, the GWP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five percent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any contract that will be issued as a result of this RFP shall be subject to the General Terms and Conditions indicated herein. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of the GWP (see Annex 9).

Please be advised that the GWP is not bound to accept any Proposal, nor award a contract, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

The GWP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to the GWP if you, or any of your affiliates or personnel, were involved in the preparation of the Terms of References, or other requirements, cost estimates, and other information used in this RFP.

Thank you and we look forward to receiving your Proposal.

## Description of requirements

| | | |
|---|---|---|
| 1 | **Brief Description of the Required Services** | The objective of the assignment is implementation of phase 1 of the roadmap including establishment of WIS as the official environment for the presentation, dissemination and public participation for the Vardar river basin management plan. |
| 2 | **List and Description of Expected Outputs to be Delivered** | Refer to the main deliverables and indicative timetable described in the Terms of Reference. **All deliverables shall be submitted in English language.** |
| 5 | **Expected duration of work** | 6 months after the signing of the contract |
| 6 | **Target start date** | July 2026 |
| 7 | **Estimated completion date** | December 2026 |
| 8 | **Language of the Proposal** | English |
| 10 | **Travels Expected** | No travel is expected during the assignment. |
| 11 | **Implementation Schedule indicating breakdown and timing of activities/sub-activities** | ☒ Required<br>☐ Not Required<br>[A detailed breakdown/timeline of activities needs to be included as part of the company's methodology reflecting the main requirements from the Terms of Reference] |
| 12 | **Names and curriculum vitae of individuals who will be involved in completing the services** | ☒ Required<br>☐ Not Required |
| 13 | **Currency of Proposal** | ☐ Other currency (if required)<br>☐ CHF<br>☒ MKD |
| 14 | **Value Added Tax on Price Proposal[2]** | ☐ must be inclusive of VAT and other applicable indirect taxes<br>☒ must be exclusive of VAT and other applicable indirect taxes |
| 19 | **Validity Period of Proposals *(Counting for the last day of submission of quotes)*** | ☒ 60 days<br>☐ 90 days<br>☐ 120 days |
| 20 | **Partial Quotes** | ☒ Not permitted<br>☐ Permitted |
| 21 | **Payment Terms** | The payment schedule will be based on instalments as per contractors agreed methodology in the signed contract. |
| 22 | **Type of Contract to be Signed** | ☒ Contract for Professional Services<br>☐ Other Type of Contract [pls. specify] |
| 23 | **Evaluation Method for the Award of Contract** | ☒ Combined Scoring Method (based on the 70% technical offer and 30% price weight distribution)<br>☒ Full acceptance of the GWP's Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of the services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal. |
| 24 | **Criteria for the Assessment of Proposal** | Technical Proposal (70%)<br>☒ The expertise of the Firm 200<br>☒ Methodology, its appropriateness to the ToR and timeliness of the implementation plan 200<br>☒ Qualification of Key Personnel 300<br>Financial Proposal (30%) To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by the GWP. |

[2] The GWP is VAT exempt in the country and all activities implemented by the Programme directly or through contracts are also VAT exempt.

| | | |
|---|---|---|
| **25** | **GWP will award the contract to** | ☒ One and only one Service Provider<br>☐ One or more Service Providers, depending on the following factors |
| **26** | **Contract General Terms and Conditions[3]** | General Terms and Conditions for contracts (goods and/or services) |
| **27** | **Annexes to this RFP** | ☒ Annex 1: Terms of Reference<br>☒ Annex 2: Bidder Submission Form<br>☒ Annex 3: Bidder Information Form<br>☒ Annex 4: Qualification Form<br>☒ Annex 5: Technical Proposal Form<br>☒ Annex 6: Financial Proposal Form<br>☒ Annex 7: Evaluation Criteria<br>☒ Annex 8: General Terms and Conditions for Contracts |
| **28** | **Contact for Inquiries (Written inquiries sent by email only)[4]** | **Email to: northmacedonia@skat.ch**<br><br>Any delay in the GWP's response shall be not used as a reason for extending the deadline for submission unless the GWP determines that such an extension is necessary and communicates a new deadline to the Proposers. |
| **29** | **Deadline for Submission of requests for clarification** | 5 working days before the deadline for submission of offers. |
| **30** | **Manner of Disseminating Supplemental Information to the RFP and responses/clarifications to queries** | By e-mail to the requesting bidder |
| **31** | **Documents to be submitted** | ☒ Copy of the registration from relevant Registry in the country of origin defining the constitution or legal status, place of registration, and principal place of business; (no translation required)<br>☒ Annex 2: Bidder Submission Form<br>☒ Annex 3: Bidder Information Form<br>☒ Annex 4: Qualification Form<br>☒ Annex 5: Technical Proposal Form including CVs of proposed experts for the assignment, as per the qualification requirements in the TORs<br>☒ CVs of proposed experts for the assignment, as per the qualification requirements in the TORs<br>☒ Annex 6: Financial Proposal Form<br>☒ Quality Certificates: ISO 9001– Quality Management System; ISO 20000 – IT service management system and ISO 27001– Information security management system)<br><br>☒ Annex 8: General Terms and Conditions for Contracts |
| **32** | **Other** | Maximum budget for this assignment is MKD 5.500.000. The GWP Programme holds the right to eliminate offers exceeding the maximum available budget for this contract. |

[3] Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

[4] This contact person and address is officially designated by the GWP. If inquiries are sent to other person/s or address/es, even if they are GWP staff, the GWP shall have no obligation to respond nor can the GWP confirm that the query was received.

# Annex 1: Term of Reference

## Development of GIS Water Information System for Vardar River basin Management Planning and Upgrade of the Groundwater Database Management System (GWDBMS)

### BACKGROUND

Although groundwater in North Macedonia is of high strategic importance (e.g. as source of 77% of the drinking water supply), it has not been recognized as such and is therefore **not adequately used, managed and protected.** The responsible institutions **do not have sufficient and adequate capacity;** there is a lack of background information, knowledge and tools for the protection, planning and monitoring of groundwater resources and the legal framework is incomplete. In addition**, low awareness of the status of groundwater** is reflected in low public pressure and weak mobilization of the public and civil society on groundwater management issues.

The Swiss-funded Groundwater Management, Use and Protection Programme (GWP) aims to build long-lasting groundwater governance capacities at national and local levels so that North Macedonia can take appropriate and effective actions to sustainably manage its groundwater resources to achieve its social and economic development goals while avoiding irreversible degradation of its aquifer systems. The overall objective of the GWP is to strengthen relevant authorities and raise awareness among civil society to implement the provisions of an integrated framework coherent with the requirements of the EU environmental acquis for the sustainable management of ground-water resources in a changing climate.

Phase 1 is designed to establish the basis for a long-term transformation of groundwater (GW) management. The development of the Vardar River Basin Management Plan (RBMP) covering about 80% of the total GW bodies (68 out of 80 municipalities with around 86% of country population) will be used as the main tool for capacity development of national and local institutions and awareness raising. Phase 1 shall create the institutional and legal conditions and the knowledge base for managing groundwater in an integrated manner. The expected results of Phase 1 (2024- 2027) include (a) strengthening the competencies of key institutions and stakeholders for integrated and sustainable groundwater management; (b) harmonizing and consolidating the legal framework; (c) developing the Vardar RBMP; and (d) implementing pilot projects with farmers, public utilities, the private sector and municipalities.

Several critical gaps impede effective planning and management of surface and groundwater bodies in the Vardar River Basin, the most significant being the absence of a formally adopted Vardar River Basin Management Plan aligned with EU water legislation (WFD and GWD). The river basin management plan is one of the most comprehensive and integrated documents developed by the public administration. It must not only assess the current state but also summarize recent developments and project conditions for the next six years. For the Vardar River Basin which spans approximately 80% of the country, the plan provides critical and site-specific data to support water management decisions. The planning process aims to protect and enhance the environment, promote efficient water use, and safeguard against floods and droughts. Achieving these objectives requires robust management, active stakeholder engagement, and rigorous data analysis, ensuring a cohesive, thorough process and high-quality documentation.

Backed with comprehensive technical review of all available documents pertaining to Vardar River Basin management planning which was conducted by team of internal and external experts from the GWP program, it was decided by the Ministry of Environment and Physical Planning as competent authority (CoA) for River Basin management planning to develop new plan. The process of development of the new plan is foreseen as coordination and implementation of key four categories of sub-projects as set of activities identified as shortcomings in the reviewing process. The sub-projects, which will serve as the core components of the River Basin Management Plan include: 1) **"River basin management"** (Focused primarily on the administrative aspects of the planning process, this subproject coordinates activities across other subprojects, manages stakeholder engagement, ensures process coherence and thoroughness, and oversees the drafting of key documents); 2) **"Development of classification system for surface and groundwater bodies"** (Development of an innovative WFD-based approach for assessing water quality in North Macedonia, involving an in-depth biological and chemical analysis of field data.); 3) **"Development of study on**

**pressures and Impact to the surface and groundwater bodies"** (Development of tools, models, and foundational resources to support informed decision-making in water management.); 4) Subproject **"Development of water information system"** (Providing robust support for comprehensive data collection, management, and sharing to ensure an efficient planning process, while facilitating foundational integration and alignment across activities.)

## RATIONALE

The Water Information System proposed for the Vardar River Basin Management Plan is envisioned as the central, integrating platform that will support comprehensive data collection, management, analysis and sharing across all basins sub-projects. Its purpose is to consolidate biological, chemical, hydrological and administrative data to enable visualization, classification and assessment in line with the Water Framework Directive, provide models and tools to understand pressures and impacts on water bodies, and supply real-time and historical data to support evidence-based decision-making and stakeholder engagement.
Recently the programme has developed plan/road map[5] which provides comprehensive and technically detailed plan for the systematic upgrade of the Groundwater Data Management System (GWDMS), including recommendations and technical details for implementing the required functional modules of the fully developed WIS. Comparative assessment of how the existing IT and GIS systems align with, support or partially fulfil the functional and technical requirements of the future Water Information System (WIS) was conducted. The assessed platforms include Groundwater Data Management System (GWDMS), the National Environmental Information System (NEIS), the Water Quality Platform and the Digital Water Book, as well as the GIS systems under development within the MoEPP. All of them contribute to certain WIS functionalities, but their capabilities and architectural maturity differ significantly compared to the needs of a fully integrated WIS. As outcome of this assessment, the roadmap suggests implementation of the WIS as a phased and scalable approach designed to build a solid operational foundation while ensuring long-term interoperability with other national systems and EU-level reporting platforms.
There are many priorities, criteria and institutional statuses (historical, ongoing and planned) that are combined in this proposal in order to provide seamless building of a fully-fledged WIS. This proposal will not only provide straightforward building steps of WIS, providing the necessary functionalities, but also will utilize all other relevant IT systems to be utilized and supported, as a part of the overall WIS platform. It should be clearly stated, WIS is not a stand-alone IT system, rather, it is a part of the broader mosaic that utilizes data and functionality from other systems, while maintaining the core functionalities required by WFD and WISE reporting schemas. Three phases are foreseen as interlinked scalable solution for development of national water information system.

PHASE 1: Establishment of WIS as the official environment for the presentation, dissemination and public participation for the Vardar RBMP. This phase will position the WIS as the official environment for presentation, dissemination and public participation related to the Vardar River Basin Management Plan (RBMP), while establishing the core datasets, structures and workflows required for future system expansion. This process will be performed by upgrading of the existing GWDMS. Successful implementation of this phase is essential for ensuring that the WIS becomes the central and authoritative platform for RBMP-related information and that all technical and organisational preconditions are in place for Phase 2 development without the need for structural redesign or reconfiguration.

**PHASE 2:** Establishment of **WIS as the national integration platform for water-related information**.
This phase includes interoperability with key national IT systems — NEIS, the Water Quality system and the Spatial Information Service. Together with the implementation of core WIS technical modules, the establishment of harmonised nomenclatures at national level and the introduction of standardised automatic, semi-automatic, and manual data exchange processes. Through these actions, WIS will function as the central point for integration, management and controlled dissemination of water-related data at national level. The phase will enable structured data exchange and interoperability across institutions responsible for water monitoring, spatial data management, environmental reporting, and planning. Successful implementation of Phase 2 will ensure consistent, reliable, and secure data flows between participating institutions, support national and EU reporting obligations, and establish the technical and organisational framework required for long-term operation and further expansion of the WIS.

[5] https://docs.google.com/document/d/1Lio8OjUP6UOSrdqdYU-WUAraTzNmvGx9a/edit?usp=drive_link&ouid=114888329893883649351&rtpof=true&sd=true

**PHASE 3**: Establishment of WIS as a fully operational national platform that supports **EU-aligned water management processes.**

This phase includes the implementation of automated and/or semiautomatic WFD and WISE reporting, systematic monitoring of RBMP implementation, advanced data processing and analysis, as well as transparent public access to water-related information. Through these developments, the WIS will operate as a long-term and sustainable tool supporting national planning, regulatory compliance and cross-institutional coordination in the water sector. It will enable structured reporting to EU frameworks, improve data availability for decision-making, and strengthen transparency and public engagement in water management. Completion of Phase 3 will transform the WIS from a repository of RBMP outputs into a comprehensive, interoperable, and future-proof national Water Information System, fully integrated with national processes and aligned with EU water policy and reporting requirements.

## SCOPE OF WORK

The objective of the assignment is implementation of phase 1 of the roadmap including establishment of WIS as the official environment for the presentation, dissemination and public participation for the Vardar river basin management plan.
It is expected the consultant to work in close collaboration with the GWP programme in the definition of detailed functional requirements and therefore in the development and implementation of the platform in line with the findings and recommendations from the conducted gap assessment of the road map and hence, in the development and implementation of the WIS platform.

## DUTIES AND RESPONSIBILITIES

### Task 1: Redesign and upgrade of GWDMS to store all RBMP datasets

This task shall include the redesign, upgrade and implementation of the relational database model underpinning the Water Information System (WIS), building upon the current GWDMS database structure and in line with the approved system functional requirements. In particular, the following activities have to be implemented:

- Upgrade and extend the existing GWDMS database model to support all spatial and tabular datasets required for the preparation, implementation and future updates of River Basin Management Plans (RBMPs), including, as a minimum, the Vardar River Basin Management Plan.
- Ensure that the upgraded database model enables WIS to store, manage, and integrate all datasets collected and produced throughout the planning and management lifecycle[6].
- Design and implement a scalable and extensible data model capable of supporting additional river basins and future RBMP cycles without requiring structural redesign.
- Implement a clear separation between spatial and attribute data, ensuring that spatial datasets contain only the identifiers, where possible, required by the business logic to enable linking and integration with corresponding tabular (attribute) data stored in the RDBMS.
- Define, implement, and manage common nomenclatures, code lists, classification schemes, and reference tables, which shall be centrally managed, reusable and accessible for integration with other national systems.
- Expose relevant datasets and reference data through secure API services, implemented as part of the WIS business logic, to enable controlled and standardised access by authorised institutions and external systems.

[6] Preliminary list of data is included in the Annex 1 of the roadmap (link to the roadmap provided in footnote 5. Precise datasets and their detailed attributes are under development by the GWP inhouse experts and will be finalized as part of the ongoing process of Vardar River basin management plan development. However, in the early stage of WIS development, the contractor with help of the GWP program will be guided on the detailed expected datasets which will be uploaded on the platform as responsibility of the contractor. **NOTE: It is not envisaged the contractor to collect any additional data or provide effort for such aim.**

- Implement database-level security, integrity and management mechanisms, including role-based access control, transaction logging, backup and recovery procedures
- WIS for each dataset in the database, must provide the following information:
    - Timestamp indicating when that dataset was included in the database.
    - Audit logs for all actions on the specific dataset. Automatic data recovery of logged data is not required.
    - Reporting period, where applicable, related to the 6-years reporting requirements under the WFD.
- The Consultant has to provide testing server with online access that will be granted to authorized users, specified by GWP team. Software version on this server has to be updated with the new software version two times per month, or as agreed.
- Deployment of WIS will be on the servers and IT environment specified and provided by the Beneficiary, which shall be made available to the Contractor not later than one (1) month prior to the official WIS handover.
- Final testing and acceptance will be performed on the deployed WIS solution. In the event that the Beneficiary does not provide the required IT environment within the specified timeframe, final testing and acceptance shall be performed on a testing server provided by the Contractor.

***Task 2: Authentication* and *Authorization module upgrade***

This task shall include the assessment of the existing module for authentication and authorization within GWDMS and, if necessary, its upgrade to support the requirements of the Water Information System (WIS).

***Task 3: Establish permanent identifiers (keys) for all relevant RBMP elements***

This task comprises two components: (i) activities to be implemented by the Contracting Authority (MoEPP, WD) and (ii) activities to be implemented by the Implementing Entity:

- Define and approve the list of feature types that require permanent and stable identifiers, within the RDMS structure of WIS. Permanent identifiers have to be established for all key entities used throughout the RBMP planning and implementation process, including but not limited to:
    - Surface water bodies;
    - Groundwater bodies;
    - Monitoring sites / stations;
    - Pressures (point, diffuse, hydro-morphological);
    - Impacts / risk assessment units;
    - Protected areas;
    - Measures (Programme of Measures items);
    - Reporting units (RBD, sub-units, UoMs) etc.

- Provide and implement the database structures, APIs and system functionalities required to manage permanent identifiers for all relevant RBMP elements. This shall include:
    - Provide functionalities for creation, storage and management of permanent identifiers within the RDBMS;
    - CRUD operations for authorised creation and maintenance of identifiers;
    - Security mechanisms to prevent unintended deletion or modification of identifiers, including detailed logging and recovery capability;
    - Mechanisms ensuring stability and persistence of identifiers across system updates and future RBMP cycles;
    - Development and implementation of API services enabling authorised national institutions and IT systems to access and use permanent identifiers in a controlled and standardised manner.

## *Task 4: Upgrade spatial data management*

This task includes the upgrade, configuration and utilisation of the existing GIS module implemented within GWDMS to support all spatial data management requirements of the Water Information System (WIS). The implemented solution shall build upon the current GWDMS spatial data organisation framework and extend it where necessary to ensure proper storage, validation, management, publication and controlled access to all GIS datasets.
As part of the system and database design, define and implement the spatial data storage structure as follows:

- Configure storage of all core vector spatial datasets (point, line, polygon layers required for relational linking, querying and reporting) within the central database, where applicable and suitable for further utilization.
- Configure and organize the storage of large raster and reference datasets (e.g. DEM/DTM, orthophotos and similar high-volume layers) within the file system.
- Ensure linkage between database-stored spatial layers and related tabular data through permanent identifiers.
- Consider the intended use of each spatial dataset within WIS and organize spatial datasets according to their primary use cases: visualisation, spatial analysis, modelling, filtering and reporting.

The system has to implement controlled mechanisms for upload, basic validation, storage and download of GIS datasets:

- Provide two upload/download options:
  - Direct import/export to database or file system (restricted to specialized technical administrators);
  - Managed upload/download through dedicated API services and WIS business logic.
- Audit and traceability: log all upload, modification and download operations.

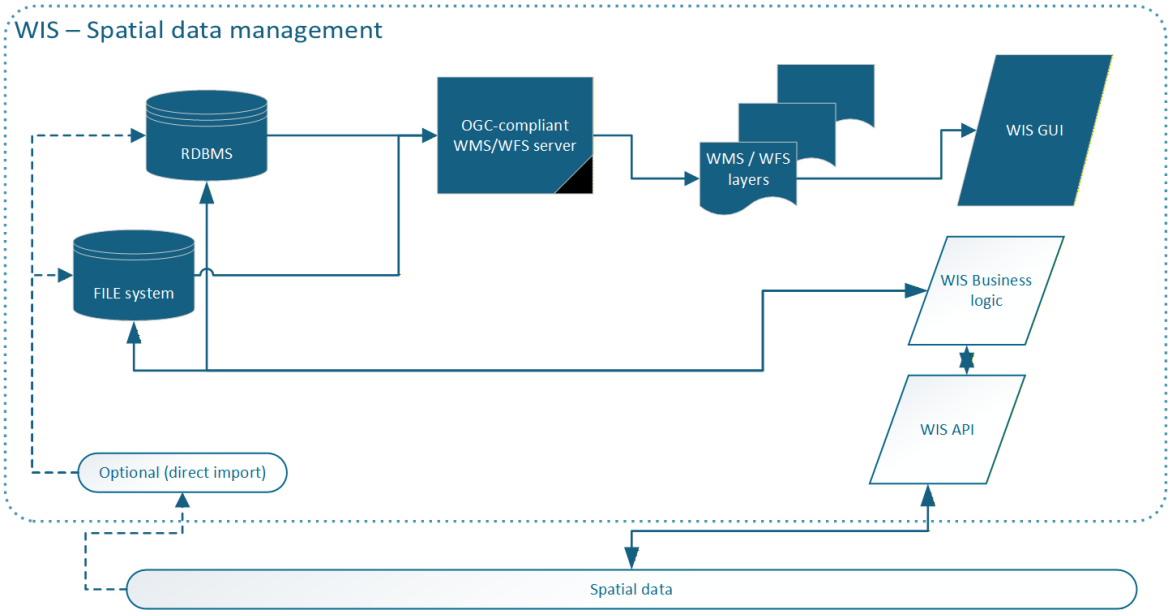



FIGURE 6: SPATIAL DATA MANAGEMENT IN WIS

REST-based Web API endpoints have to provide structured and controlled access to spatial datasets:

- Allows system-to-system integration with external applications (WEB, desktop or mobile), modelling tools and analytical platforms.
- Supports filtered and parameterised queries, enabling efficient retrieval of subsets of spatial data (e.g., by water body ID, bounding box, RBMP cycle).
- Allows retrieval of dataset versions, based on datasets timestamps and reporting periods.

***Task 5: Metadata Governance***

Metadata governance is essential for ensuring that all RBMP spatial datasets within the WIS are traceable, interoperable and compliant with EU data standards. Metadata management within the WIS is primarily associated with spatial datasets and spatial data services, in accordance with INSPIRE requirements. WFD and WISE reporting require full transparency on data origins, methodologies, quality elements and update cycles, while INSPIRE defines mandatory metadata elements enabling dataset discovery, harmonisation, and cross-institutional data exchange.

Each spatial dataset stored or published through the WIS should include at least the following metadata elements:

- Dataset identification: Title, description, thematic category, RBMP cycle, and unique dataset identifier.
- Spatial and temporal extent: Geographic coverage (bounding box, water body ID scope) and reference period or monitoring interval.
- Lineage and source information: Origin of the data, data providers, acquisition methods, processing steps, and quality assurance procedures.
- Update and versioning information: Date of creation, date of last update and reporting period.
- Technical specifications: Geometry type, coordinate reference system, mandatory attributes, and links to nomenclatures, if applicable.
- Data quality elements: Accuracy statements, completeness assessments, validation notes or known limitations.
- Access and use conditions: Licensing, access constraints (public/restricted/internal), and applicable data policies.
- Responsible organisation: Contact details and institutional responsibility for maintenance and updates.

***Task 6. Upgrade of Water book processes (Permits)***

The contractor has to implement, in addition to existing workflow management, full evidence of the issued permits The following actions need to be performed:

- Review the completeness of supported processes.
- Provide option for recording of issued permits according to the Water Book. This record should be available in both situations:
  - When users are following relevant workflow. In this situation, system should provide possibility to record issued permit that is related to the Water Book after completing the workflow.
  - Manual entry of the issued permit, without following the steps in the relevant workflow. In this case, the permit should have information that it is manual entry.
- All issued permits that are part of water book and that are not confidential should be accessible on the public portal.

***Task 7: Public and Internal WEB portal(s)***

The GWDMS, and its upgrade to WIS, is implemented as a web-based solution comprising two distinct web portals: an Internal WEB Portal and a Public WEB Portal. The Internal Portal is already operational within the existing GWDMS platform and have to be upgraded with additional functionalities defined under the tasks described above. In contrast, the Public Web Portal represents a new component that needs to be developed.

The Public Web Portal has to be built as one of the key WIS modules, providing a modern, intuitive and interactive environment that enables easy access to RBMP-related spatial information and supports active public and stakeholder participation in the planning process. The portal shall offer a combination of map-based exploration tools, dashboards, data presented in tables and charts based on selection criteria, as

well as user interaction functionalities tailored to different user groups, including the general public, technical experts, institutions, and decision-makers. Access to both portals shell be role-based including, but not limited to:

- General Public: access to visualisation tools, dashboards and public RBMP information, ability to provide feedback via participation module, access to generalised GIS layers and approved WMS/WFS services. AT the moment, there is no available public user that could access the WEB portal;
- Technical Users (Institutions, Consultants): access to operational layers, extended attributes and results datasets, ability to export datasets via WFS or through API endpoints, tools for more advanced querying and analysis.
- Administrators / In-house GIS Experts: full access to dataset management, uploads, validations, and publishing tools, access to version history, metadata editing, QA/QC tools, ability to configure dashboards and user permissions.

Interactive Map Viewer is a core and essential component of the WIS, serving as the primary interface for spatial data visualisation, exploration, and interpretation for both internal users and the public. It is the main tool for accessing, analysing and communicating RBMP-related geospatial information and therefore plays a central role in supporting planning, decision-making, and stakeholder engagement.

The Interactive Map Viewer is already available within the existing platform. However, given the planned changes in GIS data organisation, access levels, and data integration workflows, the Map Viewer will need to be redesigned and extended. The redesigned Map Viewer shall support thematic, role-based, and performance-optimised access to spatial datasets relevant for RBMP preparation and implementation. The Map Viewer shall provide, at a minimum, the following functionalities:

- Display of thematic group of layers, including (but not limited to): surface water bodies, groundwater bodies, monitoring stations, protected areas, pressures, hydrological features, programme of measures, and other RBMP-relevant spatial datasets.
- Standard map interaction functionalities, including:
    - Turning layers on and off and grouping layers by thematic topics;
    - Zooming, panning, and location search (by coordinates, place name, or water body identifier);
    - Feature identification by clicking on spatial objects (e.g. river segments, monitoring points), with display of associated attributes, descriptions, photos, documents, and hyperlinks;
    - Overlaying multiple layers to analyse relationships between monitoring results, pressures, ecological status, and measures.
- Download and data access for users
- Download selected datasets in GIS formats (GeoJSON, GPKG, SHP) or tabular data, as per authorization status;
- Use WMS/WFS and API links for use in external applications (QGIS, modelling tools).
- Public Participation Module – User Interaction and Feedback

In accordance with the Water Framework Directive (WFD) requirements for active public participation (Article 14), the WIS Public Portal shall include a dedicated User Participation Module to facilitate transparent consultation and stakeholder engagement throughout the RBMP planning cycle.

The module shall provide functionalities enabling registered citizens, NGOs, and institutions to:

- Access and download draft RBMP documents directly from the portal;
- Navigate to relevant interactive maps;
- Submit comments or proposals related to specific locations, water bodies or chapters of the RBMP;
- Track the status of their submitted comments (“received”, “reviewed”, “incorporated”, etc.).

***Task 8: Training on the use and operation of Water Information System***

The contractor will provide a training to the staff of MoEPP departments (Water department, NEIS department, HMS, etc. and other related stakeholders on the use and operation of the WIS. Training has to be provided on the number of participants proposed by the primary Beneficiary- MoEPP.
Training should provide sufficient knowledge and skills to system end users, operators and system support personnel to enable system use and management with maximum efficiency. The training should cover all the work steps that are necessary in the process of using the software platforms. The design of the training should be made based on analyses of specific requirements of different categories of people who need to be trained. Training should have, as a minimum: 1) Training for system administrators (all levels) and 2) Training for the WIS end users grouped and organized by modules. The contractor will prepare training material on the use and operation of the IFIS and support the successful implementation of the event.

***Task 9: Non-Functional Requirements (Performance, Capacity and Availability)***

In addition to the functional requirements set out under Tasks 1–7, the WIS shall comply with the following minimum non-functional requirements (NFRs). These requirements apply to the deployed production system, with the Public Web Portal and Interactive Map Viewer as the primary reference and shall be verified as part of final testing and acceptance[7].

- **Concurrent users and capacity.** The Public Web Portal and Interactive Map Viewer shall support a minimum of 20 simultaneously active users performing map operations (pan, zoom, layer toggle, feature identification, attribute query). The Internal Web Portal shall support a minimum of 30 simultaneously active authenticated users
- **Data volume and rendering capacity.** Raster basemap and thematic raster layers shall be served via a tile cache mechanism compatible with standard map clients (XYZ, WMTS or equivalent).
- **Client compatibility.** The Public Web Portal and Map Viewer shall function correctly on the two most recent stable versions of each of the following browsers at the time of final acceptance: Google Chrome, Mozilla Firefox, Microsoft Edge, and Apple Safari. The portal shall implement responsive design.

Verification of compliance with the NFRs set out in this Task shall be a precondition of final acceptance of the WIS. The Contractor shall prepare the NFR Compliance Report structured against listed requirements. The NFR Compliance Report shall be submitted together with the Final Report.

***Task 10: Presentation and Dissemination of Findings to Relevant Institutions and Stakeholders***

To ensure transparency, institutional alignment, and stakeholder engagement, the consultant shall organize and deliver structured presentations during the process of development of the WIS system. These presentations will serve to validate the proposed solutions, gather final feedback, and facilitate institutional buy-in for future implementation. Specific responsibilities under this task include:

- Prepare tailored presentation materials summarizing key findings, technical assessments and proposed system architecture.
- Organize and conduct presentation sessions and facilitate stakeholder workshops or briefings with relevant government institutions, including but not limited to the Ministry of Environment and Physical Planning, National Hydrometeorological Service, and other competent authorities involved in water resource management.
- Document feedback and recommendations received during presentations and workshops and incorporate relevant input into the final deliverables.
- Support the Competent Authority in communicating the outcomes of the assignment to national coordination bodies and international partners, as needed.

The consultant is expected to ensure that all presentation materials are clear, accessible, and aligned with the technical and strategic language used throughout the ToR. The dissemination process should promote ownership and readiness for implementation among all relevant actors.

## MAIN DELIVERABLES

[7] Should any supplementary non-functional requirements emerge, they shall be collaboratively defined in the Business Requirement Document (BRD) by both the contractor and the beneficiary along with identification of preconditions which needs to be met.

- **Deliverable 1: Fully developed water information system (WIS) with incorporated and upgraded GWDBMS as per the tasks**
- **Deliverable 2: WIS documentation: technical and user manuals, including the WIS source code**
- **Deliverable 3: Training to Beneficiary**
- **Deliverable 4: Final Report on the overall WIS implementation.**
- **Deliverable 5: Support and Warranty for the period of minimum 6 Months after deployment, including bug fixing for delivered product and plan for preventive maintenance**

## QUALIFICATION REQUIREMENTS

The Contractor (national company) shall have demonstrated experience of **at least 10 years** in conducting assignments of design, development and implementation of Web IT systems/platforms with GIS-based databases, web solutions with CRUD functionalities (both map features (spatial data) and related details (attribute data). A track record of **5 relevant projects** must be submitted together with contact details for reference checks. Company shall have, as a minimum, following certifications: ISO 9001– Quality Management System; ISO 20000 – IT service management system and ISO 27001– Information security management system.

The scope of work requires skilled professionals with previous experience in similar projects/assignments. Team members must possess excellent relevant technical and communication skills in order to successfully complete the assignment.
The scope of work requires a team of skilled professionals and support staff with previous relevant experience. The team of experts shall be able to respond to the requirements the mandatory areas of expertise described in the table below:

| | Expertise | Qualification requirements |
|---|---|---|
| 1. | Team Leader/Key Software Developer | • Relevant educational background (min. BSc in Information Technology/Engineering/Management/Computer Science)<br>• Minimum of 10 years of professional experience in similar assignments (development and implementation of GIS database and web services, Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development)<br>• Minimum 4 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, Geoserver, ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development)<br>• Previous experience as team leader in minimum 2 similar projects |
| 2. | Senior Software Developer | • Relevant educational background (minimum BSc. in Information Technology/Engineering recognized WEB GIS Certificate).<br>• Minimum 8 years of relevant professional experience in similar assignments (development and implementation of GIS database and web services, development and deployment of web-GIS solution(s), Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development. Experience in GIS data organization and publication based on EU INSPIRE Directive / NSDI specification(s) is an asset. |

| | | |
|---|---|---|
| | | • Minimum 3 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development) |
| 3. | Senior GIS Specialist | • Relevant educational background (minimum BSc. in Information Technology/Engineering/Geography)<br>• Minimum 5 years of relevant professional experience in similar assignments (development and implementation of GIS database and web services, WMS, WFS, GIS spatial data analysis, configuration of the web-GIS application).<br>• Minimum 3 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, WMS, WFS, GIS spatial data analysis, development and deployment of web-GIS solutions, configuration of the web-GIS application). |
| 4. | Junior Software Developer | • Relevant educational background (minimum BSc. in Information Technology/Engineering).<br>• Minimum 3 years of relevant professional experience in similar assignment (development web services, Geoserver or ArcGIS or similar with WMS, WFS, Open Layers, Java scripts development)<br>• At least 2 relevant projects of comparable nature and complexity (development web services, Geoserver or ArcGIS or similar with WMS, WFS, Open Layers, Java scripts development) |

## TERMS AND CONDITIONS

- *Language*

It is expected the required reports described under the section ''reporting'' below to be prepared in English language except the final report which needs to be prepared on both English and Macedonian language. User manuals and training tutorials for the application need to be developed in English, Macedonian and Albanian languages including the overall platform as well.

- *Duration of the assignment*

Maximum available time for completing the assignment is 6 months upon signing of the contract.

- *Travel*

No travel is expected during the assignment. All travel related costs (if needed) need to be included in company's offers.

- *Ownership and submission of data, reports and other material produced*

All primary data, reports, photos, video material, visual elements and other products during this assignment shall be made available to Programme in electronic format. The Programme keeps the right to use all products without any restrictions (e.g., in various publications, websites, presentations).

The entire software code that will be developed for the WIS platform will be the property of the Beneficiary, including ownership rights. After the final acceptance, the contractor will submit to the Beneficiary all source code with all components/modules, entire technical documentation, which are previously made or developed by the Contractor for this Project.

The source code must be properly documented and packaged in a form that will allow the Beneficiary to maintain and further develop or upgrade the software application.

- *Payment schedule*

The payment schedule will be based on instalments as per contractors submitted methodology and agreed in the signed contract.

- *Reporting*

The contractor shall adhere to the following reporting requirements during the assignment:

| Name of Report | Content | Time of submission |
|---|---|---|
| Inception report | Analysis of existing situation and work plan for the project | No later than 1 month after the start of the contract |
| Business Requirement Document | Detailed BRD for Phase 1 | Not later than 1 month after the submission of Inception report |
| Monthly reports | Brief description of progress against the achievement of the results as per the proposed methodology. The progress report should include all issues encountered and detailed planned work for the next month (maximum 3 pages) | No later than 5 days after the completions of the month (with the exception of the months for which interim, final or draft final report is to be submitted) |
| Final Report | Description of the achievement of the results as per the proposed methodology. | Within 1 month of final testing and acceptance of the deployed WIS solution |

## Annex 2: Bidder Submission Form

| | | | |
|---|---|---|---|
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | [Insert RFP Title] | | |

We, the undersigned, offer to provide the services for [Insert Title of services] in accordance with your Request for Proposal No. [Insert RFP Reference Number] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

1. have no conflict of interest in accordance with Instruction to Bidders Clause 4;
2. have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
3. undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the GWP.

*We declare that all the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification.*

*We offer to provide services in conformity with the Bidding documents, including the General Conditions of Contract and in accordance with the Terms of Reference.*

*Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.*

We understand and recognize that you are not bound to accept any Proposal you receive.

*I, the undersigned, certify that I am duly authorized by* [Insert Name of Bidder] *to sign this Proposal and bind it should GWP accept this Proposal.*

Name: _____

Title: _____

Date: _____

Signature: _____

[*Stamp with official stamp of the Bidder*]

## Annex 3: Bidder Information Form

| | |
|---|---|
| **The legal name of Bidder** | |
| **Legal address** | |
| **Year of registration** | |
| **Bidder's Authorized Representative Information** | |
| **Country/ies of operation** | |
| **No. of full-time employees** | |
| **Quality Assurance Certification[8] (e.g. ISO 9000 or Equivalent)** (*If yes, provide a copy of the valid Certificate):* | |
| **Does your Company hold any accreditation such as ISO 14001 related to the environment?** *(If yes, provide a copy of the valid Certificate):* | |
| **Person the GWP may contact for requests for clarification during the Proposal evaluation** | |

[8] The possession of such certification is not a mandatory requirement. However, it may result in acquiring slightly higher score on the Bidder's qualifications, capacity and experience assessment.

# Annex 4: Qualification Form

| | | | |
|---|---|---|---|
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | [Insert RFP Title] | | |

Documents to be submitted along with Annex 4:

**Previous Relevant Experience**
Please list only previous similar assignments successfully completed [as per the requirements in the Terms of Reference related to relevant experience].

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so, requested by the GWP.

| No. | Project name and a brief description | Client & Reference Contact Details | Contract Value | Period of activity and status |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

**Expertise**
Please list all experts and their qualifications in the list provided in addition to requirements under Annex 5 [as per the requirements in the Terms of Reference related to relevant experience].

| No. | Position | Relevant projects are (please check the requirements in TOR for the relevance of projects) | Education | Total-experience/experience in relevant projects (years) | Other |
|---|---|---|---|---|---|
| 1. | | 1.<br>2.<br>3. | | | |
| 2. | | 1.<br>2.<br>3. | | | |

# Annex 5: Technical Proposal Form

| | | | |
|---|---|---|---|
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | [Insert RFP Title] | | |

The Bidder's proposal should be organized to follow this format of Technical Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

**SECTION 1: Bidder's qualification, capacity and, expertise**

1.1 Brief description of the organization, including the year and country of incorporation, and types of activities undertaken.
1.2 General organizational capability which is likely to affect implementation: management structure, financial stability and, project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
1.3 The relevance of specialized knowledge and experience on similar engagements done in the region/country.
1.4 Quality assurance procedures, accreditations and certificates (such as ISO or similar), and risk mitigation measures.
1.5 Organization's commitment to sustainability.

**SECTION 2: Proposed Methodology, Approach and Implementation Plan**

This section should demonstrate the bidder's responsiveness to the TOR by identifying the specific components proposed, addressing the requirements, providing a detailed description of the essential performance characteristics proposed and demonstrating how the proposed approach and methodology meets or exceeds the requirements. All important aspects should be addressed in sufficient detail and different components of the project should be adequately weighted relative to one another.

2.1 A detailed description of the approach and methodology for how the Bidder will achieve the Terms of Reference of the project, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
2.2 The methodology shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
2.3 Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
2.4 Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement.
2.5 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
2.6 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.
2.7 Any other comments or information regarding the project approach and methodology that will be adopted.

**SECTION 3: Management Structure and Key Personnel**

3.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship

of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.

3.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the Scope of Services.

**Format for CV of Proposed Key Personnel**

At a minimum, the CV shall include the following information outlined in the table below

| | |
|---|---|
| **Name of Personnel** | [Insert] |
| **Position for this assignment / Area of Expertise (from the TORs)** | [Insert] |
| **Nationality** | [Insert] |
| **Language proficiency** | [Insert] |
| **Education/ Qualifications** | *[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]*<br>[Insert] |
| **Professional certifications** | *[Provide details of professional certifications relevant to the scope of goods and/or services]*<br>▪ Name of institution: [Insert]<br>▪ Date of certification: [Insert] |
| **Employment Record/ Experience** | *[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, the title of position held, and location of employment. For experience in the last five years, detail the type of activities performed, degree of responsibilities, location of assignments, and any other information or professional experience considered pertinent for this assignment.]*<br>[Insert] |
| **References** | *[Provide names, addresses, phone and email contact information for two (2) references]*<br>Reference 1:<br>[Insert]<br><br>Reference 2:<br>[Insert] |

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel _____ Date (Day/Month/Year _____

# Annex 6: Financial Offer Form

| | | | |
|---|---|---|---|
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| | [Insert RFP Title] | | |

We, the undersigned, offer to provide the services for [Insert RFP Title] in accordance with your Request for Proposal No. **RFP XX/2026** and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

Our attached Financial Proposal is for the sum of [Insert amount in words and figures].

Our Proposal shall be valid and remain binding upon us for the period of time specified in Description of Requirements [Annex 1].

We understand you are not bound to accept any Proposal you receive.

Name: _____

Title: _____

Date: _____

Signature: _____

[*Stamp with the official stamp of the Bidder]*

The Bidder is required to prepare the Financial Proposal following the below format and submit it in an envelope separate from the Technical Proposal as indicated in the Instruction to Bidders. Any Financial information provided in the Technical Proposal shall lead to Bidder's disqualification. The Financial Proposal should align with the requirements in the Terms of Reference and the Bidder's Technical Proposal.

**The currency of the proposal:** MKD

**Table 1: Summary of Overall Prices**

| | **Amount(s)** |
|---|---|
| **Professional Fees** (from Table 2) | |
| **Other Costs** (from Table 3) | |
| **Total Amount of Financial Proposal** | |

**Table 2: Breakdown of Professional Fees (THIS IS JUST a SAMPLE)**

| Name | Position | Fee Rate | No. of Days/months/ hours | Total Amount |
|---|---|---|---|---|
| | | *A* | *B* | *C=A+B* |
| In-Country | | | | |
| | | | | |
| | | | | |
| Home Based | | | | |
| | | | | |
| | | | | |
| | | | **Subtotal Professional Fees:** | |

**Table 3: Breakdown of Other Costs**

| Description | UOM | Quantity | Unit Price | Total Amount |
|---|---|---|---|---|
| International flights | Trip | | | |
| Subsistence allowance | Day | | | |
| Miscellaneous travel ex-penses | Trip | | | |
| Local transportation costs | Lump-Sum | | | |
| Out-of-Pocket Expenses | | | | |
| Other Costs: (please specify) | | | | |
| | | | **Subtotal Other Costs:** | |

**Table 4: Breakdown of Price per Deliverable/Activity**

| Deliverable/ Activity description | Time (person-days) | Professional Fees | Other Costs | Total |
|---|---|---|---|---|
| Deliverable 1 | | | | |
| Deliverable 2 | | | | |
| Deliverable 3 | | | | |
| ….. | | | | |

Payment is deliverables based

# Annex 7: Evaluation Criteria

Two stage procedure will be utilized for evaluation of the proposals taking in consideration as evaluation criteria all requirements specified in the Annex 1 (Terms of Reference). The cumulative method will be applied in the evaluation of the applications. The contract will be awarded to the bidder achieving the highest cumulative score from the technical and financial parts of the proposal. The technical part accounts for 70% of the total score and the financial proposal will account for 30% of the total evaluation score. Only candidates obtaining a minimum of 490 points (70%) in the technical evaluation shall be considered for the financial evaluation. For the financial evaluation, the offer with the lowest price will be awarded the maximum of 300 points. The remaining offers will be scored proportionally based on their price relative to the lowest offer.

## Technical Evaluation Criteria

| **Summary of Technical Proposal Evaluation Forms** | | **Points Obtainable** |
|---|---|---|
| 1. | Bidder's qualification, capacity and experience | 200 |
| 2. | Proposed Methodology, Technology, Approach and Implementation Plan | 200 |
| 3. | Management Structure and Key Personnel | 300 |
| | **Total** | **700** |

| Technical Proposal Evaluation<br>**Form 1** | | Maximum Points obtainable |
|---|---|---|
| **Expertise of the Firm/Organization** | | |
| 1.1 | Company profile and evidence of capacity/organization capability | 100 |
| 1.2 | Demonstrated experience of at least 10 years in conducting assignments of design, development and implementation of Web IT systems/platforms with GIS-based databases, web solutions with CRUD functionalities (both map features (spatial data) and related details (attribute data).<br>A track record of **5 relevant projects** must be submitted together with contact details for reference checks. Company should have, as a minimum, following certifications: ISO 9001– Quality Management System; ISO 20000 – IT service management system and ISO 27001– Information security management system. | 100 |
| | | **200** |

| Technical Proposal Evaluation<br>**Form 2** | | Maximum Points obtainable |
|---|---|---|
| **Proposed Methodology, Approach and Implementation Plan** | | |
| 2.1 | To what degree does the Proposer understand the task? Is the scope of task well defined and does it correspond to the TOR? | 50 |
| 2.2 | Have the important aspects of the task been addressed in sufficient detail? | 50 |
| 2.4 | Is the proposal based on a survey of the project environment and was this data input properly used in the preparation of the proposal? | 50 |

| | | | | |
|---|---|---|---|---|
| 2.7 | Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project? | | | 50 |
| | | | | **200** |
| **Management Structure and Key Personnel** | | | | |
| | | | | |
| **1** | **Team Leader/Key software developer** | | | |
| | | **YES/NO for minimum requirements** | | |
| | Relevant educational background (min. BSc in Information Technology/Engineering/Management/Computer Science) | | 9 for relevant BSc<br>10 for relevant MSc | 10 |
| | Minimum of 10 years of professional experience in similar assignments (development and implementation of GIS database and web services, Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development) | | 25 for 10 years<br>30 for more than 10 years | 30 |
| | Minimum 4 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, Geoserver, ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development) | | 30 for 4 projects<br>35 for up to 5-7 projects<br>40 for more than 7 projects | 40 |
| | Previous experience as team leader in minimum 2 similar projects | | 20 points | 20 |
| | | **Max points:** | | **100** |
| **2** | **Senior Software Developer** | | | |
| | Relevant educational background (minimum BSc. in Information Technology/Engineering recognized WEB GIS Certificate). | | 9 for relevant BSc<br>10 for relevant MSc, PhD | 10 |
| | Minimum 8 years of relevant professional experience in similar assignments (development and implementation of GIS database and web services, development and deployment of web-GIS solution(s), Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development. Experience in GIS data organization and publication based on EU INSPIRE Directive / NSDI specification(s) is an asset. | | 35 for 8 years<br>40 for more than 8 years | 40 |
| | | | 40 for 3 projects | 50 |

| | | | | |
|---|---|---|---|---|
| | Minimum 3 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, Geoserver or ArcGIS or similar with WMS, WFS, GIS spatial database, Open Layers, Java scripts development) | | 45 for up to 4-6 projects<br>50 for more than 7 projects | |
| | | **Max points:** | | **100** |
| **3** | **Senior GIS Specialist** | | | |
| | Relevant educational background (minimum BSc. in Information Technology/Engineering/Geography) | | 9 points for relevant BSc<br>10 points for relevant MSc, PhD | 10 |
| | Minimum 5 years of relevant professional experience in similar assignments (development and implementation of GIS database and web services, WMS, WFS, GIS spatial data analysis, configuration of the web-GIS application). | | 15 for 5 years<br>20 for more than 5 years | 20 |
| | Minimum 3 relevant projects of comparable nature and complexity (development and implementation of GIS database and web services, WMS, WFS, GIS spatial data analysis, development and deployment of web-GIS solutions, configuration of the web-GIS application). | | 30 for 3 projects<br>35 for up to 4-6 projects<br>40 for more than 6 projects | 40 |
| | | **Max points:** | | **70** |
| **4** | **Junior Software Developer** | | | |
| | Relevant educational background (minimum BSc. in Information Technology/Engineering). | | 4 points for relevant BSc<br>5 points for relevant MSc | 5 |
| | Minimum 3 years of relevant professional experience in similar assignment (development web services, Geoserver or ArcGIS or similar with WMS, WFS, Open Layers, Java scripts development) | | 8 for 3 years<br>10 for more than 3 years | 10 |
| | At least 2 relevant projects of comparable nature and complexity (development web services, Geoserver or ArcGIS or similar with WMS, WFS, Open Layers, Java scripts development) | | 10 for 2 projects<br>12 for 3-5 projects<br>15 for more than 5 projects | 15 |
| | | **Max points:** | | **30** |
| | | | | **300** |

# Annex 8: General Terms and Conditions for Contracts

## 1. LEGAL STATUS

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis the GWP. The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of the GWP. For the purposes of this agreement, the Contractor is defined as a business that agrees to conduct work for the GWP as specified under the terms of a contract. The term "Contract" includes the general terms and conditions set forth in the body of this document (the "General Terms and Conditions for Contracts").

## 2. SOURCE OF INSTRUCTIONS

The Contractor shall neither seek nor accept instructions from anyone else but the GWP in connection to its services under this contract. The Contractor shall refrain from any action that may adversely affect the GWP and shall fulfil its commitments with the fullest regard to the interests of the GWP.

## 3. CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

## 4. ASSIGNMENT

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims, or obligations under this Contract except with the prior written consent of the GWP.

## 5. SUB-CONTRACTING

In the event, the Contractor requires the services of sub-contractors in the course of the implementation of the assignment (unless specified in the Proposal/Offer/Bid), the Contractor shall obtain the prior written approval and clearance of the GWP for all sub-contractors. The approval of GWP of a sub-contractor shall not relieve the Contractor of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform to the provisions of this Contract.

## 6. OFFICIALS NOT TO BENEFIT

The Contractor warrants that no official of GWP has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

## 7. INDEMNIFICATION

The Contractor shall defend, indemnify and hold harmless, at its own expense, the GWP, its officials, agents, servants, and employees from and against all third-party claims, suits, obligations, causes of action, demands, and all losses, damages, judgments, the liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractor's employees, officers, agents or sub-contractors, in the performance of this Contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability, and liability arising out of the use of patented inventions or devices, copyrighted material, or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.

## 8. INSURANCE AND LIABILITIES TO THIRD PARTIES

The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or the equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.

The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under this Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with this Contract.

## 9. LIENS

The Contractor shall not cause or permit any lien, attachment, or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with the GWP against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Contractor.

## 10. TITLE TO EQUIPMENT

Title to any equipment and supplies that may be furnished by GWP shall rest with GWP and any such equipment shall be returned to GWP at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to GWP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate GWP for equipment determined to be damaged or degraded beyond normal wear and tear.

## 11. COPYRIGHT, PATENTS, AND OTHER PROPRIETARY RIGHTS

Except as is otherwise expressly provided in writing in the Contract, the GWP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for the GWP under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the contract and the Contractor acknowledges and agrees that such products, documents, and other materials constitute works made for hire for the GWP.

To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, the GWP does not and shall not claim any ownership interest thereto, and the Contractor grants to the GWP a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract.

All maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of the GWP, shall be made available for use or inspection by the GWP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to GWP authorized officials on completion of work under the Contract.

## 12. USE OF NAME, EMBLEM OR OFFICIAL SEAL OF GWP

The Contractor shall not in any manner whatsoever use the name, emblem, or official seal of the GWP in connection with its business or otherwise unless expressly allowed in writing by authorized GWP officials.

## 13. CONFIDENTIALITY

Information and data that is considered proprietary by either Party and that are delivered or disclosed by one Party ("Discloser") to the other Party ("Recipient") during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party.

The recipient ("Recipient") of such information shall:

a) use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar information that it does not wish to disclose, publish or disseminate; and,
b) use the Discloser's Information solely for the purpose for which it was disclosed.

Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the Information confidential in accordance with the Contract, the Recipient may disclose Information to:

a) any other party with the Discloser's prior written consent; and,
b) the Recipient's employees, officials, representatives, and agents who have a need to know such information for purposes of performing obligations under the Contract, and employees' officials, representatives, and agents of any legal entity that it controls it, or with which it is under common control, who have a need to know such information for purposes of performing obligations under the Contract.

The Contractor may disclose Information to the extent required by law, provided that the Contractor will give the GWP sufficient prior notice of a request for the disclosure of information in order to allow the GWP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.

The GWP may disclose Information to the extent as required by national law in North Macedonia.

These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.

## 14. FORCE MAJEURE; OTHER CHANGES IN CONDITIONS

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the GWP, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify the GWP of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this Article, the GWP shall take such action as, in its sole discretion; it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under this Contract.

If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, the GWP shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 15, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.

Force majeure means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force.

## 15. TERMINATION

Either party may terminate this Contract for cause, in whole or in part, upon thirty (30) days' notice, in writing, to the other party.

GWP reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case the GWP shall reimburse the Contractor for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.

In the event of any termination by the GWP no payment shall be due from the GWP to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract.

Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, the GWP may, without prejudice to any other right or remedy it may have under the terms of these conditions, terminate this Contract forthwith. The Contractor shall immediately inform the GWP of the occurrence of any of the above events.

## 16. SETTLEMENT OF DISPUTES

The parties shall use their best efforts to settle amicably any dispute, controversy, or claim arising out of this Contract or the breach, termination, or invalidity thereof. This Contract shall be construed and interpreted, and the legal relations created hereby shall be determined in accordance with the laws of the Republic of North Macedonia. The parties' consent to the exclusive jurisdiction of, and agree that venue lies solely with, the state courts located in the Republic of North Macedonia.

## 17. TAX EXEMPTION

GWP is exempt from all direct taxes, except charges for public utility services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the GWP's exemption from such taxes, duties, or charges, the Contractor shall immediately consult with the GWP to determine a mutually acceptable procedure.

Accordingly, the Contractor authorizes the GWP to deduct from the Contractor's invoice any amount representing such taxes, duties, or charges, unless the Contractor has consulted with the GWP before the payment thereof and the GWP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide the GWP with written evidence that payment of such taxes, duties, or charges has been made and appropriately authorized.

## 18. OBSERVANCE OF THE LAW

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract.

## 19. AUTHORITY TO MODIFY

Only the GWP Authorized Official possesses the authority to agree on behalf of the GWP to any modification of or change in this Contract, to a waiver of any of its provisions, or any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against the GWP unless provided by an amendment to this Contract signed by the Contractor and jointly by the GWP.