SAVA AND DRINA RIVERS CORRIDORS INTEGRATED DEVELOPMENT PROGRAM

TERMS OF REFERENCE FOR

SUPERVISION OF REHABILITATION WORKS ON THE GALOVICA CANAL

1. BACKGROUND

The Republic of Serbia has received financing from the World Bank towards the cost of the Sava and Drina Rivers Corridors Integrated Development Program, and intends to apply part of proceeds for financing consultancy services for supervision of works to support flood protection and environmental management of the Sava and the Drina River Corridors.

The Ministry of Agriculture, Forestry and Water Management – the Directorate for Water will be responsible for works on flood protection under two components of the Program:

Component 1: Integrated Management and Development of the Sava River Corridor – this component will finance investments in renovations and upgrading of flood protection infrastructure to address the increasing risk of flooding due to climate change. These activities will reduce the risks and impacts of floods, thereby increasing the resilience to climate change – related threats.

Component 2: Integrated Management and Development of the Drina River Corridor – this component will support multipurpose investments along the Drina River to reduce the risk of a potential impact of floods. This component will facilitate the implementation actions, management measures, and investments identified by the Drina Strategic Action Plan prepared under Western Balkans GEF-SCCF Drina River basin Management Project and investments identified through the ESAP Integrated Water and Hydropower Development Project. The above measures will contribute to increased resilience to floods and droughts.

1.1 General Operational and Technical Project Context (Galovica)

The proposed works on the Galovica canal system involve a specific operational scope and methodology, which directly condition the approach to professional supervision over contract execution:

- **Provisional quantities and work categories:** The main scope of the contract relates to the profiling and removal of sediment/silt along the entire alignment of the canal in a total length of **46.88 km**. In addition to excavation and disposal of river sediment, the works include the removal of illegal landfills and dense vegetation from the slopes, as well as accompanying concrete and rehabilitation works on existing culverts and sluice structures to restore the system to its original design functionality.
- **Work dynamics and geographic distribution:** The 46.88 km alignment is administratively and geographically divided into two water areas: the downstream section ("Beograd Sava 1", 23.58 km long, starting from the Galovica pumping station in New Belgrade/Surčin) and the upstream section ("Istočni Srem", 23.30 km long, extending into the Srem region). To comply with the anticipated 18-month construction period (approximately 540 effective working days), and assuming an average progress rate of 90 meters of channel cleaned per day, the Contractor is required to operate on **4 to 6 simultaneous work fronts**. Taking into account parallel activities on access road rehabilitation and waste material disposal, the total number of simultaneously active locations on site may reach **a maximum of 8**, which demands adequate mobility and geographic coverage from the supervision team.
- **Construction technology and methodology:** Works will be executed using a combined methodology involving heavy construction machinery. On sections where a technical right-of-way and traffic access are available, mechanical excavation and dredging from the bank (using

long-reach excavators) will be applied. On inaccessible sections and zones with permanently high water levels, works will be performed using machinery adapted for operation within the riverbed itself (*in-channel works*). The Contractor is obliged to implement strict technical mitigation measures to prevent downstream water turbidity and environmental degradation.

- **Legal status and nature of works:** The subject works are **strictly of a rehabilitation and remedial character** (*Rehabilitation works*) and do not include any structural modifications to the canal bed, geometry changes, or capacity expansions beyond the original design parameters. Given the specific location and purpose of the system, all works are governed by complex procedures under the legislation of the Republic of Serbia, which includes strict compliance with conditions and obtaining water permits from the Republican Directorate for Water, as well as coordination with other competent state authorities (including the Ministry of Defense on specific land parcels).

2. OBJECTIVE OF THE ASSINGMENT

The Directorate for Water intends to engage a suitably qualified consultancy firm to provide services for supervision of works for Rehabilitation works of the Galovica canal, Component 1.

The objective of the assignment is to provide full administration of the contracts, monitor the construction works and certify payments – fulfilling the roles of the Supervision/Engineer – and all other duties and responsibilities. It is the responsibility of the consultant to provide services which support the quality, cost and time control conditions of contract. The Supervision/Engineer is appointed by the Employer but he is obliged to act impartially when making determinations. He must help ensure that the works are carried out in full compliance with the contract for Rehabilitation works of the Galovica canal (*FIDIC Red Book 2017, reprinted 2022 with amendments published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC*) and the following "Particular Conditions" which comprise of the World Bank's COPA and the amendments and additions to such General Conditions), applicable laws of the Republic of Serbia and in accordance with applicable World Bank's policies and procedures.

Services should be carried out in cooperation and coordination with the Employer and the Consultant shall have no authority to relieve the Contractor(s) of any of his duties and obligations under the Contract. Neither work entailing delays nor any extra payments by the Employer shall be ordered by the Consultant without the authority of the Employer.

The Consultant's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The proposed rehabilitation and remedial works focus on damaged and critical sections including flood protection dikes/levees, cleaning and restoration of drainage canals. The proposed investment concentrate on areas affected by flooding, in order to reduce the risk of future flooding and further devastating, social and economic impacts.

In the following table the project's main information is given:

Table 1. Main information about the investments to be supervised by the Construction Supervision Consultant

	Responsibility (PWMC)	Contract/Description	Cost estimate (EUR)	Contact period
1	Vode Vojvodine / Srbijavode	Rehabilitation works of the Galovica canal	27.000.000,00	18 months

Note: Institutional Framework and Investment Rights: In accordance with the Law on Water of the Republic of Serbia, Water Management Company (PWMC) "Srbijavode" and PWMC "Vode Vojvodine" are designated as the statutory holders of investor rights (*"nosioci prava investitora"*) over water management infrastructure and assets within their respective territorial jurisdictions.

For contract implementation purposes, roles are designated as follows:

- **The Employer:** The Ministry of Agriculture, Forestry and Water Management – Directorate for Water (signs the contract and approves payments).
- **The PIU:** Established within the Directorate for Water, responsible for day-to-day coordination and is the official recipient of all deliverables.
- **Technical Coordination:** The Consultant shall coordinate day-to-day field works and site access with the respective PWMC based on the geographic location of the canal sections. However, all official reporting, variations, and payment certificates must be routed through the PIU.

For the avoidance of doubt, the official approval workflow dictates that any contractual or financial determination requiring Employer's consent shall be formally initiated by the Engineer, technically endorsed by the respective PWMC (Srbijavode / Vode Vojvodine) if applicable, and officially approved in writing solely by the PIU/Directorate for Water before execution."

The Galovica canal is the main canal of the Galovica hydromelioration system, it has a catchment area of 71.600 ha. The canal route from the pumping station (PS) Galovica, on the left bank of the Sava River, to the settlement of Budjanovci has a length of 46,88 km.

The main scope of this contract includes all hydrotechnical, construction and finishing works required to complete the Galovica Canal. Key work components include:

- Topographic surveys
- Cleaning of vegetation,
- Earth works for cleaning of the channel
- Building of access roads in length of 2.4 km;
- Rehabilitation of existing roads,
- Concrete works of the culverts,
- Removal of the earthen landfills.
- Removal of existing illegal unsanitary landfills
- As-Built Records

The Employer will provide the complete design package of drawings and documents, including Geodetic report issued by licensed company / geodetic engineer, as well as typical cross-section and all cross-sections and profiles of the road, prepared by the Designer and used as a base drawing for appropriate works on the Galovica canal. The Engineer shall adopt this documentation as the official measurement baseline to check and verify executed quantities before certifying payment

DURATION OF THE ASSIGNMENT

The total duration of the supervision consultancy contract shall be **42 (forty-two) months** from the Contract Effectiveness date. The contract duration is strictly linked to the execution of the Works and the Defects Notification Period (DNP), and is structured as follows:

- **Phase 1: Construction Supervision Phase** – **18 (eighteen) months**, covering the period from the Commencement Date until the issuance of the Taking-Over Certificate (TOC) for the Works.
- **Phase 2: Defects Notification Period (DNP) Phase** – **24 (twenty-four) months**, covering the period from the date of the TOC until the official issuance of the Performance Certificate.

In the event of any approved Extension of Time (EOT) granted to the Contractor under the Works Contract, the duration of the Consultant's Contract shall be adjusted accordingly through a contract modification, subject to prior approval by the Employer and the Bank.

3. SCOPE OF SERVICES, TASKS AND EXPECTED DELIVERABLES

The Consultancy firm selected under this procurement will be appointed and defined in the Works contract as the Engineer (according to FIDIC Red Book 2017, reprinted 2022 with amendments published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC)and the following "Particular Conditions" which comprise of the World Bank's COPA and the amendments and additions to such General Conditions), and Supervision of the works as per Serbian law.

The responsibility of the Engineer is to provide full administration of the contracts, monitor the construction works (with respect to quality and time/progress controls), monitor environmental and social aspects of contracts' implementation and certify payments.

This will be done by Key Experts appointed by the Engineer in writing, a Project Manager/Team Leader and the Deputy Project Managers/Supervision Site Engineers, as well as Non-key staff, listed in Chapter 4.

ENGINEER'S RESPONSIBILIITES

The Engineer shall carry out all relevant responsibilities, but not limited to:

a) General Administration and Communication

i. Managing the works and overall contract administration from commencement through completion. ii. Issuing instructions and any additional or revised drawings necessary for execution of the works and the remedy of defects. iii. Providing clarifications or instructions to resolve ambiguities or discrepancies in the contract documents. iv. Recording management meetings and distributing minutes to the participants and the Employer.

b) Quality Control and Supervision

i. Auditing the quality assurance system established by the Contractor before execution begins. ii. Reviewing and approving samples of materials and related technical documentation prior to use. iii. Examining, measuring, and testing materials and workmanship on site or at places of manufacture. iv. Rejecting defective work, plant, or materials and notifying the Contractor of the reasons. v. Instructing the removal and replacement of any items or work not in compliance with the contract.

c) Time and Progress Management

i. Confirming that the conditions precedent agreed by both parties have been met and notifying the Commencement Date. ii. Reviewing and monitoring the Contractor's detailed program and supporting progress reports. iii. Evaluating and granting Extensions of Time (EOT) when delays occur due to causes defined in the contract. iv. Requiring revisions to the program where actual progress is inconsistent with the Contractor's obligations.

d) Variations

i. Initiating and instructing Variations to the works. ii. Reviewing Contractor proposals related to value engineering and variations, and responding with approval, rejection, or comments. iii. Determining the valuation of Variations, including the proper documentation of all cost and time implications, and obtaining the Employer's prior written approval for any Variation that affects the Contract Price or exceeds the thresholds defined in the Particular Conditions.

e) Financial Administration and Certification

i. Measuring the works and preparing records of the Permanent Works. ii. Certifying interim payments and issuing Interim Payment Certificates (IPCs). iii. Determining and certifying amounts due for Employer-provided services and equipment. iv. Verifying the draft final statement and issuing the Final Payment Certificate (FPC).

f) Claims and Determinations

i. Consulting with both parties in an effort to reach amicable agreement on claims or disputed matters. ii. Making fair determinations regarding claims for time or money, taking all relevant circumstances into account. iii. Monitoring and reviewing contemporary records maintained by the Contractor in support of claims. iv. Assisting and cooperating with the Dispute Avoidance and Adjudication Board (DAAB) in accordance with the FIDIC Red Book (2017) framework. This includes, but is not limited to, facilitating regular DAAB site visits, providing all necessary contract documentation, and preparing technical updates or reports as requested by the Board to support the dispute avoidance process.

g) Completion and Defects Liability

i. Issuing the Taking-Over Certificate (TOC), stating the date on which the works or sections were completed. ii. Directing and supervising the Contractor's investigation into the causes of defects. iii. Notifying the Contractor of defects or damage to be remedied during the Defects Notification Period (DNP). iv. Issuing the Performance Certificate once the Contractor has fulfilled all obligations and remedied all defects.

h) Resource and Emergency Management

i. Delegating duties and authority to suitably qualified assistants, such as the Supervision Site Engineer or inspectors. ii. Ensuring that the Contractor maintains the required insurance in accordance with the contract. iii. Instructing urgently required work in the event of an emergency affecting the safety of life or the works. iv. Requiring the Contractor to remove any personnel from the site who are incompetent, negligent, or in breach of safety requirements.

SCOPE OF ENGINEER'S AUTHORITY

Responsibilities of the Engineer are distinguished as follows:

a) decisions the Engineer can make independently;
b) decisions requiring prior PIU/Employer approval;
c) decisions requiring Bank no-objection, consistent with the Loan Agreement and Procurement Plan;
d) decisions in compliance with the local legislation (Law on Planning and Construction of the Republic of Serbia);

Decisions the Engineer can make independently

The Engineer shall have full independent authority to issue day-to-day technical instructions, clarify design documents, approve material samples, reject defective works, order standard or additional quality testing, and approve the Contractor's Program of works and its updates. In the event of an emergency on Site affecting safety or property, the Engineer is authorized to independently order Emergency Works and issue corresponding Works Orders.

Decisions requiring prior PIU/Employer approval

The Engineer shall obtain the specific prior written approval of the Employer before acting on any matter that impacts the Project budget, timeline, or contractual terms, including but not limited to:

- Issuing a final determination on any Extension of Time (EOT) for completion of the works, following consultation with the Employer;
- Issuing a Variation Order that results in an increase in the Contract Amount (or exceeds a specified threshold agreed with the Employer (amount, percentage);
- Approving the use of Provisional Sums – In accordance with the Contract for Works for Galovica canal, i.e Particular Conditions 13.4 (Provisional sums): "The Contract Price includes an unforeseen financial reserve (Contingency) in the amount of 10% of the Accepted Contract Amount. This reserve will act as a dedicated mechanism for absorbing quantity variations or unavoidable additional works. The Contractor has no right to the automatic use of these funds. Any engagement of funds from this reserve shall be carried out exclusively on the basis of a written instruction from the Engineer, after the Engineer obtains the official written consent of the Employer."
- Approving the appointment of any new Subcontractors;
- Ordering a suspension of the works, except under extreme emergency circumstances affecting safety.
- Review the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract
- Review and consider the ES risks and impacts of any design change proposals and advise if there are implication for compliance with ESMP, consent/permits and other relevant project requirements;

Decisions requiring Bank no-objection, consistent with the Loan Agreement and Procurement Plan

In accordance with the Loan Agreement and the approved Procurement Plan, the Employer/PIU must obtain the Bank's formal "no-objection" before implementing or instructing the Engineer to proceed with any of the following actions:

- Any Contract Amendment or Variation Order that increases the original Contract Amount, individually or cumulatively;
- Approving the replacement of any member of the Consultant's or Contractor's Key Experts;
- Issuing a notice for the Termination of the Contract;
- Accepting any formal settlement or compromise regarding major Contractor Claims;
- Any significant modification to the scope of works that alters the project's development objectives as defined in the Loan Agreement.

Decisions in compliance with the local legislation (Law on Planning and Construction of the Republic of Serbia

In addition to the duties under the FIDIC conditions, the Engineer shall act as the Legal Supervisor ("Stručni nadzor") in strict accordance with the Serbian Law on Planning and Construction. The Engineer shall independently make all statutory determinations, sign the Construction Log ("Građevinski dnevnik") and Measurement Book ("Građevinska knjiga"), issue instructions for hidden works, and order the suspension of works if the Contractor fails to comply with Serbian building regulations, safety standards, or the approved Design for Execution (PZI).

Measurement and monitoring of executed quantities

As it is mentioned in the Chapter 2, the Employer will provide the complete design package of drawings and documents that the Engineer shall adopt as the official measurement baseline to check and verify executed quantities before certifying payment. The Engineer shall act in accordance with the following requirements:

- **Joint Measurement**: The Engineer and Contractor must measure excavation together on-site at agreed stages.
- **Immediate Signing**: Both parties must sign measurement records immediately on-site at the time of measurement.
- **Inaccessible Works**: Works to be covered, backfilled, or submerged must be measured before becoming inaccessible.
- **No Deferral**: Measurement of hidden or covered works cannot be deferred to project completion.
- **Quantity Cross-Checking**: Certified excavation volumes must be cross-checked against haulage and disposal records.
- **Pre-Certification Control**: Disposal records and truck slips must match calculated volumes before any payment certification.
- **Comparable Method of computation:** The Engineer shall ensure that check and completion surveys are carried out on a basis comparable with the Employer's baseline survey (same coordinate and elevation system and method of computation), so that measured differences reflect actual execution rather than a change in survey approach.

Prior to the commencement of any excavation works, the Engineer shall review, comment on, and approve the Contractor's Elaborate for channel rehabilitation within a period of 14 days from its submission. The Contractor shall incorporate all the Engineer's comments into the final version of the Elaborate. Through the approval of this Elaborate, the final restoration profile, control elevations, tolerances, and measurement rules shall be definitively established and locked as the contractual measurement baseline before the works commence, without any cost or time consequences.

Measurement and verification of Road works

The Engineer will perform following activities:

- **Review of Road Measurement Methodology:** Before any road works commence, the Engineer shall review, refine, and formally agree with the Employer and the Contractor upon a detailed measurement methodology to be applied by the Contractor. No road works shall be certified for payment until this methodology is jointly signed.
- **Verification of Pre-Works Baseline:** The Engineer shall supervise and verify the comprehensive pre-works baseline survey (including photographs and geodetic levels) conducted by the Contractor for each road section, ensuring a reliable baseline exists prior to the execution of works.
- **Reporting and Certification** Road rehabilitation works shall be verified strictly against the approved Contractor's baseline and the agreed methodology before any payment certification.
- **Road design package:** At inception, the Engineer shall confirm that the road design package (alignment, longitudinal profiles, cross-sections, earthworks, and drainage) is sufficient to measure and certify the road works, and shall notify the Employer of any gaps before works commence.

Financial Management and Variation Control

Control of Provisional Sums and Variations:
Before any expenditure is incurred against the Provisional Sum, the Engineer shall:
• Issue a formal written instruction specifying the exact scope, technical justification, and value of the works to be carried out.
• Obtain the Employer's prior written consent before issuing any such instruction to the Contractor.

• Maintain a comprehensive and up-to-date register of all variations and provisional sum drawdowns, which must be reported in detail within the monthly and quarterly progress reports."

Procedure for Hazardous Waste Discovery (aligned with Serbian Legislation):

In accordance with the Serbian Law on Planning and Construction and the Law on Waste Management, if hazardous or potentially contaminated material is encountered, the Engineer shall immediately execute the following steps:

- **Written Instruction and Logbook Entry:** Issue a formal written instruction and make an immediate entry into the **Construction Logbook (Građevinski dnevnik)** ordering the Contractor to **suspend all works** in the affected area pending professional assessment.
- **Official Notification:** Notify the Employer (PIU) in writing within 24 hours.
- **Licensed Specialist Coordination:** Supervise and coordinate the engagement of an accredited laboratory and a licensed waste management specialist (authorized by the Ministry of Environmental Protection) for sampling, testing, and waste classification.
- **Chain of Custody and Documentation:** Verify and maintain strict control over the **Document on Hazardous Waste Movement (Dokument o kretanju opasnog otpada)**. The Engineer shall not certify any payments for waste until the Contractor presents valid disposal certificates and mass-balance receipts issued by a licensed landfill/treatment facility.
- **Variation Processing:** Process any resulting suspension periods and cost impacts as a Variation under the mechanism established in the Works Contract.
- **Reporting:** Detail all instructions, suspension timelines, cost assessments, and waste movement records in the monthly and quarterly progress reports.

RESPONSIBILITIES OF ENGINEER'S KEY STAFF

For this assignment the Engineer shall appoint in writing one Project Manager/Team Leader, who shall be authorized by the Engineer to fulfill the contractual roles and responsibilities of the Engineer. This nomination will state duties and authorities in line with duties and responsibilities of the Project Manager/Team Leader defined by this Terms of Reference (***Duties and Responsibilities of the Project manager/Team Leader***).

This Project Manager/Team Leader shall be supported by two Deputy Project Managers/Supervision Site Engineers, who will be based on the construction sites, with clearly defined delegated responsibilities. The Engineer shall nominate in writing Deputy Project Manager/Supervision Site Engineers. This nomination will state duties and authorities in line with duties and responsibilities of the Deputy Project Manager/Supervision Site Engineer defined by this Terms of Reference (DUTIES AND RESPONSIBILITIES OF THE DEPUTY PROJECT MANAGER/SUPERVISION SITE ENGINEER).

The delegation shall not take effect until copies have been received by the Employer and the Contractor.

Duties and Responsibilities of the Project Manager/Team Leader

- **Contract Administration:** Act as the primary representative of the Engineer on Site, ensuring comprehensive contract management, monitoring, and administration in strict accordance with the FIDIC Red Book (2017) framework.
- **Team Coordination & Management:** Manage, supervise, and coordinate the entire supervision team (including Deputy Project Managers/Supervision Site Engineers and Non-Key Experts), and issue day-to-day operational assignments.

- **Reporting & Deliverables:** Oversee the timely preparation, quality assurance, and submission of all official project reports (Monthly, Quarterly, Accident, and Claims Reports) to the PIU/Employer.
- **Stakeholder Liaison:** Serve as the main point of contact for official communication, technical coordination, and management meetings between the Employer/PIU, the Contractor, and the relevant Public Water Management Companies.
- **Financial & Progress Control:** Review and endorse all measurement records, evaluate interim statement applications to support payment certification, and monitor the overall project schedule to manage delays.

Duties and Responsibilities of the Deputy Project Manager/Supervision Site Engineer

A Deputy Project Manager/ Supervision Site Engineer is obliged to visit each construction site at least twice a week during period of execution of works. The Deputy Project Manager/ Supervision Site Engineer shall be suitably qualified persons, who are competent to carry out duties and exercise the authority and who are fluent in the language of communication – English and Serbian. Principal responsibilities of the Deputy Project Manager/ Supervision Site Engineer shall be to:

- **Acting Team Leadership:** Assume full operational and contractual authority of the Project Manager/Team Leader during their absence or as explicitly delegated in writing by the Engineer.
- **Statutory Site Supervision:** Perform daily technical supervision on Site in strict accordance with the Serbian Law on Planning and Construction, ensuring all works comply with the approved Design for Execution (PZI) and technical specifications.
- **Quality & Material Control:** Inspect construction activities on a daily basis, check and verify domestic material certificates/atests, and independently issue instructions for the approval or rejection of works and hidden structures.
- **Site Documentation & Records:** Maintain, review, and daily sign the statutory Construction Log (Građevinski dnevnik) and Measurement Book (Građevinska knjiga) to verify actually executed quantities in the field.
- **Field Coordination & Reporting:** Coordinate day-to-day progress, site access, and technical matters with the Contractor and relevant Public Water Management Company (PWMC), and draft technical inputs for the Monthly Progress Reports.
- **Environmental & Social Compliance:** Ensure that the Environmental and Social Monitoring Plan (an integral part of the Contract-Specific ESMP), the Environmental and Social Management Framework (ESMF), and the Resettlement Policy Framework (RPF) adopted for the Project and accessible at http://www.rdvode.gov.rs/aktuelno.php. is followed and complied by the Contractor.
- Oversee and report on the Contractor's compliance with the Labour Management Procedures (LMP), including adoption and implementation of the Code of Conduct by the Contractor and all subcontractors. This shall include reviewing the proposed management of migrant workers, including advance notification of foreign worker recruitment, verification that no recruitment fees are charged, and assessment of accommodation arrangements and living conditions for compliance with applicable health, safety, welfare, and project requirements, while promptly reporting any material non-compliance to the Employer. Compliance shall be monitored throughout construction.
- The Consultants Social Specialist shall assist the Employer and the PIU in implementation of the Stakeholder Engagement Plan and shall serve as the primary community liaison during construction, ensuring proactive communication with affected communities regarding planned works, temporary access restrictions, construction schedules, and mitigation

measures. The Social Specialist shall also manage the grievance mechanism at community level, ensure timely resolution of complaints, maintain records of stakeholder engagement activities, and report recurring issues or community risks to the Employer for corrective action.

- The Consultant shall verify, prior to commencement of excavation works, that the Contractor has established and communicated a Chance Finds Procedure and that relevant personnel have been trained in its application. The Consultant shall ensure that if any archaeological, cultural heritage, paleontological, or other potential heritage items are discovered during works, activities in the affected area are immediately suspended, the site is secured, the Employer and competent authorities are promptly notified, and no works recommence until the required clearance has been issued and any prescribed mitigation measures have been implemented. The Consultant shall monitor compliance with this procedure, keep appropriate records, and include all relevant matters in regular reports to the Employer.
- Establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of SEA and/or SH. The Social specialist shall ensure that grievances received by the consultant are initially recorded, acknowledged, and screened, and then referred to the PIU GRM on a weekly basis for formal registration, oversight, and resolution. Urgent or high-risk grievances shall be escalated immediately. The Social Specialist shall aslo act as the GRM focal point and shall be responsible for forwarding grievances, sharing relevant supporting information, tracking status updates with the PIU, informing complainants of progress, and ensuring that all cases are reflected in consolidated grievance records and periodic reports.

4. QUALIFICATION REQUIIREMENTS FOR THE CONSULTANT

Possession of license P080G3 - for hydrotechnical projects for regulation works to protect urban areas and rural areas larger than 300 ha from high water is mandatory. Technical offers from Bidders who do not have a P080G3 license will be rejected and will not be evaluated. The license can be provided from the JV member, but not from the Sub-Contractor.

Experience with the total completion of:

- a minimum of 1 contract with a value equivalent of at least 640.000,00 EUR, similar in nature and complexity to the Contract with the following key activities:

  Supervising construction/reconstruction in the field of water management or environmental protection using FIDIC Conditions of Contract for Construction (Red Book), and preferably with experience in local legal frameworks applicable to design check, construction, supervision of such, and supervision of contracts under FIDIC GCC contracts funded by the Multilateral Development Banks/IFIs, such as the EBRD, the AFD, World Bank, Asian Development Bank or African Development Bank, or other.

- a minimum of 2 contracts with a value equivalent of at least 640.000,00 EUR each, similar in nature and complexity to the Contract with the following key activities:

  supervising construction/reconstruction of civil works infrastructure using FIDIC Conditions of Contract for Construction (Red Book), and preferably with experience in local legal frameworks applicable to design check, construction, supervision of such, and supervision of contracts under FIDIC GCC contracts funded by the Multilateral Development Banks/IFIs, such as the EBRD, the AFD, World Bank, Asian Development Bank or African Development Bank, or other.

Availability of valid ISO certificates or internationally recognized equivalents in respect of ESHS management (equivalency to be demonstrated by the Participant), such as ISO 14001 and OHSAS 18001/ISO 45001.

As proof, the Consultant firm shall prepare a table listing following information: name of the relevant similar assignment, short scope of work, year of contract implementation, country/region, contact reference (name, e-mail, phone number).

Consultants may associate with other firms to enhance their qualifications but should indicate clearly whether the association is in the form of a joint venture (JV) and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected. Furthermore, Proposals of JVs will be evaluated based on the composition of JV submitted, whereas the experience of other firms not included in the JV will not be considered in the evaluation. The experience of any proposed sub-consultancy shall not be included in the evaluation.

5. TEAM COMPOSITION AND QUALIFICATION REQUIREMENTS FOR THE KEY EXPERTS

The Engineer shall provide the following personnel for the supervision in accordance with the requested establishment for the time period specified. Any variation to this establishment during the execution of the contract shall be subject to approval by the Employer.

The Supervision Team consists of:

Key-Experts:

- One (1) Project Manager/Team Leader
- Two (2) Deputy Project Managers/Supervision Site Engineers

Non-key Experts:

- Surveyor/Geodesy
- Hydraulic civil / Supervising Engineer
- Construction civil / Supervising Engineer
- Road Engineer / Supervising Engineer
- Environmental specialist,
- Social Specialist,
- Contract Specialist.

The list of Non-Key Experts is indicative. The Engineer may propose additional positions and support staff as needed to deliver the required services. Non-Key Experts must maintain a continuous, daily physical presence on Site throughout the duration of their assignment.

QUALIFICATION REQUIREMENTS OF KEY STAFF OF THE SUPERVISION TEAM

Project Manager/Team Leader – (1) person, shall have the following minimum qualifications:

1. She/he will be a graduate civil engineer with 15 (fifteen) years of experience out of which at least 7 (seven) years of supervision of works in infrastructure projects;
2. She/he will have experience in supervision or construction or design of at least one project for works in water management;
3. She/he must have minimum of 3 years' experience as a Project Manager/Team Leader or Deputy Project Manager/Supervision Site Engineer for civil works;
4. Fluency in both written and spoken English is essential. Fluency in Serbian language in addition is preferred;

5. Is registered/certified practicing engineer by a recognized engineering body and shall be able to register (with support of the Consultancy firm) for necessary Serbian licenses for supervision of works issued by the Chamber of Engineers of the Republic of Serbia no. 310, 313 or 314[1];

Deputy Project Manager/Supervision Site Engineer 1, shall have the following qualifications:

1. Graduated Civil Engineers with at least 7 (seven) years of experience out of which at least 3 (three) years of supervision of civil works;
2. She/he will have experience in supervision or construction or design of at least one project for works in water management;
3. Fluency in written and spoken English and Serbian language;
4. Is a registered/certified practicing engineer by a recognized engineering body and shall be able to register (with support of Consultancy firm) for necessary Serbian licenses for supervision for works issued by the Chamber of Engineers of the Republic of Serbia no. 310[2];
5. Demonstrated experience working under FIDIC-based contracts will be considered as obligatory.

Deputy Project Manager/Supervision Site Engineer 2, shall have the following qualifications:

1. Graduated Civil Engineers with at least 7 (seven) years of experience out of which at least 3 (three) years of supervision of civil works;
2. She/he will have experience in supervision or construction or design of at least one project for works in water management;
3. Fluency in written and spoken English and Serbian language;
4. Is a registered/certified practicing engineer by a recognized engineering body and shall be able to register (with support of Consultancy firm) for necessary Serbian licenses for supervision for works issued by the Chamber of Engineers of the Republic of Serbia no. 313 or 314[3];
5. Demonstrated experience working under FIDIC-based contracts will be considered as obligatory.

In case that any/all proposed candidates do not possess valid licenses she/he shall provide necessary licenses in accordance with the Law on Planning and Construction of the Republic of Serbia within 4 weeks from the contract award notice. Possession of licenses issued/recognized (if issued by a foreign authority) by the Serbian Chamber of Engineers for all members of the Supervision Team will be a condition for contract signing.

In case the licenses are not issued in period of 4 weeks, the Engineer shall provide official replacement of the Expert, in accordance with the Contract, before start of the Site Supervision.

6. ESTIMATED CONSULTANT ENGAGEMENT

In the following:

- **the estimated total Key Experts' staff/months:** The Contract for this assignment shall be Time-Based. Therefore, the total time-input (expressed in staff-months) specified below in the Table 2 is indicative and the Proposal shall be based on the Consultant's own estimates for the same. However,

[1] In accordance with the current Law on Planning and Construction, article 153.
[2] In accordance with the current Law on Planning and Construction, article 153.
[3] In accordance with the current Law on Planning and Construction, article 153.

any proposal submitted with a lesser number of Key Experts' staff-months than specified will be financially corrected and adjusted to the required minimum during the financial evaluation stage, using the highest rate proposed for that position. The internal distribution of staff-months for individual expert positions shall be determined by the Consultant at its own professional discretion.

- **indicative Non-Key Experts:** the Engineer may propose additional positions and support staff as needed to successfully deliver the required services and achieve the project output.

THE SUPERVISION TEAM INPUTS IN MONTHS PER PERIODS (Table 2)

No.	Position	staff months
KEY EXPERTS		
KE 1	Project Manager / Team Leader	**22**
KE 2	Deputy Manager / Supervision Site Engineer 1	
KE 3	Deputy Manager / Supervision Site Engineer 2	
NON-KEY EXPERTS		
NKE 1	Surveyor/Geodesy	**53**
NKE 2	Hydraulic civil / Supervising Engineer	
NKE 3	Construction civil / Supervising Engineer	
NKE 4	Road Engineer / Supervising Engineer	
NKE 5	Environmental specialist	
NKE 6	Social specialist	
NKE 7	Contract Specialist	
	TOTAL:	**75**

The Engineer is responsible for delivery of activities and outputs defined in these Terms of Reference in order to achieve the objective of the assignment. It is the Engineer's responsibility to provide adequate staff with appropriate qualifications and experience to undertake the works described in the scope of the services.

The Engineer shall provide the necessary technical, administrative, and logistical support as required, to back stop the team of experts as required for successful implementation of the assignment. The Engineer shall outline in their proposals how such home office support will be provided.

The Engineer is responsible for all costs of the Supervision Team that will arise from services such as health insurance, transportation, accommodation, office expenses, etc. The Engineer will prepare a monthly activity schedule that will involve a detailed plan for each construction site active at the time of the schedule with detailed breakdown of site visits by the Project Manager/Team Leader and the Deputy Project Managers/Supervision Site Engineers as well as all management meetings under the works contracts. This monthly activity schedule is a subject of approval by the Employer.

7. REPORTING REQUIREMENTS

The Engineer shall prepare and submit reports on monthly and quarterly bases, as well as accident and claim reports, as necessary.

7.1 INCEPTION REPORT

The Engineer shall prepare and submit an Inception Report within **30 (thirty) days** of mobilization. This report shall establish the comprehensive supervision plan, the detailed staffing and deployment schedule, and the specific reporting and communication framework for the assignment. The Inception Report shall serve to align operational procedures between the Engineer, the PIU, and the Bank, providing an early opportunity to review and finalize the supervision methodology before full-scale construction works commence. One hard and one electronic copy shall be submitted to the Employer/PIU.

7.2 MONTHLY AND QUARTERLY REPORTS

Monthly progress reports shall include the background of the Project, a brief description of actual versus planned progress, problems encountered and resolutions, comments on the quality of works and Contractor's performance. The reports are to include graphs or charts showing physical progress of works and data regarding the current financial status of the contract including a comparison of the contract amount and the estimated total cost of completion based on an up-to-date appraisal of actual versus estimated quantities and unit prices. The reports shall include color photographs showing completed works and construction activities undertaken during relevant reporting period.

Each Monthly report will contain a section devoted entirely to an assessment of the impact of accumulated delays, if any, in the execution of works, and a projected date for compliance with required levels, if not achieved. In the event that the projected date is later than a revised date which will result from approved time extensions, the report will include an evaluation of a contractors proposed plan for corrective measures to me implemented to increase the rate of progress and meet the required targets. In addition, the effect of delays on the cost and timing of the Consulting activities should also be assessed.

The Monthly report shall discuss compliance or otherwise with Technical Specifications, Drawings and other conditions of Contract, and the penalties that may have been applied on the Contractor's monthly payment. The reasons for lack of compliance and the corrective measures being taken by the Contractor should be clearly explained.

In addition to the Monthly reports, the Engineer shall prepare Quarterly reports that summarize the content of the Monthly reports, giving an overview of progress on the contract and the main issues that have arisen during the reported period. Each Quarterly report shall contain an introduction presenting historical project background to set the current report in context. The report should contain an analysis of Contractor's performance and the impact of the works carried out on flood protection. This Report will include information on compliance with Contract Specific Environmental and Social Management Plan (ESMP). One hard and one electronic copy shall be submitted to the Employer/Project Implementation Unit in English or Serbian. The Supervision Engineer shall monitor, document and report on the Contractor's implementation and performance in relation to all site-specific environmental and social management requirements. The Engineer's monitoring and reporting responsibilities shall include, at a minimum, the implementation and effectiveness of the Site-Specific Environmental and Social Management Plan (SSESMP), the Site-Specific Stakeholder Engagement Plan (SEP), and any other site-specific environmental and social management plans,

procedures or method statements required under the approved ESMP, the Environmental and Social Commitment Plan (ESCP), the Contract, or otherwise developed to ensure compliance with the World Bank Environmental and Social Framework (ESF). Monthly and quarterly reports shall assess the Contractor's compliance with these requirements, identify any non-compliances or emerging risks, and document the status of corrective and preventive actions including performance on OHS (including worker registers and inductions, status of migrant workers employed, OHS trainings and toolbox talks, risk assessments and method statements, PPE issuance and inspections, accident/incident and near-miss logs, medical and first-aid records (where applicable), the Workers Grievance Mechanism, community grievances, emergency preparedness and drill records, site inspection and audit findings, subcontractor OHS documentation, and records of OHS-related worker grievances. A separate section of the report shall be a detailed Labor Management Report as per template which will be agreed with the PIU.

7.3 ACCIDENT REPORTS

A report of the circumstances of any accident occurring on the site shall be notified to the Employer within 24 hours in line with the Environmental and Social Incident Response Toolkit (ESIRT) of the World Bank and the Serbian law.

7.4 CLAIMS REPORTS

A report with detailed Engineer's assessment of each claim notified by the Contractor shall be prepared and submitted to the Employer.

7.5 PAYMENT CERTIFICATES

The Engineer shall review monthly interim payment applications submitted by the Contractor in accordance with the Contract Conditions. Within a maximum of 2 (two) weeks after receiving the application, the Engineer shall issue an Interim Payment Certificate (IPC) to the Employer, stating the amount which the Engineer fairly determines to be due, with supporting particulars. The Employer shall make payment to the Contractor in accordance with the certified amounts and the timeframes specified in the Contract Conditions.

It is the Engineer 's responsibility to ensure that each invoice details actual quantities and value of works completed to date compared with the total billed quantity and unit rate for each item in accordance with the Conditions of Contract. In accordance with FIDIC provisions, if the Engineer determines that the Contractor's payment application is incorrect, lacks sufficient supporting documentation, or contains non-compliant works, the Engineer shall have the authority to reduce or reject the certified amount. In such events, the Engineer must issue a formal written notice of rejection or reduction to both the Contractor and the Employer within the same 2-week review period. This notice shall explicitly specify the reasons for the reduction or rejection, detail the affected line items, and outline the corrective documentation or measures required from the Contractor to resolve the discrepancy.

The Engineer shall ensure that invoice properly account for payments due to the Contractor for:

1. Works on flood/drainage rehabilitation;
2. Price adjustments and/or other payments to which the contractor may be entitled to, if any
3. Deductions, discounts and retention.

7.6 TAKING-OVER CERTIFICATE

Taking-Over Certificate shall be issued after the works completed by the Contractor prior the beginning of the Defects Notification Period. It is the Engineer ’s responsibility to:

- Inspect the works accompanied by the representatives of the Employer, the Contractor and Sub-Contractors, if any, prior to the handing over works/any section of works;
- Prepare a final snag list of items to be completed, or replaced together with a time schedule for the remedying of the same;
- Verify that all item on the final snag list have been completed or corrected;
- Prior to the commencement of the Defects Notification Period, provide written confirmation that the works have been completed in accordance with the requirements of the contract, plans and specifications, and issue a Taking-Over Certificate.

7.7 REPORT ON COMPLETION OF WORKS

Upon completion of each Contract, the Engineer shall prepare a final report which shall highlight all major points of interest that arose during the contract. The report will also include the summary of the type, quality, quantities and sources of materials used on the project, contractor’s equipment and personnel, problems encountered and solutions applied, changes made by the Contractor in design and specifications and the reasons therefore, a breakdown of Contractor’s performance, a breakdown of the final cost of the contract item by item, a summary of contract changes. The completed “as-built drawings” shall form an integral part of the final report.

Two copies (one hard and one soft copy) of this report shall be submitted to the Employer not later than 30 days after the issue of the Taking-Over Certificate.

7.8 DEFECTS NOTIFICATION PERIOD

The Engineer ’s Representative will provide on-site supervision of the Contractor’s operations during the Defects Notification Period and for issuing any required certificates.

During the Defects Notification Period outstanding construction matters will be finalized, if any, and “as-built drawings” updated.

7.9 PERFORMANCE CERTIFICATE

Immediately prior to expiration of the Defects Notification Period for works for which a Taking-Over Certificate have been issued, the Engineer shall in the presence of the Employer and the Contractor inspect the works and provide a written confirmation that the works have been completed and maintained in accordance with the contract and issue a Performance Certificate for the works.

7.10 FINAL COMPLETION OF WORKS

Within 56 days of the issue of the Defects Notification Certificate for contracts for which the defects notification periods have expired, the Engineer shall prepare in co-operation with the Contractor the Final Account for the Contract.

7.11 LIST OF OUTSTANDING OBLIGATIONS REGARDING ISSUING THE PERFORMANCE CERTIFICATES

30 days prior of expiration of the Contract for Supervision of Works under the Sava and Drina Rivers Integrated Development Program in Serbia, the Engineer shall prepare the list existing obligations of the Employer and the Contractors under which defects notification will be ongoing after expiration of

the Contract for Supervision. Issuing a Performance Certificate for the works will become the responsibility of the Employer after expiration of the Contract for Supervision.

7.12 RECORDS

The Engineer shall:

- Maintain all the projects site orderly files for correspondence, reports of site meetings, product and materials submissions, reproductions of original construction contract documents including all addenda, variation orders, site instructions, information and drawings issued subsequent to the start of works contract, as well as the Engineer ’s clarifications and interpretations of the Contract’s documents, progress reports and other related documents.
- Establish, maintain, and make available for inspection a complete and up-to-date system of Occupational Health and Safety (OHS) records for the duration of the Project. All records shall be maintained in a systematic manner, retained on site, and submitted to the PIU upon request.
- Keep a diary/logbook on each construction site, recording Engineer ’s hours on the job site, weather conditions, data related to questions of extras or deductions, list of visiting officials, daily activities, decisions, observations in general and specific observations in more detail, as in the case of observing test procedures etc. The logbook has to be fully in compliance with the Law on Planning and Construction of the Republic of Serbia.

8. EMPLOYER’S INPUTS AND DATA

The Employer shall provide the Consultant with the following relevant documentation available for the assignment:

- **The Contract for works.**